Should You Get a 4-Channel Receiver?
The facts on over 50 models

Why Haven't Women Composed Great Music?
A psychologist vs. a feminist
NO MORE UNEMPLOYED WATTS.

Until now, 4-channel receivers could deliver their full power only into four speakers. Playing regular stereo through two speakers meant leaving two channels idle. Half of those expensive watts were unemployed.

Fisher has changed all that with the new Studio-Standard 4-channel receivers. Each has a 2/4-channel front-panel switch, like the one shown here.

In the "2" position, the four amplifiers are "strapped" together in pairs to drive two speakers with their combined power. No unemployed watts! In the "4" position, the four amplifiers are separated for 4-channel operation with four speakers.

The Fisher 504, at $599.95, is the most advanced of the Studio-Standard receivers. (See specifications.) Two others are available for considerably less, with minimal changes in features and performance.

Write us for detailed literature. The "strapping" feature is just the beginning of the Studio-Standard story.

Fisher Radio, Dept. HF-2, 11-40 45th Road, Long Island City, N.Y. 11101.

Fisher 504 Studio-Standard 4-Channel Receiver

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous sine-wave power</td>
<td>20 Hz to 20 kHz</td>
</tr>
<tr>
<td>FM sensitivity</td>
<td>1.8 µV</td>
</tr>
<tr>
<td>Capture ratio</td>
<td>1.2 dB</td>
</tr>
<tr>
<td>FM input</td>
<td>Up to 3,000,000 µV (3 V)</td>
</tr>
<tr>
<td>MPX decoder</td>
<td>PLL (phase-locked loop)</td>
</tr>
</tbody>
</table>

*Fair trade prices where applicable.
Prices slightly higher in the Far West and Southwest.
The right Pickering cartridge for your equipment is the best cartridge money can buy.

There's a "right" Pickering cartridge for every record player, and only Pickering has developed a way for you to be absolutely certain you select the "right" cartridge for your high fidelity music system.

It is a simple way for you to precisely match one of our XV-15 (100% Music Power) cartridges to whatever kind of record player you have or plan to buy. It's called Dynamic Coupling Factor – DCF for short.

We have taken virtually every record player and pre-analyzed the vital variables affecting cartridge design and those related to the engineering features of the various turntables and changers. So, no matter what equipment you own or plan to purchase, there is a Pickering XV-15 cartridge exactly "right" for it. The DCF number enables you to select the proper Pickering XV-15 cartridge in relation to a particular type of playback equipment to achieve maximum performance.

If you're ready to buy your next cartridge, be certain you end up with the Pickering XV-15 cartridge that's best for your system. Have your Pickering high fidelity dealer show you our DCF Chart, or write Pickering & Co., Inc., Dept. G, 101 Sunnyside Boulevard, Plainview, N. Y. 11803.

"for those who can hear the difference"

The 100% Music Power Cartridges

All Pickering cartridges are designed for use with all two and four-channel matrix derived compatible systems.
February 1973
VOL. 23  NO. 2

music and musicians
Leonard Marcus "NOBODY ASKED ME" 4
The death of an orchestra
Lorin Maazel A RECORDING PHILOSOPHY 20
Gene Lees A BIRD IN THE BAND 24
The resurgence of Charlie Parker's music
Judith Rosen, Grace Rubin-Rabson
WHY HAVEN'T WOMEN BECOME GREAT COMPOSERS? 46
Feminist vs. psychologist
Janos Starker DEMOCRACY IN MUSIC 62
A fantasy by the noted cellist

audio and video
TOO HOT TO HANDLE 31
NEWS AND VIEWS 32
A possible change in FM broadcasting specs?
EQUIPMENT IN THE NEWS 34
EQUIPMENT REPORTS 39
Norelco 2100 DNL stereo cassette deck
Lenco L-85 turntable assembly
B&O Beomaster 3000-2 stereo FM receiver
Fisher ST-550 speaker system
William Tynan THOSE NEW FOUR-CHANNEL RECEIVERS 54
Facts and features of over 50 models

record reviews
Royal S. Brown THE KORNGOLD ERA 66
Sumptuous film music by a master
Conrad L. Osborne SONG O' MY HEART 67
John McCormack's "lost" soundtrack
Paul Henry Lang RAMEAU'S CASTOR ET POLLUX 69
Tons of glorious baroque music
David Hamilton LISZT THE TONE POET 71
Haitink's set, Mehta's sampling of the tone poems
CLASSICAL 74
Glenn Gould as harpsichordist . . . Another Ring
LIGHTER SIDE 106
Marjoe . . . Gordon Lightfoot . . . Peter Townshend
JAZZ 111
Newport in New York . . . Billie Holiday
R. D. Darrell THE TAPE DECK 116
Dolbyized open reels: the ideal demos

etc.
LETTERS 6
Opera fans strike back
PRODUCT INFORMATION 109
An "at home" shopping service
ADVERTISING INDEX 108

Why don't women compose? See page 46.

High Fidelity
is published monthly by Billboard Publications, Inc. at New York, New York 10036. The design and contents are fully protected by copyright and must not be reproduced in any manner. Second class postage paid at New York, New York and at additional mailing offices. Authorized as second-class mail by the Post Office Department, Ottawa and for payment of postage in cash. Yearly subscription in USA, Pan-American Union $7.95, elsewhere $9.95. Single copies $0.90. Single copies $0.90. Inquiries In Reader's Guide to Periodical Literature. Change of address notices and undelivered copies (Form 3579) should be sent to High Fidelity, Subscription Department, P.O. Box 11156, Cincinnati, Ohio 45211. Please state both old and new addresses when requesting change.

Current and back copies of High Fidelity and High Fidelity/Musical America are available on microfilm from University Microfilms, Ann Arbor, Michigan 48106.
“Nobody Asked Me”

"Because of the impossibility of recording in the United States, it is necessary for me now to record in Europe. For this reason I shall only be able to conduct the first part of concerts for the ’72-’73 season. Since I am leaving next week for Europe, and will return only for those concerts, it is necessary for me to resign as Music Director...."

Thus wrote Leopold Stokowski last May to the American Symphony Orchestra he had founded ten years earlier. The net result of the Maestro’s decision was that, as I write this, the imaginative, adventurous orchestra that among other successes brought the music of Charles Ives to world-wide consciousness is no more. It was, of course, Stokowski’s baby, and without him both its headless board of directors (its fireball president had resigned earlier when his wife decided to revive a 1925 musical called No, No, Nanette) and its potential sources of money apparently dried up. Apparently. But more of that later.

Though this collapse of a major orchestra may have been almost unique (Toscanini’s NBC Symphony suffered a similar fate a generation ago), the American cultural crisis that it represents is all too pervasive. Haity stories among classical music professionals have become legion. (During the same period in New York a projected series of cable TV shows—some thirty-five concerts by the New York Philharmonic and others at Philharmonic Hall came to a sorry end when the stagehands’ union insisted on residuals for rebroadcast.) But I perhaps hold a special brief for the ASO because during two of its early years I was its program annotator. I was there when the orchestra rejuvenated Ives with the premiere of the remarkable Fourth Symphony. Through the ASO I also heard American or world premières of music by Berio, Amram, Prokopec—even Mozart. And I followed Stokowski’s policy of reprogramming those works he believed in, so that a première was not merely an ego trip for the conductor but a launching pad for the music.

But the vital orchestra was on fragile financial ground. It had no endowment. At its peak, in 1970-71, the operating budget was $750,000 for thirty-two concerts, yet the orchestra came out $25,000 ahead. Its problem was an accumulated deficit of $210,000. The next season was cut to sixteen concerts and a $500,000 budget. By the time of its demise the orchestra’s young manager, Cathy French, had been able to pare the deficit to $60,000. If enough money could have been raised to wipe that out, plus another $100,000, she said, the orchestra could have had another season.

Switch of scene to London, where the Royal Philharmonic Orchestra is contemplating an American tour. They will not be permitted to make it unless they can show that they will not weaken England’s monetary situation by running up a foreign deficit. An approach to Robert D. Sweeney, public affairs director of Time, Inc., currently celebrating its fiftieth year, brings in the necessary modest sum. The tour is now possible. Time, Inc. has sponsored a great show to celebrate its anniversary, and has garnered publicity and prestige in the bargain. The RPO has a tour. And many American communities have a chance to hear a fine orchestra. All it took was some imaginative thinking on the part of the RPO’s board.

Where is there a similar show of imagination on the American classical scene? Oh, there is some to be sure. But if there were enough, the current crisis wouldn’t be so severe. I asked Sweeney, "How is it that you sponsored the RPO tour while a great American orchestra was dying for lack of funds? Why didn’t you give the money to the American Symphony Orchestra?"

He answered, "Nobody asked me."

Next month we too will celebrate an anniversary that astonishingly seems to be slipping by without notice: 75 YEARS OF MAGNETIC RECORDING. Included will be our first tests, with CBS Labs, of raw tape, in LAB TESTS OF 10 CASSETTE TAPES.
The research behind the BOSE 901.

By now almost all Hi-Fi enthusiasts know about the performance of the BOSE 901, about its unprecedented series of rave reviews1 and its unparalleled acceptance by musicians, stereophiles and the public. But few people know how this unconventional speaker was born. In this first article of a series, we would like to share with you the highlights of the twelve years of university research that led to the 901.

The research begins.

In 1956 a basic research program on musical acoustics was started by Professor Bose.2 The motivation for this research came from the apparent discrepancy between the acoustical specifications and the audible performance of existing loudspeakers. Musicians were quick to observe the boomy and the shrill sounds produced by loudspeakers for which engineers claimed excellent specifications.

Dr. Bose's research began by making exacting measurements on loudspeakers and setting up experiments to correlate these measurements to aural perception.

By 1959 it was clear that not only were the existing measurement standards (established 30 years before) incomplete, but worse, they were often misleading. For example, measurements of frequency response and distortion made in anechoic chambers not only fail to indicate what a speaker will do in a room, but speakers with better chamber measurements can actually give inferior performance in the home—and vice versa!

Probing psychoacoustics.

By 1960 it became evident that basic psychoacoustic research was necessary to relate the subjective performance of loudspeakers to objective design parameters. This research was launched and the first major results were reported in November 1964 at a joint meeting of the Audio and Computer groups of the Institute of Electrical and Electronic Engineers held at M.I.T. It was this research that established the validity of the then controversial concepts of multiplicity of full range drivers, speaker equalization, and flat "power" response. It was also shown, with the help of computer simulations of ideal acoustical radiators, that electrostatic, or other types of speakers have no potential performance advantages over properly designed cone speakers—a result that was not known prior to 1964.

Significance of reflected sound established.

At the time of the 1964 meeting, however, little was understood about the spatial properties of speakers. There was some evidence that direct radiating speakers caused shrillness in music but the reasons were not known. From 1964 to 1967 the research concentrated on these spatial problems. With the co-operation of the Boston Symphony Orchestra, measurements were made during live performances to determine characteristics of sound incident upon the listeners. Theoretical studies, verified by experiments, showed that in live performances sound arriving at the listeners' ears from different directions was much more evenly balanced than was the case for loudspeakers in home environments. Experiments then linked this spatial difference to the strident sounds produced by loudspeakers. Then it was discovered that the desirable spatial characteristics could be produced in the home by directing a large percentage of sound away from the listener at precise angles to the rear wall.

The culmination of 12 years research.

In 1968 we decided to incorporate all the knowledge gained from the years of research into the design of an optimum loudspeaker for the home. The result is the BOSE 901. Perhaps this explains our confidence in asking you to compare it to any other loudspeaker regardless of size or price.

1For copies of the reviews, circle our number(s) on your reader service card.
2Copies of the Audio Engineering Society paper, ON THE DESIGN, MEASUREMENT AND EVALUATION OF LOUDSPEAKERS, by Dr. A. G. Bose, are available from the Bose Corporation for fifty cents.

You can hear the difference now.

BOSE
Framingham, Massachusetts 01701
letters

Criticizing the Critics

Though I am often impelled to write to magazines, I rarely do because I do not wish to subject myself to the rude and sarcastic rebuttals often made by the critics who seem to deeply resent any criticism of their colleagues.

A case in point occurs in the November 1972 issue where Dale Harris vents his spleen on three readers who have taken exception to some of his reviews. I submit that remarks such as, "It may be that Mr. Switzer's standards for phonation, musicality, and legato are more easily met than mine," or, "I cannot help wondering, since he [Barry Malkin] is so evidently troubled by narrow-mindedness," or, "Mr. Freed's definition of objective criticism would appear to be the presentation of views that agree with Mr. Freed's," are vindictive, petty, and wholly unnecessary, totally beneath the dignity of such a magazine as yours. Certainly, opinions differ. However, I feel that Mr. Harris should defend his positions without resorting to this type of personal attack. Performers are seldom in a situation where they can respond to unfair criticisms, but I do not write reviews in which they can turn aside what they consider to be unfair judgment upon their work by attacking the attacker. There are ways to rebut without rudeness. I suggest Mr. Harris investigate them.

Wilfred J. Healey
Los Angeles, Calif.

While one appreciates the trepidation with which your readers approach the "reviews" of Dale Harris, I feel they are mistaken in condemning him for not liking their favorite singers. That is certainly his privilege as a reviewer. What is distressing about Harris is his utter predictability. He does not write reviews, he writes nostalgia. Baker "competes" with Fermi, who never sang in Italy. He might possibly contribute to "spleen." In light of this I can only wonder, since he [Barry Malkin] is so evidently troubled by narrow-mindedness, what is his competence to write reviews? He attacks the aforementioned artists without prejudice toward them. He writes nostalgia, Baker "competes" with memories of Ferrier: Sills is not as "satisfying" as Callas: Madame X (1972) is never quite as fine as Madame Z (c. 1935).

If Harris wants to live in the past, let him. But at the risk of what I know that Callas could not erase memories of Ponselle anymore than Ponselle could make one forget Lilli Lehmann. Nostalgia is fun in private, but in public reviews it is a crashing bore. Your record reviewers would increase their credibility if they would develop a sense of here and now and leave the delightful reminiscence to the history books.

Vera Little
San Anselmo, Calif.

While Dale Harris is free to criticize the RCA publicity used in presenting soprano Katia Ricciarelli, his statement that "Ricciarelli (for many Italians) is the most famous high-class singer since Mario Lanza" is totally inaccurate. For most Italians, Mario Lanza was unknown and remains so to this day. He was not Italian, but a second generation Italian/American who never sang in Italy. He might possibly be known through recordings, but in no way may he be considered an operatic personality.

Mr. Harris' attitude toward the entire "Ricciarelli Affair" reeks of disdain for the Italian people, and his comment regarding Franco Sennario, one of Italy's leading music critics and host of Italy's most popular radio program about opera, demonstrates his ignorance. He also misinterprets Mr. Sennario's comment about the domination of Italian opera houses by foreign artists. Mr. Sennario states in his album notes that Italy's only entries have been Renata Scotto and Mirella Freni, while Mr. Harris seeks to give the impression that the aforementioned artists have been all but ignored by the Italians in favor of Ricciarelli.

Mr. Harris might have disregarded all the overblown publicity and judged Miss Ricciarelli's merits without prejudice toward her Italian birth. She is a very promising young soprano with a good deal to learn at the age of twenty-six and with a brilliant future should all go well for her. There was no need for Mr. Harris' attack. In Italy Ricciarelli is a personality beloved by her people because she symbolizes another link in the chain of Italy's rich vocal heritage. Mr. Harris accuses the sensationalists of having created Katia Ricciarelli. Among them we must include some of the most eminent music personalities of our time including leading critics, musicians, conductors, and singers who made up the jury of the Voci Verdiane competition.

While it is laudable to write constructive criticism, that which is destructive and born of envy is detrimental to the art form and indifferent singers have always existed. I believe that the past is a way of assessing the present. I assume that for Mr. Little this is not true and that every current singer is—quite literally—incomparable.

Mr. Lombardo is mistaken about Mario Lanza's popularity in Italy. The fact that Lanza was American rather than Italian in no way interfered with his success there. It probably was a contributory factor: At any rate, his movies were tremendous hits. Thirteen years after his death the Italian catalogue still lists no fewer than nine LP recitals. Lanza's enduring fame in Italy has nothing to do with operatic appearances. Neither does Ricciarelli's present record. Nor did he read my review very carefully. I too recognize Ricciarelli's promise, but believe it has been far too quickly exploited for her good.

Mr. Lombardo's depiction of Ricciarelli's television public as somehow the guardians of "Italy's rich vocal heritage" strikes me as naive.

During the ten years I have been reading High Fidelity I always intended to write in praise of Conrad L. Osborne's reviews of vocal and operatic recordings. However, for some reason or other I never did manage to communicate my appreciation for and admiration of his work. Lately I have come to regard Dale Harris' reviews with something of the esteem I once reserved for Mr. Osborne's criticism.

In the November issue several letters appeared expressing "distaste for his [Dale Harris'] criticism." I think Mr. Harris' critics do not so much misread him as fail to read him at all. None of them seems to have the slightest understanding of Mr. Harris' "preconception of how an aria should be sung." Thank God for a reviewer who expresses his preconceptions! Far too many reviewers give the impression that they could not recognize a legato even less have an opinion as to when one is appropriate.

Unless we carefully weigh a reviewer's preconceptions we have no way of knowing how to value his judgments. For example, when one of Mr. Harris' "critics" says her voice is exceptionally beautiful, "if I'm to understand such a vacuous statement I must ask "in exception to whom or to what?, just what are your preconceptions?, what are your criteria of beauty in a voice?" Granted Caballé has a beautiful voice. (I think it is one of the most beautiful before the public today.) But I am concerned about what she does or fails to do with this beautiful voice—especially in view of what the composer asks of her in his score.

Mr. Harris' review "Birth of an Operatic Superstar" [November 1972] is an example of the real service a critic can perform for the listening public today. He points out and questions most perceptively the media revolution and its subsequent challenges and potential with regard to the opera world.

Lawrence B. Porter
Washington, D.C.

The review by D.H. of the "Beverly Sills Concert" record is the most glaring example of prejudice and error I can recall in High Fidelity [November 1972].

Although Dale Harris' malicious review of the Sills La Traviata suggests that he is the villain, I assume the actual perpetrator is David Hamilton. If so, it is rather peculiar to find a proponent of the tasteless drivel of the Bern-
We are the Garrard Engineers.
When you finish reading this ad
we will have one thing in common.
You will understand the Zero
100 the way we do.

We aren't teachers. And you are probably
not engineers.

But we can explain the Zero 100 to you because,
in all honesty, the Zero 100 is not a difficult concept.

Neither was the wheel, although it took millions
of years to come into being.

It took us seven years to create the Zero 100,

And it would take more than this ad to explain
those seven years. The attempts that failed, the
plans drawn and redrawn, the designs built and
discarded, computed and remeasured.

Actually the problem seemed to be simple:
Distortion.

Until the Zero 100, no automatic
turntable could play a record
without
causing distortion in the sound you heard.

Records are cut at right
angles, from the outside
groove to the final one. To re-
produce this sound perfectly
 you need a turntable with a
cartridge head that tracks the
record exactly as it was cut,
at the same 90 degree
tangency.

But seven years ago,
there was no automatic
turntable that could
achieve this consistency
of tracking.

Our solution?
A turntable like
no other turntable. A
turntable with two arms.
The first arm of the
Zero 100, the normal
looking arm, is the
one with the cartridge
head. The auxiliary arm,
our innovation, is
attached to the first
arm by a unique system of
ball bearing pivots.

These precision ball bearing
pivots are built into this auxiliary
arm, enabling the cartridge head
to maintain a consistent 90 degree
angle to the grooves of the record.

Today, you can play a record
on the Zero 100 and hear reproduction
you've never heard before.

Free of tracking distortion.

Today, you can pick up issues of
Stereo Review, High Fidelity, Audio,
Rolling Stone. The Gramophone. And
read what the reviewers say about the
Zero 100.

After seven years, we are men who
have achieved our goal.

We are proud to present it to you.

The Garrard Engineers

$199.95 less base and cartridge.
Mfg. by Plessey Ltd. Dist. by British Industries Co.
True to the Bozak Tradition of “best in its class”, our new Sonora (Model B-201) delivers dramatically clean sound at far higher levels than other speakers under $100 — and many costlier ones.

The secret of Sonora is our unique 8-inch Bass/Midrange driver. Its aluminum diaphragm radiates a solid, true-pitch Bass and a transparent, breakup-free Midrange, while serving as a heat-sink for the voice coil. As a result, it can easily handle the output of any amplifier up to 60 Watts RMS rating, with freedom from overloading.

Sonora is a two-way system, with an LC Crossover linking the 8-inch driver with a single-section of B-200Y, the tried-and-true Treble Speaker used in all Bozak systems. The enclosure is a sturdy, resonance-free box of ¾-inch compacted-wood material, covered with walnut-grain vinyl. Be it rock or traditional, in stereo or quad, Music Really Comes Alive with Sonora! Hear them at your Bozak Dealer's.

Sonora
11¾" x 20¾" x 10" deep;
walnut-grain vinyl;
8 Ohms; 60 Watts RMS.
Here's your FREE HIGH FIDELITY "at home" shopping service!

It's easy! All you do is use the Reader Service card at right... HIGH FIDELITY's Reader Service Department will take it from there. It's as simple as 1, 2, 3!

1 Just circle the number on the card that matches the number below the ad or editorial mention that interests you.
You'll also find the key numbers for advertised products in the Advertiser's Index.

2 Then type or print your name and address. Don't forget your zip code, it's important!

3 Drop the card into the mail. No postage is needed if mailed in the United States.
You'll receive literature, colorful brochures and specifications about the products that interest you... free and without obligation!

B U S I N E S S R E P L Y M A I L
No postage stamp necessary if mailed in the United States
Postage will be paid by—

HIGH FIDELITY
Subscription Dept. 73
P.O. Box 14156
Cincinnati, Ohio 45214

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>31</td>
<td>32</td>
<td>33</td>
<td>34</td>
<td>35</td>
<td>36</td>
<td>37</td>
<td>38</td>
<td>39</td>
<td>40</td>
<td>41</td>
<td>42</td>
<td>43</td>
<td>44</td>
<td>45</td>
</tr>
<tr>
<td>46</td>
<td>47</td>
<td>48</td>
<td>49</td>
<td>50</td>
<td>51</td>
<td>52</td>
<td>53</td>
<td>54</td>
<td>55</td>
<td>56</td>
<td>57</td>
<td>58</td>
<td>59</td>
<td>60</td>
</tr>
<tr>
<td>61</td>
<td>62</td>
<td>63</td>
<td>64</td>
<td>65</td>
<td>66</td>
<td>67</td>
<td>68</td>
<td>69</td>
<td>70</td>
<td>71</td>
<td>72</td>
<td>73</td>
<td>74</td>
<td>75</td>
</tr>
<tr>
<td>76</td>
<td>77</td>
<td>78</td>
<td>79</td>
<td>80</td>
<td>81</td>
<td>82</td>
<td>83</td>
<td>84</td>
<td>85</td>
<td>86</td>
<td>87</td>
<td>88</td>
<td>89</td>
<td>90</td>
</tr>
<tr>
<td>91</td>
<td>92</td>
<td>93</td>
<td>94</td>
<td>95</td>
<td>96</td>
<td>97</td>
<td>98</td>
<td>99</td>
<td>100</td>
<td>101</td>
<td>102</td>
<td>103</td>
<td>104</td>
<td>105</td>
</tr>
<tr>
<td>106</td>
<td>107</td>
<td>108</td>
<td>109</td>
<td>110</td>
<td>111</td>
<td>112</td>
<td>113</td>
<td>114</td>
<td>115</td>
<td>116</td>
<td>117</td>
<td>118</td>
<td>119</td>
<td>120</td>
</tr>
<tr>
<td>121</td>
<td>122</td>
<td>123</td>
<td>124</td>
<td>125</td>
<td>126</td>
<td>127</td>
<td>128</td>
<td>129</td>
<td>130</td>
<td>131</td>
<td>132</td>
<td>133</td>
<td>134</td>
<td>135</td>
</tr>
<tr>
<td>136</td>
<td>137</td>
<td>138</td>
<td>139</td>
<td>140</td>
<td>141</td>
<td>142</td>
<td>143</td>
<td>144</td>
<td>145</td>
<td>146</td>
<td>147</td>
<td>148</td>
<td>149</td>
<td>150</td>
</tr>
<tr>
<td>151</td>
<td>152</td>
<td>153</td>
<td>154</td>
<td>155</td>
<td>156</td>
<td>157</td>
<td>158</td>
<td>159</td>
<td>160</td>
<td>161</td>
<td>162</td>
<td>163</td>
<td>164</td>
<td>165</td>
</tr>
</tbody>
</table>

* PLEASE TYPE OR PRINT *

NAME______________________________

ADDRESS____________________________

CITY________________STATE________ZIP____

[ ] I am a subscriber [ ] I am not a subscriber
USE THIS POSTAGE-FREE CARD TO
DOUBLE
YOUR LISTENING
AND READING ENJOYMENT

Now you can enjoy the best in both musical worlds—in one colorful magazine:
HIGH FIDELITY/MUSICAL AMERICA.

SUBSCRIPTION ORDER FORM

☐ Please enter a one year subscription to HIGH FIDELITY/MUSICAL AMERICA in my name. I’ll receive 12 issues of HIGH FIDELITY, plus about 32 pages per issue of news and reviews of important musical happenings throughout the world—concert, opera, etc.—for only $14.

☐ Please enter my subscription to HIGH FIDELITY only. I want to take advantage of your special offer of 15 issues for only $9.47.

☐ New Subscription
☐ Renewal
☐ Payment enclosed
☐ Bill me

Name______________________________________________________________
Address____________________________________________________________
City_________________State_________Zip Code________________________

For postage outside U.S.A., Possessions: Add $1.00 for HIGH FIDELITY/MUSICAL AMERICA subscription (12 months); add $2.00 for HIGH FIDELITY subscription (15 months).  ☐ 2 3 4

BUSINESS REPLY MAIL
No postage stamp necessary if mailed in the United States

Postage will be paid by—

HIGH FIDELITY
Reader Service 73
P.O. Box 14306
Annex Station
Cincinnati, Ohio 45214

For the full story of music and music makers today, be sure to include MUSICAL AMERICA as part of your HIGH FIDELITY subscription.

In 32 sparkling pages, MUSICAL AMERICA covers the live musical scene completely. You’ll get news, reviews and reports of important musical events all over the world—written by critics who know the score and how to write about it with wit as well as authority. You’ll meet today’s outstanding conductors, composers and performers... learn how they work and live... what they think and say about music—and about each other.

MUSICAL AMERICA adds a new dimension to HIGH FIDELITY—and to your enjoyment of music. Use the postage-free card to start copies coming your way regularly.

(MUSICAL AMERICA is available only by subscription... and only with HIGH FIDELITY. It is not sold on newsstands. Another important reason for you to use the subscription card now.)
The AR-7 is the smallest speaker system Acoustic Research has ever designed. It is purposely small. Recognizing the space demands imposed by four channel stereo music systems, AR decided to develop a small speaker to permit installation in areas where our larger speakers are not appropriate. At the same time, this speaker must offer the extended range usually associated with speakers of much larger dimensions. That the AR-7 has achieved both design objectives is clearly evident. The size (9¾ x 15¾ x 6¼) is such that four AR-7's occupy less cubic volume than a single AR-3a.

The woofer of the AR-7 uses such advanced design and manufacturing techniques that its low frequency response extends substantially below that of competitive speakers of far greater size. The tweeter of the AR-7 is similar to the tweeter used in the highly acclaimed AR-6. It produces smooth, wide dispersion sound. Both the woofer and the tweeter use high temperature voice coils, permitting higher power handling capability.

The accuracy of the sound is such that we show these power response curves and guarantee each AR-7 speaker to match the curves within ±2dB. Such accurate, full frequency range performance from an enclosure of this size did not come easily. It required years of development and state-of-the-art technology.

Though the AR-7 was designed primarily with four channel stereo installations in mind, its accurate wide frequency response makes it a wise choice for high quality two channel stereo systems. AR-7's come packed two to a box and sell for $60.00 each.
Mr. Hamilton replies: Mr. Gray, like many others, seems to believe that "technical perfection" is to be defined as "the way Beverly Sills [or whoever] sing[s]"... but there are other standards in such matters, including some set by Miss Sills herself. As one of her earliest and most vocal admirers, I very much regret that the commercial recording companies caught up with her only at a time when her vocal and technical prowess had begun to decline. Miss Sills's theatrical performances (and, to a certain extent, her operatic recordings) continue to profit from her extraordinary dramatic projection, character, and musical intelligence, but the recital disc in question is merely a new instance of a general trend heavily on a degree sheer executive polish that she no longer commands, although she once did. There is no point in pretending about this, much as we may be sorry about it, that Mr. Gray considers my criticism of technique "unfair," neither indicates how badly he hears, or perhaps how ill informed he is about what good singing should sound like; the former condition I cannot correct, but for the latter I can recommend daily immersions in Hempel, early Catti-Curci, Elisabeth Schumann, prewar Carpi, Einaudi, Lurssen, and some of the pirated Sills discs from the mid-1960s.

I believe High Fidelity's readership was badly served by Gregor Benko's review of our Romantic piano concertos. None of these works has ever been recorded, and Genesis selected them because in our opinion they deserved a reprinting by contemporary listeners—a reprinting that we hoped would be prompted by our tasteful and thoughtful review. The kind one expects from High Fidelity. Mr. Benko's lopsided survey was anything but considered or tasteful, and many of his pronouncements even force us to call into question his qualifications as a music critic.

I am certain that any "serious musicologist," the main woofers to eliminate the conventional problems of "muddy" bass caused by run-away cone oscillations, cone breakup and frequency doubling.

Result: superb bass response... large dimensional sound from speaker systems smaller in size and cost, than you'd expect.

It's an intelligent speaker. It's a smart move to listen to it. It's your move.

For the name and location of your nearest dealer, call or write:

Magnum Opus Electronics Ltd.
220 W. 19th St., New York, N.Y. 10011
(212) 255-8156-7-8

CIRCLE 34 ON READER-SERVICE CARD
Avoid 4-Channel Confusion

Quality Quad Sound Now At Low Dynaco Prices

Dynaco's $20 Quadaptor decoder delivers full 4-Dimensional sound now from encoded records in any of the compatible matrix formats. More important, it recaptures the elusive ambience, or realism, which has always been a part of your present stereo records too, but which you've never been able to hear before.

No phase shifting gimmicks; zero distortion; all the sound that's always been there, with correct placement and proportion. It's Dynaco's simpler way to fully decode (U.S. Patent #3697692)—at the output of your present amplifier. You don't need a new amplifier. Use your stereo system to the fullest while the 4 channel hassle settles down.

Superior audio performance is a Dynaco tradition. Fine craftsmanship is evident in even our least expensive speaker. The compact A-10 (8½” x 15” x 8”) nearly duplicates the famous A-25's sonics. It uses the same woofer magnet and the identical tweeter in an oiled-walnut wood (not plastic) cabinet at a fraction of the A-25’s price. The A-10 fits in any bookshelf, or is easily hung on the wall with brackets supplied.

The best buy A-10 is the first choice for inconspicuous back speakers in quad systems, perfectly complementing your present larger Dynaco (or other similar-sounding) designs. Smooth, articulate, wide-range clarity; near-perfect transient response for precise delineation. Verbatim reproduction with prodigious power handling capability makes the A-10 the obvious choice for main speakers, too, where space is at a premium.

Dynaco never rips you off. To prove it, a diagram on our demo record (from your dealer, or send coupon) shows you how to try 4-D sound without even the Quadaptor if you have 4 similar speakers.

SPECIAL DIRECT OFFER ON 4-DIMENSIONAL DEMO RECORD

DYNAKO INC.
3060 Jefferson Street, Philadelphia, Pa. 19121

Enclosed is my check or money order for $2.95. Please send me the new Dynaco/Vanguard 4-D demo record postpaid. Limited to USA residents only.

Name
Address
City State Zip

DYNAKO INC. Division Tyco
3060 JEFFERSON ST., PHILADELPHIA, PA. 19121

In Canada write: DYNAKO OF CANADA LTD., Montreal, 760, Quebec, Canada

February 1973

CIRCLE 17 ON READER-SERVICE CARD
Two new switchers from Russound

Tired of the interconnection hassle with tangled cables and wires every time you want to change something in your high fidelity stereo sound system? Now, Russound introduces two new switchers which let you interconnect any or all of your sound sources with any or all of your speakers at the simple flip of a switch.

For the program source end, Russound offers the TMS-1W which lets you connect up to three recorders or other sources through a single preamp, amplifier, receiver, or mixer, and switch them in, between, or out at will. In walnut finish cabinet at $32.95. TMS-1 in utility steel case at $22.95.

For the speaker end, Russound suggests SWB-2W which lets you connect one or two amplifiers with up to three sets of speakers and play any or all at once while maintaining proper load impedance at your amplifier output. In walnut finish cabinet at $25.95. SWB-2 in utility steel case at $14.95.

Available from better audio dealers, or you may order direct from manufacturer by adding $1.50 per unit for shipping walnut cabinet version and $1.25 per unit for utility steel case version. Or send for complete literature.

Russound/FMP, Inc., Portsmouth Avenue Traffic Circle, Stratham, New Hampshire 03885

CIRCLE 50 ON READER-SERVICE CARD

While others struggle to meet the demands of discrete four channel sound...

AUDIO-TECHNICA introduces its 2nd generation 4-channel phono cartridges.

Now you can play any kind of stereo or 4-channel record, including the most demanding discrete 4-channel discs. Audio-Technica Model AT14S with Shibata stylus provides 5-45,000 Hz response. Unique Dual Magnet* design and ultra-precise fabrication sets new performance standards for others to copy. From Japan's most advanced phono cartridge manufacturer with a 10-year history of innovation and design leadership.

Write today for technical data on the entire line of Audio-Technica Dual Magnet cartridges for every high fidelity system.

*Patents pending.

Audio-Technica®

AUDIO-TECHNICA U.S., Inc., Dept. 23H, 1655 W. Market St., Fairlawn, Ohio 44313

CIRCLE 51 ON READER-SERVICE CARD

ual to express his very soul without restraint. Surely it is as true then as it should be now that several varying interpretations of a Romantic work are valid and that an important aspect of performance is that the personality of the performer comes through. There is no one single correct way of playing "romantically," just as the old saying that "there is only one wrong way" is foolish on its face.

Bravo to Genesis! What enormous trouble it must have been to produce these enticing discs.

Donald M. Garvelmann
Bronx, N. Y.

Mr. Benko replies: It was not my intention to consign Corelli's entire output to the trash heap, but simply to point out the staggering amount of inferior baroque music on discs; nor did I wish to imply that research into unknown Romantic composers was limited to Frank Cooper's work in the field—although Professor Cooper has explored the obscure branches of Romanticism more than any other musicologist known to me. Both Mr. Garvelmann's well-considered opinions and Mr. Conningone's comments differ from my own views and this is simply a matter of personal taste. If I do not care for the Brahms concertos as much as his other music for piano, this opinion should hardly make me a target for pedants and rabid Brahms lovers. All their advocacy will not improve these concertos in my estimation.

Adrian Ratz is a competent pianist—but mere competency is not really acceptable for the performance of a super-virtuoso, ultra-flashy work like the Rubinstein Fifth.

Doubtless a great deal of money and effort was spent to bring these Genesis records before the public, and it is unfortunate that all the works selected and all the performances represented are not better. I find it difficult to understand the thought process that highly regards the Rubinstein Fifth Concerto simply because Joseph Lhevinne (or anyone else, for that matter) once played it in public, but this kind of thinking sometimes guides the artists and repertoire departments of even the large, prestigious record companies. I cannot deny that the Berwald, Rheinberger, and Rubinstein piano concertos most probably have the capacity to please somebody, somewhere, sometime; but I sincerely doubt if a majority of listeners will find much merit in them. But again, these are matters of taste on which Mr. Conningone and I will undoubtedly never agree.

Silent Musicals

Regarding the Gene Lees article "In Love with Life" [November 1972]. I'd like to question the statement that the 1928 version of Rose Marie was "history's only silent musical." I recently saw a silent Lubitsch version of The Student Prince, made at MGM with Ramon Navarro. There were no sequences in which the actors were obviously singing (except for the drinking song). Instead, it was treated more as a play without music. Did the 1928 Rose Marie have silent musical numbers, or was it like the Lubitsch Student Prince? If the latter, then Rose Marie is obviously not unique.

Thomas Cluster
San Francisco, Calif.

Actually there were many silent movies based on Broadway musicals. MGM itself produced, among other "silent musicals," Sally, Irene.
This receiver gives you more control over Beethoven's Fifth than Beethoven had.

We call it our SEA.
What it stands for is sound effect amplifier. What it does is nothing short of amazing.

If you're crazy about a certain singer, but not so crazy about the band that's playing with him, you can bring up the voice and push the music into the background.

The same thing can be done to emphasize a particular section of an orchestra. Or even a particular instrument.

And since there's not much point in having a great receiver with not-so-great acoustics, SEA lets you compensate for the shape of your room and the furniture in it.

But the nicest thing about the SEA system is its ability to create entirely new sounds by mixing and altering other recorded sounds.

This SEA receiver also has a linear dial scale with "Bull's Eye" tuning. Which takes the guesswork out of tuning FM.

Another great thing about this powerful FM/AM receiver: it's ready to handle 4-channel sound any time you are. Because it has all the necessary inputs and outputs for 4-channel sound.

So any frustrated conductor can now improve on Beethoven in the privacy of his own home.

JVC America, Inc.
50-35 56th Road,
Maspeth, New York 11378


CIRCLE 26 ON READER-SERVICE CARD

February 1973
and Mary with Joan Crawford (who was also in Rose Marie), Constance Bennett, and Sally O'Neil; The Red Mill, with Marion Davies; and The Merry Widow, with Mae Murray and John Gilbert. Incidentally, during this last movie's famous Waltz Scene, the on-screen conductor was actually playing for the dancers. His name: Xavier Cugat. Clark Gable can be spotted as one of the extras.

Where's That Club?

Several months ago I requested the details about Elmer Bernstein's film music club mentioned in the July 1972 issue of High Fidelity. Although I have received no reply, I am still very interested and if the club is functioning, I would greatly appreciate the information.

Robert S. Lichtenberger
Laurel, Md.

The response to Elmer Bernstein's proposal to form a club to record and distribute great film scores was enormous—in fact, five months after the issue appeared, letters were still arriving. Mr. Bernstein has informed us that he still plans to organize the club and is answering each letter with all possible dispatch.

Previn and Vaughan Williams

It was with a great deal of regret that I read Alfred Frankenstein's comments on the last installment of the Vaughan Williams symphonies from André Previn [November 1972]. I share Mr. Frankenstein's admiration for the quality and authenticity of the Boult performances, but not his unfortunate feeling that Previn is "an American conductor of no great reputation or achievement."

Certainly Previn has received extraordinary acclaim in London—both from audiences and critics, the latter having judged his set of Vaughan Williams symphonies as an excellent alternative to the Boult recordings. Mr. Frankenstein is certainly entitled to his opinion regarding these performances, but I feel that his evaluation of Mr. Previn's reputation is perhaps prejudiced and certainly uninformed. Readers will, I trust, temper his statements with their own sampling of the recordings, if possible.

David J. Lieberman
Boston, Mass.
When you make a better cartridge the world beats a path to your door.

From the U.S.
"Separation was tops... square wave response outstanding. We tracked it as low as ¼ gram."
Audio Magazine

"Among the very best. The sound is superb. Frequency response was flat within ±1 ½ dB from 20-20,000Hz. Compliance measured 35 x 10-6 cm/dyne."
High Fidelity

"The I.M. distortion at high velocities ranks among the lowest we have measured. A true non-fatiguing cartridge."
Stereo Review

From Great Britain
"A real hi fi masterpiece. A remarkable cartridge unlikely to wear out discs any more rapidly than a feather held lightly against the spinning groove."
Hi-Fi Sound

A design that encourages the hi-fi purist to clap his hands with joy."
Records and Recording Magazine

From Canada
"One of the world's greatest cartridges,"
Dealer's Choice, Scotty's Stereo.
Sound Magazine

From Japan
Grand Prize for cartridges in first all Japan Stereo Component competition.
Radio Gijutsu Magazine

For your free
"Empire Guide to Sound Design"

write:
Empire Scientific Corp.
Garden City, New York 11530

EMPIRE Mfd. U.S.A.
More soundtracks have come to life over an Altec system, so...

it makes sense they come alive best over an Altec system in your home. The famed Altec Voice of Theatre speaker system is used in nine out of ten movie houses. From this granddaddy of all speakers has emerged the new Altec 891A, shown below.

The 891A bookshelf speaker offers clear, balanced highs and lows. Full dynamics so you hear more music. More than you've ever heard before.

The Altec 891A sells for only $125 each speaker. Your Altec dealer will turn it on for you.

Or write Altec, 1515 S. Manchester Avenue, Anaheim, California 92803.

When music becomes more than just something to listen to, Altec is involved.
Presenting great artists conducting their own works, other people's works, playing the piano, and creating a monster.

Eugene List, Frank Glazer, Barry Snyder, and others, sixteen pianists and ten pianos in all, here create on record what Harold C. Schonberg of The New York Times called "the greatest piano noise (Philharmonic Hall) has ever heard" (referring to the October 14, 1972 concert). A monster album in stereo, twice as monstrous in 4-channel, surround sound.

Bernstein here brilliantly conducts the music from the opera "Carmen" with which he opened the Metropolitan Opera this season. The album, which is packed with sixty-two minutes of Bernstein at his best, also includes the "Peer Gynt" Suites.

Zukerman performs one of the most justifiably popular works in the classical repertoire: "The Four Seasons." His performance with the English Chamber Orchestra reemphasizes the talent that has made him, despite his youth, one of the foremost contemporary artists. Especially brilliant in Quad.

Stravinsky conducts his own ballets, "Jeux de Cartes, "Scènes de Ballet," and his brilliant arrangement of "Pas de deux." This album is being reissued by the popular demand created by the recent surge of interest in Stravinsky's music.

Copland conducts his own "Symphonic Ode," "Preamble for a Solemn Occasion," and "Orchestral Variations," all complex and interesting works here brought to you for the first time on an LP.

Ormandy, responding to the recent Bruckner renaissance, here conducts the "Romantic" symphony, a perfect work to show off the opulent, luscious-yet-disciplined sound of the Philadelphia Orchestra.

Graffman here celebrates his twenty-fifth anniversary as a concert pianist. The Chopin program he plays here shows him off as the talented virtuoso well deserving of the critical acclaim he has received during his extremely active quarter of a century of performing.

On Columbia Records
speaking of records

A Recording Philosophy

by Lorin Maazel

IN RECORD REVIEWS. I often see it stated that so and so has finally managed to make the definitive recording of a particular piece. But I feel that any performance the audience relates to is a definitive performance. This is what music is all about—re-creating in sound something that is vital and viable and meaningful at that moment. I find that a recording has more value as a document, not as a definitive point of departure. A good recording preserves a performance that has been tested in the concert hall, that is matured, that is the fruit of many live experiences—the quintessence of an artist's experience at that particular time of his life. It's definitive only until the next recording, either by another artist or by the same artist some years later.

I am therefore very much put out when an artist who hasn't really had a chance to fully come to grips with a work is engaged by a record company because of some extra-musical reason. Many record producers prefer an artist who has not had any deep experience with a particular work, probably because many of these producers are frustrated musicians, and they feel the insecurity, the tentative quality of the artist's view of the work in question. It gives them an opportunity to put in their two cents' worth: faster, slower, louder, softer, why not emphasize the second bassoon, etc. Many record producers are against having, say, a Charles Munch walk into the studio and simply do his thing. What is a young, still wet-behind-the-ears producer to tell the old master? There is nothing to say, nothing to do but turn on the mikese and say, "Oll you go." Eventually it all comes out in the wash, because people are interested in what a master has to say, they are not interested in a composite effort involving a superorchestra, an untried conductor, and an overconscientious producer. That kind of recording finally falls by the wayside. What endures is a recording such as De Sabata's Tosca (Angel 3508). I've recorded Tosca myself, and I'm pleased with my performance. Nevertheless I still treasure that old Angel set with Callas, Di Stefano, and Gobbi, simply because you hear the performance. It's there, it's real, it's not something that's been slapped together. I cherish Dinu Lipatti's recordings for the same reason, especially the ones he did of the Chopin and Grieg concertos (Odyssey 32 16 0141).

The recording industry is going through a kind of metamorphosis. Costs have risen to prohibitive levels. Up until three or four years ago, it was the custom in the United States for an orchestra to tape directly after a performance; the orchestra would play two or three subscription concerts, then go directly into the recording studio. That was a marvelous system. But that too has become extremely expensive. Hence you find companies recording symphonic literature in the most obscure places, geographically and artistically, simply to cut costs. Certainly the companies have made marvelous technological advances, but the technical proficiency of some performers, and of even some mediocre orchestras, is self-defeating. They have ironed out all the elements that make recording tedious. They have discovered that the fastest way of getting something on tape is to avoid nuance, to avoid the ritard, to avoid the rubato—to avoid, in other words, anything that rocks the boat. The conductor gives the downbeat, and off they go.

Of course, the piece is played well and recorded well, but it's dull because nothing ever really happens. It's like looking at a magnificent meal in Life magazine. It looks marvelously appetizing, but God preserve you if you have to eat it. One of the reasons why some companies record abroad is that musicians are paid for a specific job rather than for the number of hours it takes to complete the recording. This means there are no time pressures. If another tape has to be made you make it; if it takes a whole day, fine; if it takes a week, that's fine too. So you can take all kinds of musical risks and try for a more eventful and interesting performance. Generally speaking, these recordings do have a lower technical level than ours but they are splendid nevertheless. For example, the very fine Supraphon recording of the Dvořák symphonies performed by the Czech Philharmonic were recorded under these conditions.

I feel that these unfavorable trends are transitional and will be reversed as symphony orchestras find a new financial rhythm. We are beginning to grasp the fact that classical music is not a noncommercial affair. The old idea that music must be supported solely by a minority group, that they must be forever responsible for maintaining a nation's cultural heritage is fading. People are now beginning to understand that our classical heritage is of vital interest to the very survival of a nation, that it must be spread out into vast areas hitherto untouched by classical musicians. I think it will start with the schools, and television too will eventually become an important factor. So I am not at all discouraged by what is at present a rather difficult situation. Once the orchestras are on a firmer financial footing, the organizations supporting them will surely subsidize important recordings.

As a musician (and I think all musicians feel this way), I couldn't care less about sound dimension and the stereo aspects of a recording. Some of my favorite albums were made long before stereo, and I still listen to them with pleasure. Some great pianists of the past have left us some delightful mementos: the Chopin and Beethoven piano rolls of Josef Hoffmann; Rachmaninoff's old recordings, which may be sonically dim, but what is said is charming and graceful; or those old recordings by violinists Ysaye, Thibaud, and Sarasate— I find all of them extraordinary. I cite these old performers because it's so glorious for us today to listen to interpreters who had something very specific and personal to say. There is also the Robert Heger recording of Der Rosenkavalier (Seraphim 6041) with the Vienna Philharmonic and a cast including Lotte Lehmann and Elisabeth Schumann. Heger kept it going at a terrific clip—no one plays it any faster today—but the performance is molded, a result of many, many performances in the opera house, and you feel it. For example, there were many young conductors who had insufficient musical backgrounds, who couldn't even play an instrument. I think this kind of conductor is disappearing. A conductor I espe-
All in the family.

In the space of a few short years, the critically acclaimed Revox A77 has established itself as the tape recorder of choice for the knowledgeable enthusiast.

Now, from the same dedicated design team that created the Revox A77 come two new meticulously engineered components, an FM tuner and a stereo amplifier, that extend performance to the limits of current technology.

Take the Revox A76 FM stereo monitor tuner. With its incredibly sensitive front end, unique dual action IF strip, specially developed discriminator circuit and two regulated power supplies, the A76 represents an entirely new approach to FM signal processing.

In fact, the Revox A76 sets new performance standards in a half dozen different categories.

But simply quoting a list of specifications, however fine, doesn’t begin to describe the capabilities of this remarkable instrument.

For what distinguishes the Revox A76 from all the rest is its uncanny ability to capture the weakest signals with a clarity and a freedom from noise that is truly startling.

As for the Revox A78 stereo amplifier, it does everything a superb amplifier should do. And it does it just a little better.

Together or separately these remarkable components are a fitting addition to the Revox family and provide further proof of what we’ve said all along...

Revox delivers what all the rest only promise.
Ever wondered why records seem to have less dynamic range than live performances? Commercial record producers typically sacrifice as much as 20 db of dynamic range through compression (for reasons we explain in our literature).

The dbx 117 Decilinear Expander restores up to 20 db of the dynamics missing from records, tapes, and FM broadcasts. The Model 117 also lets you make professionally noise-free, full range recordings on even a modestly priced tape recorder.

The stereo dbx 117 is sold by better audio dealers or the factory at $159. dbx, Incorporated, 296 Newton Street, Waltham, Massachusetts 02154

circle 11 on reader-service card
Now Marantz adds full 4-channel to any stereo system.

Got the urge to go 4-channel, but don't want to give up your great stereo system? Well, Marantz ends your dilemma with the new Model 2440 adaptor/amplifier.

Rated at 40 Watts continuous RMS power with less than 0.3% distortion, the Model 2440 converts virtually any stereo receiver to full 4-channel capability.

But that's not all. Marantz components synthesize 4-channel sound from any stereo source (including your stereo records and tapes), decodes any matrix-encoded 4-channel disc or FM broadcast, and accepts optional SQ* matrix decoders and CD-4** demodulators. This Marantz-exclusive decoder feature provides built-in snap-in, snap-out adaptability to any future 4-channel matrix development. So you'll never have to worry about your system becoming obsolete.

The Marantz Model 2440 is another member of the Marantz family of 2 or 4-channel receivers, amplifiers and adaptors starting at just $149.95. See your Marantz dealer now.

Optional Marantz Model SQA-1 Decoder (shown) is just one of a variety of optional matrix decoders which snap instantly into exclusive SQ* decoder pocket found on all Marantz 4-channel equipment.

Optional Marantz Model SQA-1 DECODER (shown) is just one of a variety of optional matrix decoders which snap instantly into exclusive SQ* decoder pocket found on all Marantz 4-channel equipment.

A Bird in the Band

Los Angeles

There is in Los Angeles studio musicians an admirable, and sometimes even thrilling, spirit of experiment that has long since faded away in New York. And since L.A. has more first-rate players than any other city—an element in its population that has been swelled in the last year or two by all sorts of refugees from New York's slow-motion cultural dying—a great many profoundly interesting if little-publicized performances occur there.

One of these unexpected ear-openers took place on a recent Sunday evening at Donnie's, the San Fernando restaurant and gathering place where L.A. musicians are wont to repair to when they've made enough money to meet their pool payments and where they now go just to play. Saxophonist Med Flory and bassist Buddy Clark, two gentlemen well-known to the profession if not the public, put together a nine-piece band—five saxophones, one trumpet, and three rhythm—with the simple idea of playing orchestrations of Charlie Parker's compositions and solos. When the members gathered on the bandstand at Donnie's, they were surprised to find themselves facing a full house; and the audience in turn was surprised to find its mind blown by the music. Days later, both groups were still shaking their heads at the performance.

What had happened, of course, was a shared rediscovery of Charlie Parker.

It has long been a commonplace for those on the fringes of the jazz world to say, "Man, I dug Bird the first time I heard him." Any number of musicians, however, have told me that Parker utterly puzzled them when they first heard him. I personally thought he was crazy.

So original was Parker that neither I nor many others could assimilate what he was doing. Parker had an eclecticism so universal and wide-ranging—like Bach's, really—that his playing was bewilderingly brilliant.

I am almost persuaded that the greatest art is created out of existing vocabulary. Anybody can get up and make a lot of noise and call it "free" and "original." Indeed, jazz (and rock, and for that matter legit music too) has been cursed in recent years by an appalling tolerance of soloeism in the quest for originality—a quest that has had conspicuously little success. Self-indulgent indiscipline, the euphemism for which is "self-expression," has taken us away from music itself. It has led us, as the English historian J. H. Plumb says of the dawn of romanticism in the early nineteenth century, "to false attitudes, to posing, to self-conscious eccentricity, to spurious nonsence." Bird was free, but he was astonishingly disciplined. And he had genius. Genius takes materials that are already there and makes something new out of them. Some of Parker's characteristic phrases are as precise as any of the mathematically derived examples in Nicolas Slonimsky's Thesaurus of Scales and Melodic Patterns. In fact, some of them are exactly the same. Parker would quote show tunes, sometimes very obscure ones, and his playing was full of veiled allusions to works of the past. "I think he must have had total recall for everything he ever heard," Buddy Clark said. And he used it all. As so often happens with genius, the new combinations and juxtapositions of known elements he used at first left the public and other artists confused and surprised.

The point is that music is not about Hentoffian social content. Music is about notes. And it was as a refresher course in this oft-obscured fact that the Buddy Clark-Med Flory performance was most effective. Hearing Bird's bright, wild, free, skittering, silver flights of exuberant fancy orchestrated for five saxophones was like seeing a favorite novel turned into a really good movie. The performance told me what Bird was about more than all the printer's ink that has been expended on him (though Robert Reiner's The Legend of Charlie Parker is a valuable book). I came away feeling that at last I understood him.

Parker has been dead for seventeen years. Much of what he did, in a fortuitous and happy relationship with Dizzy Gillespie, has passed into the world's musical language. One hears bebop phrases even in children's animated cartoons and in television commercials.

You'd think Bird's own solos would sound stale after years of being cannibalized. But that's not the case. Any waving I may have experienced in my feeling that nine-tenths of what has happened in all music in recent years is pure crap was instantly swept away by Bird's originality.

The word genius is debased by current usage. But in the sense in which it is applied to the top rock of mountain peaks only and not to the cordillera and all its foothills, any country in any given century produces very few geniuses. And I am inclined to think that in the twentieth century, America has had only two musical geniuses: Charles Ives and Charles Parker; Ives was really a turned page-founder, any country in any given century produces very few geniuses. And I am inclined to think that in the twentieth century, America has had only two musical geniuses: Charles Ives and Charles Parker; Ives was really a turned page from the nineteenth.

Describing Bird's genius, or that of any other musician, is next to impossible. But one is tempted to try. Med Flory, who played lead alto in the performance at Donnie's and shared with Buddy Clark the long task of transcribing and orchestrating the improvisations, said: "I never heard Bird get hung up, except on Lover Man, and that was just before he went to Camarillo." (Parker had a nervous collapse during a record date and was taken to hospital; the flawed Lover Man solo is now part of his legend.) "He'd jay-walk across the changes," said Flory. "He'd play other chords below the chords. But I never heard him have a blank-out, a brain lag. It was like Mozart—only Bird had no eraser."

Clark said, "The beautiful thing about Bird was the way he'd take time apart."

"Stretch the time and catch it up," put in Flory. "Surrealism." They were referring to pace of time in the musical sense, but one of the odd things about Parker's solos is that they do set up an actual sense of temporal distortion.

Like Bach, Parker would begin phrases at odd and unexpected times and

Buddy Clark and Med Flory are trying to locate copies of several Charlie "Bird" Parker records: the flawed take of Lover Man; the four tracks recorded with Red Norvo, The Gypsy; and the original version of Embraceable You—not the alternate masters. Anyone who has these records or information about them please contact Clark at 12670 Jimeno, Granada Hills, Calif. 91344.
The same flatness of response. The same application of the basic laws of physics. The widest range with the least distortion of any speaker its size. All these make the HERESY a superlative primary speaker where space is limited.

Tweeter and midrange, as on the KLIPSCHORN, are horn loaded. The woofer, a direct radiator, has the low diaphragm amplitudes and velocities necessary for low modulation distortion. Although it occupies only 1.5 cubic feet, the response range and efficiency equal or exceed systems of considerably larger size.

Where an existing stereo array comprises large Klipsch models, HERESY speakers, being compatible, are ideal for expanding to a quadraphonic or other multi-speaker array.

Klipsch and Associates, Inc. P.O. Box 280H-2 Hope, Arkansas 71801

*Please send me your latest brochure and list of dealers.*

Name
Address
City State Zip
"Without a doubt, the Design Acoustics D-12 is one of the finest sounding home speaker systems we have ever encountered."

**Equipment Test Reports by Hirsch-Houck Laboratories January 1973 Stereo Review**

**POWER RESPONSE:**
- ±2db 30-15,000 Hz.

**DISPERSION:**
- Uniform power radiatation over 46 stereadiams.

**POWER OUTPUT:**
- 100 db SPL in 4,000 cu. ft. room with 50 watts input.

**DISTORTION:**
- Function of frequency and power level, lowest at 25 Hz of any speaker measured.

**SPEAKER COMPLEMENT:**
- Nine 2-1/2" diameter cone type tweeters.
- 5" diameter mid range, and 10" diameter high excursion woofer.

**ENCLOSURE:**
- Dodecahedron shaped (21/2 cu. ft.) tuned to 27 Hz resonance. Maximum width 22", height 30" on pedestal. Weight 45 lbs.

**NOMINAL IMPEDANCE:**
- 8 ohms

Price: $325.00 per unit

For more detailed information, write:

Design Acoustics
P.O. Box 2722, Palos Verdes, CA 90274
Telephone: (213) 530-5065

---

**THE MIRACLE WORKER**

When Sherwood can take America's most popular receiver, increase its low frequency RMS power, broaden the power bandwidth, improve FM selectivity by 10 dB, and reduce the price $20.00...that's a miracle.

**THE SHERWOOD S-7100A....$199.95**

(including walnut case)

For complete information write Sherwood Electronic Laboratories, 4300 North California Avenue, Chicago, Illinois 60638.
We’ve written the book on kits

You can get a copy free

Shown below are only a few of the more than 350 kits fully described in the 1973 Heathkit catalog. Kits for every interest, every budget...including color TV; stereo systems; electronic organs; marine equipment; a kitchen waste compactor; home intercoms and protection systems, garage door openers; table radios; portable radios and phonographs; guitar amplifiers and accessories; educational electronic workshops for youngsters and adults; tool sets; electronic test instruments; amateur and shortwave radio gear; radio-control equipment; metal locators.

Can you build a Heathkit? For 25 years people just like you have been doing it - armed with no more than a soldering iron and a few conventional hand tools.

No matter how complex the kit, the manual reduces assembly to a simple step-by-step operation. Add to that the availability of the technical correspondence department here in Benton Harbor, and service people in 36 retail stores across the country, and you see why we say “we won’t let you fail.” And finally, building a Heathkit is fun, pure and simple. The coupon below gets you started.

Here are just a few of the new kits in this new ’73 edition

See them all at your nearest Heathkit Electronic Center...or send for FREE ’73 Heathkit Catalog

CIRCLE 21 ON READER-SERVICE CARD
Only the sound is heavy.

Koss breaks the lightweight sound barrier with a revolutionary new High Velocity Stereophone.

Up until now a lightweight phone meant a lightweight sound. But not any more. Because Koss engineers have developed a micro/weight, high velocity type stereophone that sounds like a heavyweight. And that's an achievement no music lover will take lightly.

Unique electro-acoustical design.

Unlike conventional stereophones which contain the sound waves in a sealed acoustical chamber, the new Koss HV-1 High Velocity Stereophone vents the back sound waves to the rear. Without raising the resonance or inhibiting transient response. This unique electro-acoustical design concept provides not only unusual lightness and hear-thru characteristics, but also the exciting, full-range Sound of Koss as well.

Superb tonal quality.

And by substantially reducing the mass of the moving diaphragm assemblies used in the HV-1, Koss has been able to achieve a wide-range frequency response of unusual fidelity. Delicate overtones, which add to the faithfulness of the reproduction are retained. Yet, bass response is extended, clean and "unmuddied."

Stylish low-silhouette design.

Designed to fit close to the head, the new Koss HV-1 Stereophone has a stylish, low-silhouette design without the cone-type projections found in other headphones. This slim design permits unusually fine acoustical tuning of the element chamber at the factory. Which means that, unlike other lightweight phones, every Koss HV-1 Stereophone provides the breathtaking Sound of Koss. And that's not something to treat lightly.

Designed for unprecedented comfort.

You'll listen in comfort hour after hour. Because the new Koss HV-1 is lighter than 10 ounces. And because it has the perfect balance you expect in a Koss Stereophone. Not to mention a glove soft vinyl-covered headband and acoustical sponge ear cushions.

Hearing is believing.

Listen to the Koss HV-1 Stereophone at your favorite Hi-Fi Dealer or Department Store. And get the whole story on the heavy Sound of Koss by writing Virginia Lamm, c/o Dept. HF-372. We won't take your interest lightly either.

KOSS HV-1 stereophone
from the people who invented Stereophones.

KOSS CORPORATION, 4129 N. Port Washington Ave., Milwaukee, Wis. 53212. Koss S.r.l., Via Dei Valtorta, 21 20127, Milan, Italy
In your report on the JVC CD-1667 cassette deck [October 1972] you imply that JVC's ANRS is not entirely compatible with Dolby B—that you can't record with one system and play back with the other and still expect “perfect” reproduction. But you don't say which system you prefer. How about it?—John R. Balducchi, Baltimore, Md.

We lean toward Dolby on two grounds. First, the Dolby B system already is so deeply entrenched that it has become a de facto standard. Not only can you buy a wide variety of Dolby equipment, but Dolby B encoding has been used for quite a number of prerecorded cassettes and is used in FM broadcasting to some extent as well. It's not impossible that Dolby circuitry may become as common as tape-monitoring connections in audio equipment; at the moment we see no basis for a comparable statement about ANRS. Second, we believe the Dolby circuit to be technically superior on at least one count: Its ability to compress and expand high frequencies with minimum interference from lower-frequency signals. If, for example, tape hiss tends to fluctuate with the audio level when there are no high frequencies present to mask the hiss, the hiss tends to catch your attention and be more apparent, rather than less. This undesirable effect is known as pumping; and trying to make both Dolby B and ANRS pump audibly we have been successful only with the ANRS.

I've read that I can copy matrixed quadraphonic recordings in stereo on my Teac 6010 open-reel deck, just as I would any stereo recording, and play the tape back through a matrix decoder to recover the full quadraphonic effect. Could I do the same thing with the multiplexed RCA Quadradsics, or would their high-frequency carrier pose a problem? If it would, might the use of chromium dioxide tape solve that problem?—Scott C. Lewis, Austin, Tex.

We'd say forget it. While the system does work with matrixed recordings, the bandwidth of Quadradsic signals (to about 45 kHz) is beyond the capabilities of normal home tape equipment; chromium dioxide is not currently available in open reels. The 6010 is designed for regular ferric oxide tape; the “demodulators” used to extract the quadraphonic information from the Quadradsic signals are specifically designed for use with phono cartridges, rather than tape decks. You'd have to be something of an engineering genius to adapt all the elements so that they will work together to do what you want. As a matter of fact, we understand that the Quadradsic disc cut at slow speed from tapes that are proportionately slowed down in order to solve some of the special problems involved.

Why should one spend hundreds of dollars on a high-quality open-reel deck—as I have done—if 1) there are very few issues on commercially recorded reels relative to cartridges and cassettes, 2) one resides in an area where one can't get really good quad signals even with the most sophisticated of antennas, and 3) the broadcasts contain nothing worth recording?—Charles A. Kanter, Fayette, Ala.

We're tempted to answer: Why indeed! Actually there are some uses (tape editing, for example) for which the open-reel deck is irreplaceable, but all presuppose an activist approach on the part of the user. If you use a tape deck simply as an alternative to discs for the collecting and reproduction of program material from regular commercial sources, then the paucity of open-reel issues plus the degeneration of FM programming pose real problems. It's a moot point whether the open-reel fans have let down the tape duplicators through insufficient support, or the duplicators have let down the fans. For instance, we see Dolby-ized open-reels at 3% ips as a near-ideal format for long works where continuity is important—Wagner operas, for example—yet no processor has had the commercial temerity to attempt such a project. There simply aren't enough open-reel users with Dolby equipment to support it.

In rereading the article on FM “How to Understand Our FM Test Reports” [February 1972] I didn't find the word selectivity even once. The uninitiated would take this to mean that selectivity is only of marginal importance in a tuner and does not deserve data of its own in your test reports. Do you disagree with the importance given it by other magazines?—Chauncey Chen, Berkeley, Calif.

Not at all. And since you apparently haven't seen any of our recent reports we should point out that alternate-channel selectivity now is a standard item in the “Additional Data” boxes for tests of FM tuners and receivers. At the time the article appeared we still were relying on a count of stations logged through our local cable FM system as a rough index of selectivity—or rather of over-all performance, since sensitivity, quieting characteristics, capture ratio, image rejection, and selectivity all influenced the actual count in that test. So did reception conditions. That's why we've abandoned the cable test in favor of the added lab test for selectivity.

Some time ago I wrote an item [News & Views, October 1972] about the proposed Federal Trade Commission rules governing the advertising of power-amplifier capabilities. What are your real feelings on this subject?—Robert Hagenbach, Carmel, Ind.

It would be obvious from the item itself that we feel the FTC rules are far more valid than the loophole-ridden EIA “specifications” by which most noncomponent home-entertainment products are rated; and they are in fact better than we had dared hope for when the FTC first raised the subject. Even in components, the rules seem to have had an impact already—although this may be merely coincidence. In recent literature we seem to see that 1 kHz harmonic distortion ratings are disappearing in favor of full-bandwidth ratings. (An amplifier rated at 0.5% THD at 1 kHz may run as high as 5% THD at 20 kHz but the same power output; an amplifier rated at 0.5% THD, 20 Hz to 20 kHz will produce no more than 0.5% distortion at any frequency within that range.) Kenwood, Pioneer, and the other component manufacturers who have tightened published specs in this or similar ways are to be congratulated whether or not the FTC rules had anything to do with the case. But this tightening is only a minor refinement by comparison to what is needed among makers of compact systems and packaged phonographs (typically EIA numbered) who still print utter nonsense about their products and have made it plain that, for the most part, they plan to continue the nonsense until the FTC starts twisting arms.

A friend insists that there is no bias switching in the Teac 350, though it has a Crolyn/ferric switch. Is this possible?—Norman Winter, Pensacola, Fla.

Yes. The 350—and apparently many other current machines equipped with tape switches—doesn't actually change the record bias in switching from one tape type to another; it changes only record equalization. Since the most common practice under these circumstances is to bias for chromium dioxide and then boost high frequencies during recording with ferric oxide tapes to make up for the losses occasioned by the excess bias, the ferric oxides must work at something of a disadvantage. A true bias switch would be preferable in this respect, but an examination of our reports for the 350 and other current models will show that these machines do very well with ferric oxides nonetheless.
Static on FM?

Noise is the nemesis of high fidelity, and FM broadcasting has its own particular noise problems. Up to now the key to FM noise suppression has been pre-emphasis—the boosting of high-frequency signals in broadcasting and a reciprocal de-emphasis network in the receiver that attenuates the high end and with it the noise. In this respect FM broadcasting can be compared to disc recording, where the RIAA high-frequency equalization curve is used for much the same purpose.

Now Dolby Labs—a name synonymous with noise reduction—has suggested revising the FM pre-emphasis factor as a concomitant of employing a Dolby B system. Dolby says the conversion of the time constant—the factor in terms of which FM pre-emphasis is specified—would have the effect of multiplying by seven the “covering” power of U.S. stations. Listeners could then pull in marginal stations with greatly improved signal-to-noise ratios. Many engineers have long favored some such change, although Dolby’s proposal has some new wrinkles.

But the proposal bears directly on a long-time gripe of the FM listeners—the loss of dynamic range because stations so often use limiting to prevent overmodulation. B-type encoding combined with the altered time constant would increase high-frequency headroom by up to 10 dB, according to the Dolby people. And by changing both factors at once the reduced pre-emphasis would approximately correct the “excessive” brilliance that appears to be present in Dolby B signals when they are played back without benefit of Dolby circuitry. In other words present broadcast equipment would not have to be changed unless the station is going Dolby; and present receivers would not even require a treble-control touchup when tuned to a Dolby-processed signal.

Present (75-microsecond) pre-emphasis is shown in upper curve; proposed (25-microsecond) pre-emphasis in lower solid curve. Dotted line represents approximate apparent brightness added by Dolby processing when receiving equipment contains no Dolby circuit.

With Dolby B noise reduction already in use by some stations, and with delivery of Dolby reception equipment only just beginning, Dolby sees this as the perfect moment for making the change. So far, however, the FCC—which would have to approve any change in the pre-emphasis standard—has yet to be heard from.

Record Records

The world continues to be alive with “The Sound of Music,” says RCA. Sales of the soundtrack album are approaching thirteen million worldwide, making it the largest selling album in the history of the recording industry. Certainly Columbia’s “My Fair Lady” must be right up there, we thought. Columbia says yes, it’s up there (about seven million copies worldwide), but (surprise!) it’s way behind Simon and Garfunkel’s “Bridge Over Troubled Water,” which is now passing the nine million mark.

New Hope for Open-Reel Fans

Open-reel tapes are the quality medium for the reproduction of music, right? Not always. Too often tape hiss is as intrusive as the clicks and pops of LP discs. Now Ampex says two improvements incorporated in its new Ampex II tape series will significantly reduce this noise.

First, as previously announced in HF, Ampex will Dolby-encode those open-reel releases that will benefit most from the process. Perhaps of greater general interest is Ampex’s decision to use low-noise, high-output tape for all its AST open-reel releases. This tape is said to reduce noise levels by up to 3 dB.

Incidentally, Ampex is not following up Vanguard’s move into Dolby B quadraphonic open-reel issues, nor has it released any quadraphonic reels for some time. Ampex says it’s studying the market to see whether the demand will increase.
Other fine turntables protect records. The new $79.95 PE 3012 also protects the stylus.

Some of the finer and more expensive turntables stress their ability to protect records. Which is as it should be.

But no turntable, at any price, can promote its ability to protect the stylus. Except PE. For this is a feature exclusive with PE. And it's available on all PE turntables, including the 3012 at $79.95.

This fail-safe feature prevents any possible damage to the stylus by preventing the tonearm from descending to the platter unless there's a record on it. Simple, foolproof and very important.

Yet this is not the only reason for you to consider the 3012, no matter how much or how little you intended to spend for a turntable. Because the 3012 also has a number of features you won't find on any other turntable at or near its price.

For example: variable speed control that lets you match record pitch to live instruments. Cue-control viscous-damped in both directions for smooth rise and descent. And, a single-play spindle that rotates with the platter to prevent binding or causing eccentric wear.

In short, the 3012 offers exactly what you've come to expect from the craftsmen of West Germany's Black Forest. Good design, fine engineering, costly materials and meticulous manufacturing.

But if you do insist on spending freely, there are two other PE's to choose from. At $119.95 and $149.95. Both are superb precision instruments, offering progressively greater sophistication.

You should consider the matter carefully before spending more than $79.95. And to help you decide, we're offering our new brochure. Simply circle the number at the bottom of the page.

The new PE
Precision for under $100

Impro Industries, Inc., 120 Hartford Ave., Mt. Vernon, N.Y. 10553

Circle 24 on Reader-Service Card
Ditton loudspeaker series offered here

From England's Rola Celestion Ltd. comes the Ditton series of loudspeakers, available in this country through Hervic Electronics, Inc., of Los Angeles. The series ranges from the $450 Ditton 66 Studio Monitor (shown), said to offer substantially flat response from 25 Hz to 30 kHz, to the $91 Ditton 10 Mk II, rated for 45 Hz to 15 kHz. The use of a passive Auxiliary Bass Radiator (ABR) in three of the six systems is said to ensure controlled bass. All speakers are available in matched pairs in teak or walnut.

And now from Heath: a Dolby cassette deck

If you're looking for a project to fill the long evenings of winter, Heath-kit is ready to oblige with the AD-1530 Deluxe Dolby Cassette Tape Deck—the first Dolby equipment to be available in kit form. Heath's specifications: frequency response ± 3 dB from 40 Hz to 12 kHz with ferric oxide tape, or 40 Hz to 14 kHz with chromium dioxide; wow and flutter less than 0.25 per cent rms; S/N ratio, 48 dB with the Dolby circuit off. The amplifier and Dolby system use modular plug-in circuit board designs. Price: $249.95.

Power in the raw from Tomlinson

The new Model 1002 power amplifier from Tomlinson Research Instruments Corp. of Tallahassee, Florida is a high-power stereo amp in utility dress. Rated by the company at greater than 100 watts per channel into 8 ohms and greater than 160 into 4 ohms, with distortion of less than 0.1 per cent at any power level, the direct-coupled amplifier features protection circuitry and modular construction. The price is $450.

Kenwood's new four-channel receiver

All current four-channel options—discrete, matrixed, and synthesized—are allowed for in Kenwood's KR-6140A AM/FM receiver. The matrix section has separate switching positions for both the SQ and the RM (QS) matrices. The unit has recording and playback jacks and monitor switches for two four-channel tape decks, two four-channel aux inputs, and outputs for a four-channel speaker system plus two remote stereo pairs of speakers. The KR-6140A sells for $599.95.

See-through Superex headphone

Superex Electronics Corp. is marketing a see-through version of its PRO-B VI headsets. A transparent plastic cover on the earcups allows a view of the printed-circuit crossover network and inner acoustic chamber. This unit originally was designed as a display demonstrator for the standard cordovan-colored PRO-B VI (also available). The heart of the PRO-B VI is a woofer design based on the acoustic-suspension principle and a ceramic tweeter. It costs $60 and comes with a fifteen-foot coiled cord and a clip that attaches to your clothing to relieve cord pull.
You can. In 4-channels. With a Panasonic discrete system. Panasonic chose discrete as its 4-channel standard for a lot of reasons. First, it has the highest degree of speaker separation and steady sound positioning of any type of 4-channel system. And in addition to playing discrete 4-channel tapes and records, a Panasonic discrete system enhances the sound of stereo tapes, records, and radio. Because of our Quadriplex™ circuitry.

Start with one of our 4-channel receivers. Like Model SA-6800X. It has Panasonic's Acoustic Field Dimension. That lets you adjust the speaker separation electronically. Plus a full 300 watts of power (IHF).

You'll also need a tape deck. For 8-track cartridges, there's the RS-858US. It plays and records 2 and 4-channel cartridges. With four separate input level controls. And 4 VU meters. If you want all that in reel to reel, there's our 4-channel deck, Model RS-740US. It has Hot Pressed Ferrite heads, noise suppressor systems and other features. That add up to a frequency response of 30-23,000 Hz at 7½ ips. And an S/N ratio of better than 50 dB.

If you want records, you'll want the SL-1100 direct-drive turntable. With wow and flutter of less than 0.03% W/R/M/S. And the SE-405 demodulator for Compatible Discrete 4-channel (CD-4) records. Like RCA Quadradiscs.

As well as matrix 4-channel, stereo and monaural records.

And our speakers, Model SB-750 are 3-way air-suspension systems. With 5 speakers in each enclosure. Two domed tweeters. Two domed midranges. And a 12" woofer.

We can also let you see 4-channel sound. On our 4-channel audio scope. Model SH-3433. The screen will show you how much sound you're getting from each channel.

You can see our discrete 4-channel components at your franchised Panasonic Hi-Fi dealer. The man who can make your wishes come true. But this time in 4 channels.

FOR YOUR NEAREST FRANCHISED PANASONIC HI-FI DEALER, CALL TOLL FREE 800 243-6000. IN CONN., 1-800 882-6500
Here is another wonder from Sansui. Who else but Sansui engineers could have achieved it? We've highlighted seven significant features of the many that will make this total-capability FM/AM Stereo Receiver the most wanted instrument of its kind. Actually there are more than 30, many of them Sansui exclusives, that set the SEVEN off from others. Yours for $459.95.

1. DIRECT-COUPLED POWER AMPLIFIER WITH AUTOMATICALLY RESTORING DOUBLE-PROTECTED OUTPUT. Direct coupling from one end of the power amplifier to the other yields unimpaired damping factor and transient response at exceptional power bandwidth and phenomenally low distortion levels. Both quick-acting fuses and relay circuits protect both amplifier and speakers if failures occur, with automatic self-restoration if the problem is transient.

2. FULL-FEATURED JACK FIELD FOR DOLBY, QUADAPTERS AND MORE. Connect any noise-reduction adapter, Dolby or other, and activate it with push-button convenience for tape recording. Go to four-channel stereo simply by connecting an adapter and rear-channel amplifier any time you wish, again with pushbutton activation. Connect two tape decks through a choice of regular pin jacks, three-contact phone jack or DIN multiple connector. Connect two phonographs. In addition, quick connect/disconnect links between amplifier and preamp sections permit separate use or addition of other add-on devices.

3. CERAMIC FILTERS AND IC's IN FM IF. For exceptional selectivity and rejection characteristics with full bandwidth, minimum phase shift and remarkable freedom from distortion. The IC embodies a 3-stage differential amplifier. Two ceramic resonators filter each of three stages.

4. SIGNAL-GRABBING FM FRONT END WITH DUAL-GATED MOSFET, 4-GANG TUNING CAPACITOR AND WIDE-DIAL LINEAR FM SCALE. A sophisticated two-stage RF amplifier and mixer stage uses a low-noise MOSFET in conjunction with three costly, special-purpose silicon transistors and a 4-gang frequency-linear tuning capacitor. That's why the SEVEN is outstanding with respect to sensitivity, IM distortion and image ratio, and offers a dial scale precisely calibrated in 250kHz steps for pinpoint tuning.

5. TRIPLE, STEPPED EQUALIZER-TYPE TONE CONTROLS. Separate treble, bass, and midrange tone controls, the first two calibrated in 3dB steps, the midrange in 1dB steps, for custom tailoring of response across the full audio spectrum.

6. THREE-STAGE, DIRECT-COUPLED EQUALIZER/PREAMP AND CONSTANT CURRENT DRIVER AMPLIFIER. High signal-to-noise ratio, high stability, extremely wide dynamic range and elimination of crossover distortion, as well as other types, all contribute to an exceptionally clean, effortless, unclipped sound. Broad frequency response beyond the audio extremes also prevents phase shift at the low or high end of the spectrum, to add to the exceptional purity of reproduction.

7. NEW-DESIGN, QUALITY AM TUNER. AM reception is not just an “also” on the SEVEN: learn again how good AM can sound, at its best. An RF preselector-amplifier combines with a 3-gang tuning capacitor and an IF section that includes a 2-resonator ceramic filter for ideal bandpass characteristics. A 2-stage Automatic Gain Control Circuit acts on both RF and IF sections for constant volume regardless of signal strength. A whistle filter eliminates other-station beat interference.

MORE THAN SEVEN—Other features of the SEVEN include:
- Sharp-cutoff, Negative-feedback High and Low Filters. Low-distortion circuitry using especially designed transistors provide 12dB/octave characteristics.
- Brute-strength Power Supply. High plus-and-minus DC power supplies with constant-voltage stabilization and ripple filter applied to the equalizer/control circuits, plus 4 bridge rectifiers and 2 huge 4,700-mf capacitors for the power amplifier. All for clean, rock-steady handling of signals with ample power reserve.
- Two Large Tuning Meters. One for signal strength, the other for center channel, for precision tuning.
- FM Muting Switch. Off for hunting distant stations; on for velvet-quiet tuning.
- Three-System Speaker Selector. Off for headphone-only listening; also A, B, C, A+B and A+C.
- Adjustment-free Sharp-cutoff Filter for Multiplex Carrier. Front-panel Headphone Jack, Grounding Terminals, Switched and Unswitched AC Outlets, One-Touch Connector Terminals for Speakers and Antennas, 300-ohm/75-ohm FM Antenna Inputs, Loudness Switch ... and more, more, more.
and its seven wonders

SPECIFICATIONS

- Power Output
  - IHF Music
  - Power Bandwidth, IHF
  - Frequency Response, Overall
  - Distortion, Overall
  - Total Harmonic IM
  - Hum and Noise, Overall (IHF)
- FM Sensitivity (IHF)
- FM Signal/Noise
- FM IF or Spurious-Response
  - Rejection
- FM Capture Ratio
- AM Sensitivity
- AM Selectivity
- Phono Input Sensitivity
- Phono Input Maximum
- Total Harmonic Distortion vs. Power (20 to 20,000 Hz)

THE SANSUI MODEL SIX:

There's great news for those who want the essential performance capability of the Model SEVEN, but whose power-output requirements are somewhat less demanding. Look into the Superb SANSUI SIX, close relative of the SEVEN with basically the same design, features and performance capability.

$389.95.

SANSUI ELECTRONICS CORP.
Woolside, New York 11377 • Gardena, California 90247
ELECTRONIC DISTRIBUTORS (Canada), Vancouver 9, B.C
SANSUI ELECTRIC CO., LTD., Tokyo, Japan • Sansui Audio Europe S. A., Antwerp, Belgium

CIRCLE 50 ON READER-SERVICE CARD
Our very remarkable crowd pleaser.

The ADC 303AX.
Without a doubt, the most popular speaker we've ever made.
Time and again, enthusiastic owners have written to tell us how very pleased they were with the 303AX. Fantastic... outstanding... beautiful... and remarkable were among the more commonplace accolades we received.

As for the experts, they expressed their pleasure in more measured phrases such as, superb transient response, excellent high frequency dispersion, exceptionally smooth frequency response and unusually free of coloration.

Obviously, a speaker like the ADC 303AX doesn't just happen.
It is the result of continually designing and redesigning. Measuring and remeasuring, improving and then improving on the improvements. All with only one goal in mind...
To create a speaker system that produces a completely convincing illusion of reality.

And we believe that the key to this most desirable illusion is a speaker that has no characteristic sound of its own.
We've even coined an expression to describe this unique quality... we call it, "high transparency".

It's what makes listening to music with the ADC 303AX like listening back through the speaker to a live performance.
And it is this very same quality that has made our very remarkable crowd pleaser the choice of leading audio testing organizations.

Finally, when you consider that this unparalleled combination of popular acceptance and critical acclaim is modestly priced at only $103*, you begin to appreciate just how very remarkable our crowd pleasing ADC 303AX really is.

*Other ADC high transparency speaker systems from $55 to $275.

Audio Dynamics Corporation
Pickett District Road, New Milford, Connecticut 06776
Norelco's DNL: Cassette Noise Reduction Without Preprocessing


Comment: The most striking single feature of the 2100 is the noise-reduction circuitry—the DNL, standing for Dynamic Noise Limiting. In operating principle it seems to be quite similar to the dynamic noise suppression devices that first appeared on the consumer market over twenty years ago; the big difference is that the DNL really works. The next most striking thing about the 2100 is its styling: European in its simplicity but not quite antiseptic, as some European designs tend to be. The asymmetrical placement of the control panel gives it a certain boldness, though we found it a little less than ideally functional.

The counter, tape well, pilot lamps (for recording and DNL) and "piano-key" controls all are at the left of the top surface. The keys are slightly smaller than average and all have verbal identification—no color coding or symbols, which might have helped in quick identification of the correct control under some circumstances. Along the sloping face in front of these elements are the dual meter, recording-level sliders for each channel (there are no playback-level controls), and six pushbuttons: three for tape matching in the record mode (regular, high-performance, and chromium dioxide), and one each for recording mode (mono/stereo), DNL, and AC power.

Along the bottom of the front panel are connections for mikes (a pair of miniature phone jacks) and headphones (the usual stereo phone jack). On the back panel are the usual RCA phono jacks for input and output cable pairs. (There is no European DIN socket in this model, which apparently is built specifically for the 120-volt market area.) Also on the back panel are access holes for adjustment—by a technician—of the DNL operating level.

We said that DNL was unique in that it really works. Dolby works too, of course, but it is not a comparable noise-reduction scheme. With Dolby and similar techniques the tape must be preprocessed (encoded) during recording if the benefits of the system are to be enjoyed. With dynamic noise reduction this preprocessing is unnecessary, but the conventional dynamic devices have suffered from unwanted side effects—notably the "pumping" that makes unwanted noise fluctuate audibly in response to changing program levels. Or the high frequencies in the program may be audibly affected by the circuit's action. We have been unable to make DNL misbehave in these ways. Press the DNL button and tape hiss drops in level (subjectively, by about the same factor as that offered by the Dolby circuit); and it will do so with any tape it's playing.

Technically the 2100 checked out in the lab at about par or better. Speed accuracy (at 1% fast) was what we would consider par, but better than par in its being unaffected by changes in line voltage. Note that the meters' 0-VU point is relatively high by contrast to most models we've tested recently. Philips is staying close to its original specification in this respect, while other manufacturers generally choose to set the meters so that home recordings will be at a lower level, improving high-fre-
frequency response and adding an extra safety margin against overload on peaks albeit at the expense of effective S/N ratios.

The dual meter is convenient, since it allows you to evaluate both channels simultaneously with ease, but when confronted with sudden bursts of tone the needles tend to overshoot badly making readings for short-duration peaks unrealistically high. You need to be careful in using the sliders, which are critical to the touch, since their total travel distance is less than $1\frac{3}{4}$ inches; even slight movement of the controls makes a relatively large difference in recording level, but after you are familiar with this machine, you should have little trouble either here or with the meter.

The most attractive features of the 2100 certainly are its sturdy construction and the DNL. Particularly for recordists who already own a large collection of non-Dolby cassettes, it is an attractive unit of unique capabilities.

**New Sophistication in Lenco Turntable**

The Equipment: Lenco L-85, a two-speed (33 and 45) single-play turntable, with integral tone arm, in wood case. Dimensions: 18 by 14$\frac{1}{4}$ by 5$\frac{1}{2}$ inches. Price: $179.95; hinged dust cover, $19.95. Manufacturer: Lenco, Switzerland; U.S. distributor: Benjamin Electronic Sound Corp., 40 Smith St., Farmingdale, N. Y. 11735.

Comment: This is a Lenco all right, but minus the feature for which Lenco turntables are best known: the continuously variable speed adjustment working off a tapered drive shaft and idler. Instead the L-85 combines a synchronous motor, a belt drive, a vernier speed adjustment with built-in strobe, and an automatic shut-off feature. All told it is the most luxurious and sophisticated Lenco to date.

At the right of the top plate are "on" and "off" but-
tons, a speed selector knob (33 or 45), and the speed vernier which has an "off" position. We tended to use the "off" as the normal setting. CBS Labs measured 33 rpm as 0.9% fast and 45 rpm as 1.0% fast with the vernier turned off, but variations in AC line voltage did not measurably alter speed in this mode. The circuitry of the electronic vernier control, together with the strobe system, makes absolute speed accuracy possible, of course; but as the accompanying table demonstrates, it also introduces some change in speed with variations in line voltage. The vernier provides an adjustment range measured in the lab at -6% to +3% for either speed—more flexible than the ±3% claimed by Lenco.

The arm is basically similar to that on the L-75 (HF test reports, October 1971), though it has been handsomely restyled. The antiskating system retains the choice of suspended weights and notch positions of the earlier arm, though the design is different and it is easier to set. Measured antiskating forces proved to be close to optimum. Arm friction remains unmeasurably low. Tracking force settings now are made by moving a sleeve along the arm, which has calibrations for every whole-gram setting from 0 to 4 grams. These calibrations proved to be off by 20%. The 1-gram position results in a 1.2-gram tracking force, the 2-gram position in 2.4 grams, and so on. Since many users tend to set an arm for the cartridge manufacturer's minimum recommendation, rather than for a force somewhat higher to provide a safety margin, this inaccuracy may actually be something of an advantage. Arm resonance, measured with the Shure V-15 Type II Improved cartridge, is a 9-dB rise at 6.4 Hz—typical figures for today's better turntable units.

The plug-in shell on the tone arm will accept any standard cartridge and has provision for overhang adjustment, using a template supplied for the purpose by Lenco. A single-play large-hole adapter for 45s is provided, as is a little tone-arm clip that is used in cueing. A protrusion on the clip fits into three detents in the cueing support and aligns the stylus above the lead-in grooves of 12-, 10-, and 7-inch discs respectively. When this cueing feature is not wanted, the clip simply is slid out of the way along the tone arm. The upper surface of the cueing support now has an antiskid surface treatment that eliminates the side drift that might be encountered with previous Lencos. And the appearance and feel of the cueing lever and its associated damping system have been improved.

Predictably the belt drive improves performance significantly by contrast to the Lenco variable-speed idler system. Flutter averages 0.04% with NAB weighting, 0.03% with ANSI weighting; the ARLL rumble measurement was -63 dB. The platter weighs 3 pounds 6 ounces and supports the full width of a 12-inch record; the strobe markings are built into a flange at the outer edge and are illuminated at the front by a small strobe light. One particularly nice feature is the automatic shut-off. When the stylus reaches the final groove the cueing lever is automatically tripped, raising the arm, and the unit is then switched to "off." When you press the "on" button once again to play the next record the start-up time is about a second—much faster than on the variable-speed models. Though those older models have unique virtues, they are virtues for the specialist—for instance, the collector of early acoustic records whose speeds varied from the 78-rpm standard. In contrast, the L-85 is aimed squarely (and successfully) at that broader audience interested in a modern turntable for playing modern recordings.

### Lenco L-85 Vernier Speed Accuracy

<table>
<thead>
<tr>
<th>Speed</th>
<th>Accuracy at 120 VAC</th>
<th>Accuracy at 105 VAC</th>
<th>Accuracy at 127 VAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 rpm</td>
<td>0.1% slow</td>
<td>0.1% fast</td>
<td>0.1% fast</td>
</tr>
<tr>
<td>45 rpm</td>
<td>0.4% slow</td>
<td>0.4% fast</td>
<td>0.4% fast</td>
</tr>
</tbody>
</table>


Comment: The 3000-2 is unquestionably the most strikingly styled receiver we have reviewed in recent years. And in case you're familiar with the original European version (the 3000), it has been revamped some-
what with the U.S. market in mind. Most obvious in this respect probably is the increased power output. But it remains extremely European in feeling—and in many details.

Volume, bass, treble, balance, and FM tuning controls are a series of "slide-rule" elements across the top of the front panel. The remaining front-panel controls are in a low row across the bottom. They are, in order: the headphone jack, which is live at all times; on/off switches for speakers 1, speakers 2, low filter, and high filter; a green stereo pilot light; on/off switches for mono from the left input, mono from the right input, and tape monitor; a red AC-power pilot light; the power-off switch; a pair of FM tuning lights plus a signal-strength meter; and the six FM pretuning dials, which are protected from inadvertent misadjustment by a clear plastic snap-off panel. The reason the main power switch has no on position in the usual sense is because it interlocks with the source selector switches; press any source and the unit comes on automatically, the power-off switch being released to its up position in the process.

The back panel has RCA phono-jack pairs for the phono and tape inputs and tape-recording output, plus DIN jacks for each of these purposes. The speaker connections use DIN two-pin speaker/ headphone plugs, two pairs of which are supplied with the unit. Additional plugs or DIN cables can be bought from B&O or from local outlets carrying the Switchcraft/Preh line. There are three pairs of the corresponding jacks on the 3000-2: one for each set of speakers plus an input pair for use with equipment (a tape recorder, for example) that has its own power amp. When a signal is fed into this last pair it will go to any speaker pair whose front-panel switch is in the off position. This means that you can listen via the recorder's amplifiers when the 3000-2 is turned off completely; or you can use the 3000-2 to feed one speaker pair and the recorder to feed the other pair with a different program. The antenna connections also are unusual: a European jack for 250-300-ohm twin-lead, a concentric jack for 75-ohm coax, and a bracket to hold telescoping "rabbit ears." A matching 300-ohm coax connector can be bought from B&O; so can the rabbit ears ($8.60).

One special feature of the back panel, a channel-balance test mode, is used in conjunction with a series of screwdriver input level controls accessible through the bottom of the case. Adjustments are included for phono 1, phono 2, and tape playback, and permit levels to be matched to those produced by the FM section of the receiver. Mono program material is used to set the balance. First the front-panel balance control is adjusted for aural balance in the room, using an FM station as a source. Then the receiver is switched to the other inputs in turn, and a "test" switch on the back panel turned on to put one channel out of phase and cause cancellation between the two signals. The right channel is then adjusted for minimum output—that is, most perfect cancellation—and therefore optimum balance.

The tuner section's performance, as measured at CBS Labs, is generally about par, though two items stand out as particularly good. First is the linearity of FM response: almost dead flat in both mono and, except for a slight rise at the top end, stereo. The second is the surprising similarity of mono and stereo quieting curves. Above the threshold point the stereo curve is as good as the mono curves in many of the less expensive receivers we have tested recently. The amplifier section still is no powerhouse, though it's certainly more than adequate for any pair of conventional speakers in normal rooms and should handle two pairs of speakers well if they are not excessively inefficient. At rated output (36 watts) harmonic distortion creeps above the rating point (0.6%) at the frequency extremes—particularly in the very deep bass. At lower output (or even with normal program material, which does not go below 40 or 50 Hz) this is a negligible consideration, however, at half power (18 watts) and 1% of rated output (0.36 watts) the distortion is well below the 0.6% rating at all frequencies.

The Beomaster 3000-2 obviously has an extremely individual "personality"—and one that we found refreshing to work with. Its award-winning cosmetics and its functionalism both make it unusually attractive. The functionalism is, in fact, surprising; at first glance you might expect that the extremely long row of switches would lead to fumbling. But their grouping is so well thought out that we mastered the controls almost immediately. Only the small dials for the preset FM stations proved awkward; the AFC can be used to correct minor misadjustments, however. Overall, a handsome and unique product.
**Wide-Dispersion Speakers From Fisher**

**Beomaster 3000-2** Additional Data

<table>
<thead>
<tr>
<th>Tuner Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capture ratio</td>
</tr>
<tr>
<td>Alternate-channel selectivity</td>
</tr>
<tr>
<td>S/N ratio</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THD</th>
<th>Mono</th>
<th>L ch</th>
<th>R ch</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 Hz</td>
<td>0.37%</td>
<td>0.46%</td>
<td>0.50%</td>
</tr>
<tr>
<td>1 kHz</td>
<td>0.67%</td>
<td>0.67%</td>
<td>0.67%</td>
</tr>
<tr>
<td>10 kHz</td>
<td>1.7%</td>
<td>1.7%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IM distortion</th>
<th>1.0%</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>19 dB pilot</th>
<th>-48 dB</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>38-kHz subcarrier</th>
<th>-39.5 dB</th>
</tr>
</thead>
</table>

**Amplifier Section**

<table>
<thead>
<tr>
<th>Damping factor</th>
<th>24</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Input characteristics (for 36 watts output)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity</td>
</tr>
<tr>
<td>phono 1</td>
</tr>
<tr>
<td>phono 2</td>
</tr>
<tr>
<td>tape monitor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RIAA equalization accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>+1 5, -1 dB, 20 Hz to 20 kHz</td>
</tr>
</tbody>
</table>


**Comment:** Fisher's 500-series loudspeakers, of which the ST-550 is the top model, are designed with wide-angle dispersion in mind—a feature that has gained considerable attention in recent years and one that some listeners feel will be even more important to quadraphonic "imaging" than it is to stereo. All the speakers...
in the series use angled tweeter arrays of one sort or an-
other to achieve the required spread of high fre-
quencies, but the driver configuration in the ST-550 is
considerably more elaborate than that in either of the
lower-priced models.

There are seven drivers all told in the ST-550. In the
center is a 15-inch woofer. Flanking it on each side are
a domed midrange driver, a cone tweeter, and a domed
"side-dispersion" driver. The woofer is crossed over to
the midrange drivers at a nominal frequency of 600 Hz,
the midrange domes to the tweeters at 6 kHz. The extra
domes—which are not used in the lower-priced 500-
series speakers—are intended to reproduce a range
from 1 kHz to the inherent upper limit of these drivers,
according to Fisher. So although we have identified the
ST-550 as a four-way design it might with some justice
be called a three-way design with added dispersion
drivers.

On the back of the speaker enclosure are a pair of
color-coded binding posts plus three adjustment
knobs—for midrange, treble, and dispersion respec-
tively. Each has three positions: "0" (for normal), "+" (for boost), and "-" (for attenuate). These controls
proved to alter frequency response very little, except for
deviations in very narrow frequency bands the boost
and attenuation curves were generally within about 2
dB of each other. Indeed we could detect no specific
changes in the sound in switching from one position to
another, although with extended listening there did
seem to be some subtle alteration of balances. What dif-
fferences we could hear led us to prefer the normal posi-
tion in each of the three controls.

Nominal impedance of the system measures 6 ohms
(at about 100 Hz, following a rise to only 8 ohms at bass
resonance); above the rating point, impedance rises to
above 8 ohms and then gradually slopes off again. The
average impedance in the midrange and high fre-
quencies is a little higher than 8 ohms, but because of
the relatively low measured impedance at the rating
point and in the extreme bass (slightly less than 4 ohms
at 20 Hz) we'd suggest that you treat the ST-550 as a 4-
ohm system when considering multiple-speaker hook-
ups to transistorized amplifiers.

The power needed to produce the standard lab test
level of 94 dB at 1 meter in the midrange was 9 watts,
placing the unit's efficiency in the moderate range. It
handled 100 watts (for 105 dB) before exceeding distor-
tion limits from a 300-Hz steady tone and handled
pulses to 300 watts (average power, for 112.7 dB), the
capacity of the lab's test amplifier.

The wide-dispersion design does indeed spread the
sound, as demonstrated by the relatively close curves in
the frequency-response graph. (A beaming speaker
shows considerably greater high-frequency response
on-axis than off-axis.) Though the treble is not very
prominent in the over-all sonic balance, which is no-
tably strong in the lower midrange, test tones remain
audible and fairly well dispersed right up to 20 kHz.
Tones below about 15 kHz are approximately as audible
from the sides of the system as they are on-axis. The
bass is strong, remaining audible to about 30 Hz in lis-
tening to test tones, and is relatively free of doubling
above about 40 Hz.

Though the means that Fisher employs in designing
for wide horizontal dispersion are not entirely unique,
they do achieve the intended purpose. The ST-550 is,
incidentally, too large to be considered a typical book-
shelf unit (though the less expensive 500-series models
are closer to the two-cubic-foot "standard"). Fisher
says, and our listening confirms, that it will perform best
when placed against a wall and supported by a table or
other surface that holds it approximately at ear level.

Kenwood KR-7200 stereo receiver
Onkyo Model 20 loudspeaker system
Dokorder 9100 open-reel tape deck

CIRCLE 142 ON READER-SERVICE CARD

REPORTS IN PROGRESS
Stanton. Brings on the new.

A new Station, and a new sound hits the air in Kalamazoo, Michigan. WQLR STEREO starts serving the market in June, 1972 with all new equipment and new programming. Every cartridge on every tonearm at WQLR is a Stanton. Vice President, Bill Wertz states, “We chose Stanton because we were starting fresh and we needed to impress the community with the quality of our sound from the very first on-the-air minute. Naturally, the well-documented reliability of Stanton’s 500 series cartridges helped influence our choice.”

Radio stations all over the nation specify Stanton.

For on-the-air use, Stanton 500 series cartridges have the ability to withstand rugged handling without any lessening of audio quality. They meet all standards for reliability and sound quality, both in on-air playback usage, and in the production of transfers. These characteristics, which assure high quality sound with minimum maintenance, make them ideally suited not only for professional use, but for home stereo systems as well.

You can enjoy the professional audio quality of Stanton Products whether your purpose involves broadcasting or home entertainment.

Write today for further information to Stanton Magnetics Inc., Terminal Drive, Plainview, New York 11803.

*All Stanton cartridges are designed for use with all two and four-channel matrix derived compatible systems.*

CIRCLE 55 ON READER-SERVICE CARD
They've Been Squelched by Men
charges feminist Judith Rosen

Why Haven't Women Become "Throughout history the more complex activities have been defined and redefined, now as male, now as female, now as neither, sometimes as drawing equally on the gifts of both sexes. When an activity to which each could have contributed—and probably all complex activities belong to this class—is limited to one sex, a rich differentiated quality is lost from the activity itself. Once such a complex activity is defined as belonging to one sex, the entrance of the other sex into it is made difficult and compromising."—Margaret Mead.

A FRIEND OF MINE is a very accomplished composer, arranger, and orchestrator. I shall call her "Roberta Smith" because her name, with a slight alteration, could be mistaken for a man's. An agent got her a job orchestrating a motion picture score. When the producer saw her name, he asked, "Who is Robert Smith? I've never heard of him." The agent told the producer it was "Roberta Smith." There was a long silence and then the producer asked, "You mean it's a dame?" When he was told that it was in fact a dame, he was reluctant to employ her. Finally, however, he relented. "I'll take her on," he explained, "but only because I've got a lot of respect for you. If you say this broad can write, I'll go along with you.

This type of attitude lies as deep as the roots of modern civilization, with the woman composer, the patron, and music itself all being victims of traditionally imposed sex roles.

It is hardly necessary to cite example after example to divine the common thread running through the history of patronage in the world of music: Patrons, themselves men—with a few isolated exceptions (which may or may not prove the rule)—patronized male artists. Bach had the Margrave of Brandenburg and Prince Leopold of Anhalt-Cöthen. Haydn had Prince Nicolas Joseph of Esterháza; Wagner had Ludwig, the Mad King of Bavaria; and in modern times and under somewhat more exotic circumstances Nicolai Medtner (the poor man's Rachmaninoff) had the Maharajah of Mysore to foot the bills while he composed in his ersatz Romantic idiom.

In using the word "patronage" we cannot confine its application to the stereotyped image of the dilettante nobleman or the self-made millionaire trying to buy respectability. In its larger and more meaningful sense "patronage" is really the equivalent of "job" and "patron" the alter ego of "employer." Though it would be an extravagant statement to say that this male patron-employer was and is the cause of woman's suppressed and therefore secondary role as composer, it was he who greatly contributed to limiting the opportunities available to women composers.

This form of exclusion has permeated all levels of musical opportunity for female composers. It is an attitude which, until quite recently, has infected those in control of music education, symphony orchestras, and even so pervasive a patron as the motion picture studio.

Music was not always a man's world. During the early development of culture (and it still can be observed in many primitive societies), woman's role in the tribe was that of the procreator and guardian of music. Woman was responsible for all forms of music in connection with birth, death, love, work, and even war. With the rise of Western Civilization, accompanied as it was by the increasing power of the Church, woman was stripped of her role as either composer or performer. This was so because formalized music in the West was a virtual monopoly of the early Christian Church where women were excluded by the unrelenting prohibition mulier tacet in ecclesia (women are silent in the Church). Parenthetically, it should be added that

Judith Rosen, an amateur musicologist, is currently at work on a book dealing with women in music.

Continued on page 51
**They Lack the Ultimate Creative Spark**

claims psychologist Grace Rubin-Rabson

**Great Composers?**

**WOMEN HAVE LONG BEEN recognized as instrumentalis, teachers, singers, and singing actresses;** indeed, music has always been viewed as a feminine activity, as an area in which to show off a social accomplishment, as an aid to marriage. As a means of making a living. Except in the jazz field and its variants, music has always been viewed as a feminine activity, as an area in which to show off a social accomplishment, as an aid to marriage. Except in the jazz field and its variants, musically inclined men on the other hand, seem to show a somewhat masculine personality.

To date, feminine creativity in music has left little impression on the musical scene. To discover why, it is necessary to explore both the nature of higher-order musical composition and the nature of women. Since determined women do what they deeply wish to do, factors transcending social repression must be at work.

Clara Schumann, wife of Robert, though of lesser brilliance than he in the musical firmament, was nonetheless a star of considerable magnitude in her own right. A concert pianist who spent much of her time on tour, a sought-after teacher, an able counselor in her husband's career, she was a composer as well. Of her biological creativity there was no doubt—she bore eight children. In early nineteenth-century Germany, hardly noted for its liberal attitude toward women, Clara functioned fully. As a composer, she seems less successful. Of a trio of hers (performed recently in New York) she herself wrote: "I do not care for it particularly. After Robert's, it sounded effeminate and sentimental." But as a contemporary critic commented: "The lady needn't have compared her work to a masterpiece—it is all bad on its own: such wan thematic material, such banal harmonies, such pedantic and trivial watering down of ideas obviously assimilated from her spouse."

During the same period, Louise Bertin, a gifted French writer and musician, composed an opera for which Victor Hugo himself prepared the libretto. The opera was produced, but like most operas did not last. Berlioz, who thought her the most intelligent woman of her time, found her music indecisive in style and its melodies naive.

Women composers were no novelty either then or earlier when the twenty-two-year-old Mozart undertook to teach composition to a brilliant woman harpist. If he despised over her lack of talent and found her "lazy and stupid," he might have expressed the same reactions to a male student. He expected neither more nor less from her. What he failed to realize, however, was her complete lack of motivation. An angel at her harp, the focus of attention, to what end the struggle to write indifferent music?

The names of few women composers survive from the past and few resound in the present. There are none of first or even second order. Only an occasional musician of a certain age will remember Chaminade's piano pieces, the names of Germaine Tailleferre, Ethel Smyth, Lili Boulanger abroad, of Marion Bauer, Mabel Daniels, Radie Britain, Gena Branscombe, Louise Talma in this country—perhaps the best known of a long list of women composers.

Of Cécile Chaminade, born in France in 1857 and already an impressive talent at eight years of age, Percy Scholes commented that she was a writer of tuneful and graceful short piano compositions which, if they exhibited no intricacy of texture, no elaboration of form, and no depth of feeling, at least were pleasant enough to hear and play and so tasteful in conception and execution as to disarm the highbrow critic. Gustave Ferrari in Grove's Dictionary of Music and Musicians says only, "Notwithstanding the real charm and clever writing of many of Chaminade's productions, they do not rise above the level of agreeable drawing-room music." Perhaps her talent seemed initially marked in terms of her years and in relation to other women composers.

---

*Dr. Rabson, a Fellow of the American Psychological Association and a widely published author in psychological journals, is also a professional pianist who has taught music at Hunter College in New York. She is listed in American Men and Women of Science.*
Ethel Smyth, a year younger than her French colleague, was made a Dame of the British Empire in recognition of her success as a composer. A feminist, and jailed as a suffragette, she was sure that had she been a man her mark as a composer would have been more quickly made. Her supporters made the same claim but Scholes observed simply that “she would with difficulty have made it at all; it is fair to consider that these views of her music cancel out, leaving sex as no important factor in the sum.”

In the first half of this century, Germaine Tailleferre, a French musician, enjoyed considerable renown. Thibaud and Cortot played her sonata in public and Cortot performed her Concertino in D at a concert of the British Women’s Symphony Orchestra, in London. But her success has not lasted, again according to Grove’s Dictionary, “the reason being in part a slackening in her productivity as well as the fact that her talent, for all its charm and refinement, proved to be slender.” Critic Paul Rosenfeld, echoing Scholes on Smyth, was more acerbic. “Tailleferre has nothing of great novelty to say,” he wrote in Musical Impressions. “There is a certain charm and cleverness in what she writes that is feminine. She may in time prove herself a sort of Marie Laurencin [a French painter, born in 1885—Ed.] of composition . . . her talent is frail and her inclusion in the group (the Six) must be attributed chiefly to a fine enthusiasm for the sex on the part of the five male members.”

Two other Frenchwomen merit attention. One is Nadia Boulanger, who has been a teacher of composition to nearly every American composer since 1920. Like the skillful art forger whose technique in duplicating other artists’ styles guarantees no vitality in his original work, so Boulanger, who modestly admits to little merit in her own composition, nonetheless commands all the techniques for composing. The other is Lili, her sister, perhaps the greater talent, who worked intensively against an imminent early death. Both were winners of the Prix de Rome, awarded on the basis of compositions requiring voices, hence tapping the acknowledged feminine verbal competence.

Marion Bauer, who died in 1955, was well reviewed by critic William Henderson. Of her chamber music compositions he observed, “Those who like to descant upon the differences between the intellect of woman and that of man must have found themselves in difficulties while listening . . . It is anything but a ladylike composition.” The composer herself, who admitted to having no specific goal nor a definite plan to do anything important, professed to being pleased with her success and with her treatment in the critical musical world. Unfortunately, lasting eminence does not flower in a climate of such ambivalent motivation.

Of a toccata by Louise Talma (like Miss Bauer, a teacher of music on the college level), Olin Downes commented favorably on its rich orchestration and design. Her opera, The Acestiad, based on a libretto by Thornton Wilder, was presented in Frankfurt in 1962.

But why have women not been more strongly motivated to greater musical creativity? Is it simply a matter of men controlling the cultural climate? In a study by psychologist Paul Farnsworth, superior students at Stanford University rated a series of artistic activities on a masculinity-femininity scale. Both sexes agreed that ballet dancing was the most feminine, and passive activities—viewing, listening—as well as performance skills were appraised similarly. Those artistic activities rated most masculine were predominantly of the creative type. From this, Professor Farnsworth concluded: “Women appear to be so impressed by the dismal picture history has so far given of their contributions to the arts that they picture creativity as an enduring characteristic of the male role. So long as they retain this picture of themselves, it is likely
Typical of the women of the past whose compositional output has been viewed as a mixed blessing are (from left) Cécile Chaminade ("her works do not rise above the level of agreeable drawing room music"), Louise Talma (her toccata was praised for its rich orchestration and design), and Germaine Tailleferre ("her talent is frail").

that relatively few will be willing to put forth the effort essential to sustained creativity.

But why the "dismal history" and why the unwillingness to exert themselves? These may be effects only of a deep-lying cause.

Fundamental, and deriving from the sexual function, are differences in interests and motivations. With or without liberation, men will remain actively penetrating, women receptive, accounting for their readiness to accept and interpret. That this tendency is innate and not culturally conditioned appears in the laboratory study of baby monkeys reared together from birth without other social influences. The males run, fight, and explore; the females sit and watch. High-level human creativity is investigative, innovative, agonistic; receptivity and passivity will not conjure it into being.

The late humanistic psychologist Abraham Maslow reported profound male-female differences bearing on the feminine lack of will to high-level creation. All really serious men, he said, are messianic; women are not messianic. Such males have no intrinsic interest in power or money or anything but their mission. A male will neglect his health, risk his life, subordinate all else to his messianic mission. Man's duty is to the three books he must write before he dies. Men build bridges; that's their job. Though there are a few women philosophers, they do not write a philosophy, something to save the world. And, he observes, women often do not bother to publish even a good work. Nor have they shown much interest in invention—of things, of theories, of processes and procedures. But invention is implicit in musical composition, as witness the application of the word to Bach's two and three-part gems.

If women have left these activities to the biologically less productive male, the answer lies not only in the distraction of time and energy but in the profound satisfaction in the fulfillment of a primal function. That motherhood does not preclude other creative activity or superior performance in demanding assignments is everywhere apparent, but a mother does not "neglect her health, risk her life, subordinate all else to a messianic mission," except as her children are the mission.

Studies in male-female development and achievement show early differences in the sexes in addition to the greater outgoing energy of the male. Early in life, girls are verbally more competent than boys. The original verbal success reinforces motivation and propels them into writing and other essentially verbal activities. Add the feminine nurturant and social proclivities, and it is apparent why women concentrate in educational and other socially oriented services. They are often for the same reason far less active in the natural and physical sciences, engineering, philosophy, and mathematics. An interest in the last two, the abstract and the quantitative, is a requisite for serious musical composition and in women's disinterest in philosophy and mathematics we find reasons for the small number of them drawn to serious composition.

The personality profiles of high-achieving women—authors, mathematicians, Ph.D.s, psychologists, champion fencers, graphic artists, physicians—depart considerably from national feminine norms. They are, of course, intelligent; they are also flexible, original, rejecting of outside influence, dominant, self-sufficient, productive, socially aloof, less nurturant, often unmarried, more frequently divorced, with few or no children. The dedicated concentration necessary to reach the goal of superior musical creativity would presuppose a feminine personality even more aberrant from the norm.

Composing is itself essentially an intellectual craft, the manipulation of learned sound materials according to the degree of native talent, independent of a heaven-sent Muse. When, however, in the course of intense absorption the full treasury of personal resources becomes available, then "inspiration" enters in, not a breath from Olympus, but from the inner self. And when the inner breath is missing, even great composers reveal relatively arid stretches. As Stravinsky has said, a masterpiece is more likely to happen to the composer with the most highly developed vocabulary, a product of intense labor and growth. In the work of a gifted
composer, even the arid stretches are redeemed by his deep fertility and highly developed vocabulary.

An objective view of the somewhat controversial question of emotion as a musical component would more logically locate it not in the music but in the listener's association, a persistence of memories linked with emotion. The composer selects from a broad palette of tempos, dynamics, rhythms, harmonies, tone qualities, and literary references, those necessary to effect the association. Composers themselves make this articulate. Berlioz wrote: “Passionate subjects must be dealt with in cold blood”; Debussy: “People who cry when writing masterpieces are insolent jokers”; Tchaikovsky: “Among the happiest surroundings, I may write music suffused with darkness and despair”; Stravinsky: “Music is order.” Music, then, will not lure women into composition through its intrinsic emotion, whatever personal associated response they may project in performance.

Composing requires neither academic degrees, high intelligence as measured by tests, long training, nor costly overhead. Even a piano is not essential. Some composers work at the piano and find this contact imperative for guidance; for others it becomes a limitation of conception to familiar keyboard hand patterns. The technique of composing can be learned, though it cannot be taught, and teaching is a matter of making suggestions. It can be studied in texts and by comparative analysis of existing works. The choice of materials and their use depend on inventiveness, temperament, the composer's personal style, his native equipment, and taste. Without taste, the other attributes lie sterile. More even than these is the obsessive need to compose, an overwhelming impulse despite despair in the labor. Without the obsession, the anguish of the work itself may be overwhelming.

Tchaikovsky agonized over his Fourth Symphony: “There is something repellent, superfluous, patchy, and insincere in this work which the public instinctively recognizes.” Of his piano concerto: “The work progresses very slowly and does not turn out well. However, I stick to my intentions and hammer piano forte passages out of my brain: the result is nervous irritability.”

Of Chopin's travail, George Sand cited his clear image while walking; then a heart-rending labor at the piano; then a period of overanalysis when he could not find his original image and fell into despair, shutting himself up for days, altering a bar a hundred times, beginning next day with a minute and desperate perseverance. Then, having spent six weeks on a single page, to write it at last as noted down in the beginning.

Only to a Mozart, working in the calm conviction of being on earth to make music, was creation an unalloyed joy. Though a virtuoso, to him the piano was secondary. For the dedicated composer all other musical activities—teaching, playing, directing—are secondary. And many—Berlioz, Rimsky-Korsakov, Stravinsky, among others—were impelled to composition after earlier social and parental pressures had impelled them to other professions.

The agony and dedication requisite to serious musical production yields little but the satisfaction of creation: except for the rare opera successful during the composer's lifetime, there is almost no money in it, and save for a few, little fame. Presented once by an organization at considerable cost, a work may never be heard again. Unlike visible artistic productions, unheard music lies dead. Women, practical realists, foregoing the solitary intellectual enterprise that is composition, prefer to invest their time and talents in teaching and in performance where social contact is intrinsic, the rewards are tangible, and the exposure ego-satisfying.

Why there are no women composers listed among the eminent begins to clarify. Of all the women who study music, even at length, many will go into other activities and use it little or not at all. Of the more devoted, most will choose marriage and motherhood, including, not stressing, teaching or performance. The most gifted, vocally or instrumentally, will choose a career, including, not stressing, marriage and motherhood. When Erica Morini, herself an outstanding violinist, ascribes the smaller number of female virtuosos to a want of the necessary concentration, she is restating the obvious fact that living in the complex world of two careers requires a degree of compromise. Male virtuosos are occasionally composers as well; it is no wonder that female virtuosos rarely are.

For the production of masterpieces, rich talent is essential, and musical talent like any other is distributed sparingly, regardless of sex. If only a handful of women are drawn to composition, the probability of superior endowment is almost negligible.

Despite this, should an eminent female composer some day appear on the scene, a composite portrait will show her naturally possessed of marked musical talent, aptitudes for abstract and quantitative thinking, tenacity in the face of deep discouragement, patience in developing skills until the talent flows free and masterpieces have time to evolve, a conviction that composition is the primary purpose of her existence. Like other high-achieving women, she will be socially aloof, self-sufficient, minimally nurturant, indifferent to outside influence, innovative, agonistic. She will also demonstrate a working knowledge of machines and electronics if she is to carry musical sound forward.

As marriage, motherhood, and males are downgraded in women's century-old struggle for equality, one among them may make it her life mission, a "messianic mission," to prove that a woman can indeed become a great composer. No one will stand in her way. All power to her.
Judith Rosen
continued

the Jews, Mohammedans, and most of the Eastern civilizations were not much better in this regard.

When music was finally freed from the church and was used apart from ritual and liturgy, one might have expected women to be able to contribute to new forms of musical expression. But all creative expression is inevitably tied to and molded by the patterns of culture that exist at the time. Thousands of years of custom had established men as the musical leaders. Women were relegated to performing men's music, mostly as singers. Women accepted this role and men likewise accepted theirs. Few men who had success in music believed in or were interested in the attempts of a few women to prove themselves as composers. The harpist Carlos Salzedo once told his girl pupils that only men compose music. "Women," he reportedly said, "are born to compose babies." Sibelius too, at least once, seems to have rid himself of two girl composition students by suggesting that they go for a walk outdoors. According to one account, when they had left the room he remarked, "It would be a pity if the young ladies' cheeks were to lose their beautiful country color," and then began to instruct the remaining students (all male) in music theory.

Women were often forced to use noms de plumes in music as well as literature in order to gain recognition in a male-dominated world. Augusta Holmes, a foremost woman composer of the late nineteenth century, used the name Hermann Zenta. Ethel Smyth, early in her career and before she became actively involved in the feminist movement in England, signed her musical compositions E. M. Smyth.

One can only wonder what contributions women would have made to Western music if they had not been so inhibited by the society around them. Would the world's great composers have been exclusively men if women had continued in their primitive roles as the creators and guardians of musical tradition? The glimmer of an answer is given to us when we examine those rare moments in history when female composers were allowed to escape this repressive atmosphere, usually through the intercession of another woman—a queen, a royal mistress, or another lady of the court.

Francesca Caccini was one of the first composers to try the then new art form called "opera" in the early seventeenth century. She won the favor of Queen Maria de' Medici with her many operas and ballets. Tarquinia Molza, who was a conductor as well as a composer, and France's Clementine de Bourges (whose four-part chorus "Da Bei rami") signed "Clem. de Bourges" led future scholars to question whether she was the actual composer) are other examples of women composers of the Renaissance period. During the baroque era Elizabeth Jacquet de la Guerre, whose works survive and can be judged on phonograph records today ("Complete Harpsichord Works of Elizabeth Jacquet de la Guerre and Louis Nicolas Clerambault," Oiseau-Lyre OL 5013), and Antonia Bembo (a Venetian noblewoman whose musical artistry was respected at court) were both aided in their careers by the largesse of Louis XIV, primarily through the prompting of one of his mistresses. The classical period gave us Maria Theresia von Paradis (named for her godmother, the Empress of Austria) who though blind from early childhood was an accomplished pianist as well as gifted composer. Her Sicilienne can also be heard today on Ruggiero Ricci's recording "The Glory of Cremona" (Decca DXSE 7179). Maria Szymanowska wrote piano music in the late 1700s and gave us a foretaste of her more famous compatriot, Frederic Chopin, with her nocturnes, mazurkas, and polonaises. The most outstanding woman in music of the Romantic period is unquestionably Clara Wieck-Schumann, who though more often known as a gifted pianist and champion of her husband Robert's works, was a composer of the highest caliber. This musical era also produced
The untimely death of Lili Boulanger and the relatively early demise of Ruth Crawford Seeger robbed the contemporary musical world of future important works. In France Lili, the younger sister of Nadia, was extremely active and prolific during her short career. Fortunately, some of her best works are preserved on recordings. One has only to listen to the rendition of her three pieces for violin and piano by Yehudi Menuhin and Clifford Curzon (not available in this country) or the album, "Music of Lili Boulanger" (Everest 3059), including the magnificent Psaume 24, a composition that has been likened to Bloch's Schelomo and Honegger's King David—both of which were written after Psaume 24—to realize the extent of her musical gifts.

In 1913, when Lili was only nineteen years old she anonymously entered a competition and won the Grand Prix de Rome for her cantata Faust et Hélène—the first time this coveted prize was ever awarded to a woman. Then in 1918 she again submitted an original composition to the committee, but was denied entrance because that year the donors of the prize had restricted the competition to males under thirty, presumably feeling that this was the most likely group to produce a great composer. Vindication was never achieved. In a few months, at the age of twenty-four, Lili Boulanger was dead.

In America, the works of Ruth Crawford Seeger, the first woman ever awarded a Guggenheim Fellowship, stand out in their originality of form and contemporary approach. Her numerous chamber works were composed primarily during the 20s. In 1931 she married the folk musicologist Charles Seeger, thus becoming the stepmother of Pete Seeger. (She and Charles had four children of their own, including Peggy Seeger, another noted folk musician.) Ruth devoted herself to transcribing, editing, and arranging Anglo-American folksongs. She became nationally known for her original and effective techniques in preschool music activity. A return to "serious" music was marked by her Suite for Wind Quintet published in 1952. It shows a development of style akin to that of Bela Bartók, combining folk spirit with the classical approach. It demonstrates her development as a composer, but her sudden death in 1953 (at the age of fifty-two) left us with only a hint of what might have been.

Admittedly these examples, though historically interesting, are few in number. But today the number of women composing is increasing. Nicola LeFanu, the twenty-four-year-old daughter of English composer Elizabeth Maconchy, is one of the brightest young contemporary composers. While her mother's generation could boast but a few active English women composers (among them Elizabeth Lutyens, Priaulx Rainier, and Phyllis Tate), Ms. LeFanu is one of a dozen or more women of her age who are currently composing for the concert stage. This is indeed a hopeful sign. There is of course a real need for the further liberalizing of social and educational barriers so that more and more women can fulfill their desire to write music, for it is only out of quantity that quality will emerge. We cannot expect excellence from everyone who attempts to compose, and neither is it fair to expect excellence from the handful of women who are managing to express themselves. To the recurring question, "Why has there never been a female Bach?" one could as easily query, "How many male composers had there been before there was one Bach?"

Would Bach have been so prolific or so great if he had not held the positions in church and court which required him to compose? He had the responsibility of turning out cantatas, chorales, and motets on a weekly basis. Pressure of this sort is very conducive to creativity. With music a male's world for so long, who was interested in giving a job, much less a commission, to a woman composer? An example of incentive in the form of employment did occur in ancient Greece, where women were hired as professional mourners. They were expected to sing dirges for long periods at a time and to create new music continuously. In such an environment, women flourished as composers.

A position and the resulting financial rewards are only part of the requirements for the successful functioning of the creative imagination. In addition to that kind of incentive, a co-existing necessary stimulus is audience recognition.

Pauline Oliveros, mostly known as a composer of electronic music, has her own method of having her works performed. She finds the vehicle first and then composes with a particular person or group in mind. But of course this does not always guarantee a very wide audience due to the limited market for avant-garde works. Perhaps because Ms. Oliveros is a faculty member of the University of California at San Diego she has had more exposure than most other young composers. But any woman who is not in this position has the added difficulty of attempting to win the artistic approval of male conductors and impresarios. Men, on the other hand, do not face the cultural obstacles that impede professional women.

The future of women composers, however, seems to be brightening as a general awareness of the loss of "a rich differentiated quality" becomes more prevalent. And the day may not be too far distant when composition will no longer be considered the exclusive domain of men but a field of endeavor in which everyone can participate, on the basis of talent and not sex.
Available Recordings of Works by Women Composers


Kolb, Barbara: Trobar Clus; Solitaire for Piano and Vibes; Barbara Kolb, piano. Chicago University Contemporary Players, Ralph Shapely, cond. Turnabout 34487.


Maconchy, Elizabeth (1907- ): Quartet No. 5. Allegri Quartet. Argo ZRG 572.

Mamlok, Ursula (1928-): Variations for Solo Flute. Composers Recordings CRI 212.


Those New 4-Channel Receivers

Their quadraphonic capabilities vary widely; here's a guide through the maze of claims.

IF SOMEONE were to ask you what the difference is between quadraphonics and stereo, you'd probably think the answer is easy. Four channels versus two, right? But the distinction, especially when applied to receivers, isn't always quite that simple.

First of all, the quadraphonic capabilities of receivers vary widely, and the four channels can be utilized in several ways. Then there is the difference between matrixed and discrete systems. Again, while both employ all four channels individually, some receivers allow for bridging, or "strapping," the amplifiers into a higher-powered two-channel stereo system in which the total stereo output may exceed the total quadraphonic output—a factor depending largely on speaker impedance and on the way the amplifiers are connected to each other. Strapping the four amps changes their output performance somewhat. The accompanying table indicates models with the bridging option by listing power output for two-channel, as well as for four-channel, operation. All other units use only the front (or back) amplifiers in reproducing stereo. The ratings (supplied by the manufacturers) represent continuous power into 8 ohms.

A receiver's capacity to operate the two front channels independently of the two back channels in some instances allows you to funnel different stereo programs simultaneously to two locations. This function is indicated by an asterisk next to the four-channel ratings. There are degrees of adaptability to this double-stereo use, however, depending on the receiver's switching options.

The importance of four channels of amplification really depends on what you want out of your system. The major limitation of a two-channel receiver is a basic one: It cannot reproduce four-channel material "correctly" unless you add an external stereo amplifier. Except for RCA's "discrete" Quadradiscs, quadraphonic records are produced by matrix encoding techniques and most of the matrix decoders built into quadraphonic receivers are basically designed to match one of these matrix systems: CBS's SQ, Sansui's QS (called regular matrix, or RM, by most other companies), and Electro-Voice's (E-V) Stereo-4. The type of quadraphonic receiver that contains only two channels of amplification also uses a form of matrix decoder—sometimes called a "speaker matrix" but probably best known as the Dynaquad circuit—to create the quadraphonic effect and drive the four speakers. But for precise matching of the matrixing in present quadraphonic records with these receivers you would need an outboard decoder plus another stereo amplifier.

Add-ons provide the electronic link between stereo and four-channel. No four-channel receivers come with all the possible quadraphonic facilities built in. And while most four-channel receivers have some type of matrix system, a number of them employ a basic "catchall" circuit. Therefore, as with twin-amplifier quadraphonic models, you may eventually want to add a decoder specifically designed to play the SQ or RM discs. If you plan to play Quadradiscs, an outboard CD-4 demodulator is a must. Some Japanese manufacturers have announced receivers with these demodulators built in, but at this writing no such receivers are yet available. And for playing Q-8 tape cartridges you would need an eight-track tape deck.

Some quadraphonic modular receivers are available with built-in eight-track players, but these compacts generally lack the adaptability for future upgrading via outboard units. And even among true quadraphonic receivers there are degrees of adaptability. Since any outboard unit will need appropriate connections and switching if it is to be used successfully, the more of these options the receiver offers the better. Of course you could use the extra input and switching options often built into the outboard units themselves—you can, for example, plug an eight-track player into many outboard matrix decoders rather than directly into the receiver—but the resulting system tends to be unnecessarily complex. If all the outboard units you will want can be connected simultaneously and directly into the receiver, you'll find quadraphonic life simpler.

FM: A Waiting Game

The FM sections of many receivers are said to be "quadraphonic-ready," which means they have a special output connection from the detector circuit. This jack can feed a signal to an outboard adapter that presumably will be developed in the future to handle discrete quadraphonic FM broadcasts from a single station, once a broadcast method has received government approval. Quadraphonic transmission already is a reality. However, except for experimental broadcasts, the programs are all matrixed, and thus technologically compatible with existing Federal Communications Commission standards. A quadraphonic receiver with an appropriate matrix decoder (or any stereo receiver with an appropriate external decoder and back-channel amp) can reproduce the program quadraphonically. It is possible to broadcast discrete
material; but the station must either first encode it, which defeats the advantages of the discrete format, or team up with another station to carry half of the program as a separate stereo signal pair. This latter procedure, of course, requires the listener to have two receivers at home, each tuned to a different frequency. The FCC permits this plan only on a limited, experimental basis.

Single-station discrete four-channel transmissions in the immediate future are unlikely. The FCC currently is studying more than half a dozen proposals. All would interfere in some way with the subcarrier frequency now allocated for background music (SCA) signals, limit response in or separation between some of the four signals, and/or add greater noise to the received signals. The FCC apparently is waiting for quadraphonics to stabilize before moving decisively and selecting the discrete transmission system. Come what may, the detector output jack adds to the adaptability of your receiver; but when you'll get to use it no one knows.

The Muddle of Matrices

Much of the confusion about quadraphonic receivers centers in the matrix systems they employ. Present models usually have the CBS-SQ, Sansui-QS (RM), original Electro-Voice, E-V's new Universal, or a variation on the Dynaquad speaker-matrix circuit. All are alike in that they will produce some kind of quadraphonic effect from the relationships—in phase and intensity—between the two signals of a stereo pair, matrixed or not. But each system behaves somewhat differently, and your choice will probably depend on which system offers the recordings you most prefer.

SQ is currently the most popular system with recording companies and equipment manufacturers: More than fifty now are licensees of CBS. Integrated circuits for SQ purposes are just becoming available, including some for “logic” enhancement of the quadraphonic effect. ICs are not necessary for these purposes, but they reduce the cost considerably. The other major matrix format, RM, is used by many Japanese equipment manufacturers. Some equipment has a front-panel control for choosing more than one matrix system; more often the additional matrix option or options are for simulating quadraphonics from stereo sources. One company (Panasonic) allows the listener to vary matrix parameters by adjusting “width” and “depth” controls and a phase-shift selector (0, 90, and 180 degrees). Electro-Voice's new Universal system chooses median decoding values that allow playback of all encoded material within very close tolerance of “ideal” values. The amount of material available in E-V's own matrix format, however, is currently quite limited. Finally there are what we have been calling the speaker-matrix systems,
Those New 4-Channel Receivers Compared

Receivers With "Strippable" 2/4-Channel Amps

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model</th>
<th>Built-in Matrix Decoder(s)</th>
<th>Power Output</th>
<th>Inputs</th>
<th>No. of Sets of Four Speakers Accepted</th>
<th>4-Channel Headphone Output</th>
<th>Approx. Price ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akai</td>
<td>AS-8100S</td>
<td>&quot;surround stereo&quot; simulator</td>
<td>2 x 36W 4 x 18W</td>
<td>2 mag.</td>
<td>2</td>
<td>•</td>
<td>400</td>
</tr>
<tr>
<td>Fisher</td>
<td>304</td>
<td>SQ</td>
<td>2 x 38W 4 x 15W</td>
<td>4 mag.</td>
<td>2</td>
<td>•</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>404</td>
<td>SQ</td>
<td>2 x 55W 4 x 28W</td>
<td>4 mag.</td>
<td>2</td>
<td>•</td>
<td>400</td>
</tr>
<tr>
<td></td>
<td>504</td>
<td>SQ</td>
<td>2 x 110W 4 x 40W</td>
<td>4 mag.</td>
<td>2</td>
<td>•</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td>801</td>
<td>2 simulator positions</td>
<td>2 x 22W 4 x 11W</td>
<td>3 mag.</td>
<td>2</td>
<td>•</td>
<td>750</td>
</tr>
<tr>
<td>Harman-Kardon</td>
<td>50+</td>
<td>SQ</td>
<td>2 x 25W 4 x 12.5W*</td>
<td>2 mag.</td>
<td>1</td>
<td>•</td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>75+</td>
<td>SQ; SQ matrix blend (for other systems); simulator same as 75+</td>
<td>2 x 57.5W 4 x 24W*</td>
<td>3 mag.</td>
<td>2</td>
<td>•</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td>100+</td>
<td>same as 75+</td>
<td>2 x 70W 4 x 30W*</td>
<td>3 mag.</td>
<td>2</td>
<td>•</td>
<td>600</td>
</tr>
<tr>
<td>JVC</td>
<td>4VR-5414</td>
<td>SFCS (simulator)</td>
<td>2 x 20W 4 x 16W</td>
<td>4 mag.</td>
<td>1</td>
<td>•</td>
<td>370</td>
</tr>
<tr>
<td></td>
<td>4VR-5445</td>
<td>same as 5414</td>
<td>2 x 34W 4 x 21W</td>
<td>4 mag.</td>
<td>1</td>
<td>•</td>
<td>500</td>
</tr>
<tr>
<td>KLH</td>
<td>Fifty-Four</td>
<td>SQ</td>
<td>2 x 60W 4 x 25W*</td>
<td>3 mag.</td>
<td>2</td>
<td>•</td>
<td>560</td>
</tr>
<tr>
<td>Panasonic</td>
<td>SA-5700</td>
<td>&quot;Quadriplex&quot; for all systems; simulator variable &quot;Quadriplex&quot; for all systems; simulator same as 6400X</td>
<td>2 x 28W 4 x 14W*</td>
<td>2 mag.</td>
<td>2</td>
<td>•</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>SQ-6400X</td>
<td></td>
<td>2 x 38W 4 x 19W*</td>
<td>4 mag.</td>
<td>2</td>
<td>•</td>
<td>430</td>
</tr>
<tr>
<td></td>
<td>SA-6800X</td>
<td>same as 6400X</td>
<td>2 x 84W 4 x 42W*</td>
<td>4 mag.</td>
<td>2</td>
<td>•</td>
<td>600</td>
</tr>
<tr>
<td>Pilot</td>
<td>365</td>
<td>SQ; &quot;Matrix-4&quot; simulator same as 365</td>
<td>2 x 30W 4 x 15W*</td>
<td>1 mag.</td>
<td>1</td>
<td>•</td>
<td>380</td>
</tr>
<tr>
<td></td>
<td>366</td>
<td>same as 365</td>
<td>2 x 60W 4 x 30W*</td>
<td>1 mag.</td>
<td>2</td>
<td>•</td>
<td>500</td>
</tr>
<tr>
<td>Scott</td>
<td>554</td>
<td>&quot;DVR&quot; simulator</td>
<td>2 x 60W 4 x 25W*</td>
<td>2 mag.</td>
<td>3</td>
<td>•</td>
<td>550</td>
</tr>
<tr>
<td>Toshiba</td>
<td>SA-304</td>
<td>2 &quot;QM&quot; simulator positions</td>
<td>2 x 20W 4 x 10W</td>
<td>1 mag.</td>
<td>1</td>
<td>•</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>SA-504</td>
<td>SQ; &quot;QM&quot; simulator</td>
<td>2 x 53W 4 x 30W</td>
<td>3 mag.</td>
<td>2</td>
<td>•</td>
<td>500</td>
</tr>
</tbody>
</table>

* Asterisks indicate 4 amplifiers can be used as 2 independent stereo amplifiers, each with "4 x-" power rating.

Receivers With 4-Channel Amps

<table>
<thead>
<tr>
<th>Electro-Voice</th>
<th>EVR-4X4</th>
<th>Universal</th>
<th>4 x 10W</th>
<th>2 mag.</th>
<th>2</th>
<th>•</th>
<th>250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenwood</td>
<td>KR-6140A</td>
<td>SQ; RM</td>
<td>4 x 30W</td>
<td>4 mag.</td>
<td>2</td>
<td>•</td>
<td>600</td>
</tr>
<tr>
<td>Lafayette</td>
<td>LR-220</td>
<td>SQ; simulator</td>
<td>4 x 11W</td>
<td>2 mag., cer.</td>
<td>2</td>
<td>•</td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>LR-440</td>
<td>same as 220</td>
<td>4 x 25W</td>
<td>2 mag.</td>
<td>2</td>
<td>•</td>
<td>370</td>
</tr>
<tr>
<td></td>
<td>LR-4000</td>
<td>SQ; logic; 2 simulator positions</td>
<td>4 x 47.5W</td>
<td>3 mag., cer.</td>
<td>2</td>
<td>•</td>
<td>500</td>
</tr>
</tbody>
</table>
### Receivers With 4-Channel Amps (Continued)

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model</th>
<th>Built-in Matrix Decoder(s)</th>
<th>Power Output</th>
<th>Inputs</th>
<th>No. of Sets of Four Speakers Accepted</th>
<th>4-Channel Headphone Output</th>
<th>Approx. Price ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lloyd's</td>
<td>M-825</td>
<td>&quot;Quadratic&quot; for all systems</td>
<td>N/A</td>
<td>3 mag.</td>
<td>1</td>
<td>•</td>
<td>N/A</td>
</tr>
<tr>
<td>Marantz</td>
<td>4415</td>
<td>&quot;Vari-Matrix&quot; (all systems, simulator); optional SQ same as 4415</td>
<td>4 x 15W</td>
<td>2 mag.</td>
<td>2</td>
<td>•</td>
<td>400</td>
</tr>
<tr>
<td>Miida</td>
<td>3020</td>
<td>SQ</td>
<td>4 x 8.5W</td>
<td>1 mag., cer.</td>
<td>2</td>
<td>•</td>
<td>290</td>
</tr>
<tr>
<td>Motorola</td>
<td>FH-411JW</td>
<td>EV</td>
<td>4 x 3.5W</td>
<td>1 cer.</td>
<td>1</td>
<td>•</td>
<td>200</td>
</tr>
<tr>
<td>Olson</td>
<td>RA-632B</td>
<td>&quot;universal decoder&quot; for SQ, EV, simulator same as 632B</td>
<td>4 x 15W</td>
<td>2 mag.</td>
<td>2</td>
<td>•</td>
<td>230</td>
</tr>
<tr>
<td></td>
<td>RA-660B</td>
<td>all systems</td>
<td>4 x 5W</td>
<td>2 mag.</td>
<td>1</td>
<td>•</td>
<td>190</td>
</tr>
<tr>
<td>Onkyo</td>
<td>TS-300</td>
<td>all systems</td>
<td>4 x 13W</td>
<td>2 mag.</td>
<td>1</td>
<td>•</td>
<td>400</td>
</tr>
<tr>
<td>Pioneer</td>
<td>QX-4000</td>
<td>SQ, RM same as 4000</td>
<td>4 x 10W</td>
<td>2 mag.</td>
<td>1</td>
<td>•</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td>QX-8000A</td>
<td>SQ, RM same as 4000</td>
<td>4 x 22W</td>
<td>2 mag.</td>
<td>1</td>
<td>•</td>
<td>550</td>
</tr>
<tr>
<td>Realistic</td>
<td>QTA-750</td>
<td>SQ</td>
<td>4 x 11.5W</td>
<td>1 mag.</td>
<td>1</td>
<td>•</td>
<td>260</td>
</tr>
<tr>
<td></td>
<td>QTA-790</td>
<td>SQ</td>
<td>4 x 25W</td>
<td>1 mag.</td>
<td>2</td>
<td>•</td>
<td>550</td>
</tr>
<tr>
<td>Sansui</td>
<td>QR-550</td>
<td>QS (RM); 3 simulator positions same as 550</td>
<td>4 x 8W</td>
<td>1 mag.</td>
<td>1</td>
<td>•</td>
<td>240</td>
</tr>
<tr>
<td></td>
<td>QR-1500</td>
<td>same as 550</td>
<td>4 x 15W</td>
<td>1 mag.</td>
<td>1</td>
<td>•</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>QR-4500</td>
<td>same as 550</td>
<td>4 x 27W</td>
<td>2 mag.</td>
<td>2</td>
<td>•</td>
<td>600</td>
</tr>
<tr>
<td></td>
<td>QR-6500</td>
<td>same as 550</td>
<td>4 x 37W</td>
<td>2 mag.</td>
<td>2</td>
<td>•</td>
<td>700</td>
</tr>
<tr>
<td>Sanyo</td>
<td>DCX-3000K</td>
<td>SQ, logic; simulator positions</td>
<td>4 x 10W</td>
<td>2 mag.</td>
<td>1</td>
<td>•</td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>DCX-3300K</td>
<td>SQ, logic; simulator positions</td>
<td>4 x 20W</td>
<td>2 mag., cer.</td>
<td>1</td>
<td>•</td>
<td>380</td>
</tr>
<tr>
<td>Teledyne</td>
<td>R-10401</td>
<td>RM</td>
<td>4 x 40W</td>
<td>1 mag., cer.</td>
<td>1</td>
<td>•</td>
<td>450</td>
</tr>
<tr>
<td>Packard Bell</td>
<td>R-30401</td>
<td>RM</td>
<td>4 x 30W</td>
<td>2 mag.</td>
<td>1</td>
<td>•</td>
<td>500</td>
</tr>
</tbody>
</table>

### Receivers With "Speaker-Matrix" 2-Channel Amps

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model</th>
<th>Built-in 4-Channel Simulator</th>
<th>Power Output</th>
<th>Inputs</th>
<th>No. of Sets of Four Speakers Accepted</th>
<th>2-Channel Headphone Output</th>
<th>Approx. Price ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grundig</td>
<td>RTV-900a</td>
<td>•</td>
<td>2 x 25W</td>
<td>1 (S) mag., cer.</td>
<td>1</td>
<td>•</td>
<td>400</td>
</tr>
<tr>
<td>Lafayette</td>
<td>LR-75A</td>
<td>•</td>
<td>2 x 10W</td>
<td>1 (S) cer.</td>
<td>1</td>
<td>•</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>LR-200</td>
<td>•</td>
<td>2 x 16W</td>
<td>1 (S) mag., cer.</td>
<td>1</td>
<td>•</td>
<td>175</td>
</tr>
<tr>
<td></td>
<td>LR-810</td>
<td>•</td>
<td>2 x 26.5W</td>
<td>2 (S) mag., cer.</td>
<td>1</td>
<td>•</td>
<td>200</td>
</tr>
<tr>
<td>Olson</td>
<td>RA-618B</td>
<td>&quot;Phase Power&quot;</td>
<td>2 x 15W</td>
<td>1 (S) mag.</td>
<td>1</td>
<td>•</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>RA-655B</td>
<td>same as 618B</td>
<td>2 x 5W</td>
<td>2 (S) mag.</td>
<td>1</td>
<td>•</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>RA-777B</td>
<td>same as 618B</td>
<td>2 x 20W</td>
<td>1 (S) mag.</td>
<td>1</td>
<td>•</td>
<td>250</td>
</tr>
<tr>
<td>Sherwood</td>
<td>S-7900A</td>
<td>Dynaquad</td>
<td>2 x 65W</td>
<td>2 (S) mag., cer.</td>
<td>1</td>
<td>•</td>
<td>460</td>
</tr>
<tr>
<td>Teledyne</td>
<td>R-20201</td>
<td>&quot;Stage 4&quot;</td>
<td>2 x 20W</td>
<td>1 (Q) mag.</td>
<td>1</td>
<td>•</td>
<td>350</td>
</tr>
<tr>
<td>Packard Bell</td>
<td>V-M</td>
<td>1545</td>
<td>N/A</td>
<td>1 (S) cer.</td>
<td>1</td>
<td>•</td>
<td>150</td>
</tr>
</tbody>
</table>
Some control options are particularly elaborate. Top two knobs (from same unit) offer two “synthetic” quadraphonic options in addition to matrix decoder proper and allow quadraphonic image to be rotated in the room. Unit at the middle of the page has sliders for width and depth of matrixed quadraphonic image plus three phase-shift options (“Q’plex” positions of right knob). In addition it has mike input and control for “panning” signal around the room. Bottom unit is remote control for quadraphonic receiver; “joystick” balance control often is built into receivers.

which use only two channels of playback amplification and place the decoder between amplifier and speakers, rather than between preamp and amp. They generally use only passive circuit configurations, making them inexpensive to build but leaving little opportunity for the more sophisticated elements of the “true matrix” systems, as the four-amp types often are called. No recording companies are offering matrixed material specifically engineered for the speaker matrix systems, though a Dynaquad encoder does exist and Dyna itself has produced a sampler record.

The term synthesizer sometimes is used for the application of a matrix circuit to stereo programs, though that word implies the creation of a new entity rather than the recovery of an existing one (the quadraphonic information implicit in all stereo recordings). Be that as it may, the terms “derive,” “synthesize,” and “simulate” can be taken as interchangeable.

In the table we list first the matrix system for which the individual unit’s decoder is engineered, then the additional capabilities with which the manufacturer credits his decoder circuit. All matrix circuits will produce a quadraphonic effect from all matrixed (or even stereo) recordings or broadcasts, however; distinctions therefore become somewhat hazy when we come to list other capabilities.

Some Other Thoughts

How many sets of four speakers do you need? Most manufacturers apparently feel you might want to use eight speakers at a time. The second set of four could be used for another four-channel listening area, or perhaps as two separate stereo systems outside your main listening area. If you want to use eight speakers simultaneously with your new receiver, make certain it has enough power to drive all at once.

Four-channel headphone outputs also appear on the majority of units. Quadraphonic headsets come with two stereo plugs, one for the front channels and one for the back. In most cases these jacks convert to twin stereo headphone outputs when the receiver is in the stereo mode. Some four-channel receivers, however, have only a single stereo headphone output.

One last cautionary word. Don’t be alarmed by all the new terminology when you come to examine quadraphonic faceplates. At the moment, manufacturers are dreaming up expressions like Quadratic, SFCS, and Phase Power to suggest something special and proprietary about their circuits and controls. If the word means nothing to you, ask to see an instruction manual. Its explanation of how the feature is to be used should tip you off. Usually you’ll find that the word means simply matrix—or rather “simulator,” “deriver,” or “synthesizer.”
1. It's a brand new, one-of-a-kind publication.
2. Contains laboratory test reports on more than 175 stereo and four-channel products and accessories:
   - Amplifiers
   - Tuners
   - Receivers
   - FM Antennas
   - Speaker Systems
   - Turntables
   - Headphones
   - Tape Equipment (open-reel, cassette, cartridge)
3. Includes 240 pages of facts, charts, tables, product prices and pictures.
4. Only evaluates products currently available (old and new).
5. Provides definitions of technical terms.
6. Available at the pre-publication price of only $1.50 (will be sold for $1.95).

There are 6 reasons why you should purchase a copy of High Fidelity's Test Reports:

TO ORDER, simply fill out and mail the coupon below with payment. But hurry, this offer closes March 31!
Okay, it’s gorgeous.
But we’re not in the furniture business. What’s inside?
An incredibly efficient two-way sound system.
The biggest woofer you can get in an enclosure that size: 14 inches.
More presence, more richness, more sound than you’d believe just looking at it. (Take our word: A pair of Lancer 55’s and your 10-watt amplifier are everything you need to get evicted.)
And Lancer 55 is yours for $276.
Now you can look at it. Smoked glass top. 25" x 18" x 13" cabinet. Hand-rubbed oiled walnut finish. Mandarin or Coffee or Indigo grille.
But beauty starts inside. See your nearest JBL high fidelity specialist and hear what we did.
Democracy in Music

11:00 a.m. The rehearsal is in full swing. Resident conductor Mr. Nice raps his baton on the stand.

"Gentlemen, please, would you mind taking the scherzo again, and a bit faster?"

He lifts his arm for the cue when a loud pounding sounds from the horn section.

"Hold it, Maestro."

Mr. Power, third horn and chairman of the orchestra committee, stands up.

"Sir," he says, "as you know, Article 17 of our contract states that the orchestra has a right to reject tempos or dynamics proposed by conductors if the majority of the membership finds them incompatible with their artistic judgment. I have received a complaint that your proposed tempo for the scherzo is too fast. Sirs and brothers, do I hear a formal move? Yes brother White?"

Mr. White of the second violin section gets to his feet. "Before a move is made I would like to suggest Janos Starker, the noted cellist virtuoso, is also professor of music at Indiana University. This article is an edited excerpt from a larger unpublished manuscript.

that we discuss the merits and weaknesses of the proposed tempo. In the last performance with Gringner we played 120 bars per minute, which allowed the eighth notes to be played clearly. I would prefer to adhere to that use of the metronome marking."

A hand from the bass section is raised.

"Yes brother Gold."

Mr. Gold takes off his glasses and says firmly, "I must take issue with my respected colleague Mr. White. In the score Beethoven clearly marked 116 bars per minute. Mr. Gringner did indeed use 120 as a metronome marking and it did cause a lot of difficulties."

"Mr. White?"

"I beg to differ. It was one of the best scherzos we ever played."

"Yes brother Sure?"

Mr. Sure, the contrabassoonist, clears his voice.

"Before we consider those arguments let me remind you gentlemen that in the Breitkopf and Härtel edition we do find the 116 metronome marks; however, recent musicological research has

A Fantasy Set in the Not Too Distant Future

by Janos Starker
"I move that tonight the conductor will observe a tempo of 132 bars per minute," proclaimed Mr. Neat.
established the fact that the author neglected to put metronome marks for the scherzo. Only at the end of the nineteenth century did Schnupperauf mark the 116 as an original suggestion of the author.

Mr. Power shows signs of impatience. "Gentlemen, gentlemen. We had no intention of getting into a musicological discussion. Are we or are we not in agreement with the tempo proposed by the Maestro? This is the issue for us to resolve."

First oboist Mr. Neat is acknowledged. "Obviously we are in disagreement with the Maestro."

Mr. Stuck, the first cellist, interrupts. "Obviously? What is so obvious so far? I happen to like the faster tempo the Maestro has requested. There is no question that it would help the bigger line... two bars in one, not just dull beats..."

The oboist’s ears turn red. He is well-known for his explosive temper and is about to lose it. "Brother Power, would you kindly remind Mr. Stuck to extend me the courtesy of letting me finish my statement."

"Yes, it is your turn now, Mr. Neat," says the chairman. "Go ahead."

The Maestro wipes his forehead with a handkerchief. "Gentlemen!" he whispers.

Neat cannot contain himself any longer. "Will the chairman make everyone observe the rules of our constitutional proceedings? Or shall we review the proposed new election list to ensure proper representation?"

 Silence falls over the orchestra. Everyone is very much aware of the impending election. Mr. Neat, whose powers extend beyond his admired musical prowess, had long ago decided that no one was more qualified than he to rule the orchestra—his orchestra, as it was increasingly referred to by everyone. For years he had planned, had played politics, and had undermined all existing authorities until now havoc reigned. No one dared to make a move without him. The government representative, the audience representative, the union, press, radio, and TV had all been beaten into submission by his well-documented schemes, all of which were based on artistic quality. He had sworn allegiance to a long-departed musical great, and was now convinced that he alone could serve the great man's memory by forcing and cajoling everyone into accepting the legacy handled by him.

No one, of course—musicians, guest artists, or conductors—was good enough to satisfy Mr. Neat’s professed standards, and they all had to fall to his domination. The last obstacle to his complete control was the chairmanship of the orchestra. Until now a few bastions of artistic freedom had fought him, but he actually didn’t mind acting as if the orchestra’s democratic constitution were his only concern—a concern which most of his colleagues enthusiastically equated with the delightful lack of authority above them.

The upcoming election results were practically determined. As the next chairman, Mr. Neat would set programs, hire, fire, judge, and execute. True, one member had been heard to grumble that it was beginning to sound like “the old days when we had musical directors.” But he was put down by a colleague who expressed the general feeling that “those bastards” had been hired by a board of directors. They had been chosen, by managers, because they were successful elsewhere, because the ladies liked their looks, because the audience cheered when they conducted, and because guests and critics raved about them. “How does that qualify someone to direct our affairs? After all, we play; we know more about music; we know what our audiences need. All we need a conductor for is to give us a signal to start. And even that we can do without, really!”

“But, isn’t that what Neat will be? The critics rave about him. The ladies love him. He takes bows after every solo he plays. The manager does all he asks. And he gets paid more than anyone else.”

All had tacitly agreed not to mention the conversation. They remembered the two concertmasters and five other well-established members of the orchestra who left for other pastures when, after such disruptive remarks, the newspapers began criticizing the efficiency of the players, whereupon the latter became nervous before performances and thereby justified the criticisms leveled against them. Two quit music altogether, another sought psychiatric treatment, the luckier four recovered their nerve sufficiently to play elsewhere.

Mr. Neat surveys the scene like a general reviewing his troops before battle. “I move that we do not play the scherzo again and that tonight the conductor will observe a tempo of 132 bars per minute.”

Heads turn incredulously. This is exactly what the conductor had asked for. A trombonist seconded the motion.


"Those against?"

No sound but a sneeze. The hay fever season is in full bloom.

"Motion carried."

Neat cleans his reed, blows into it, and smirks. The union representative gets up to leave. It is the second rest period. The orchestra members follow, lighting cigarettes and making their way backstage. The poker games assemble. The coffee machine goes into action.

When the rehearsal begins again, it goes smoothly. Only one quick vote is taken when the concertmaster suggests a change to a downbow instead of an upbow. He is quickly voted down. After the last movement is over the conductor profusely thanks the players for a beautiful morning of music-making. “See you tonight, gentlemen.”
SONY 7065
Dedicated to the proposition that an enlightened listener is a happy listener

You've got a really great receiver. With an air of confidence, you switch it on, prepared to demonstrate the soul-stirring quality of the FM Stereo. And get, instead, an embarrassing silence. Because the source switch is on phono.

It won't happen with the Sony 7065, because it keeps you informed. Enlightened, with easy-reading function lights on the dial. AM, FM, Phono, Aux, Tape, Mic. You always know where you are, at a glance. Without squinting or stooping.

But that's just the beginning. The 7065 delivers 60+60W RMS into 8 ohms from 20Hz to 20kHz. That means full rated power at each and every frequency across the entire audio spectrum. You don't lose the power you paid for when you need it, particularly for those gut-stirring lows. The sound is clean and natural, because direct-coupling eliminates the output coupling capacitors that stand between you and the music.

You can pluck stations from even the most crowded dials, or from fringe locations (thanks to the sensitive 2µV FET front end and a 1 dB capture ratio). Switch to AM and the center-channel meter winks out, while the signal strength meter stays lit. AM isn't just an afterthought in the 7065. It's quiet and sensitive.

The controls make all that superb performance easy to enjoy. Smooth acting levers switch in positive muting, the two tape monitors (with direct dubbing), and loudness compensation. Or click in your choice of three speaker pairs, high and low filters, or mix one or two microphones with any source. The 7065 is ready for SQ 4-channel and any of the other matrix systems.

The price? An enlightened $459.50 (suggested retail), including a handsome walnut finish cabinet. The 7065 highlights a line of Sony receivers starting under $200.

Sony Corporation of America, 47-47 Van Dam St., Long Island City, N.Y. 11101.

Buy a Sony, and see the light.
RCA's "Classic Film Scores of Erich Wolfgang Korngold" contains an entire era within its grooves—a beautifully conceived and absolutely stunningly engineered recording of musical excerpts from the composer's Hollywood years. Whether it is the moody atmosphere of the Anthony Adverse music, the romantic lyricism of the Juarez theme, or the sweep and splendor of the fanfares from The Sea Hawk or Kings Row, everything here is stamped not only with Korngold's totally distinct style but also with the period from which it grew. It is, of course, easy to bad-mouth the naiveté of 1930-1940 Hollywood and dismiss the proliferation of heroes and happy endings accompanied by waves of grandiose music as producers' gimmicks aimed at the cash register. Yet we must realize that while undoubt-edly certain tendencies were exploited to death (as are many of the opposite tendencies today) the ingenuity of much Hollywood art in the 1930s and 1940s corresponded with a strong optimistic vision of life that even the depression had not succeeded in shaking. The movies of this period offered the American public an art that was largely either epic or romantic (or a combination of both); because these films were able to reach the masses, they perhaps achieved more closely the original goals of epic and romance than any other previous genre. Quite obviously, the music accompanying these films had to be tailored to the same dimensions.

Thus, although the music of Erich Korngold as we hear it on this superb disc would be inconceivable for most of the films being made today, it is difficult to imagine scores more suitable to the films they were written for, particularly the ones represented on this release. To begin with, the films for which Korngold generally wrote music were not usually spectacular from the technical point of view; this is not to say that they were badly made, but simply that they lacked the self-conscious use of the medium that one sees, for instance, in Citizen Kane. That film overlaps Korngold's era but Welles's work has much more in common with today's films than with those of the period in which it was made. Consequently, not only did Korngold's scores establish mood, which any good film score must do, they also provided a certain element of abstraction that counterbalanced the relatively straightforward and drama-oriented cinematic style. Such is generally not the case today, except in the use of title songs, a practice almost unheard of in Korngold's day (for nonmusical films) and recently blasted by Elmer Bernstein in High Fidelity's July 1972 movie issue. But the prevalence of title songs is not altogether unjustifiable, since today it is only in the credits that music bigger than the movie is aesthetically valid and even necessary.

On the other hand, a great deal of Korngold's music is often bigger—intentionally so—than the film for which it was written, which provides, almost single-handedly, the aesthetic emotion that supplements the dramatic emotion. From this point of view, the warm, often sumptuous romanticism of Korngold's writing could not be more appropriate. The scores here abound in extraordinary lyrical richness, from the haunting theme for Between Two Worlds (occasionally reminding one of a Waxman theme for Hitchcock's Rebecca) to the

Continued on page 68
by Conrad L. Osborne

Song O’ My Heart
A singing and talking Movietone romance with John McCormack

The resurrected Song O’ My Heart features John McCormack and also the film debut of Maureen O’Sullivan (above with Tommy Clifford and McCormack). During the 1929 filming (above right), McCormack and Edwin Schneider (at the piano) discuss the recital scene with director Frank Borzage.

Song O’ My Heart, a “Singing and Talking Movietone Romance” from Fox Film Corp., with a screenplay by Tom Barry, was filmed late in 1929 and early 1930 in Ireland and Hollywood under the direction of Frank Borzage. The film starred John McCormack and featured his singing of a dozen selections, including several filmed during a live recital in Philharmonic Hall, Los Angeles. It was released in March 1930, had a premiere in New York and a normal domestic first run, then disappeared for almost forty years. The common assumption was that the existing prints had been destroyed in the fire at the Fox warehouse in New Jersey in the late 1930s.

As HIGH FIDELITY readers know, however, common assumptions carry little weight with Miles Kreuger, the groaning floors and bulging walls of whose largish West Side New York apartment bear testimony to the mass and volume of every fact and artifact of imaginable connection to the American musical theater, especially the filmed variety. In 1969, Miles visited the Fox studios in the course of researching his forthcoming history of the American musical film. Among the thirty-odd films he requested for screening was Song O’ My Heart. Fox, rather to its own surprise and Miles’s, located a nitrate print in its vault, and Miles became the first viewer of Song O’ My Heart since its premiere distribution.

The version he saw, though, was a peculiar variant, including the musical soundtrack and incidental snippets of conversation but omitting most of the dialogue, though it had been made as a full talkie. Why this version existed is a small mystery. Miles’s educated and logical guess is that the print was intended for foreign distribution, leaving the distributor with the option of treating the dialogue in the native language; this might also explain the presence of two songs, both in foreign tongues (Plaisir d’amour and All’ mein Gedanken) which were deleted from the domestic release. This makes reasonable sense, though one is left wondering why a couple of English dialogue sequences (whole passages, not just a word or phrase for “flavor”) were retained, or why the studio went to the trouble of creating and inserting English titles. (Tantalizingly, yet another version is known to have existed, filmed in “Grandeur,” a 70-mm process which was a forerunner of some of today’s widescreen techniques. According to its original release order — in Miles’s possession, of course — it contained other songs and its sound quality was most probably superior. It is evidently lost.)

Miles contacted the John McCormack Association of Greater Kansas City, which had been in search of the film, as well as of other McCormack memorabilia. Primarily through the efforts of two of the Association’s members (Donald J. Quinn and Robert DeFlores), rights for the showing of the film were secured and safety film prints made. The first public showings in forty years took place at the Museum of Modern Art in the summer of 1971, part of Miles’s series, “The Roots of the American Musical Film.” And another Association member, Peter Dolan, collaborated with Mr. DeFlores in producing and releasing the soundtrack LP considered here.

The film, as seen in the Museum showings, is a strange and remarkable experience. The story, to the extent that it exists at all, is sentimental and structured to conform closely to McCormack’s own personality—he more or less plays himself. The only outstanding qualities reside in McCormack’s singing and in some of the camera work in the more scenic sequences — as Miles correctly points out in his notations for the film, there are purely visual qualities, especially in the treatment of light and shade, of unusual beauty. The other leads are taken by Alice Joyce, a very young Maureen O’Sullivan (her screen debut, in fact), and John Garrick (a screen singer, but here in a nonsinging role). Opera fans will be fascinated by the brief appearance of Andres de Segurola, then retired from his opera and concert career. He plays an aging singer, mugs ferociously, and says “Perrr - rrrr - rrrr - Bacce!” repeatedly.

McCormack, who is reputed to have been a poor actor, is not called upon for anything much in that line, but he behaves fairly naturally and with some charm, which is more than can be said for many an actor. Of special interest, of course, is the recital sequence, which does preserve in a straightforward way at least some of the living presence of a performer who must be ranked among the great recitalists of the century. The utter sincerity and
Korngold continued

spirited march theme—including some ear-opening minor-ninth leaps in the strings—of Robin Hood. Mahler occasionally comes to mind, particularly in the Constant Nymph tone poem, Tomorrow, and so does Richard Strauss in the understated, Rosenkavalier shimmer of the orchestration (although Korngold, like most Hollywood composers, was obliged to have the orchestration done by an outsider, he always indicated his instrumental intentions quite precisely and always checked over and revised the final copy). Often, for instance, a particular harmonic detail is highlighted by its appearance in an instrument that contrasts with the rest of the orchestra, a technique that stands out in the Of Human Bondage score.

On the other hand, Korngold was able to use music in an entirely different manner as well, a manner that beautifully complemented the human aspect of the films he often scored. To begin with, Korngold’s method of handling thematic material—in which main themes are frequently backed up by diverse snippets of countermelodies—imparted a vitality and movement to his writing that are quite unique. Even more important is the manner in which Korngold’s music often seems to evoke the human voice. As is pointed out in the excellent notes written by the composer’s son, George Korngold (who also deserves many loud bravos for his role as producer of this disc), one of Korngold’s important contributions to his art was the idea of composing just below the pitch level of the actors’ voices in order to complement the dialogue and at the same time balance it with the music. But even in the melodic contours and orchestration, one almost expects the voice of an Ann Sheridan or a Joan Fontaine to grow from the music like a tonic chord in a cadence. This is a far cry from the usual practice today, when music in a film almost never accompanies dialogues (unless it is “justified” by the presence of a radio or record player)—or else is played at a volume that is just above the level of minimum audibility, as in parts of John Barry’s exceptional score for Lester’s Petulia.

I have absolutely no fault to find with this release. Conductor Charles Gerhardt leads the National Philharmonic Orchestra of London in flawless, perfectly executed performances that bring out every one of the music’s numerous emotional nuances. There is openness, breadth, and an essential optimism to this music—even in the more somber passages, which never even border on the morbid—that Gerhardt and his forces have completely fathomed, and one suspects that producer George Korngold had no small hand in this. The recorded sound, as I hinted at the beginning, approaches perfection and simply dazzles in its realism (the recording was made directly from the original two-track master) and its richness. What is there left to say? Might one dare to hope for more of the same?

Song O’ My Heart continued

commitment of his singing are most impressive and touching; his recitals must have been continuously communicative.

The soundtrack includes all the sung selections from this variant version, including a fourteen-second unaccompanied fragment in which McCormack demonstrates the “by-a-a-a-h” in his voice for a couple of village characters, and a short dialogue sequence in which McCormack banters with some children and sings them a song. Obviously, it catches McCormack a little late in the day vocally—he was not a miracle of vocal longevity, and was just eight years from his formal retirement. The top is used sparingly, particularly at full voice (in fact, there is nothing above A natural on the record), and there are moments when the voice loses its usual clear resonance around the break. The nature of the material assures that there is no attempt at the sort of technical display embodied in some of his most famous recordings.

But the lovable timbre of the voice, and its crystalline vowel formation, are still there. In fact the middle and bottom parts of the range sound rather richer than they do in earlier discs. And chronologically, these selections fill a bit of a gap so far as LP reissues go, for while there is ample representation of his early operatic output, and some (in the out-of-print Angel COLH discs) of his still later recordings of art songs and Irish ballads, there is actually very little available of this sort of popular repertoire from this period. The great musical and vocal charm of the singing, the superb directness of his storytelling in song, the dignity and integrity of his emotional approach to even the most sentimental trifle, are in evidence on every band. There is a gorgeous trill in Plaisir d’amour, and a number of his stunning suspended high pianissimos which somehow never seem like gimmicks or mere effects. Most of the material was also recorded by McCormack commercially, but relatively little of it is currently to be had. The one song written expressly for the picture, A Pair of Blue Eyes, is a very pleasant one, and furnishes the little theme tune for the finale. The sound, taken straight from the nitrate print, has a little noise in it, and occasional distortion at full volume in the middle, but is reasonably full, with the voice well forward—the record is much better than the film print in this respect. I found that a few notches of roll-off on both treble and bass helped noticeably. The packaging includes a double-fold album with photos of the stars and stills from the film as well as extensive biographical/historical notes.

If you have a chance, see the film. Meanwhile, the recording will interest and entertain not only all McCormack devotees, but anyone susceptible to truly personal, emotionally open performing.

**Song O’ My Heart**. Original motion picture soundtrack. John McCormack, tenor; Edwin Schneider, piano; organ and orchestral accompaniment. Then You’ll Remember Me; A Fairy Story by the Fire; Just for Today; I Feel You Near Me; Kity, My Love; The Magpie’s Nest; The Rose of Tralee; Loveli seren di car; Little Boy Blue; Plaisir d’amour; All mein Gedanken; Ireland; Mother Ireland; I Hear You Calling Me; A Pair of Blue Eyes. JMCX KC 1000, $5.95. (Also available from the John McCormack Association of Greater Kansas City, 1012 Baltimore Ave., Suite 900, Kansas City, Mo. 64116.)
by Paul Henry Lang

Rameau's

Castor et Pollux—
Tons of Glorious Music

A prize baroque opera from Harnoncourt and Telefunken

TELEFUNKEN and its prize crew directed by Nikolaus Harnoncourt come with a prize offering: Castor et Pollux (1737), one of Rameau's principal operas—all five and a half acts of it. We may quibble about Harnoncourt's Bach and perhaps switch to Richter, but there is no place to switch to with Rameau, and happily there is no need for it, because this is a very distinguished achievement.

Rameau, born two years before the illustrious trio of the Class of 1685—Bach, Handel, and Domenico Scarlatti—outlived all of them, dying at the age of eighty-one in 1764. He was by any method of reckoning one of the most original, powerful, and prophetic personalities in musical history. Well, that's quite a statement, for what is generally known of this Frenchman to whom we owe our modern harmonic system? A few harpsichord pieces and a couple of ballet suites made up of pieces culled from his stage works. Rameau's harpsichord music, though delightful and masterly, dates from his youth. He wrote no operas until he was fifty, but after that he turned them out in profusion. We are just beginning to appreciate Italian baroque opera by getting used to its conventions (as we have gotten used to Verdi's and Wagner's), but in French baroque opera we are facing an altogether new set of national conventions and characteristics that will have to be digested before Rameau attains the stature due to him.

In France everything begins with literature, and the French considered their opera a form of the literary the-
ater with music, hence the term *tragédie lyrique* applied to opera. They preferred mythological subjects because mythology could be freely manipulated in the services of *le spectacle* and *le merveilleux*, which was their chief concern on the musical stage. The elaborate stage machinery of the preceding era was retained and enhanced—Rameau’s operas are still *pièces à machines*—with gods and goddesses descending to earth or riding chariots on the clouds. And every opportunity offered by the *libretto* (and even when it was not offered) was used to indulge in *divertissement*, that is, dances, garlands of them. All this is an obstacle to modern presentation, for the *spectacle* tends to shift attention from the ear to the eye, while the abundance of dances constantly interrupts and suspends the dramatic continuity. Of the total of about eighty acts of theater music composed by Rameau, almost half consists of dances! Needless to say, this strong emphasis on the visual affects recording even more than live performance. Then there is the rather tedious French recitative, the visual affects recording even more than live performance.

Rameau’s operas are still *pièces à machines*—with gods and goddesses descending to earth or riding chariots on the clouds. And every opportunity offered by the *libretto* (and even when it was not offered) was used to indulge in *divertissement*, that is, dances, garlands of them. All this is an obstacle to modern presentation, for the *spectacle* tends to shift attention from the ear to the eye, while the abundance of dances constantly interrupts and suspends the dramatic continuity. Of the total of about eighty acts of theater music composed by Rameau, almost half consists of dances! Needless to say, this strong emphasis on the visual affects recording even more than live performance. Then there is the rather tedious French recitative, the visual affects recording even more than live performance.

The strings do yeoman work and sound fine except when playing piano; when they are somewhat anemic. Harnoncourt puts in the field a first-class chorus and a good orchestra; both are steady, sturdy, and full of brio. *Castor et Pollux* is generally more elegiac than dramatic; still, the bittersweet melancholy of the *style galant* is perhaps a little overdone by some of the soloists, who do indeed have a difficult task. Perfect French vocal diction, especially the enunciation of the mute vowels and the characteristic minute inflections of the language, is seldom achieved by foreigners. When to this hazard is added the profusion of upward-moving appoggiaturas, the already cautious singer becomes even more so. lest he slide beyond the intended tone. None of the women of the cast can cope with the double jeopardy, least of all Jeanette Scovotti, usually a fine and dependable singer. To my mind the best singing among the female protagonists is done by Marta Schelle, who takes care of half of the distaff parts. She has a good voice, solidly placed, and though her French is like Joan Sutherland’s Italian, she is pleasant to hear. Norma Lerer handles her part capably. Gérard Souzay has of course no trouble with the French language, his diction is impeccable and every word comes through; he brings a gratifying masculinity into the somewhat Sèvres porcelain quality created by the swooning women. Jacques Illiszech, another Frenchman, is good though not as expressive as Souzay. Zeger Vandersteene holds his own commendably and his diction is good, but his light lyric tenor thins on the high notes and the falsetto to which he occasionally resorts is not attractive. All the smaller roles are satisfactorily executed. The chorus, as I have said, is top-drawer; its pianos are delectable but it can be insensitive and highly dramatic. Ye olde winde instruments are fine, notably the flutes and the solo bassoon, and the baroque trumpeter coaxes some marvelously clear high tones out of his ancient bugle, though he gurgles a bit on the low ones. The strings do yeoman work and sound fine except when playing piano; when they are somewhat anemic.

Harnoncourt deserves particular praise for the genuine operatic thrust he infuses into his ensemble; his players bite into the music as they seldom do in his Bach recordings. He is also quite successful in reproducing the many subtle shades of color that Rameau constantly delights us with. On the other hand, the vocal lines are overornamented, occasionally causing unsteadiness and a fuzziness of the melodic profile. Harnoncourt is less successful with his musicology. His German notes, very awkwardly translated, are negative and contain quite a few misstatements. (The “provincial theaters” where Rameau is supposed to have played the organ were the cathedrals in Dijon, Clermont-Ferrand, and Lyons.)

Don’t miss *Castor et Pollux*. You don’t have to take it in one sitting, but any single record will reward you with superb music well and intelligently performed.

**RAMEAU:** *Castor et Pollux*. Jeanette Scovotti (s), Minnèrve and Telære; Marta Schelle (s), Venus, First Attendant of Hebe; A Ghost, and A Planet; Helga Reiter (s); Second Attendant; Norma Lerer (ms); Phèbes; Zeger Vandersteene (t); Amor and Castor; Sven-Erik Alexandersson (t); High Priest and An Athlete; Gérard Souzay (t); Pollux; Rolf Leanderson (t); Mars and An Athlete; Jacques Illiszech (bs); Jupiter, Stockholm Chamber Choir, Eric Ericson, cond.; Concentus Musicus, Nikolaus Harnoncourt, cond. Telefunken SAWT 9584/7, $23.92 (four discs).
If Franz Liszt scarcely originated the idea of "program music," he surely contributed significantly to its development by his devisement of the "symphonic poem." This single-movement form (or, perhaps more accurately in retrospect, genre) was intended to derive its integrity from the composer's poetic impulse, which would govern the succession of musical events without reference, at least in theory, to conventional forms of absolute music. With a view to permitting a broad spectrum of character contrast within such a piece, Liszt made a significant departure from one basic practice of the prevailing musical tradition: the principle that a single instrumental movement has a single basic tempo for all or most of its length, additional tempos being introduced only in clearly demarcated subsidiary positions, as slow introductions, trios, and codas, or as explicit interruptions of the primary tempo, which is usually quickly resumed.

(The traditional exception to that principle is, of course, the theme with characteristic variations, wherein the extensive carry-over of other musical elements from one tempo to the next assures coherence. A few other apparent exceptions really result from a procedure the reverse of Liszt's, i.e., the linking of normally separate movements—as in Beethoven's Piano Sonata, Op. 101, or Schumann's Fourth Symphony—or from formal

"stunts" such as the Finale of Beethoven's Ninth, where a theme-and-variations is superimposed on a classical concerto, and of course there is a text as well!)

That this was a departure may not be immediately obvious to the modern listener, for the hundred-plus years since have thrown up so many compositional approaches which eschew this fundamental consistency of pulse that functioned as a background to classic and early romantic music; indeed, today pulse itself is often absent altogether. But Liszt's step in this direction was an important one and, aside from its historical significance, it was one that presented him with a severe compositional challenge: how to realize the expressive potentialities of such highly contrasted materials without losing the essential single-movement continuity that he wanted. He did not always succeed, and the twelve symphonic poems of the Weimar years, as we hear them in this first integral stereo recording (a Russian mono set of some years back, conducted by Golovanov, was never distributed in the West) cover a wide spectrum of success and failure. The problems are not always structural, for the quality of Liszt's invention also varied, and he had technical limitations as well (most of the earlier symphonic poems were orchestrated in collaboration with August Conradi or Joachim Raff); but today, when we are no longer particularly impressed by the literary values of the works—their "pictorial accuracy," so to speak—it is on the structural aspect that they stand or fall.

Perhaps the nadir is reached in the Bergsymphonie (Ce qu'on entend sur la montagne), where the sprawling proliferation of thematic materials under some fifteen different tempo rubrics leaves the listener fairly well at sea; he hears thematic exposition, development, and liquidation, harmonic tension and release, fresh starts and gestures of conclusion—but as often as not in juxtapositions that are mutually contradictory. The geography of the piece is unclear, and much of it seems to take place in a kind of no-man's-land where one's aural compass gives confusing, even opposite readings.

Shorter pieces are simpler matters, of course, and Liszt learned, in fits and starts, how to achieve a convincing continuity. One strategy was the celebrated device of thematic transformation (an adumbration of Berlioz's idée fixe), best exemplified in Les Préludes, where the tunes all evolve from a three-note "germ motive" (a description of how this works in detail can be found in almost any music appreciation textbook). Here too Liszt takes care to delineate function more carefully: thematic material returns at the end of the piece in an explicitly recapitulatory way, so that we are in no doubt about having achieved a destination, and the Allegro has a clearly developmental character, with a rate of harmonic mo-
Bernard Haitink leads a complete reading of Franz Liszt’s major orchestral contribution—the thirteen symphonic poems.

One may not care for the rhetorical flourishes of this piece, but it is rather skilfully put together.

Almost entirely devoid of rhetoric, and therefore often regarded as the most successful of the symphonic poems, is Orpheus, a contemplative piece that attempts little formally (it is essentially an extended ABA): the harmonic movement is subtly worked out, however, and there are many felicitous details of scoring. Also impressive is the later Héroïde funèbre, basically a large-scale funeral march with an almost Mahlerian character; this should be heard more often.

Most of the earlier symphonic poems were subject to several revisions: A case in point is Tasso, where Liszt inserted a lengthy quasi-minuet passage into a basically two-part piece ("Lament" and "Triumph"). Unfortunately, this somewhat banal episode extends itself to a point of tedium while disrupting what may originally have been a workable juxtaposition of two basic moods—as things now stand, there just isn’t enough connective muscle in the surrounding material to sustain it. The two-part idea turns up again in Hunnenschlacht, where the brighter, more forward London recording also seems more impressive: the same conductor, is quite powerfully carried off. But where the bombast quotient gets higher, he becomes less comfortable, and one only has to compare his Mazeppa with Mehta’s to hear that something is missing. The piece may be perilously close to trash, but it can be made into a considerable orchestral showpiece—which is what Mehta, despite his orchestra’s palpable inferiority to the London Philharmonic, succeeds in doing. The same holds true for Hunnenschlacht, where the brighter, more forward London recording also seems more impressive; in Orpheus the honors are about even.

The first two of the Philips discs have already been issued separately, and the others apparently will be in the near future (the individual numbers are given in the listing below), so you may feel that the five-for-the-price-of-four deal is not entirely compelling, although Philips has taken care to distribute the rarest and most interesting pieces (corresponding generally, to those that Haitink does best) rather evenly across the five discs.

The Haitink package comes with a trilingual booklet containing an essay by Humphrey Searle and notes on the individual works. I’m sorry that, given the somewhat documentary nature of the production, the opportunity was not taken to include the full texts of Liszt’s own program notes and literary epigraphs for these works.

LISZT: Symphonic Poems Nos. 1–13; Mephisto Waltz No. 1. London Philharmonic Orchestra, Bernard Haitink, cond. Philips 6709 005, $27.95 (five discs).

No. 3, Les Préludes; No. 4, Orpheus; No. 2, Tasso, Lamento e trionfo (839788).

No. 9, Hungaria; No. 6, Mazeppa; No. 10, Hamlet (6500 046). No. 1, Ce qu’on entend sur la montagne; No. 11, Hunnenschlacht; No. 12, Die Ideale (6500 189). No. 5, Prometheus; Mephisto Waltz No. 1; No. 8, Héroïde funèbre (6500 190); No. 7, Festklänge; No. 12, Die Ideale (6500 191).

LISZT: Symphonic Poems: No. 4, Orpheus; No. 6, Mazeppa; No. 11, Hunnenschlacht. Los Angeles Philharmonic Orchestra, Zubin Mehta, cond. London CS 6738, $5.95.
When the Swiss make a watch, they make a watch. And when they make a turntable, they make stereo history.

The new Lenco L85 is everything you ever wanted in a professional turntable. When you look at the specifications, the L85 looks like an audiophile's perfect dream.

One reason: "Swiss movement." The L85 is ultra-smooth belt-driven by a 16-pole synchronous motor that reduces rumble to unheard of extremes, and results in rare and beautiful sound.

Another: The distortion caused by mechanical shutoff in other turntables is totally eliminated in the L85 by means of a unique Lenco electronic shutoff system.

Keep listening. The speed of the L85 can be varied ± 3% by adjusting the electronic line speed control. Returning to the precise designated speed of the unit is accomplished easily through the built-in illuminated stroboscope. The L85 also features viscous-damped cueing for the ultimate in stylus and record protection; and perfect leveling via 4 viscous-damped adjustable suspension springs.

The new Lenco L85—a jewel of a turntable that performs and sounds like a jewel. But costs $179.95. Hear it at your Lenco dealer or send for the spectacular specs today.
Altena, tenors: Max van Egmond, bass; Tolzer Knabenchor, King's College Choir, Chorus Viennensis; Vienna Concentus Musicus, Egmond, bass; Vienna Choir Boys; Chorus Viennensis; Vienna Concentus Musicus, Gustav Leonhardt, cond; Telefunken SKW 5, $11.96 (two discs).

BACH: Cantatas, Vol. 4. Paul Esswood, altos; Mathis, Sheila Armstrong, and Lotte Schadle. Bach Gesellschaft scores. A new feature of these two volumes is a detailed listing of all alterations made in the Gesellschaft scores (keyed to footnotes in the scores themselves) in accordance with recent research. I found it a fascinating and very useful addition, though such detail will probably be of little interest to the layman.

Contrasting Harnoncourt's and Leonhardt's work is difficult to do; they each have their own style and sound, but the unanimity of their approach is more remarkable than their individual differences. Both play with a gentle and restrained enthusiasm, and the precise ensemble of seasoned chamber players. Because of their relatively small size and the sound of the old instruments, and especially because of their extremely precise phrasing and articulation, the textures are at all times utterly clear and transparent. This transparent "sound" is perhaps the most outstanding attribute of these performances. The differences between the two choirs are somewhat easier to characterize, though both are excellent. From the King's College group every note, every sound is polished and beautiful. If there is any complaint, it is that they are sometimes being too careful, too precious, as if they're walking on eggs. The Vienna Choir Boys, on the other hand, sing in an altogether more natural and easy manner, though not a whit less precise, and I do prefer their sound somewhat.

Of the eight cantatas in these two volumes, two (Nos. 14 and 16) have never been recorded anywhere, and No. 17 is available only on the German Cantate label. No. 19 used to be available in performances by Lehmann (Archive) and Grishkat (Renaissance), but only a Werner-led version is currently available from the Musical Heritage Society (MHS, for the way, is also engaged in a complete cantata series, which at present includes about eighty numbers.) Serious competition does exist, however, for No. 20 (Rilling/MHS) and No. 13 (in the new Richter collection discussed below). Leonhardt recorded No. 18 a number of years ago and it is still available, but it has been newly recorded by Harnoncourt for this series, presumably because a female soprano, Agnes Giebel, sang on that earlier recording; for this complete edition we must remain true to Bach's intentions in every detail and use a boy soprano, of course. The cantata exists in two settings: The original Weimar version was scored for four violas, bassoon, and continuo and was notated in G minor. For a later performance in Leipzig Bach added two recorders to the instrumentation and transposed it to A minor (the organ in Weimar was tuned to the high "choir" pitch, so it actually sounded in A minor there too). Harnoncourt's new recording uses the Weimar form without recorders, and is played in

Envy the fortunate music critic, whose job occasionally requires him to listen repeatedly and in close succession to recordings of nearly two-dozen Bach cantatas—a task he would seldom undertake of his own volition without the external stimulus of a press deadline. It could be an arduous undertaking, but when the recordings are from the likes of Richter, a Harnoncourt, or a Leonhardt, this critic emerges from his listening sessions in something near a euphoric state. Richter on the one hand, and Harnoncourt/Leonhardt on the other, represent tremendously different approaches to this music, but in both cases the results are so splendid on their own terms that I am almost equally excited by both these large collections. The music too is so multifaceted and incredibly varied from work to work that a large boxed cantata collection seems more satisfying than large integral editions of certain other works that don't encompass so much variety. You may well ask what such a critic does for pleasure after finishing his "work." In this case, the critic goes right back to rehear yet again some of the better of these cantata performances.

Telefunken seems to be keeping right on schedule with its mammoth project: Something over 200 cantatas are scheduled to appear over a period of about ten years, and now, less than a year after the appearance of Vol. 1, we're up to Cantata No. 20 (the series is being recorded in the numerical order of the old Bach Gesellschaft edition, which follows neither a chronological nor any other sort of "logical" system). Performing duties for the entire series are being shared equally by Nikolaus Harnoncourt's Vienna Concentus Musicus and Gustav Leonhardt's Amsterdam-based group with the Vienna Choir Boys and the King's College Choir. Both groups are specialists in playing old music on old instruments and have gone to great lengths in preparing scholarly accurate performing editions of the music—in other words, their goal is to present every detail in a form as near to what Bach would have wanted as is possible for them to do. These two boxes, like the previous three, each include three booklets: a general survey of the cantatas, a more specific description of the specific works recorded in that box (both of these are by Bach scholar Alfred Durr), and reproductions of the complete Bach Gesellschaft scores. A new feature of these two volumes is a detailed listing of all alterations made in the Gesellschaft scores (keyed to footnotes in the scores themselves) in accordance with recent research. I found it a fascinating and very useful addition, though such detail will probably be of little interest to the layman.

Contrasting Harnoncourt's and Leonhardt's work is difficult to do; they each have their own style and sound, but the unanimity of their approach is more remarkable than their individual differences. Both play with a gentle and restrained enthusiasm, and the precise ensemble of seasoned chamber players. Because of their relatively small size and the sound of the old instruments, and especially because of their extremely precise phrasing and articulation, the textures are at all times utterly clear and transparent. This transparent "sound" is perhaps the most outstanding attribute of these performances. The differences between the two choirs are somewhat easier to characterize, though both are excellent. From the King's College group every note, every sound is polished and beautiful. If there is any complaint, it is that they are sometimes being too careful, too precious, as if they're walking on eggs. The Vienna Choir Boys, on the other hand, sing in an altogether more natural and easy manner, though not a whit less precise, and I do prefer their sound somewhat.

Of the eight cantatas in these two volumes, two (Nos. 14 and 16) have never been recorded anywhere, and No. 17 is available only on the German Cantate label. No. 19 used to be available in performances by Lehmann (Archive) and Grishkat (Renaissance), but only a Werner-led version is currently available from the Musical Heritage Society (MHS, for the way, is also engaged in a complete cantata series, which at present includes about eighty numbers.) Serious competition does exist, however, for No. 20 (Rilling/MHS) and No. 13 (in the new Richter collection discussed below). Leonhardt recorded No. 18 a number of years ago and it is still available, but it has been newly recorded by Harnoncourt for this series, presumably because a female soprano, Agnes Giebel, sang on that earlier recording; for this complete edition we must remain true to Bach's intentions in every detail and use a boy soprano, of course. The cantata exists in two settings: The original Weimar version was scored for four violas, bassoon, and continuo and was notated in G minor. For a later performance in Leipzig Bach added two recorders to the instrumentation and transposed it to A minor (the organ in Weimar was tuned to the high "choir" pitch, so it actually sounded in A minor there too). Harnoncourt's new recording uses the Weimar form without recorders, and is played in

Envy the fortunate music critic, whose job occasionally requires him to listen repeatedly and in close succession to recordings of nearly two-dozen Bach cantatas—a task he would seldom undertake of his own volition without the external stimulus of a press deadline. It could be an arduous undertaking, but when the recordings are from the likes of Richter, a Harnoncourt, or a Leonhardt, this critic emerges from his listening sessions in something near a euphoric state. Richter on the one hand, and Harnoncourt/Leonhardt on the other, represent tremendously different approaches to this music, but in both cases the results are so splendid on their own terms that I am almost equally excited by both these large collections. The music too is so multifaceted and incredibly varied from work to work that a large boxed cantata collection seems more satisfying than large integral editions of certain other works that don't encompass so much variety. You may well ask what such a critic does for pleasure after finishing his "work." In this case, the critic goes right back to rehear yet again some of the better of these cantata performances.

Telefunken seems to be keeping right on schedule with its mammoth project: Something over 200 cantatas are scheduled to appear over a period of about ten years, and now, less than a year after the appearance of Vol. 1, we're up to Cantata No. 20 (the series is being recorded in the numerical order of the old Bach Gesellschaft edition, which follows neither a chronological nor any other sort of "logical" system). Performing duties for the entire series are being shared equally by Nikolaus Harnoncourt's Vienna Concentus Musicus and Gustav Leonhardt's Amsterdam-based group with the Vienna Choir Boys and the King's College Choir. Both groups are specialists in playing old music on old instruments and have gone to great lengths in preparing scholarly accurate performing editions of the music—in other words, their goal is to present every detail in a form as near to what Bach would have wanted as is possible for them to do. These two boxes, like the previous three, each include three booklets: a general survey of the cantatas, a more specific description of the specific works recorded in that box (both of these are by Bach scholar Alfred Durr), and reproductions of the complete Bach Gesellschaft scores. A new feature of these two volumes is a detailed listing of all alterations made in the Gesellschaft scores (keyed to footnotes in the scores themselves) in accordance with recent research. I found it a fascinating and very useful addition, though such detail will probably be of little interest to the layman.

Contrasting Harnoncourt's and Leonhardt's work is difficult to do; they each have their own style and sound, but the unanimity of their approach is more remarkable than their individual differences. Both play with a gentle and restrained enthusiasm, and the precise ensemble of seasoned chamber players. Because of their relatively small size and the sound of the old instruments, and especially because of their extremely precise phrasing and articulation, the textures are at all times utterly clear and transparent. This transparent "sound" is perhaps the most outstanding attribute of these performances. The differences between the two choirs are somewhat easier to characterize, though both are excellent. From the King's College group every note, every sound is polished and beautiful. If there is any complaint, it is that they are sometimes being too careful, too precious, as if they're walking on eggs. The Vienna Choir Boys, on the other hand, sing in an altogether more natural and easy manner, though not a whit less precise, and I do prefer their sound somewhat.

Of the eight cantatas in these two volumes, two (Nos. 14 and 16) have never been recorded anywhere, and No. 17 is available only on the German Cantate label. No. 19 used to be available in performances by Lehmann (Archive) and Grishkat (Renaissance), but only a Werner-led version is currently available from the Musical Heritage Society (MHS, for the way, is also engaged in a complete cantata series, which at present includes about eighty numbers.) Serious competition does exist, however, for No. 20 (Rilling/MHS) and No. 13 (in the new Richter collection discussed below). Leonhardt recorded No. 18 a number of years ago and it is still available, but it has been newly recorded by Harnoncourt for this series, presumably because a female soprano, Agnes Giebel, sang on that earlier recording; for this complete edition we must remain true to Bach's intentions in every detail and use a boy soprano, of course. The cantata exists in two settings: The original Weimar version was scored for four violas, bassoon, and continuo and was notated in G minor. For a later performance in Leipzig Bach added two recorders to the instrumentation and transposed it to A minor (the organ in Weimar was tuned to the high "choir" pitch, so it actually sounded in A minor there too). Harnoncourt's new recording uses the Weimar form without recorders, and is played in
Your records represent a major investment. Does your record player protect it?

According to surveys by the major music magazines, the average music lover owns more than 200 records. If you're typical, a little math will tell you that your record collection has already cost you over a thousand dollars. And will cost even more as you continue to buy records.

With that much money involved, it's certainly worth your while to consider how to protect that investment. Especially since the soft vinyl record is so vulnerable to permanent damage from the unyielding hardness of the diamond-tipped stylus.

What can do the damage.
As soon as the stylus touches down in the groove, a running battle begins. The rapidly changing contours of the record groove force the stylus to move up, down and sideways at great speeds. To reproduce a piccolo, for example, the stylus must vibrate about fifteen thousand times a second.

The battle is a very uneven one. If the stylus can't respond easily and accurately, there's trouble. Especially with the sharp and fragile curves which produce the high frequencies. Instead of going around these peaks, the stylus will simply lop them off. The record looks unchanged, but with those little bits of vinyl go the lovely high notes.

It's all up to the tonearm.
Actually, no damage need occur. Your records can continue to sound new every time you play them. It all depends on the tonearm, which is to the stylus as the surgeon's hand is to the scalpel.

Basically the tonearm has just three jobs to perform. It must apply just the right amount of pressure to the stylus, keep this pressure equal on both walls of the groove, and follow the stylus without resistance as the groove spirals inward.

Today's finest cartridges are designed to track optimally at very low pressures (one gram or less). So you can appreciate how important it is for the tonearm settings to be accurate and dependable. And for the friction in the bearings to be extremely low.

Yet the difference in cost between a turntable with a precision-balanced tonearm and one with a less refined tonearm can be as little as $50. (The cost of only a dozen records.)

Dual: The choice of serious record collectors.
For these reasons and others, Dual automatic turntables have long been the choice of serious music lovers. And for years, readers of the leading music magazines have bought more Duals than any other make of quality turntable.

We think these are impressive endorsements of Dual quality. But if you would like to know what independent test labs say about Dual, we'll send you complete reprints of their reports. Plus an article on what you should look for in record playing equipment.

Or, if you feel ready to invest in a Dual, just visit your franchised United Audio dealer for a demonstration. The dividends will start immediately.

United Audio Products, Inc., 120 So. Columbus Ave., Mt. Vernon, N.Y. 10553
Exclusive U.S. Distribution Agency for Dual

How Dual protects your records.
The tonearms of the Dual 1218 and 1229 are mounted in gyroscopic gimbals, the best known scientific means for balancing a precision instrument that must remain balanced in all planes of motion.

Unlike conventional tonearms, the 1218 and 1229 track records at the original cutting angle. The 1229 tonearm parallel-kills single records, moves up to parallel changer stock in the 1218, a similar adjustment is provided in the cartridge housing.

For perfect tracking balance in each wall of the stereo groove separate anti-skating calibrations for conical and elliptical styli are provided on all Duals.

Dual 1218 $155.00
Dual 1215 $129.50
Dual 1229 $199.50

CIRCLE 16 ON READER-SERVICE CARD
You have some questions about 4-channel? 
We have the answers.

**EVX-44 Four-Channel Universal Decoder $99.95 suggested retail**

Q. With so many different matrix encodings (E-V Stereo-4", SQ, OS, Dyna, and all the rest) how do I know which decoder to buy?
A. Simple. Choose the new EVX-44 Universal Decoder. It plays ALL matrixes accurately without switching, no matter how they are made.

Q. The EVX-44 has an extra Separation Enhancement circuit. Why?
A. To keep a soloist firmly in the front of the room by increasing 0. The EVX-44 has an extra Separation Enhancement circuit. Why?

Q. What if so-called "discrete" records become popular? Won't I be wasting my money buying a matrix decoder now?
A. Not at all. Major record companies are firmly committed to matrix 2-channel stereo records. The circuit works equally well with all encodings and even with A. Not at all. Major record companies are firmly committed to matrix 2-channel stereo records. The circuit works equally well with all encodings and even with A.

Q. Why does E-V offer two decoders?
A. Cost, mostly. The original EVX-4 is still a great bargain. It does an excellent job of decoding matrix records and is tops for enhancing 2-channel stereo. But the new EVX-44 does a more accurate job with all matrixes, and it has the separation enhancement circuit. It's quite a bit more complex, hence more expensive. E-V thinks you should have a choice.

Q. I don't want to buy 2 stereo systems to get 4-channel sound. What should I do?
A. Choose the EVR-44X 4-channel AM/FM receiver. It has everything including the Universal Decoder circuit built right in. Simply hook up 4 loudspeakers (hopefully E-V) and whatever tape or record players you prefer, and play.

When it comes to 4-channel ... there's no question about it. Electro-Voice makes it happen.

A minor. There is also a rather good Mauersberger recording on Archive—also in A minor but with recorders—that is interesting to compare with Harmonnour's lighter and livelier performance. The Easter Cantata, No. 15, has regrettably been banned from this series because very recent research has established that it and about seventeen other cantatas attributed to Bach were in fact written by his kinsman Johann Ludwig Bach. There has never been a recording of this festive and enjoyable work.

There's no need to single out individual performances here, since all are superb. Of Ewastad, Equiluz, and Van Egmond I'll only say I cannot imagine their work ever being surpassed. My strong and unqualified recommendation is to acquire each of these history-making volumes as they appear. If you're curious about the series but not sure you want to own all 200-plus cantatas, then buy any one of the volumes, since the performances are uniformly excellent and the recording sequence is such that nearly every volume will include cantatas from widely different periods and in various styles.

Karl Richter has little interest in old instruments or boy's choirs and seems undisturbed by the fact that numerous small details of the old Bach Gesellschaft edition have been revised in the new edition because of recent research and new discoveries. He is a specialist, however, in training a medium-sized mixed chorus to sing with almost astonishing clarity and purity of sound and in getting the entire vocal/instrumental ensemble to perform with the utmost precision. In addition, Richter seems to have the romantic's inborn instinct and flair for finding and projecting the intrinsic drama and excitement of each work; his performances are invariably arresting and moving, often electrifyingly exciting, even if he frequently oversteps the stylistic boundaries of the baroque period.

Several of the fourteen cantatas in Richter's collection are new to the American catalogues (Nos. 81 and 121) and world premieres. Three of these cantatas, however, (Nos. 65, 82, and 124), are merely repackagings of earlier Richter performances that have been available here for several years. They are good performances, though, and if you missed them the first time around, you'll be glad they're included here—especially Fischer-Dieskau's memorable account of No. 82, Ich habe genug. I can't condone the policy, though, of forcing the serious collector to buy the same performances twice.

There is a great deal of variety in Richter's random selection of fourteen cantatas. Two of the best are Weimar works (Nos. 61 and 132) dating from 1714 and 1715, and they are also two of the best performances here. The others are all Leipzig works dating from 1723 to 1728 and 1729 and they range from the huge, festive and elaborate Christmas Cantata, No. 63, with four trumpets and drums, three oboes, bassoon, and strings, to the intimate style of the chorale dialogue Cantata, No. 58, which employs only soprano and bass soloists (no chorus) with oboes and strings. Not all of Richter's performances are uniformly successful. In No. 63, for instance, because of the large orchestration. Richter seems to have beefed up the size of the chorus as well, with a consequent loss of precision and clarity in the opening chorus. The monotonous style of No. 121 also suffers from muddy textures and...
The Big New Sound in Cassettes

AKAI gives you the most perfect cassette recording in the world today! That's a mighty big claim, but we can prove it. Our GXC-65D Stereo Cassette Recorder is innovatively engineered with ADRS.* This exclusive system eliminates almost all high frequency distortion above 8,000Hz.

But we didn't stop there. We combined ADRS with Dolby. And then added AKAI's exclusive GX (glass and crystal ferrite) head.

Illustrated below are the actual output curves of a 13,000Hz signal from a Dolby-equipped cassette deck without ADRS, and a comparable curve from the new AKAI GXC-65D.

Without ADRS

With ADRS

The clear, undistorted signal is a pleasure to behold. And a greater pleasure to hear.

What's more, the GXC-65D is equipped with AKAI's Invert-O-Matic—automatically reverses the cassette inside the recorder for continuous repeat/reverse. And the Invert-O-Matic mechanism is unconditionally guaranteed for two years—parts and labor.

So you can stop sitting around waiting for perfect cassette recording. Listen to the GXC-65D. Your ears will make up your mind for you.

*Automatic Distortion Reduction System

AKAI™
AKAI America, Ltd./P.O. Office Box 55055, Los Angeles, California 90055.

For your nearest AKAI dealer call 800-243-6000 Toll Free. In Connecticut, 1-800-822-6500.

CIRCLE 3 ON READER-SERVICE CARD
complete unintelligibility of words, possibly because the tempo is just too fast even for this sprightly choir. A similar motet-style chorus which opens No. 64 calls for a cornetto and three trombones to double the vocal lines. Richter uses a modern trumpet, whose brassy sound is ideal, yet she makes a strong contribution nonetheless. Pete Schreier, who sings all the tenor music except on the two reissued cantatas here, has all the required lightness and agility and sings with a pleasing sound. He's sometimes a rather bland interpreter, though, when heard in the company of sparklers like Richter or Fischer-Dieskau. Theo Adam gets called upon whenever the barnstorming variety of booming basso is required and he makes a stunning effect. Only in No. 111 does he seem to be miscast; the range could easily be handled by a Fischer-Dieskau-type baritone and the melismatic writing requires more agility and grace than Adam can comfortably deliver. Herta Topper, of the matronly tone, has some wobble problems and pitch insecurities that mar her heartfelt readings. As I've said, the over-all level of these fourteen performances is high, and Richter's unabashed romanticism and dramatic sense provide a wonderful alternative to the more austere Telefunken readings. I recommend both.

C.F.G.


The Pathétique Sonata was one of the works on Stephen Bishop's debut recording (an EMI disc CLP 1655 that also included, among other things, Chopin's Barcarolle and F minor Ballade). He played it well then, and he does it even better today. The older performance had solidity, pianistic poise, and quite a degree of excitement to which are now added a greater nuance and personal involvement. There is a certain flexibility of tempo and a fiery Sturm und Drang bravura which allow the music to speak with impelling force and yet never transcend the limitations of classical decorum. The Concerto—the third of the five Beethoven's to be recorded by Bishop and Davis (the pianist also recorded No. 4 with a different conductor for World Record Club)—similarly receives a more sharply characterized reading than these artists gave to either the C major, Op. 15 or to the Emperor. The tempos—on the broad side—have a great deal of swinging pulse, the dynamic contrasts are bold, and there is some excellent orchestral pointing. Davis favors woodwinds and drums in an unusual degree and these are excellently caught in Philips' clean, almost clinical recording. The pianist brings considerable tonal weight to his task—the forties are admirably robust—and similarly keeps on the alert for meaningful inner lines.

Yet for my taste, this Bishop/Davis rendition falls short of the very best in Beethoven performance. There is still in evidence an emotional reticence and oppressive sobriety which stand as a barrier between listener and music. To cite one example, Bishop's left hand in the Rondo theme is rather too symmetrical and reminiscent of a polite music box, whereas a stylist to the manner born such as Leon Fleisher (Columbia) gives subordinate sections a more flexible metric and supple angularity. I don't always want to be reminded that Beethoven was an eighteenth-century composer and am quite sure that he would have been the last person to align himself to the Emily Post School of well-bred pianism.

H.G.
Onkyo
Scepter
Speaker Systems
bring out the

Beethoven,
Beatles,
& Blues
in you.

For the moment, picture yourself at a conductor's podium... or performing with a modern Blues, Rock or Jazz group. There's no question that this would be the ultimate in exciting musical involvement. We believe that Onkyo Scepter Speaker Systems will have a similar effect—totally involving you in the music you like best! That's because Onkyo Scepter Speaker Systems have the uniquely outstanding ability to reproduce instrumental and tonal definitions with artistic integrity. The well-balanced, virtually distortion-free response is so overwhelming it must be experienced. The bass is full, natural and rich. Mid-range response is clean and clear. The highs are distinctively pure and sweet. And the quality of design and construction... the craftsmanship, is far superior to any competitive systems. There are 5 models in the Scepter Series for bookshelf or free standing use, priced from $149.95 to $499.95. Product performance is guaranteed to meet or exceed printed specifications. And, you can match these fine quality Onkyo speakers to our outstanding Receivers, Tuners and Amplifiers for the ultimate in...

"Artistry in Sound".

Write for complete details.

ONKYO
Artistry in Sound

Mitsubishi International Corp./Onkyo Sales Section
25-19 43rd Avenue, Long Island City, N.Y. 11101 / (212) 729-2323
The ‘special kind of magic’ of Victoria de los Angeles.

Harold Schonberg (N.Y. Times) chose those words and added, "She sings sweetly and intimately, with enough charm to melt the north polar ice cap." That charm, and the purity of her art, shine through her two latest Angel albums.

"Concert at Hunter College" was recorded live when she and Alicia de Larrocha appeared together for the first time. Irving Kolodin summed it up, "a beautiful evening of beautiful music by two beautiful people."

"Songs of the Auvergne" distilled a lifetime of love for folk music. She sings with intelligence, humor, and joy, telling us more about southern France and its people than any books ever could.

The second side is Chausson's "Poem of Love and the Sea." Her velvet-textured soprano brings this sensuous, truly poetic work to life. Both albums are beautiful experiences.

FREE McIntosh CATALOG and FM DIRECTORY

Get all the newest and latest information on the new McIntosh Solid State equipment in the McIntosh catalog. In addition you will receive an FM station directory that covers all of North America.

MX 113
FM/FM STEREO · AM TUNER AND PREAMPLIFIER

Send Today!

McIntosh Laboratory, Inc.  East Side Station P.O. Box 96  Binghamton, N.Y. 13904

NAME ________________________ ADDRESS ________________________

CITY ________________________ STATE ______ ZIP ______

If you are in a hurry for your catalog please send the coupon to McIntosh. For non rush service send the Reader Service Card to the magazine.

CIRCLE 37 ON READER SERVICE CARD

Viktor Pikaizen, a thirty-nine-year-old Soviet virtuoso, has won prizes at many important European contests, but until 1965 he always had the bad luck to come in second (in that year the violinist finally walked away with the first prize at the Vienna Paganini competition). His style is broad-toned, rather grandly inflected, sometimes a bit generalized and muscular in its lyricism, usually devoid of grace, and chary of a true pianissimo—all in all, quite reminiscent of David Oistrakh. This is not terribly surprising as Pikaizen studied with his illustrious older compatriot (who in fact conducts for his former pupil on one side of this disc).

The Dvořák gets a large-scaled, rather square-toned performance here. Pikaizen has a big sound, which he projects thrustingly, conductor Oistrakh's direction is very clear and sometimes just a trifle unsubtle. I like the way he scrupulously unveils all the woodwind solos which are often buried in the thickly devised scoring, and I also like the way he clarifies the pulse and structure of the sometimes diffuse writing (it has always seemed to me that this concerto never quite strikes fire until its finale). At the same time a bit more charm, a graceful rubato or two, and some delicacy would have been welcome. For that reason I continue to prefer the superb Milstein/Fltihlbeck de Burgos edition. Male and the Czech Philharmonic contribute vital orchestral support to Edith Peinemann's well recorded DGG, but I am not a particular admirer of that soloist's inflected, Teutonic fiddling. Ricci sounds rather anemic in his London version, and Stern's broad interpretation suffers from Ormandy's heaviness and handling of tempo in the first movement.

There is a good reason why Wieniawski's F sharp minor Violin Concerto is so much less popular than his second in D minor. It's a far less memorable piece! Whereas the D minor has at least two tunes that stick in the mind (and the D minor has at least two tunes that stick in the mind: the present concerto lacks even that attraction). Pikaizen plays quite brilliantly, and perhaps realizing the innate deficiencies of the composition, serves up the piece with a garnishment of violinistic sauce: juicy portamentos, throbby vibrato, and the like. The one remaining alternative version available by mail order from the Musical Heritage Society (an earlier Angel with Michael Rabin and Boult having long since been deleted) is a less personalized interpretation, but I prefer Oleg Krysa's leaner but no less silken sound. Rothdestvensky, by the way, draws some finely pointed phrasing from his forces and is a more flexible conductor than either Oistrakh or Satanowski (in the MHS edition of the Wieniawski).

It may be the empty-hall acoustics which turn me off the new record: Detail is present, but the violin tone is rather raspy and raw.

H.G.


ESTHERHÁZY: Harmonia Caelistis. Kristin A Laky and Anna Adam, sopranos; Katalin Koczor, alto; Attila Füles, tenor; Kós-Szabó, bass; Chamber Choir of the Academy of Music, Budapest. Girls' Choir of Györ. Ferenc
Maxell announces a huge improvement in cassette tape.
Magnified 10,000x so you can see it.

Introducing the new Maxell Ultra Dynamic cassette. We've added several new improvements to the cassette. And a little more Ultra to the Dynamic.

Our smallest improvement is our biggest improvement.
We reduced the size of the tiny PX gamma ferric oxide particles on the surface of our tape. The Hz now go up to 22,000 Hz so you get even higher highs. The signal-to-noise ratio's now 8dB more than ordinary cassettes—which means you get less noise from your cassette player and cleaner, clearer sound from your cassette. And the dynamic range is wider so you can turn the sound up loud enough to disturb the neighbors without worrying about distortion.

Little pad finally gets grip on self.
Every cassette has a little pressure pad inside to keep the tape pressed firmly against the tape head. Other cassettes keep their pads in place with glue—or rather don't keep their pads in place with glue. So we've designed a little metal frame that holds the pad in a grip of steel. And now the tape can't push the little pad out of place—and you don't need to worry about signal fluctuations and loss of response any more.

An improvement you can see but can't hear.
The first five seconds of our new cassette is a timing leader. And we've marked the place where it starts with three little arrows so you'll always know exactly where you are.

Amazing new miracle ingredient fights dirt fast!!!
But the leader's also a head-cleaner and what's amazing, new and miraculous about it is that it doesn't rub as it scrubs as it cleans. Because it's nonabrasive. So it keeps your tape heads clean without wearing them down.

Our new long-playing cassette is shorter.
Our new UDC-46 is twenty-three minutes per side. Which very conveniently just happens to be the approximate playing time of your average long-playing record. (Our other cassettes are 60, 90 and 120.)

And that's our new improved Ultra Dynamic cassette. And its ultra dynamic new improvements.

maxell
The answer to all your tape needs.

February 1973
CIRCLE 35 ON READER-SERVICE CARD
The name of the Esterházy family is well known to music lovers, for it is forever associated with that of Haydn. Haydn served four Esterházy princes, all of whom, especially Nicholas (“the Magnificent”), were devoted to music. But the first of the line to be made prince of the Holy Roman Empire, Pal (Paul), 1635-1713, though unknown except to musicians, occupies an important role in Hungarian musical history. This premier peer of Hungary—a general who distinguished himself in the Turkish wars, and a mighty politician—was a well-trained composer, familiar with the entire range of contemporary music. The work recorded here was published in 1711 in Vienna but must have been composed by Prince Paul a decade or two earlier. It is a collection of fifty-five one-movement cantatas for solo voices, chorus, and orchestra. But the unique value of his work rests on its attempt—a successful one—to combine the idiom of international Western church style with popular Hungarian sacred song. The “baroque Latin” as well as the subjective tone of the texts indicate that they too were Prince Paul’s work, for this military man had a copious humanistic education. This was the first, and for a long time the only effort, to use genuine folk material in Western garb, and thus the prince was the Barbók of his time—no small merit.

Esterházy, though obviously beholden to southern German and Italian music, shows many original traits. His vocal writing is idiomatic, and he has a pronounced sense for color, reflected in his imaginative handling of the orchestra consisting of strings, woodwinds, trumpets, timpani, and organ. The Hungarian melodies are often in evidence, and in two instances (Jesus dulcedo cordim; Cur fles Jesu) an entire religious folksong is used. The first heralds of Hungarian orchestral music appear in the plots and preludes and postludes. The work, dedicated to the Infant Jesus, remains unique, and while of course it cannot mean here what it does to the Hungarians, it well deserves to be known.

The performances are excellent. Soloists, choirs, and orchestra are all good, even the "trouble instruments," recorder and high trumpets, are faultless. The continuity is always just right, and the conductor is in unquestioned command of a nice intimate chamber-music mood and tone. The sound is fine and the notes too are commendable. This recording is fully the equal of the best similar recording is fully the equal of the best similar


The first five symphonies of Hans Werner Henze, written in 1947, 1949, 1953, 1955, and 1962, form an important body of works through which one can gain considerable insight into the composer’s first major creative period, a period extending from the years immediately following the Second World War until the late 1960s. Along with his operas written during the same span, the symphonies clearly define Henze’s position in the postwar compositional scene: Conservatively oriented and extremely eclectic in his use of both techniques and materials. Henze was consistently concerned with an attempt to bring new life to the instrumental forms inherited from the eighteenth and nineteenth centuries. Significantly, he was the only prominent composer of his generation to occupy himself with the problem of specifically symphonic composition: and the five works which resulted from this occupation, whatever their limitations in regard to intrinsic value (and it is my own feeling that they are not among Henze’s best pieces), remain impressive monuments to the composer’s steadfast search for new answers to the questions posed by traditional, large-scale symphonic forms.

With Henze’s well-known shift toward a more free-wheeling, “avant-garde” style in the late 1960s, (a shift accompanied by a closely related political movement to the radical left), it appeared, however, that the first five symphonies formed a completed, self-contained cycle. Yet surprisingly, when the Cuban Cultural Ministry commissioned Henze in 1969 to write a large-scale orchestral piece—and more spe-
CASSETTE STEREO TAPE DECK

TRQ-2000: Built in "Dolby" sound reproduction system eliminates tape noise by a cycle of sound compression and expansion. A 4-pole hysteresis synchronous motor and balanced flywheel reduce wow and flutter. Special tape selector permits use of chromium dioxide tapes. Hitachi's Auto Stop system automatically halts the motor and switch when the tape end is reached. 4-digit tape counter. Two VU meters. Convenient push button and slide controls. $229.95.*

TRQ-262: A large-scale flywheel and 4-pole hysteresis synchronous motor drastically reduce wow and flutter. And included are shut-off device, pause button, clearly visible level meters for right/left channels and level indicator along with easy push button controls. $149.95.*

8-TRACK CARTRIDGE TAPE DECK

TPQ-144: Automatic switchover to 4-channel or 2-channel operation according to the type of cartridge you insert. Unique easy loading system. The motor is an elaborate 4-pole hysteresis synchronous outer rotor design usually found only in the most costly hi-fi equipment. Integrated circuits assure improved frequency characteristics and top reliability. $129.95.*

TRQ-134: Hitachi's Auto Stop system automatically halts the motor when the tape end is reached. Two VU meters are provided for accurate level adjustment. Easy loading mechanism. Fast forward winding possible. Auxiliary features include headphone jack, program indicator lamp, slide volume controls, program selector button and a pause button. $149.95.*

No matter what you want in 8-track or cassette ... Hitachi has the deck for you. For more information, write, Dept. HF-3, Hitachi Sales Corp. of America, 48-50 34th St., Long Island City, N.Y. 11101

Suggested retail.

Hitachi

Quality always comes first at H I T A C H I

February 1973
This is Glenn Gould’s first harpsichord recording, and it is truly something to marvel at: an absolutely dazzling tour de force by this most unpredictable of performers. Actually, I suppose it should come as no great surprise that Gould seems so completely at home on his new instrument. I have always felt that he depended far less than most of his colleagues upon purely dynamic differentiation—a pianistic device not applicable to the harpsichord—for the definition of complex contrapuntal textures, preferring rather to rely principally upon a careful rendering of the unique shape, character, and inner articulation of the various polyphonic voices. It is an approach eminently suited to the harpsichord. Add to this the fact that Gould seems somehow to have transferred his phenomenal pianistic technique to the new instrument with no apparent loss whatever and you have what this recording makes clearly manifest: the birth of a harpsichordist of extraordinary ability and originality.

That Gould should have chosen Handel for his debut seems particularly appropriate. As a well-known Bach performer on the piano, he avoids the inevitable comparisons that a Bach recording (at least at this stage) would evoke and thereby enables the listener to receive this new offering on its own terms. Furthermore, these Handel suites are wonderful pieces in their own right, being beautifully wrought musical statements containing a wealth of textural variety and virtuosic keyboard writing. Gould plays them for all they are worth. To mention just a few high points: The remarkable improvisation upon Handel’s unadorned chord progression in the Prelude to the Suite No. 1 is especially striking. Also notable is Gould’s seemingly free (yet carefully controlled) metrical conception of the adagio movements in Suites Nos. 2 and 3. The latter of these serves as the theme for a long, brilliant set of variations which Gould devours in a single gulp as it were, tying together some ten minutes of uninterrupted music into one tightly knit package. (Particularly important in this regard is the careful balancing of the tempo relationships between individual variations.) Finally, it is at the sheer musicality of the total performance that is most impressive. The music is allowed to flow with a naturalness of phrasing, and a carefully regulated rhythmic flexibility that is completely convincing at every stage. This is especially remarkable when one considers that Gould plays some of the movements faster—and others slower—than probably any other present-day harpsichordist (with the possible exception of Anthony Newman) would dare. Yet he never allows his tempos to interfere with the music’s over-all linear progression, a feat which, given these extremes (particularly at the slow end), requires the utmost in musical concentration and control.

This recording is so good that it might even trigger a revival of interest in Handel’s keyboard music, which has never managed to reattain the prominence accorded it during the composer’s own lifetime. Significantly, none of the four suites recorded here is currently listed in the catalogue. In fact, the only recordings of any of the keyboard suites (of which there are sixteen to be found in the keyboard volume of the complete Handel edition brought out by the Handel Society) are included as single items on discs consisting of miscellaneous keyboard works. Yet this is music of the very highest order, and the four suites to be heard here hardly need take second place even to Handel’s greatest vocal music. The sound is excellent, the liner notes are informative, and even the album cover is interesting: It carries a photograph of an extraordinarily elaborate eighteenth-century harpsichord from the musical instrument collection of the Metropolitan Museum of Art in New York.

**HANDEL: Suites for Harpsichord.**

No. 1, in A: No. 2, in F: No. 3, in D minor: No. 4, in E minor.
What Makes the LAFAYETTE LR-4000 the Most Sophisticated Hi-Fi 4-Channel SQ Receiver...

Among other things is the exclusive “wave matching full logic” SQ decoder

Quite frankly, the LR-4000 4-Channel SQ Stereo Receiver represents the culmination of an "all out" design philosophy on the part of Lafayette's engineering team. One of the LR-4000's many advanced features is a "wave matching full logic" SQ decoder. This type of SQ decoder provides a highly sophisticated level of performance by employing two electronic systems: front/back logic and wave matching logic. This results in a performance capability in excess of 20db of precise channel separation of any SQ program source. 4-Channel SQ... like you never heard it before!

Our "all out" design philosophy brings you an FM stereo tuner section which has a "phase locking" multiplex decoder section providing optimum stereo separation (40db at 400 Hz) at minimum distortion (0.3% H.D. at 100% Modulation). Four channels of amplification at 57-watts/channel RMS "feeds" even power hungry speakers! We've also incorporated two additional "matrix" decoder circuits in the LR-4000 which enables you to enjoy "derived" 4-channel sound from your regular 2-channel stereo records, stereo tapes, and FM stereo broadcasts as well as any other specially "encoded" 4-channel stereo program source. And there's lots more innovative features, but we're out of space!

The LR-4000 is Lafayette's answer to an "all out" extraordinary 4-Channel SQ Receiver in all areas but one—the price! Only $499.95... and waiting for you at your nearest Lafayette Electronics Center. Hope to see you soon...

Lafayette Radio Electronics P.O. Box 10, Dept. 19023, Syosset, L.I., N.Y. 11791

[Ad for catalog]

Send today! FREE The World's Largest Consumer Electronics Catalog Your One Complete Buying Guide For "Everything In Electronics"
piece is very similar to Henze's *The Raft of the Frigate Medusa*, which was written at about the same time.)

In writing about a slightly later piece, *El Caminante*, I remarked in the August 1971 issue of *High Fidelity* that I suspected one of the reasons the composer had been so successful in reshaping his compositional attitudes and in establishing for them a new formal framework, was that he had confined himself to a small ensemble consisting of only four musicians. After hearing the Sinfonia No. 6, I am more than ever convinced of this. Here, confronted with the old instrumental forces, Henze is too inclined to fall back on his old compositional responses. Much has changed, of course, in the composer's development since 1969, and it will be interesting to see, should he choose to return to the symphony again, if Henze will be able to break new ground in this area. But as for the present work, it leaves the question very much open.

The symphony has been very well recorded, and the performance under Henze's direction seems quite good. The composer also provides informative liner notes. 

R.P.M.

---

**HINDEMITH:** Nusch-Nuschi-Tänze, Op. 20; Der Dämon, Op. 28: Concert Suite; Hin und Zurück, Op. 45a. Barbara Miller (s), Helene; Claus Bock (t), Robert; Ulrich Schaible (b), Doctor; Helmuth Kuhnle (cs), Ordeyri (in Op. 45a); Berlin Symphony Orchestra (in Opp. 20 and 45a); Stuttgart Solisten (in Op. 28); Arthur Gruber, cond. Candide CE 31044. $3.98.

With the exception of *Cardillac*, Paul Hindemith's theater music of the 1920s has been scantily available on records. This was the decade when he, as much as anyone else, made the news at the European new-music festivals in Donaueschingen, Salzburg, and elsewhere, and his ebulliently iconoclastic subject matter, fluent dissonant counterpoint, and constant willingness to rearrange an old piece presented an image much in contrast to the sober, ponderous didactic codifier of later years. It is good to have these reminders of the early Hindemith, especially as these recordings are tolerably well made.

The earliest work of the three is the dance suite from *Das Nusch-Nuschi*, a one-act piece for Burmese marionettes, first performed in June 1921 at Stuttgart, on a double bill with the still-unrecorded *Mörder, Hoffnung der Frauen*, a revised version was premiered in 1931, the present ten-minute suite extracted in 1921. The influence of Busoni is evident in the contrapuntal textures, with the oriental touches of orchestration and the pentatonic melodies recalling the older composer's *Turanand*, but Hindemith's characteristic rhythmic drive is already quite striking, the leanness of the texture an equally individual trait.

*Der Dämon*, a 1924 "dance pantomime," is scored for a chamber group: flute (doubling piccolo), clarinet, horn, trumpet, piano, and a quintet of solo strings; the suite omits almost half of the complete score, and while the Candide program note gives a full synopsis of the ballet, there is no clear indication of what music is played here (with the help of the label, you may be able to figure this out, although the last band is the Finale. not the "Dance of the Red Race," as it is mistranslated). There is much textural variety here despite the limited ensemble, but also a more rigid metrical treatment than in the earlier score: the influence of Bach is more direct, as in the two- and three-part "inventions" of the second dance.

Finally we have the celebrated *jou d'esprit*, *Hin und Zurück*, which first appeared on a quadruple bill at Laden-Baden in July 1927 (along with the Weill-Brecht *Mahagonny Singspiel*, Toch's *Princess and the Pea*, and Milhaud's *L'Enfleuvant d'Europe*). The gimmick of this ten-minute operatic sketch is the reversal of the opening action in the second half: after wife gets up, husband comes in, becomes suspicious of a letter she receives, and shoots her—whereupon a wise man appears and, observing that to those in the heavens it hardly matters in which direction men lead their lives, orders the action to go backwards. I have seen the score described as a "crab canon," but this is nonsense: Hindemith makes an abridged recapitulation of his material, cunningly reversed and, in literal retrograde, certainly not in canon. Something of a "send-up" of opera, it is clever enough to sustain its brief length, and the stage action (which should be presented as a literal retrograde) would doubtless help carry the joke. The voices in this performance are far from tonally luscious, but accurate enough; the challenge of balancing them has caused the engineer to obscure the orchestral textures that are so clear on the other tracks. No libretto is provided.

---

**HONEGGER:** Le Roi David, Christiane Ede-Pierre, soprano; Jeanneine Collard, alto; Henc Tappy, tenor; Jean Desailly, narrator, Philippe Caillard.
if you are serious about music use the tape of the pro. TDK

Ask any artist or musician, any recording engineer or audiophile, chances are he uses TDK for his professional work. Unmatched in purity and fidelity over the full range of human hearing, crystal clear in its dynamic response and with complete reliability, TDK truly is the tape of the expert. Cassettes, 8-track cartridges or reel-to-reel, in the widest choice of formulations and lengths, including cassettes running as long as 3 hours.

Purity In Sound

Ask your dealer for free copy of 48-page "Guide to Cassettes," or write us directly.
If you're familiar with LDL, you know we don't like talking "breakthroughs". It's become a tired word for minor improvements.

Yet what else do you call a new transducer design that reduces IM distortion up to 2% and increases bass response as much as 6 dB? That's exactly what happens with the new Laminar Core Transducer we're using in our new LDL 749 Professional Reflecting Speaker System. It's a difference you HEAR.

The first transducer that doesn't fight itself. In conventional dynamic loudspeakers, normal voice-coil action produces eddy currents in the magnet structure—currents whose magnetic fields oppose speaker motion, increasing IM distortion and reducing speaker output. Especially on heavy bass passages requiring long cone excursions.

By utilizing a magnet structure with laminated pole pieces (instead of conventional solid ones), the professional's transducers virtually eliminate distortion-producing, power-robbery eddy currents. Resulting in cleaner sound. And greater efficiency in the important bass region.

A "Fearless" speaker: the new industry standard with the Laminar Core Transducer, we sincerely believe we have set a new industry standard in speaker performance. Without being facetious, we say that the new LDL 749 Professional Reflecting Speaker is equal to the challenge of flawlessly reproducing the tonal and spatial nuances of any musical performance, or any volume level, from the softest pianissimo to the human pain threshold, if need be.

Believe your ears. Not your eyes. We don't expect to convince you here: there's nothing like listening for yourself. Next time you visit your LDL dealer, take along a familiar record and listen to the way our new LDL 749 Professional recreates the fidelity and spatial effect of the concert hall with its precise combination of frontal radiation and panoramic reflection. Then look at the pricetag. It may amaze you even more than our sound.

U.S.Pat. No. 3,632,904. The last word in speaker design.

Stands optional, prices slightly higher in south and west. Dealer inquiries invited.
The three-dollar bill.

The stylus shown above is phony. It's represented as a replacement stylus for a Shure-cartridge, and although it looks somewhat authentic, it is, in fact, a shoddy imitation. It can fool the eye, but the critical ear? Never! The fact is that the Shure Quality Control Specialists have examined many of these impostors and found them, at best, to be woefully lacking in uniform performance — and at worst, to be outright failures that simply do not perform even to minimal track-ability specifications. Remember that the performance of your Shure cartridge depends upon the stylus, so insist on the real thing. Look for the name SHURE on the stylus grip (as shown in the photo, left) and the words, "This Stereo Dynetic* Stylus is precision manufactured by Shure Brothers Inc." on the box.

Shure Brothers Inc.
222 Hartrey Avenue, Evanston, Illinois 60204

FEBRUARY 1973
Joachim advised his old friend Brahms in the solo writing of that composer's D major Violin Concerto for Violin and Orchestra, in D minor (Hungarian).

It is a program annotator's commonplace that Joachim advised his old friend Brahms in the solo writing of that composer's D major Violin Concerto. But Joachim's own D minor Concerto for the instrument has tended to be a textbook reference. Clearly this is an unjust state of affairs. The Joachim concerto, on the basis of this recorded performance, deserves hearing. Indeed it seems a stronger work than some other concertos of the same period which, for one reason or another, have managed to stay in the active repertoire. It is decidedly a violinist's showpiece. The orchestra part is not nearly as complex or dramatic as that of the Brahms, for example, but other concertos have the same limitations. The thematic material is interesting, strongly Hungarian in flavor, and developed well in terms of its possibilities for the instrument. The slow movement is quite romantic and is here filled with sentiment. It is the only portion of the score uncut in this performance. The first and third movements, we are told, have been adroitly trimmed. It doesn't seem to have done them any harm, but I lack an urtext for comparison.

The orchestra of Radio Luxembourg will never be rated among the great ensembles of the world, but its performance here is more than adequate. Kohler's conducting is vigorous and sympathetic, and the recorded sound is adequate for documentary purposes if in no way representative of the state of the art.

The orchestra of Radio Luxembourg will never be rated among the great ensembles of the world, but its performance here is more than adequate. Kohler's conducting is vigorous and sympathetic, and the recorded sound is adequate for documentary purposes if in no way representative of the state of the art.

Joachim's demands, and a capacity to provide an effective encore piece.

R.C.M.

LISZT: Symphonic Poems. London Philharmonic Orchestra, Bernard Haitink, cond.; Los Angeles Philharmonic Orchestra, Zubin Mehta, cond. (For a feature review of these recordings, see page 71).

Mozart: Music for Violin and Orchestra. David Oistrakh, violin and viola (in the Sinfonia concertante); Igor Oistrakh, violin (in the Sinfonia concertante and Concertone); Berlin Philharmonic Orchestra, David Oistrakh, cond. Angel 3789, $29.90 (four discs).

Concertos for Violin and Orchestra: No. 1, In B flat, K. 207; No. 2, in D, K. 211, No. 3, in G, K. 216; No. 4, in D, K. 218; No. 5, in A, K. 219; Rondo for Violin and Orchestra. In C, K. 373; Rondo concertante for Violin and Orchestra, in B flat, K. 269; Sinfonia Concertante for Violin, Viola, and Orchestra, in E flat, K. 364; Concertone for Two Violins and Orchestra, in C, K. 190.

Selected comparisons:
Menuhin (concertos, Concertone) Ang. 36231, 35745, 36152, 36240
Stem-Trampler (Concerto No. 3, Sinfonia Concertante) Col. 7062
Zukerman (concertos 4 and 5) Col. 30055
Francescatti (concertos 3 and 4) Col. 6063

Oistrakh the elder plays only the standard five concertos in this collection, so that anyone interested in the two works now thought to be at least partly by other hands than Mozart's (K. 268, in E flat, and K. 271, in D) must still be directed to the Menuhin set on Angel. However, Oistrakh offers more secure violin playing, the Berlin Philharmonic is clearly the better ensemble, and his inclusion of the rarely recorded briefer works for violin and orchestra makes the Russian's set worth acquiring. Worth it, that is, unless you mistrust complete collections on principle, knowing that the chances of one artist being the best choice in all the works are rather doubtful. Even doubters, however, might find the Oistrakh box persuasive: These are unfailingly polished and stylish readings, with enough variety in approach from piece to piece to forestall any complaint of monotony. In the two earlier concertos, for example, and to an even more striking extent in the miscellaneous pieces, Oistrakh adopts a wrong-end-of-the-telescope approach, tending to stress the tiny-craft and gallant elegance of admittedly minor efforts by the composer. But in the familiar concertos as well as in the Sinfonia concertante (in which he plays a luscious viola while [ogf takes the violin part) and the oddly neglected Concer-
An acoustic achievement destined to become the universally preferred sound reproduction system.

Too often these days superlatives are used to camouflage mediocrity. Let's just say, you'll be excited with the magnitude of the achievement of the three new Pioneer series R speaker systems, once you hear them. We built in the sound most people prefer when compared with the conventional speakers now available.

Pioneer has incorporated many meaningful refinements to achieve this exceptional sound reproduction. For example, the series R speaker units are flush mounted to the face of the enclosure, rather than recessed. This produces added vitality to the midrange, and wider overall dispersion.

Exclusive FB cones assure robust bass, clear mid and high tones, improve damping, while keeping distortion at an absolute minimum.

Another example of Pioneer's meticulous engineering detail is the unique concave center pole with a pure copper cap/ring. Not only does this reduce the inductance of the voice coil, it also reduces the dynamic magnetic field generated by the voice coil, for minimum intermodulation distortion and magnificent transient response.

While all three models use long-throw voice coils for greater cone movement and higher excursions, the R700 and R500 have sound-absorbing polyurethane foam surrounding their woofers to reduce distortion even further.

By using improved horn tweeters instead of less costly cone or dome-type tweeters, you can hear the difference in wider dispersion, lower distortion and high transient response.

The same on-target thinking has been applied to the precisely designed crossovers and the sturdy, acoustically padded enclosures.

We'd be happy to send you complete specifications on the R series. But first make this test. Compare the R700 ($229.95), R500 ($159.95), R300 ($119.95) with similarly priced speaker systems at your Pioneer dealer. It's their absolute superiority in sound reproduction that will convince you to buy them.

tone, the attack is more virile, the tone more robust. Sometimes, as in the not terribly distinguished Adagio of K. 216, Oistrakh slips into the small-scaled, hypermannered style one associates with Karajan's Mozart, possibly because the orchestra is Karajan's and adopts that style easily.

Oistrakh is at his formidable best in such studiør movements as the Rondeau of No. 5. No matter what the expressive intent or the tempo of a movement, however, the sixty-four-year-old achieves miracles of subtle articulation, without calling attention to virtuosity when that is not the point. When it is the point, at least partly, Oistrakh can be dazzling, of course. Occasionally, one wishes his cadenzas were slightly abbreviated (the one in the Adagio of No. 3, for instance), so that the thematic line and impulse of the movement itself were not in danger of being lost. But generally the cadenzas, most of them composed by him, suit the music as well as they do the musician. Oistrakh plays his own cadenzas in Nos. 2 and 3. in the Rondeau and in the Rondo concertante. In No. 1 the cadenza is by K. Mostras, in No. 4 by Ferdinand David, in No. 5 by Joachim, and in the Sinfonia concertante and the Concertone by Mozart himself.

As to competing sets and single performances, tastes will certainly vary. There would be an argument in favor of considering the leaner, more austere readings on Philips by Arthur Grumiaux with Colin Davis conducting, or the beautifully fluffed Henryk Szeryng/Alexander Gibson set, also on Philips and available on import. The Zino Francescatti/Brutto Walter, targeted in Nos. 3 and 4, is still available, and still a classic. Among recent recordings, Pianzas Zukerman/Daniel Barenboim offer Nos. 4 and 5 in excellent, though somewhat deliberate and romantically colored performances (the orchestra sounds thicker and tubbier than one would like, but control knobs can alleviate that). Barenboim brings the orchestral parts into play more meaningfully than do versions in which the violin doubles or supports.

The most important piece involving orchestra and solo violin that Mozart composed, the Sinfonia concertante, is in effect a double concerto, with the viola an equal partner in every way. Eliminating the Cero/Tntermal/Szell, for all its merits, because it often seems constrained and construpated, one would happily recommend either the Oistrakh/Oistrakh or Stern/Zukerman/Barenboim. The scales tip toward the latter because of a more expressive slow movement and somewhat blither finale. In all of the works, by the way, Oistrakh scrupulously follows the printed notes and adheres to what few dynamic and expressive indications Mozart provides. In addition he takes advantage of the frequent Lufsspanen and fermate to insert little squibs of decoration that sound entirely right.

On the whole, an admirable set, executed with more uniformity of success than comprehensive collections ordinarily can manage. Not all of this is vintage Mozart, but Oistrakh easily makes one forget that.

D.J.H.

Puccini: Le Villi; Edgar: Act II

Le Villi

Roberto

Anna

Adriana Lecouvreur (s)

Anna

Gustavino II

Edgar

Act II

Barry Morel (t)

Nancy Stokes (ms)

Walker Wylly (b)

Vienna Academy Chamber Chorus; Vienna Volksoper Orchestra, Anton Guadagno, cond. RCA Red Seal LSC 7096, $11.96 (two discs).

Anyone wanting a comprehensive view of Puccini's development will find this set rewarding since it supplements our knowledge of the composer's familiar, mature oeuvre with his precent efforts. Truth to tell, there is little about either Le Villi or Edgar to indicate the mastery that was soon to rise its head in Manon and Tosca. Certain Puccinian modes are adumbrated in these early works—like the melancholy melodist cast of Roberto's aria from the second act of Le Villi, in which the characteristics of a piece like "E lucevan le stelle" are already prefigured. Or the swift, brilliant 3/4 opening of Edgar, Act II and the sudden change of mood and tempo as Edgar enters and gives utterance to his satiety and remorse. Knowing now what we do about Puccini's career it is easy enough for us to spot the intimations of future success. On the other hand, it is hard to find these operas very enlivening. To his eternal credit (and eventual vast reward) Giulio Ricordi saw in Le Villi sufficient signs of talent to back his hunch with a monthly stipend to the young composer of two hundred lire. Listening to this music today is enough to make Ricordi's foresight seem preposterous.

The performance under Guadagno is decent enough, the over-all quality being reminiscent of a taped broadcast that circulates in the underground market. The Vienna Orchestra and Chorus are adequate, not really idiomatic and a bit underhearsed. Orchestral attacks are sometimes slack. The chorus sounds weak in high, soft sostenuto passages (e.g., in the Intermezzo). Guadagno's tempos are slow and his rhythms not quite taut enough, there is an air of desultoriness about the performance as a whole. The singing is not very different in quality. Barry Morell, the only artist to be heard in both operas, is stalwart, a mite graceless, and lacking in variety, though he tends to compensate for this with intrusive sobs. Adriana Maliponte is a curious instrumental-like imibre; the voice sounds belted up, sometimes for something a little more open, a little more impassioned and colorful. Since most of her consonants get submerged she cannot make anything of her recriminations at the ghostly climax. There is hardly any impact at all in the condemnation she levels against Robert: "Senza speranze in cuore, me faresti morte" ("Without hope in my heart, you made me die"). Matteo Manuguerra sounds a little rusty, but the top of his voice is wonderfully free. In Edgar Nancy Stokes is unpleasantly squally. Her voice lacks line and definition, as does that of Walker Wylly.

The recording is not very satisfactory. It needs more presence and more consistency. The fact that at times the soloists are closely mixed and at others distantly mixed bears little relationship to the dramatic action. Moreover, there is a crude splice in the middle of Edgar's opening soliloquy. Perhaps this set should have appeared on Victrola: It fills a gap, certainly, but not a very important one and not very satisfactorily.

D.S.H.

Rameau: Castor et Pollux; Jeanette Scovotti, Marielle Schelm, Nicholas Moxon, Lode Groenundersteere, Gérard Souzy, Jacques Villiers, et al.; Stockholm Chamber Choir; Concertus Musicus, Nikolaus Harnoncourt, cond. For a feature review of this recording, see page 69.
Sony's new chromium dioxide cassette tape is hungrier for high frequencies.

Sony chromium dioxide CRO-60 tape will record up to 50% more volume before you encounter distortion on playback. CRO-60 is hungrier than other tapes for high frequencies. This means more recorded sound than standard cassette tapes before distortion sets in.

What you hear.
Far less distortion, a smoother frequency response, and a greater dynamic range than standard tape. Every aspect of the sound, especially the higher ranges, comes through with sparkling fidelity.

Sony CRO-60 gets it all together from bottom bass lows to high howlin' highs. And everything in between.

A Sony tape for every purpose.
The new Sony CRO-60 cassette tape becomes a member of a highly advanced line of tapes for every recording requirement.

In addition to standard open reel, cassette, and 8-track cartridge tapes, Sony also offers the finest in high performance tape: SLH-180 Low-Noise High Output tape on 7" and 10½" reels, plus Ultra-High Fidelity Cassettes.

These high-performance tape configurations take advantage of the added performance of today's highly sophisticated recorders by providing wider dynamic range, greatly improved signal-to-noise ratio, extended frequency response, and reduced tape hiss.

How's your appetite?
Now if your appetite has been whetted and you're hungry for more information or a demonstration of CRO-60 or any other Sony tapes, get on down to your nearest Sony/Superscope dealer (he's listed in the yellow pages) and get an earful.

February 1973

CIRCLE 63 ON READER-SERVICE CARD
Why the first name in recording has the last word in quad.

It Takes A Little Longer To Be Right.

While a lot of the other companies were busy bragging about how sensational their matrix quad recordings sounded, we knew that what they touted to be true quadraphonic sound really wasn't. The Discrete RCA Quadradisc is.

The Discrete RCA Quadradisc Was Worth Its Wait.

The sound reproduction from our discrete Quadradiscs is the standard in high fidelity recording. Its "in-person presence" a technical triumph for the most demanding connoisseur. The Quadradisc's realism is revolutionary because the Quadradisc wraps its sound around you. To make you feel like you're sitting in the center of the sound on stage; or, it can treat sound as the ambient reflection of the concert hall and provide you with the best seat in the orchestra. No matrix system is capable of doing this. The RCA Quadradisc is. Every one of its four channels is recorded and reproduced on its own separate track. That's what makes us discrete and everyone else, well, just everyone else.

The RCA Quadradisc Delivers Better-Than-Stereo Sound On A Stereo.

Even if you don't own a quad system right now, you can enjoy RCA Quadradiscs on your present system. In a recent issue, Time Magazine said "...the stereo sound from one of RCA's new Quadradiscs is stunning."

Quadradisc Compatibility Guaranteed

An analysis by a leading independent research laboratory, in accordance with standards set by the Recording Industry Association of America (RIAA), has enabled us to guarantee full compatibility of the RCA Quadradisc when played on standard stereo systems. They have also certified that the RCA Quadradisc plays with excellent frequency response, in full accord with The National Association of Broadcasters (NAB) Disc Recording and Reproduction Standards.

Guaranteed Quality Doesn't Cost More

While a lot of other companies are charging extra for their quad recordings, RCA Quadradiscs are available at the same price as regular stereo records.

The Pros Agree

- Walter Carlos - Columbia Recording Artist: "When Rachel Elkind and I began our Sonic Seasonings album, we planned for quadrasonic and recorded all the material in quadrasonic... We tried to process this master on all the known matrix systems... I am most unhappy to report that the results were catastrophic. "No other product will be marketed in quadrasonic now for awhile — until a non-matrix system is accepted as an industry standard. Perhaps the JVC/RCA carrier disc is the answer... "With a discrete release available we can have the best of all worlds."

- New York Times: "Since there can be no doubt in anyone's mind who has heard both systems that the discrete method is clearly superior, it probably should be used for all new recordings."

- Stereo Review: "...the ideal way to record and reproduce four channels of information is with a discrete system in which each channel remains completely independent of the others throughout the recording and reproduction process. "The Quadradisc can provide discrete material from all speakers simultaneously — something no matrix system can do."

They Chose To Be First. We Chose To Be Best.

All quads are not created equal. Other companies spoke too soon and claimed too much. We stayed silent until we had our quad recording system perfected. Now we do. And we're working with high fidelity manufacturers like JVC, Panasonic and others to implement the state-of-the-art. And we are working with our artists and producers, creating musical material that will utilize the RCA Quadradisc to its greatest potential. That way you'll get the best of both worlds — the artist's creative freedom coupled with engineering integrity. In rock, pop, classical, country and rhythm and blues. For now and for the future. The Discrete RCA Quadradisc. The first quad record that's true quad.

Sometimes you have to save the best for last.

CIRCLE 47 ON READER-SERVICE CARD
Premiere Recording in the Western World

SHOSTAKOVICH
SYMPHONY NO. 15

EUGENE ORMANDY
THE PHILADELPHIA ORCHESTRA

THE FANTASTIC PHILADELPHIANS, Vol. 1

Sorcerer's Apprentice - Danse Macabre
España - Night on Bald Mountain

EUGENE ORMANDY
THE PHILADELPHIA ORCHESTRA

The Outrageous Dr. Teleny's Plugged-In Orchestra

Wolfgang Amadeus...Ludwig Van
and friends

STOLEN GOODS
Gems Lifted from the Masters

The Outrageous Dr. Teleny's Plugged-In Orchestra

Johann Sebastian...Wolfgang Amadeus...
TD-160C
It’s new. It’s integrated.

Here’s the Thorens precision turntable you’ve always wanted at a price you can afford. Introduced right on the heels of the new, highly sophisticated TD-125 Mark II series, the Thorens TD-160C shares many of its advanced engineering features, including: Magnetic anti-skating control with the new TP-16 gimbal suspension tonearm... Faster start up with a newly designed high torque belt-driven 16-pole synchronous motor...Front panel precision cueing control...Dynamically balanced 7 lb., 12-inch non-ferrous die cast platter with a new resonance-muffling rubber mat...Unified suspension system to minimize rumble, acoustic feedback and vibrations.

Don’t settle for less than the best.

The precision TD-160C comes complete with the new Thorens TP-16 tonearm, walnut base, and even a tinted dust cover, for only $175. Visit your Thorens dealer today.


It’s a Thorens

HIGH FIDELITY MAGAZINE
"Looking for Extension Speakers that Really Sound Good? Radio Shack Has Them!"

Solo-1. A long-running hit because its BIG sound rivals more expensive speakers! Ultra-high compliance, tuned, vented-duct type enclosure; 50-14,000 Hz; oiled walnut cabinet. $24.50 Each

Solo-4. A bookshelf system that's a perfect "add-on" for 4-channel sound or as a handy extension pair! 100-12,500 Hz; rear-loaded, reflex-type enclosure. $15.00 Each

Solo-103. Its secret o' great sound is unrestricted cone excursion—first time ever in a 4" speaker! 30-17,000 Hz response! 9-3/4 x 6 x 6-5/8". $17.50 Each

Minimus-2. Get the sound and range of a "big speaker" system at the size and price of an "add-on"! The "little" 7 x 8 x 14" oiled walnut cabinet has a 6" acoustic suspension woofer and tweeter with control. 20-20,000 Hz. $42.95 Each

Solo-5. Our lowest price full-range speaker adds "new life" to your phono console or small stereo. Has a wide-response 5" speaker, easy hookup with plug-in jacks or screw terminals. $9.95 Each

Deluxe Wall Baffle Speaker. Mount anywhere in home or office. Has its own up-front volume control, 40-15,000 Hz response! $24.95 Each

8" Outdoor Speaker. Hear your favorite music on patio, porch or at poolside. Carrying handle, easy hookup. $17.95 Each

Minimus-0.5. Makes your transistor radio or portable recorder sound like it cost twice as much! Only 4-3/4 x 6-5/8 x 4-1/2"... but its oiled walnut case makes it look like the big ones! $11.95 Each

MC-500. It's the best $30 sound around and you can use it in the tightest stereo set-ups! Combines an air-loaded, acoustic suspension 5" woofer with a 2" high-frequency tweeter for an amazing 40-20,000 Hz response. $30.00 Each

Radio Shack and Allied Radio Stores
A Tandy Corporation Company
P. O. Box 1052, Fort Worth, Texas 76107
FREE '73 CATALOG! AT YOUR NEARBY STORE OR SEND IN THIS COUPON
180 pages! Stereo Hi-Fi, CB, Kits, Radios, Recorders, More!

Name ______________________ Apt # ________
Street ______________________
City ______________________ State _______ Zip ________

February 1973

CIRCLE 46 ON READER-SERVICE CARD
What? Another Ring? by Peter G. Davis

What you may well ask, is this? A complete Ring issued on the market, virtually unannounced, with all the nonchalance of another Rohene. Yes, the singers listed below are bona fide—this is not the kind of hoodoo that Albrecht/Royal-owned in the Fifty, a pirated Bayreuth broadcast badly labeled as a "Dresden State Opera performed by Fritz Schreiber." Westminster's artists may not be of international renown, but they are all real and most of them are actively engaged in Europe's smaller opera houses. As far as I can gather from the spotty information available, this recording was studio-made in Munich at the behest of an Italian record magazine which wanted to bind a disc of excerpts in one of its issues; evidently once the artists got into the studio, it was decided to go ahead with the complete set of four operas and there seems to be more Wagner on the way from the same source.

As for the performance itself, this is a Ring that, if you happen to find yourself in Graz or Düsseldorf, would at least elicit glumly admiring glances—after all, Wagner's cycle is securely in the repertory of every German opera house, large or small, and performance traditions are of long standing: only at the Met, it seems, does the launching of a new Ring become a traumatic experience. Still, this is hardly the kind of workaday event the phonograph was intended to enhance, particularly in view of the largesse already available from Furtwängler, Solti, and Karajan. Dedicated Wagnerians will have already saved up their pennies for one or all three of these distinguished recordings, for them this new version can only have a sort of weird documentary value—even the budget price is not especially meaningful when one realizes that the 1955 Bayreuth Ring with Varnay, Hotter, and Windgassen in top form may well be at hand in the near future on London's Richmond label.

Although each opera is available separately, there seems little point in discussing them individually since the level of performance is remarkably consistent. In fact, it's not inconceivable that a Wagner conductor of extraordinary talents could have galvanized this cast into something special—Furtwängler's singers (and the orchestra, too, for that matter) are not the most memorable, but the unique insight he brings to the music often overrides even the most obvious disappointments. Hans Swarowsky, alas, is not the conductor to pull off such a feat. He offers solid, firm, briskly paced leadership without ever illuminating details or giving the whole a really cogent shape or point of view—in short, an unexceptionally straightforward and reading by a dependable répétiteur, untroubled by interpretational subtleties. His orchestra plays decently enough and the instrumental sonority is remarkable for its clarity and balance, although the string section is obviously undermaned, rather painfully so whenever Wagner calls for divisi strings.

None of the singers can really be singled out for unusual excellence, yet on the other hand there are few out-and-out disasters: the Siegmund/Gutrune/Alberich, a Walküre or two perhaps. But here opinion may well differ. The soprano Nadeza Kniplova brings a steely, gritty sound and quite a bit of temperament to Brunnhilde—she resembles Modl in many respects and the agony school may find parts of her reading anything but for its forthright emotional honesty. But her stringent tone often gives the impression that she is inflicting more pain on herself than on the listener. Gerald McKee, a young American Heldentenor, takes on Siegfried and Sieglinde. He has the right basic weight for these parts but the unvarying metallic buzz of his voice becomes wearing and he has a tendency to sing around the notes, especially in rapid passages. McKee does make most of the obvious points, but on the whole one feels he is often simply plowing through the music for better or for worse; alternating three clumsy phrases for every imaginative one.

Rolf Počke also brings a sturdy bass-baritone with good staying power to Wotan—when he is not on the border of the recorded competition, he actually holds his own quite well. The big narrative in Walküre sustains interest even if he seems rather solid elsewhere. Another decent contribution is the Alberich of Rolf Kühne (Solti's Alberich in the Chicago Symphony Rheingold two years ago)—the sound tends to be a bit raw, but he makes a great deal of the part and his rhythmic articulation of the text is superb. Otto von Rohr (Fasolt, Hunding, and Hagen) is a rather mushy, soft-centered bass for these important roles, while the less said about Ditha Sommer's Woglinde, Lisette Beckner-Egner's Erda, and Bella Jasper's Brünnhilde the better. Specifically, the over-all acoustics is bright and clean, if somewhat shallow and in sore need of a treble cut. Westminster supplies a complete libretto and cover art that must be seen to be believed.

WAGNER: Der Ring des Nibelungen.

Das Rheingold: Lisette Beckner-Egner (s) Angelika Berger (ms) Marie Hoffmann (s) Theodor Kuhn (b) Ruth Hesse (ms) Margit Kobeck (c) Ursula Bösse (b) Brussels Philharmonic, Wieland Wagner, Diagrams.

Die Walküre: Gerald McKee (s) Rolf Počke (b) Rudolf Knötel (b) Bella Jasper (ms) Hildegard Fichtner (y) Westminster Records, Peter G. Davis, Diagrams.

Siegfried: Rolf Kühne (b) Svatopluk Nenadic (t) Otto von Rohr (ms) Richard Storck (t) Herbert Dousset (b) Westminster Records, Peter G. Davis, Diagrams.

Götterdämmerung: Ingrid Ganz (s) Gerd Aschenbrenner (b) Herbert Dousset (t) Franz von Rohr (b) Gerd Aschenbrenner (ms) Rolf Kühne (t) Peter G. Davis, Diagrams.

Chorus of the Vienna State Opera; Süddeutsche Philharmonie; Hans Swarowsky, cond Westminster WS9 8175-3, $28.84 (three discs, Das Rheingold); WS9 8178-5, $14.88 (five discs, Die Walküre); WS9 8177-5, $14.88 (five discs, Siegfried); WS9 8178-8, $17.86 (six discs, Götterdämmerung).

"Most impressive range and power...
Bass is clear and very deep. Distortion was quite low even at high sound levels."

Audio Magazine

"Superior transient response...
extreme clarity, will not break up under any normal or even super normal push...
Larry Zide, American Record Guide

"What a speaker!...
The scenic presentation was excellent; voices were natural with no coloration; orchestral music was balanced and full; transients came through cleanly; the organ sounded authentic. Indeed, for a system of its size and price, designed for home use, the Grenadier strikes us as among the best."

High Fidelity

CONSUMER COMMENTS:
B. A., Portsmouth, N. H., "The rich true sound of stereo..."
W. S., Canoga Park, Calif., "The style for my wife..."
J. A., Hyattsville, Md., "Superior sound over anything near it in price..."
D. O., Vallejo, Calif., "That's good sound..."
T. F., St. Louis, Mo., "Fantastic sound and the true quality in the design..."
R. C., New York, N. Y., "I love it; you made it!"
D. B., Honeybrook, P. A., "Fantastically good fidelity..."
J. F., Vancouver, B. C., "This speaker is truly a work of art..."

Empire Scientific Corp.
Garden City, New York 11530

Empire
Mfd. U.S.A.
World Famous Speaker Systems
Introducing the first speakers worthy of the Crown name—Auralinear System, four models of unique electrostatics that are as far ahead of ordinary speakers as the DC300 was ahead of all other amplifiers when it was introduced.

The electrostatic design has potential for the finest response and lowest distortion, but previous electrostatic speakers suffered from three major weaknesses: (1) inability to deliver realistic sound pressure levels, especially at low frequencies; (2) fragile, unreliable elements; (3) poor dispersion.

All of these problems have now been beautifully resolved in the Crown Auralinear System, by uniting radically new extended-range electrostatic radiators with special acoustic suspension woofers. One result is accurate reproduction of clear, high frequencies with none of the poor dispersion.

Four models of unique electrostatic speakers, by uniting radically new extended-range electrostatic radiators with special acoustic suspension woofers. One result is accurate reproduction of high frequencies with none of the crackling, fryin sounds that characterize many of today's electrostats. We call it honest sound.

For the location of your local Auralinear dealer, write Crown, Box 1000, Elkhart, Indiana, 46514.

**Recitals and miscellany**

**Anita Cerquetti:** Opera Recital, Anita Cerquetti, soprano, Chorus, and Orchestra of the Maggio Musicale, Florence, Gianandrea Gavazzeni, cond. Richmond SR 33189, $2.98 (from London, OS 25100).

**Verdi:** Aida: O patria mia; La Forza del destino: Pace, pace, mio Dio. **Bellini:** Norma: Casta diva. **Puccini:** Tosca: Vissi d'arte. **Sportin:** Agnes von Hohenstein: O re dei cieli.

While still in her twenties, Anita Cerquetti was an international star, singing many of the great lirici spinto and dramatic roles of the Italian repertory. Aida, Leonora (both Trovatore and Forza), Amelia, Abigail, Elisabetta di Valois, Norma. Turandot. Before she reached her thirtieth birthday her career was over. At twenty she made a debut in no less an assignment than Aida. On the famous occasion when she took over Norma from Callas after the latter walked out on the production at the Kone Opera, she was twenty-seven years old. Moreover, she had sung the role. one of the most taxing in all opera, only two days before, in Naples. No wonder the voice failed to survive. By the end of the decade Cerquetti had fallen victim to a paralyzed vocal chord.

It is a dispiriting story. Quite apart from the human consideration, first-class exponents of the great Verdi roles are rare indeed. We suffer today because of the lack of prudence that marred Cerquetti's career. The present disc makes available once again a recital which appeared at the height of Cerquetti's career. It is the work of an immature yet prodigiously gifted singer. As an instrument the voice was glorious—a large, full-toned, dark-hued soprano, firm and well placed in the all-important middle register. Technically Cerquetti still had some way to go. Breathing was clearly something she needed to work on. Some of her one here is breathy ("Pace, pace") and some of her phrases don't have the proper support ("mai feci mai male ad animo vivo") from "Vissi d'arte." In addition, her intonation ("Ernani, involammi") is sometimes suspect. Her attacks on high notes occasionally uncertain ("O patria mia"). and she betrays a certain rhythmic clumsiness ("Casta diva").

Those are some of her never-to-be-eliminated weaknesses. Her virtues remain standing. Above all, there is the power and splendor of a young, formerly placed voice. She had ardor, brilliance, and a thrilling largeness of temperament; she was almost recklessly impetuous (the recitative to Abigaille's aria). There is a lot of superb legato in the last in this recital, one note joined seamlessly to the next (the Spontini aria). There is a hushed rapturousness in her "Casta diva."—once, that is, she gets past the opening phrases—a fine downward chromatic scale at the end, and vivid projection of the text. It is sad that Cerquetti got no further than this.

No texts, a great disadvantage in the case of the Spontini piece.


**Glinka:** The Midnight Review. Rubinstein: Melody. Dargomizsky: The Worm; A pleasant nocturnal breeze. The Old Corporal.

This is an engaging recital. The Russian song repertory is still comparatively unknown in the West, doubtless because of its specialized linguistic demands. Perhaps the thaw in international relations will increase our opportunities for hearing more of this music in live performances. This collection is a welcome reminder of the riches available.

Russian composers—uniquely responsive to fine poetry—made the song a serious and expressive art form. As early as Glinka—the innovator of what we know as "rhapsody" music—the song achieved maturity. The Midnight Review, with its evocation of a ghostly Napoleon reviewing his army of phantoms and its atmosphere of strangeness and terror, is a complete and unforgettable vivid drama. The same is true of Dargomizsky's The Old Corporal, a monologue by an old soldier about to be shot for insulting a young officer. The three works here by Dargomizsky, Glinka's near contemporary, attest to the early diversity of the Russian song: A pleasant nocturnal breeze is a full-blooded romantic serenade. And The Worm an ironically bitter portrait of a cuckold. The Borodin song, set to a poem by Pushkin, is exotic and melancholy. After these, Anton Rubinstein's Melody, the vocal version of his all-too-familiar melody in F is a deep descent to the world of salon trifles. But the Tchaikovsky side is a miniature survey of his song output and exemplifies his great gift for melody and the creation of atmosphere. Most of the songs express longing, fugitive feelings, transience.

Ghiaurov sings everything beautifully. If his voice is not quite as plangent and free as it once was it is still a splendid instrument: smooth, even in scale, capable of very expressive colorations. The legato he employs in a song like Tchaikovsky's Op. 38, No. 3 is wonderful to hear. A comparison with Chaliapin's version of The Midnight Review and The Old Corporal reveals quite a different, more lyrical and smooth approach, from Giuseppe Verdi's famous aria, a reminder of the riches available. Ghiaurov's melodic emphasis is no less valid, especially as the younger singer is fully alert to the drama of each song. Zlatina Ghiaurov is a sensitive accompanist. Texts and translations are provided.

Perhaps Angel could be persuaded to issue some of Boris Christoff's recent and extensive explorations into Russian song literature. This is music that repays investigation handsomely.

**D.S.H.**

**Eighteenth Century Overtures.** English Chamber Orchestra, Richard Bonynge, cond. London CS 6735, $5.98.

**Kraus:** Olympia. **Gassmann:** L'Amore artigiano. **Boieldieu:** Zorame et Zulma. **Sartorio:** Magnifique. **Saccini:** La Contadina in corto. **Haydn:** Orlando Palatino. **Salieri:** La Fiera di Venezia.

This anthology provides not only some enjoyable music but also a liberal education in music history that should be welcomed by all who listen with both ears. One of the most intriguing of musicological problems concerns
At Pilot, our best four-channel receiver is our best stereo receiver.

It takes a lot more than adding two plus two to produce an outstanding four-channel receiver. Technological change must be anticipated, as well as the needs—present and future—of those who will use the equipment. Unfortunately, not all companies recognize this.

Fortunately, Pilot does. We knew from the beginning that many of you would not be able to make the switch to four-channel all at once. That's why the Pilot 366 four-channel receiver (30/30/30/30 Watts RMS into 8 ohms) incorporates an ingenious "double power" circuit that permits you right off to enjoy the full power of this receiver in stereo (60/60 Watts RMS into 8 ohms).

Not only does the 366 provide advanced SQ circuitry, but it can also reproduce any other matrix system currently in use. Plus it will extract hidden ambience information from conventional stereo material.

Naturally, the 366 is fully adaptable to any discrete system. We didn't stop there, however, in considering the manifold uses of this receiver. An ultra-sensitive FM tuner section (1.8µV, IHF) has a special detector output to accommodate proposed FM four-channel transmissions.

Finally, we saw to it that setting up in four-channel would be a simple operation. The 366 provides a special balancing signal, we call it Pilotone®, which makes channel balancing a virtually foolproof procedure.

No matter how you use it, the very things that make the Pilot 366 our best four-channel receiver also make it our best stereo receiver. And yours too.

For complete information and the name of your nearest Pilot dealer write: Pilot, 66 Field Point Road, Greenwich, Conn. 06830.

The Pilot 366 Four-Channel Receiver $499.90:
*Manufacturer's suggested retail price
The origin of the symphonic style, and while these overtures are well beyond the beginnings, several of them clearly show the symphony when it was still inhabiting the opera pit. Of the earlier composers, Florian Gassmann and Antonio Sacchini, whose overtures date from 1767 and 1765 respectively, show the pleasure of the composers in playing with the newly found symphonic elements, though not yet in exploiting them. Sacchini is more alert than Gassmann: his is the kind of music the young Mozart heard and liked in Italy. Sacchini's overtures sign too much to the Mannheimers: the turns and phrases we know from Mozart and Haydn are all here, the only difference being that they are manipulated not by genius but by talent. Antonio Sacchini's overture (1782) is not the best example of his art. This Italian, better known for the (imput) accusation of having poisoned Mozart than by his compositions, was highly admired by his contemporaries, including Beethoven, and a better selection would have shown why Mozart regarded Sacchini as a rival. Ferdinando Paer was among those Italians who lived in and worked for Paris, and thus were inevitably indebted to Gluck, Mehul, and Cherubini. His overture from 1803 is typical theater music that undoubtedly had something to do with the body of the opera itself. Paer, curiously Rossinian before Rossini, was an "organization man" who knew all the tricks of the opera trade, but he had little individuality.

The Frenchmen in the group, Grétry and Boieldieu, are also theater composers to the core. Grétry's overture, with its snare drum rolls and trumpet signals, is "atmospheric" rather than melodic, but it is lively. Some of the harmonies are quite bold. Boieldieu (1798) had the advantage of knowing the music of his great Austrian contemporaries as well as that of Cherubini, the reigning master in France. His piece is both delicate and dramatic, with sudden unexpected changes in mood and general pauses. This little composer, who later became famous with his La Dame blanche, often reminds one of Weber. That leaves us with two more Germans. Haydn's overtures date from 1782, and hearing it makes us realize that we know very little about Haydn the composer of a couple of dozen operas. The buffa tone is skillfully blended here with Haydn's advanced symphonic technique. adding up to an attractive piece. The sleeper in the collection is Johann Michael Kraus (1756-1792), a contemporary of Mozart, whose overtures are indeed a remarkable piece. The slow introduction is brooding while the allegro is both elegiac and symphonic, with Gluckian accents also with a hint of Don Giovanni—before Mozart composed his opera. This interesting composer deserves rehabilitation.

The English Chamber Orchestra is excellent as usual, and Bonynge does a workmanlike job not excitingly. P.H.L.


CAZZATTI: Sonata in D minor (La Pellicana); FONTANA: Sonata No. 10 in E minor; BOZZA: Caprice; MARINI: Sonata in D minor; ROMANESCA: TELEMANN: Air; ANONYMOUS: Sonatas; in F minor; in F. Noneuchet.

Solos by Schwartz, principal trumpeter of the American Symphony Orchestra, is known from earlier recordings as a member of the American Brass Quintet and as solist in a 1970 Desto release of Frescobaldi cantons and Fontana sonatas. But unlike many others in the younger generation of virtuoso trumpeters, he is willing to combine his baroque explorations with those of a less novel but perhaps more practically useful repertory.

His Harlequin disc (first from a new independent label) is of less historical or aesthetic musical interest than of pedagogic value. For the whole program is made up of relatively short pieces which either have been specifically commissioned as conservatory competition vehicles or designed to be suitable for the same study-and-test purposes. It's not surprising then, that the "name" composers here seem uncharacteristically routine; only Enesco manages to achieve some distinctive eloquence as well as outrunning his colleagues in making bravura technical demands. The less familiar men are more at home: the prolific conductor/composer Eugene Bozza in a spectacularif episodic Caprice; the prolific Claude Pascal and Theo Chalier in a jaunty Capriccio and well-varied Solo de concours respectively; and above all Henri Senex (of whom the liner notes say only that his concerto was written early in this century) in a miniature concerto that is both musically engaging and technically virtuosic. But there are new records of the B-side composers that will allow that to alloy his pleasure in the delectable music itself. There are two further examples by the Brescian master Fontana (whom Schwartz first represented in his Decca release). Another fine Sonata and a pair of dances: a well-varied Sonata and charming Romanesca variations by Fontana's pupil, Biagio Manni (c. 1656) and an infectiously high-spirited sonata (named after a Signor Pellicani, not the Pelican bird!) by Moritz Cozza of Padua (c. 1757). All of these are new to records as far as I can determine, as are also the cheerful Telemann air and the three early eighteenth-century anonymous sonatas drawn from manuscripts preserved in Kassel, Germany. Two of these are just pleasant; workmanlike-making, but one, that in F major, is a masterpiece of genuine melodic and virtuosic distinction. R.D.D.

Westwood Wind Quintet: Music by Cortes, Chavez, Revueltas, and Ginastera. Westwood Wind Quintet; Thomas Stevens, trumpet (in the Chavez and Revueltas); Roger Greenberg, baritone saxophone (in the Revueltas). Crystal S 912, $5.98.

CORTES: Duo for Flute and Oboe; CHAVEZ: Duo for Flute and Oboe. CORTES: Two Little Serious Pieces. GINASTERA: Duo for Flute and Oboe. CHAVEZ: Solo. Crystal Records of Los Angeles is one of several small independent companies that have sprung up in recent years (on the West Coast in particular) to perform three functions often ignored or poorly served by the majors. One is to give recording opportunities to talented young and regional musicians. Another is to broaden the recorded repertory with off-the-beaten-path compositions, especially those for small, often unusually constituted ensembles. The third is to give a first recording-hearing to relatively obscure composers (especially contemporary and often those of regional note) or to represent usually passed-over smaller works by better-known composers, contemporary or otherwise.

Here, characteristically, Crystal presents a whole program of what I believe to be recorded for the first time by modern composers of Latin American ancestry: Tonio Ramirez (b. 1933) is a new name to me (although Cortes has recorded his chamber concerto), but his five-movement duo and three quintet movements impress me by their skillful exploitation of a modified twelve-tone motivic system that on itself is conservative, ears, often surprisingly lyrical, and always faultlessly controlled. The B-side composers are better known, but two of them are represented by unusually constituted works and the third by one of the most immediately delightful windwood duos I've ever encountered.
Our amazing low-cost speaker is made with a revolutionary substitute for money: brains.

Two facts stand out about the Rectilinear Xla bookshelf speaker:
- Its price is $79.50*
- And its sound is beautiful.

In fact, it sounds quite respectable even in comparison with our top speakers, which cost up to three and a half times as much and have been called the best in the world. We wouldn't be ashamed to match the Rectilinear Xla against heavily advertised competitors at twice the price.

The secret of our design? Merely some vigorous thought processes.

We could never see why inexpensive speakers had to sound mediocre, just because nobody bothered to make them any other way. Our engineering logic led us to the startling conclusion that a correct crossover frequency costs no more than an incorrect one. The right distance between the drivers no more than the wrong one. Proper cone material and magnetic structure no more than the wrong ones. And so on, down the line.

When you get right down to it, we reasoned, at least seventy-five percent of speaker design is knowledge, not money.

So we specified a 10-inch woofer that will handle 50 watts RMS at 1000 HZ, a 3½ inch tweeter and a network that crosses over at 1000 HZ, a lower crossover point than some "highly regarded" three way systems. We put these into a 23” by 12” by 10 ½” cabinet and fussed and fussed. Without any preconceived notions as to how good or bad such an austere design should sound. We stopped only when we could no longer improve the performance.

The result was a $79.50+ speaker that not only covers the range from 45 to 20,000 HZ without peaks or harmonics but also has extremely low time delay distortion, which is Rectilinear's chief criterion of speaker quality.

What's more, the Rectilinear Xla is a high-efficiency speaker. Unlike some other designs that claim accurate reproduction at a moderate price, it doesn't defeat its purpose by requiring an expensive, high-powered amplifier or receiver for good results. It can be driven to window-rattling levels with a puny 10 watts.

A triumph of brain over brawn, you might say.

(For more information, including detailed literature, see your audio dealer or write to Rectilinear Corp., 107 Bruckner Blvd., Bronx, N.Y. 10454. Canada: H. Roy Gray Co., Ltd., Markham, Ont. Overseas: Royal Sound Co., 409 N. Main St., Freeport, N.Y. 11520.)

Rectilinear Xla
Engineering Excellence

*Optional fretwork grille $10.00 each.

FEBRUARY 1973
THE MOST EAGERLY AWAITED RECORDING OF THE YEAR.

The crowning achievement of the Solti/London Silver Jubilee Anniversary

SIR GEORG SOLTI
AND THE CHICAGO SYMPHONY ORCHESTRA AND CHORUS

with soloists
Pilar Lorengar  Yvonne Minton
Stuart Burrows  Martti Talvela

BEETHOVEN: 9th SYMPHONY
CSP-8

"No Solti performance of recent years seems a more complete representation of the conductor as a man and musician."

A reminder of two outstanding recent releases

Mahler:
DAS LIEB VON DER ERDE
René Kollo, Yvonne Minton — The Chicago Symphony Orchestra —
Sir Georg Solti
OS-26292

Mahler:
THE NINE SYMPHONIES
The Chicago Symphony Orchestra —
The London Symphony Orchestra —
The Concertgebouw Orchestra of Amsterdam — Sir Georg Solti
CSP-7

RANSOM WILSON: Flute Recital. Ransom Wilson, flute. Orion ORS 7289, 55.98.


Ransom Wilson is a very young flutist (according to information given in the liner notes, he must be only twenty or so), and he undertakes an extremely difficult program of unaccompanied flute music in his second recording. The works by Bach and Telemann are among the handful of masterpieces in the genre, and despite problems, there is much to say for Wilson's performances of these works. He has a clear conception of the linear design of the music, and is particularly good at bringing out the contrapuntal implications of the single line, a crucial factor for projecting such one-voice compositions. Also, his breath control is unbelievably good. Wilson's rhythmic conception, however, seems problematic to me, at least in the Bach and Telemann. An underlying metrical pulse is basic to their style, yet Wilson occasionally lets the pulse get away from him. This happens most frequently in slow tempos, where his ornamentations sometimes spill out over the beat. But it is also noticeable in syncopated short-long patterns, in which the short note, despite its metrical position, frequently seems to be treated as an upbeat. There are even metrical problems in such uncomplicated situations as the opening of Telemann's Fantasia No. 7. Wilson also has a tendency to play too fast, with the result that notes occasionally get lost in the rush and that in general the line seems somewhat under-articulated.

Undoubtedly much of the problem here is simply that of a young performer dealing with music of this degree of complexity. In the Marais and Blavet pieces, which are fine examples of eighteenth-century French fluff (very tasty, but a little goes a long way), Wilson occasionally lets the pulse get away from him. This happens most frequently in slow tempos, where his ornamentations sometimes spill out over the beat. But it is also noticeable in syncopated short-long patterns, in which the short note, despite its metrical position, frequently seems to be treated as an upbeat. There are even metrical problems in such uncomplicated situations as the opening of Telemann's Fantasia No. 7. Wilson also has a tendency to play too fast, with the result that notes occasionally get lost in the rush and that in general the line seems somewhat under-articulated.

One textual observation: According to the Neue Bach Ausgabe. Wilson uses an incorrect reading in the tenth measure of the Sarabande from the Partita.

R.P.M.
Everybody talks about linear sound.
But only EPI has EPI's Linear Sound. And there's a difference.

**CURVE “A”**
See the curve marked “A” on our linear response graph? We recorded curve “A” in the usual manner, placing our microphone (a B&K Model 4133) directly in front of our EPI speaker.
That's a remarkable thing, that curve “A”. From way down on the bass end all the way up to the high treble end, it's practically a straight line.
What you see is what you hear: a pure, uncolored, natural sound from top to bottom. With no artificial boosting of the bass to impress the innocent. And all the nuances and overtones at the treble end that, on ordinary speakers, just fade away.

**CURVE “B”**
New look at curve “B”, and you'll see something even more remarkable: another virtually straight line.
What's remarkable about this is that curve “B” was recorded by placing our mike at a point 60 degrees off axis. So EPI's speakers disperse Linear Sound not just straight ahead, but in all directions, and at all frequencies.
In fact, up to 15 KHz, the off-axis dispersion is down only an average of 3db. This is the result of EPI's unique one-inch linear air spring tweeter.
What does that mean?
It means that when you're listening to music, you can sit anywhere in the room, and you'll be hearing that big, full, natural sound you've just seen on our graph.
EPI's Linear Sound. It comes out of eight great speakers, from $55 to $1000, made only by Epicure Products Inc., Newburyport, Mass. 01950.

_LINEAR SOUND IS FROM EPI._

---

This is what EPI's Linear Sound looks like.

This is what EPI's Linear Sound dispersion looks like.
The Who’s Peter Townshend bills this disc, his first official solo LP as a “gypsy music ego trip.” One shudders. Is Townshend really going to indulge us in every gimmick and affectation he’s No Time as AIL Nothing Is Everything and Easy followed by the gently rocked Forever’s No Time at All; six more. Track DL 79189, $4.98.

**Peter Townshend: Who Came First**

The Who’s Peter Townshend bills this disc, his first official solo LP as a “gypsy music ego trip.” One shudders. Is Townshend really going to indulge us in every gimmick and affectation he’s No Time as AIL Nothing Is Everything and Easy followed by the gently rocked Forever’s No Time at All; six more. Track DL 79189, $4.98.

**Kris Kristofferson: Jesus Was a Capricorn**

The orchestrations are written by Nick DeCaro (who also plays piano) and well performed by the Toronto Symphony Orchestra. Which means that the album was made at least partially in Lightfoot’s homeland. Canada. DeCaro has exercised beautiful taste in deciding where to include the orchestra and where to leave Lightfoot and his musicians alone. The album is expertly and unobtrusively produced by Lenny Waronker and engineered by Lee Herschberg.

Gordon Lightfoot is a country man who is true to both his simple roots and his own native intelligence. The result is a remarkable kind of music that is as honestly appealing to one of the world’s premier hard-rock bands? The answer, thankfully, is no. “Who Came First” is a tribute to Meyer Baba, the Indian Mystic of whom Townshend is a disciple. The album should send young guitar players the message: MI’ Porn’ Won’t Go. a song of sadness. and Lacy Marlin’s a song about a love that’s working. Both are ballads, superbly complimented by Lightfoot’s rhythm section, including guitarist Terry Clemments and Red Shea, plus David Bromberg on slide dobro (I’ve never heard the instrument played more simply or effectively).

The orchestrations are written by Nick DeCaro (who also plays piano) and well performed by the Toronto Symphony Orchestra. Which means that the album was made at least partially in Lightfoot’s homeland. Canada. DeCaro has exercised beautiful taste in deciding where to include the orchestra and where to leave Lightfoot and his musicians alone. The album is expertly and unobtrusively produced by Lenny Waronker and engineered by Lee Herschberg.

Gordon Lightfoot is a country man who is true to both his simple roots and his own native intelligence. The result is a remarkable kind of music that is as honestly appealing to the practiced music listener as it is to the down-home. Highly recommended. M.A.

**Kris Kristofferson: Jesus Was a Capricorn**

The orchestrations are written by Nick DeCaro (who also plays piano) and well performed by the Toronto Symphony Orchestra. Which means that the album was made at least partially in Lightfoot’s homeland. Canada. DeCaro has exercised beautiful taste in deciding where to include the orchestra and where to leave Lightfoot and his musicians alone. The album is expertly and unobtrusively produced by Lenny Waronker and engineered by Lee Herschberg.

Gordon Lightfoot is a country man who is true to both his simple roots and his own native intelligence. The result is a remarkable kind of music that is as honestly appealing to the practiced music listener as it is to the down-home. Highly recommended. M.A.

**Gordon Lightfoot: Old Dan’s Records**

Gordon Lightfoot, vocals, guitar, vibes, and songs; rhythm accompaniment; Nick DeCaro, arr. You Are What I Am; Mother of a Miner’s Child; That Same Old Obsession; seven more. Reprise 2116, $5.98.

Gordon Lightfoot is the essence of what is meant by the term “natural musician.” So easy is his music—his voice, guitar playing, melodies, and words—that it is hard to imagine he ever learned it all. That’s an illusion of suc-cessful accomplishment. Of course, no one gets to be as good as Lightfoot, and certainly no one stays that good, without working hard. Nevertheless, Lightfoot is as graceful as his name. His albums seem to flow together. There is a special peace about Lightfoot’s latest effort. One suspects he has had a happy year. The melodies are particularly lovely, the lyrics relaxed rather than intense, as they have been in the past. As a matter of fact, these are not terrific lyrics. Lightfoot can be brilliant but he seems to prefer to be calm.

Two selections are especially haunting to me: Mi’ Porn’ Won’t Go. a song of sadness, and Lacy Marlin’s a song about a love that’s working. Both are ballads, superbly complimented by Lightfoot’s rhythm section, including guitarist Terry Clemments and Red Shea, plus David Bromberg on slide dobro (I’ve never heard the instrument played more simply or effectively).

The orchestrations are written by Nick DeCaro (who also plays piano) and well performed by the Toronto Symphony Orchestra. Which means that the album was made at least partially in Lightfoot’s homeland. Canada. DeCaro has exercised beautiful taste in deciding where to include the orchestra and where to leave Lightfoot and his musicians alone. The album is expertly and unobtrusively produced by Lenny Waronker and engineered by Lee Herschberg.

Gordon Lightfoot is a country man who is true to both his simple roots and his own native intelligence. The result is a remarkable kind of music that is as honestly appealing to the practiced music listener as it is to the down-home. Highly recommended. M.A.

**The new Blood, Sweat & Tears—reconstituted with an added guitar and different lead singer.**
the group’s recent recordings. Best is a driving version of Dylan’s “Down in the Flood” and an inspired reading by Fischel: of the ballad “So Long Dixie.”

M.J.

ROXY MUSIC. Bryan Ferry, vocals and piano; Pik Kenton and Graham Simpson, bass guitar; Andrew Mackay, oboe and saxophone; Eno, synthesizer and tapes; Paul Thompson, drums; Phil Manzanares, guitar. Re-make/Re-model, Ladytron, If There Is Something, seven more. Reprise MS 2114, $5.98.

Roxy Music is one of London’s current success stories. Reviews have filtered back that this six-man ensemble does rank high in the parade of bizarre lookers that have become this season’s “in” thing. Roxy Music’s musicians wear black leather jackets and fake tiger skins and most of the handsomely sport slick DA haircuts. In addition, the group’s sound has also been touted as something out of the ordinary. Synthesizers and tapes are utilized to create a spooky, eerie, spacy, futuristic sound, which combined with Roxy Music’s natural golden oldies bent, theoretically makes this band one of the most unusual of the current musical organizations.

Admittedly, this prior information has made me curious. After listening to “Roxy Music,” this band’s first album, I’ve decided that one should probably see them work because then one will do nothing to further the band’s cause in the U.S.A. On disc, they do not seem to be interesting in any way. Bryan Ferry’s lyrics are pedestrian; his melodies are feeble. The band’s sound lacks the novelty value it was rumored to have. Throughout, the musicianship seems perfunctory. Roxy Music’s hit single, “Virginia Plain,” is ordinary. Only Deep Breezes, with a lovely vocal by Ferry, captivates, and Eternal Caravan of Reincarnation; these songs demand total concentration.

The latest recording from the San Francisco jazz/Latin/rock band is quite a good one, if a bit long-winded. The melodies are less vibrant than, say, Kasenoster’s hit single. The latest recording from the San Francisco jazz/Latin/rock band is quite a good one, if a bit long-winded. The melodies are less vibrant than, say, Kasenoster’s hit single.

With The Godfather, family matters are par-tyzizingly serious. Bill Cosby’s genius, on the other hand, is the ability to present family and childhood as fun. The facts of Cosby’s history are not the crucial factors but rather his perception of those facts—or simply his ability to elaborate or fantasize upon them. It is the warmth we respond to, the human affirmation of it all. Of all the areas in which Cosby has experimented and succeeded, this is the one in which he is most loved.

In this album, recorded live in California, Cosby relates a childhood episode of being placed in Sow Class, complete with his father’s reactions. He deals with children’s natural and mysterious ability to intimidate their parents in Bedroom Slippers and Foofie the Dog. He throws in a couple of his sports sketches as well.

The album is warm, comforting, comforting, and worth hearing, if only to sample how childhood might have been.

M.A.

Harry Chapin: Sniper and Other Love Songs. Harry Chapin, vocals and guitar, Tim Scott, cello, Ron Palmer, lead guitar and harmony vocals; John Wallace, electric bass and vocal pyrotechnics. Sunday Morning Sunshine; Sniper; And the Baby Never Dies; six more. Elektra EKS 75042, $5.98.

Harry Chapin is one of the most striking new talents of the Seventies and this LP, his second album, is a potent, dramatic follow-up to his “Taxi” collection of songs. Chapin is a fearless original who writes what only can be described as rock-and-roll Lieder. He tells complicated stories about real people and the desperate, despairing, ultimately poetic lives that they lead. Two of the cuts on this disc, Sniper and Better Place to Be, are each over seven minutes long. These songs demand total concentration from the listener, something one rarely expects from the pop audience. Both numbers are also examples of the slow-speed monster pieces; both are unlike anything else ever conjured up in the world of pop.

Can you imagine a pop song about the sociological and psychological conditions that turn a man into a mass murderer? At the end of Better Place to Be—a story of a customer relating a tale about an isolated moment of love to a harried—Chapin expresses sentiments that are far from the cliché assumptions that pop writers usually come up with. Chapin’s world also includes women who inflict bodily harm on themselves and teenagers who undergo abortions. However, the song—writer/performer’s humanism endows these wretched figures with the compassion one usually encounters in serious literature and poetry rather than pop. In addition, Chapin’s band includes a hard-working cellist named Tim Scott who makes the cello seem like the most likely instrument one would have in a rock band. John Wallace, who can sing both bass and soprano, is another fascinating addition to the Chapin ensemble.

Not all of the selections are about misery, however. Chapin also includes two joyfully tunes, the delightful Sunday Morning Sunrise and Circle, a metaphorical number about the cyclical inevitability of love. This item is bound to become the Seventies’ favorite sing-along. This disc is pure pleasure all the way.

H.E.

MCKENDREE SPRING. Tracks: Fran McKendree, guitar, vocals; Fred Holman, bass; Michael Dreyfuss, violin, viola, and synthesizers; Martin Sluksky, guitar, vocal and instrumental accompaniment. Don’t Keep Me Waiting, Underground Railroad; The Man in Me; Watch Those Pennies, Shoot Me; Two of Me, Train to Dixie, Friends Die Easy, Road to Somewhere; Light Up the Skies. Decca DL 7-5385, $4.98.

McKendree Spring is an excellent rock band that suffers from lack of good material. Their original compositions—with a few exceptions—are not up to that written by others. None of the original tunes on this LP match Dylan’s The Man in Me, or Keith Sykes’ Shoot Me. Still, the group is truly a fine one and worth watching. For whatever this information is worth in the context of a recordings column, they really are very exciting in person.

M.J.

JOEY HEATHERTON: The Joey Heatherton Album. Joey Heatherton, vocals; Tommy Oliver and Tony Scotti, arr. and producer. Crazy, It’s Not Easy, Say Hello; eight more. MGM 4858, $5.98.

I can’t get over the feeling that this album is better than it ought to be. Joey Heatherton sounds better here than she sounds in real life. Which is not to put Miss Heatherton down. She is a good performer and an okay singer in the TV variety show sense. One can listen to the album and visualize her in a Las Vegas nightclub in a dazzling slinky dress. But nightclub personalities often make rotten albums. They suffer from lack of visual impact.

Miss Heatherton has fallen in with two of the finest producers in town: Tony Scotti and Tommy Oliver. Between them, they assessed Miss Heatherton’s abilities to perfection. The material was chosen with meticulous care and fits flawlessly: not too complicated, not too corny, neither new nor old. Miss Heatherton is best in the blocked-out, deliberate 6/8 tempos associated with the ‘50s. No arranger’s ego gets in the way. Everything is designed to set off the singer, who sings simply, wistfully and in tune. The background singers are another supportive touch. The lead in the chorus sounds like Carol Carmichael: She gives just the right touch of contemporariness.

If ever there was a producers’ album, this it. There are people in this business who could take a lesson from it. Assess your artist honestly: deal with what you’ve got: don’t kid yourself or your artist; don’t be cute: commit yourself firmly: make the artist comfortable. Except for a couple of tracks. I’m not crazy about this album, but I recognize a spectacular
ADVERTISING INDEX

<table>
<thead>
<tr>
<th>Key No.</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>...Acoustic Research, Inc......</td>
</tr>
<tr>
<td>2</td>
<td>...A.D.R. Audio ................</td>
</tr>
<tr>
<td>3</td>
<td>...Aki Electric Co. ..........</td>
</tr>
<tr>
<td>57</td>
<td>...Altec ........................</td>
</tr>
<tr>
<td>4</td>
<td>...Angel Records ..........</td>
</tr>
<tr>
<td>5</td>
<td>...Audio Dynamics Corp.</td>
</tr>
<tr>
<td>51</td>
<td>...Audio Technics. U.S., Inc.</td>
</tr>
<tr>
<td>6</td>
<td>...Audio Warehouse Sales..</td>
</tr>
<tr>
<td>57</td>
<td>...Arturo Carrillo, Inc.</td>
</tr>
<tr>
<td>8</td>
<td>...Bose Corp. .............</td>
</tr>
<tr>
<td>80</td>
<td>...Boroughs &amp; Co. ..........</td>
</tr>
<tr>
<td>103</td>
<td>...British Industries Co.</td>
</tr>
<tr>
<td>56</td>
<td>...BSR (USA) Ltd..........</td>
</tr>
<tr>
<td>117</td>
<td>...Cable &amp; Wire Co. ........</td>
</tr>
<tr>
<td>94</td>
<td>...Cajun Records ...........</td>
</tr>
<tr>
<td>39</td>
<td>...Cajun Records ..........</td>
</tr>
<tr>
<td>96</td>
<td>...Cajun Records .........</td>
</tr>
<tr>
<td>86</td>
<td>...Cajun Records ..........</td>
</tr>
<tr>
<td>100</td>
<td>...Cajun Records ...........</td>
</tr>
<tr>
<td>50</td>
<td>...Cajun Records ...........</td>
</tr>
<tr>
<td>32</td>
<td>...Cajun Records ...........</td>
</tr>
</tbody>
</table>

Many have hailed John Prine as the new Dylan. On the basis of this disc, his second, I am still unconvinced. Prine can write an engaging tune; he has the proper, nasal, whiny sound for this type of coffee-house creation. He believes in simplicity and his arrangements and performance are testament to this belief. However, the minimal approach works best on large ideas. Small treatments of small ideas make small ideas seem even smaller. These songs, carelessly and conventionally constructed, just do not offer any new insights. If their purpose is to tell me about Prine, then my feeling is that Prine's imagination definitely needs some stimulation. Occasionally, Prine does shrewdly observe the verities of ordinary life and he has written one or two gems. Here, however, one wonders if some of these tunes aren't put-ons. They are so trite. If indeed they are tongue-in-cheek, their intent is so confusing that they simply lose their effectiveness. Only on 'Rocky Mountain Time' does the song writer create an environment for some real emotion, though the rhyming of 'home' and 'room' doesn't help. I do defer to the Prine fanatics: There is a genuine talent here, but I think it needs developing. H.E.

JOHN PRINE: Diamonds in the Rough. John Prine, vocals and acoustic guitar; strings, rhythm and vocal accompaniment. Everybody. The Torch Singer; Souvenirs; ten more. Atlantic SD 7240, $5.98.

The best compliment I can pay Birtha is to say that these four young women attack their music with the same savagery displayed by many successful, highly energized young male rock bands who are currently on the pop scene. They wail their vocals, pound their drums and strum their guitars powerfully enough to wring the last inch of fury out of each of their songs. This album opens with Free Spirit, a hard, punchy rock tune with a screaming vocal. Eight relatively short selections follow, including the tender She Was Good to Me, an all-stars-out version of Ike Turner's Too Much Woman (For a Hen Pecked Man) that might make Tina Turner blush, and a soulful Forgotten Soul. Nowhere on this disc does the intensity, the dynamics, or the dedication to hard rock waver. If Birtha can't make it when they are obviously as talented and noisy as so many of their male counterparts, then this country truly is as sexist as so many women's liberationists contend. I shudder at the wrath Gloria Steinem and Bella Abzug will bring down on us if we deny women the right to rock as loudly as men. H.E.

DOUG KERSHAW: Devil's Elbow. Doug Kershaw, vocals and instrumentation; Devil's Elbow; eleven more. Warner Bros. BS 2649, $5.98.

BIRTHA. Rosemary, bass and vocals; Sherry, keyboards and vocals; Shele, guitars and vocals; Liver, drums and vocals. Free Spirit; The Talking Man; Tuesday, six more. ABC Dunhill DSX 50127, $5.98.

The Sea Hawk: The Classic Film Scores of Erich Wolfgang Korngold. Norma Proctor, contralto. Ambrosian Singers, National Philharmonic Orchestra, Charles Gerhardt, cond. For a feature review of this recording, see page 66.

Song O' My Heart. Original motion picture soundtrack. John McCormack, tenor, Edwin Schneider, piano; organ and orchestral accompaniment. For a feature review of this recording, see page 67.

The Electric Company. Original cast recording; music by Joe Raposo, special music and lyrics by Clark Gesner and Tom Lehrer. Lee Chamberlin, Bill Cosby, Morgan Freeman, Judy Graubart, Skip Hinnant, and Rita Moreno; vocals; instrumental accompaniment. Electric Company Theme; Easy Reader; Silent 'e'; Be Kind to the Letter 's'; Love of Chair; Jennifer of the Jungle; Your Rich Uncle Died; eighteen more. Warner Bros. BS 2636, $5.98.

The cast album of the popular NET children's series, this sister show to Sesame Street is a fascinating LP which displays both the extraordinary composing talents of Joe Raposo and the well-known exuberance of these children's Television Workshop programs. "The Electric Company" music is written, of course, as a guide for youngsters with reading problems, but it's catchy and so engaging that it's of much wider appeal. Raposo might consider moving to Broadway. Clearly, Broadway needs him. M.J.

MARJEO. Original motion picture soundtrack; Marjoe, narrations; various musicians. Warner Bros. BS 2667, $5.98.

"Howdy folks, my name is Marjoe Gortner and I'm here to give the devil two black eyes." Such is the essence of Marjoe, a filmed account of a young man who began his career as an evangelist at the age of four and became disenchanted with the calling somewhere in his twenties. During those years he worked the big-time religion circuit in the United States, first with his parents and then on his own.

theater and film
Here’s your FREE HIGH FIDELITY “at home” shopping service!

It’s easy! All you do is use one of the Reader Service cards at right. HIGH FIDELITY’s Reader Service Department will take it from there. It’s as simple as 1, 2, 3!

1. Just circle the number on the card that matches the number below the ad or editorial mention that interests you.

You’ll also find the key numbers for advertised products in the Advertiser’s Index.

2. Then type or print your name and address. Don’t forget your zip code, it’s important!

3. Drop the card into the mail. No postage is needed if mailed in the United States.

You’ll receive literature, colorful brochures and specifications about the products that interest you ... free and without obligation!

Use HIGH FIDELITY’s “at home” shopping service today!
How to Make Your Record-Playing Components Compatible

There's more pleasure in store for you every month with HIGH FIDELITY . . .

See Reverse Side for FREE "at Home" shopping service!
The film exposes the business end of evangelism—as Masters and Johnson exposed the technical aspects of sex. In both cases the truth uncovered will matter least to those it affects most. Marjoe appeals not to the audiences of religiousists, to whom he is a lamb who has strayed viciously from the flock, but rather to sophisticates to whom big-time religion is but one more bizarre American phenomenon.

Unlike the film, this album is a total flop. It is nothing more than a bunch of low-fidelity tapes of Marjoe’s services in tents from Fort Worth to Detroit. It includes several musical numbers by various religious circuit singers, most of which are below average.

With any kind of thoughtful production, this could have been an interesting album. Instead it is without concept or cohesion, totally exploitative. See the film instead. M.A.

**jazz**

Billie Holiday: Strange Fruit. Billie Holiday, vocals; various accompaniments. I’ll Get By; I Cover the Waterfront; As Time Goes By; thirteen performances—Embraceable You (a marvelous bit of sinuous toying with a lyric), I’ll Get By; I Cover the Waterfront; As Time Goes By; thirteen performances—Embraceable You (a marvelous bit of sinuous toying with a lyric). Billie Holiday, vocals; various accompaniments. Strange Fruit. Billie Holiday, vocals; various accompaniments. Strange Fruit. Billie Holiday, vocals; various accompaniments. Strange Fruit.

Two peaks of Billie Holiday’s recording career occurred under the auspices of Commodore Records, the jazz label that grew out of Milt Gabler’s Commodore Music Shop in New York. Her first session for Commodore was held in April 1939 with the band that had been backing Billie at Cafe Society for four months. The prime purpose of the session was to record Strange Fruit, which she had introduced at Cafe Society. But it also produced an incredibly haunting version of Yesterdays, her memorable blues Fine and Mellow, and an appealing I Gotta Right to Sing the Blues. The choice of tunes and the long period that Billie had been working regularly with the musicians made these performances much more representative of her qualities as a singer at that early stage in her career than the more casual treatments of current pop songs she sang in those days with Teddy Wilson’s studio bands.

Five years later, Billie was recording for Commodore once again, making several sessions with Eddie Heywood’s highly compatible sextet. Her artistry by then had been polished and refined, filled with subtle inflections and fascinating turns of musical phrase. It was just before she began to be hemmed in by the corded quality they have had to date.

J.S.W.
NEWPORT IN NEW YORK '72: The Jam Sessions, Vols. 1 and 2. Cat Anderson and Jimmy Owens, trumpets; Charles McPherson and Buddy Tate, saxophones; Milt Buckner, organ; Roland Hanna, piano; Charles Mingus, bass; Alan Dawson, drums; Jumpin' at the Woodside; Lo-Slo Bluz. Dizzy Gillespie, trumpet; Benny Green, trombone; Stan Getz, tenor saxophone; Milt Jackson, vibes; John Blair, violin, Kenny Burrell, guitar, Mary Lou Williams, piano; Percy Heath, bass; Big Black, conga; Max Roach, drums; Bags Groove, Night in Tunisia. Cobblestone 9025-2, $11.96 (two discs)

NEWPORT IN NEW YORK '72: The Jam Sessions, Vols. 3 and 4. Joe Newman and Nat Adderley, trumpets; Illinois Jacquet and Budd Johnson, tenor saxophones; Tyree Glenn, trombone, Gerry Mulligan, baritone saxophone; Jaki Byard, piano; Chubby Jackson, bass, Elvin Jones, drums; Perdido; Misty; Now's the Time. Clark Terry and Howard McGhee, trumpets; Sonny Stitt and Dexter Gordon, saxophones; Gary Burton, vibes; Jimmy Smith, organ; George Duke, piano, Al McKibbon, bass; Art Blakey, drums; Blue 'n Boogie. Harry Edison, trumpet; James Moody, Flip Phillips, Dexter Gordon, Zoot Sims, and Roland Kirk, saxophones; Kai Winding, trombone; Chuck Wayne, guitar; Herbie Hancock, piano; Larry Ridley, bass; Tony Williams, drums. So What. Cobblestone 9026-2, $11.96 (two discs)

KLH has always made a lot of very good loudspeakers. Now we make a lot of very good receivers, too. And like our loudspeakers, our receivers deliver an inordinate amount of performance at a very modest price. For instance our new Model Fifty-Five is an AM/FM stereo receiver with power, dependability and every feature you could possibly want—all for $199.95.* Team it with our nifty Model Thirty-Two loudspeakers and our new automatic turntable made especially for us by Garrard (includes base, dust cover, Pickering cartridge and diamond needle) and you’ve got a super system for just about $300! Or step up to a pair of Sixes with the Model Fifty-Two. Or match a pair of Seventeens with the Model Fifty-One. Or simply mix and match them anyway they sound best to you. It’s fun. It’s easy. And it really doesn’t cost a whole lot of money. So why settle for someone else’s “bargain” system, when you can get the best for less? Complete KLH component music systems. At your KLH dealer now.

*For more information on KLH components, write to KLH Research and Development Corporation, 30 Cross Street, Cambridge, Mass. 02139.

Now you can mix and match a complete KLH component music system for as little as $300.

*Suggested retail price.
for sale
RARE ROMANTIC PIANO SCORES—莫斯科, Hesselt, Herz, Litaff, Scharwenka, Scriabin, etc. Free catalog. MUSIC TREASURE PUBLICATIONS, Box 127, Highbidge Station, Bronx, New York 10452.

CANADIANS—DYNACO COMPONENTS AT TREMENDOUS DISCOUNTS—Write En-Jay Sales, Norripsayne, Ontario.

AR: KLH ADVENT, DYNACO, ADC RECTILINEAR OWNERS—Low cost electronic equalization for your particular speakers overcomes limitations of bookshelf enclosures, provides full range performance. Complete specifications, test reports, from Norman Laboratories, 520 Highland Parkway, Norman, Oklahoma 73069.

SAY MONEY BY THE BUSHEL WHERE THE CORN GROWS.
Fantastic Savings on Name Brand Stereo Equipment...WRITE FOR QUOTE

MIDWEST AUDIO WHOLESALERS
P.O. Box 1132, Waterloo, Iowa 50707.

Test
FREE COMPARISONS
Comparisons by Pittsburgh's Audio experts of over 100 speakers, receivers, changers, and cartridges included in the most informative catalog of its kind. Complete with lowest wholesale prices.

Wholesale Audio Inc
3916 SAW MILL RUN BLVD, D-1
PITTS., PA. 15227
3916 SAW MILL RUN BLVD, 121-1
FREE
COMPARE

miscellaneous

KLIPSCH, JBL, TANNOY, MARANTZ, THIERSO, RABCO, No discounting. Superior Sound, 1801 Brewerton Rd., Syracuse, N.Y. 13211.

DIAMOND NEEDLES and Stereo Cartridges at Discount prices for Share, Pickering, Stanton, Empire, Grado and ADC. Send for free catalog. All merchandise brand new and factory sealed. LYLE CARTRIDGES, Dept. H, Box 69, Kensington Station, Brooklyn, New York 11218.

HIGH FIDELITY IS ON MICROFILM: Back copies of HIGH FIDELITY are available on microfilm dating from APRIL, 1951 to DECEMBER 1970. Microfilm copies of articles from any of these issues may be obtained from Billboard Publications at a cost of $1.00 per page. For further information contact: Andy Tomko, Corporate Research Division, Billboard Publications, 185 W. 46th St., New York, N.Y. 10036.

THE HORN SPEAKER vintage audio electronic newspaper 50c $1.00 per year, Box 12, Nebra, Texas 75145.

ACT South [Audio Components Terminal]—The absolute end of your search for lowest prices on name brand stereo components. You name it, we price it. ACT South, Dept. B-6, Box 16777, Memphis, TN 38116.

Name:
Address:
City State Zip
Telephone:

My classified ad copy is attached.

HIGHER FIDELITY CLASSIFIED
165 W. 46th St., New York, N. Y. • Phone (212) 757-2800
Rates: $1.00 per word. Minimum $10.00. Words in caps at 10¢ extra each.

Display Classified
1 inch by 1 column—$200.
2 inch by 1 column—400.
3 inch by 1 column—600.

Full Payment Must Accompany All Copy for Displayed Ads except those placed by accredited advertising agencies.

INTEGRATED CIRCUIT KITS—Free catalog. FRAZER & ASSOCIATES, 3809 Sutford Road, Waldorf, California 90655.

Empty Phonograph record covers. White or black cardboard covers, plastic lined inner sleeves. 78 and 45 covers, hinged boxes, 12", 10", 7". Cabco Room 31-1, 89 East Woodruff, Columbus, Ohio 43201.

Protect your records Poly sleeves for jackets 54 Roundbottom inner sleeves 54 Poly lined paper sleeves 114 White jackets 254 Postage $1.00. Record Supply House, Hillburn, New York 10931.

10% RECORDER OWNERS: Used boxed 10%" metal reels, excellent condition, prepaid $24.00 each—2 for 1.75 each, 200 single, 10%" Specialty Co., P.O. Box 88388, Atlanta, Ga. 30338.

CUEING DEVICE. For AR and others. Damped. Precision machined. $12.00 postpaid. LYRE TRADING CO., 582 Franklin St., Cambridge, MA 02139.


Unique novelty catalog, Send quarter. Ezerins, 68 Bullard Ln., Millis, Mass. 02051.

Stereo Components, Appliances, low prices, $1.00 for catalog. Delco Electronics, 2209 B'Way, N.Y., N.Y. 10024, (212) 874-0900.

new equipment for sale
DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE is coming to your area. Franchises available. WAREHOUSE RECORD SALES, DEPT. H, 6716 NORTH BROAD ST., PHILADELPHIA, PENNSYLVANIA 19126.

LIVE OPERA PERFORMANCES ON REEL TO REEL TAPES. Incredible performances dating back 40 years, from PUNZELLE-CALIF. Operettes. MR. TAPE, Box 138, Murray Hill Station, N.Y. 10016.

ALBUMS $2.00 AND LESS! WE BREAK THE PRICE BARRIER ON RARE out-of-print motion picture soundtrack and show albums. Stein, North, Waxman, Berstein, Styne, etc. Only the best: Send $25 for new catalog to Recollections—P.O. Box 197, Roselle Park, N.J. 07204.

BASE—MEMOREX—Audio and Video Recording Tape. BSC Inc., Box 1181 (HF), Melrose Park, Il., 60161.

"Rocco Records: Famous Voices of the Past, vocal, instrumental, orchestral. Free numerical list; detailed catalogue $1.00. Box 175 Station "K", Toronto, Ontario, Canada.

Film Music. Free List. Soundtracks Ltd., P.O. Box 215, Glen Ridge, N.J. 07028.

RARE out of print motion picture soundtrack and show albums. Stein, North, Waxman, Berstein, Styne, etc. Only the best: Send $25 for new catalog to Recollections—P.O. Box 197, Roselle Park, N.J. 07204.

THE HORN SPEAKER vintage audio electronic newspaper 50c $1.00 per year, Box 12, Nebra, Texas 75145.

7" (4" HUB)
5" (3" HUB)
4" PLASTIC
3" PLASTIC
2" PLASTIC
1 1/2" PLASTIC
1" PLASTIC
3/4" PLASTIC
1/2" PLASTIC
.75 PLASTIC
.50 PLASTIC
.25 PLASTIC
.12 PLASTIC
.05 PLASTIC
.01 PLASTIC
7" NAB METAL
7" FLAT METAL
6" FLAT METAL
5" FLAT METAL
4" FLAT METAL
3" FLAT METAL
2" FLAT METAL
1 1/2" FLAT METAL
1" FLAT METAL
3/4" FLAT METAL
1/2" FLAT METAL
.75 FLAT METAL
.50 FLAT METAL
.25 FLAT METAL
.12 FLAT METAL
.05 FLAT METAL
.01 FLAT METAL
7" NAB GLASS
7" FLAT GLASS
6" FLAT GLASS
5" FLAT GLASS
4" FLAT GLASS
3" FLAT GLASS
2" FLAT GLASS
1 1/2" FLAT GLASS
1" FLAT GLASS
3/4" FLAT GLASS
1/2" FLAT GLASS
.75 FLAT GLASS
.50 FLAT GLASS
.25 FLAT GLASS
.12 FLAT GLASS
.05 FLAT GLASS
.01 FLAT GLASS
20% (1000).
Hall, largely because, at the moment of performance, it came as a refreshing relief to an increasingly dull evening. But even on its own, Owens’ opening solo is still a marvelously impassioned statement. Buddy Tate responds warmly to the standard Owens sets while Roland Hanna and Charles Mingus wrap it up with a pair of glory solos. The Yankee Stadium excerpts are essentially more of the same except for Illinois Jacquet’s vigorous, swinging development of The Man I Love in the midst of an otherwise routine ballad medley.

J.S.W.

in brief

DAVID BOWIE: Space Oddity. RCA LSP 4813, $5.98. These are David Bowie’s second and third LPs, recorded in 1969 and 1970, released originally by Mercury, and now re-released by RCA in the hopes of cashing in on the potential David Bowie craze. Bowie, here, is certainly no less obscure and more folky than he currently is as he sets about displaying his ampic writing and singing skills. Space Oddity, the title cut of his second LP, and the single that originally brought him to the attention of the public, is still a dazzer.

THE SHIP. Elektra 0598, $5.98. Submitted “A Contemporary Folk Music Journey,” this disc starts with promise but never gets out of the ground. The sound is reminiscent somehow of the Kingston Trio, only The Ship sings better. The album features a strikingly beautiful cover photo of a sailboat: If graphics make an album good, this one would be great.

CLASSIFIED continued

1930-1962 radio programs on tape. Huge catalog! Sample recordings $1.00 refundable! AM Treasures, Box 192W, Babylon, N.Y. 11702.

Lowest of the LOW!

Shamelessly Low Prices.

As one of America’s largest wholesale distributors, we’re guilty of shamelessly low prices. Our buying volume has made our prices the lowest! We seriously doubt you can find one lower...and that we’re proud of. What’s more, at S.C.A. you can select from hundreds of NEW, Factory Sealed, Full Warranace Brand names; Hi-Fi Stereo components. If its in the Hi-Fi, Audio field we have it! Write for a lowest of the low quote or even better come down and see for yourself...we’re not ashamed.
the tape deck

BY R.D. DARRELL

Dr. Dolby Gilds the Reel Lily. The blessings of noise reduction via the Dolby-B system may be proceeding relatively slowly, but progress continues to be unflaggingly steady and expansive. Already proved most beneficial in music-cassette processing, Dolbyization is now working out well in FM broadcasting, and there are even rumors that it is being studied for possible use with discs. Meanwhile, a number of tape specialists, led by one of the great pioneers in this field, Bert Whyte, have long been crying insistently for Dolbyization of open-reel tapes—in fact they were persuasive enough to prod Ampex now has begun to test the tape-buying public’s interest with a batch of no less than twenty Dolbyized Deutsche Grammophon and London 7½-ips reels.

It’s probable that most tape collectors, apart from audiophile extremists, haven’t worried overmuch about reel surface noise. The average tapester undoubtedly believes that, at the 7½-ips speed in particular, current noise standards are good enough to suggest that further quieting would be an unnecessary luxury. I thought so—anyway—that is, up to the moment when I first listened at home to the Dolbyized playback of a Dolbyized reel and realized fully the vital differences between “minimum” background noise and what amounts to almost complete elimination. Except under laboratory conditions, where inherent operational and ambient noises are reduced to levels normally impossible to achieve by home listeners, Dolbyization can submerge a reel’s surface noise below all usual operational and circumambient noise. What this means in sonic transparency and in listening delight is simply impossible to describe in words or even to comprehend until it has been experienced at firsthand.

So in one sense innocence is bliss: If your present open-reel playback seems satisfactorily noise-free, you don’t need to worry about Dolbyization. But if you’re anything of an audiophile purist, or if you’re particularly sensitive to noise, it richly warrants investigation and careful trial.

Catches 23 through 26. As always, supreme excellence isn’t achieved easily or cheaply. A Dolbyized reel costs no more than a conventional one, to be sure, but to exploit its advantages one must have the proper playback circuits or equipment. Built-in Dolby-B circuits are just beginning to be featured in some reel players, but most tape fans will require separate units, of which the Advent 100 and Advocate 101 are the best known at present (but others are likely to be along soon). I’m lucky, for I still have the Model 101 I bought when it first came out several years ago. And, after dusting off and recalibration, it again works like a charm.

Another handicap to the general acceptance of reel Dolbyization is the manufacturers’ dilemma of having to choose between the costly nuisance of providing dual editions of each reel release (as Ampex is doing at present); or, if they put out Dolbyized ones only, home listeners without Dolby playback facilities will have to put up with somewhat boosted highs in low-level passages. This may be more advantageous than otherwise where run-of-the-mill home systems are concerned, but with any good wide-range system the frequency imbalances are noticeable, and while the boost can be corrected by treble-reduction controls, that effect then is (unnecessarily) evident in high-level passages as well.

Then, even the most miraculous benefits of Dolbyization cannot eliminate hum or background noise built into either recordings or playback systems. Nor can they prevent such tape-base or processing defects as drop-outs, pre-echoes, or reverse-channel spillovers. Indeed my only adverse criticism of the otherwise admirably processed Dolbyized reels I’ve heard so far is the spillovers evident in the blank A-side leaders of reels in which the B side is the longer. Of course we’re not supposed to “play” these blanks at all, but too often we fail to notice the specified side timings and forget to skip over the sometimes several minutes-long leaders.

Finally, there’s a danger that Dolbyization may be used for “big” or spectacular recorded performances only. It does help here, of course, but less significantly than with works in which quiet or solo passages are more frequent. To appreciate the true miracles of Dolbyization, hear what it can do for an entirely unaccompanied vocal or instrumental solo.

Ideal Dolby Demos. The only solo instrumental example so far is Roberto Szidon’s coupling of Ives’s Second (Concord) and Three-Page Piano Sonatas (DGG/Ampex L 43215, $7.95), which by chance I missed in its non-Dolbyized reel edition of a few months ago. No comparisons are necessary, however, to realize the blessings of surface noise elimination—advantages partly psychological perhaps but by no means inconsiderable technologically in their enhancements of the already admirable sonic lucidity. Incidentally, the performances are extremely good too as well as comprehensive in their inclusion of the usually omitted very brief viola and flute obbligato bits.

A perhaps even more overwhelming demonstration is the technically remarkable D’Oyly Carte Company recording of the Gilbert & Sullivan H.M.S. Pinafore (London/Ampex K 475066, double-play, $11.95), which I reviewed in April 1972 in its Dolbyized cassette edition. That was—and is—one of the best examples of cassette Dolbyization I know, yet the reel’s Dolby-B technology is even better, especially in the nonmusical moments of spoken dialogue.

Non-Odious Comparisons. I have been particularly fascinated by comparisons between Mehta’s Holst: Planets and Saint-Saëns Organ Symphony (London/Ampex L 480250 and L 480241, $7.95 each) with their original disc editions of July 1972 and September 1971. The disc surfaces were pretty good, but a properly Dolbyized reel conclusively silences all arguments about relative disc/tape surface quietness characteristics. Dolbyization also works wonders in lightening and making more lucid the recorded sonics themselves. What it can’t do (as we’ve all discovered earlier with Dolbyized cassettes) is to alter one’s evaluations of interpretative and executant matters. My original (disc review) reactions to what I find a lack of distinctively individual character, in both the readings and the engineering, still hold good—or should I say, bad?

Silent surfaces exert even more magical appeal when comparisons are made with non-Dolbyized reel editions, as is the case with two deservedly famous DGG Boston Symphony recordings: my beloved Smetana Ma Vlast by Kubelik (now DGG/Ampex K 47054, double-play, $11.95) and the coupling of Ruggles’ Sun-Treader and Ives’s Three Places in New England by Thomas (L 43048, $7.95), their music-cassette editions reviewed here in March 1972 and April 1971 respectively. If a little surface noise doesn’t bother you, the cassette versions are fine. Yet even for a veteran of the 78-rpm era like myself, accustomed to mentally filtering out such noise, its minimization in a Dolbyized cassette is a great relief, and its practically complete elimination in a Dolbyized reel is sheer delicious bliss!

Coming Up: Comments on more Dolby-B reels, plus, I hope, my first reports on further sensationally good news for reel collectors—the new Stereotape open-reel series of current and “catalogue” RCA Red Seal recordings. I’ve just seen the formidable impressive advance list and I’m waiting impatiently to hear the reels themselves.
Today's hi-fi is great. Records and tapes are constantly being improved. Components get better each year . . . except for one, the listening room.

That big blob of air filled with furniture and carpeting and windows and pets and people is a component too; it gets plugged into your stereo system between your speakers and your ears. Most people don't think too much about their listening rooms. Maybe it's too obvious, or maybe because you don't have to switch it on and off, or maybe because it just doesn't have any motors or fuses or jacks.

But your listening room is as much an audio component as a tape deck or turntable; it's just as vital a link in the music reproduction chain, and deserves as much attention. The problem is that most listening rooms aren't listening rooms. They're living rooms or sitting rooms or drinking rooms or sleeping rooms or pool rooms; with speakers stuck in somewhere.

And the things that make a room good for partying or pool-shooting might not make it good for listening. Heavy drapes and overstuffed furniture soak up the sound, robbing you of the live feeling. Wide bare windows and sleek modern furniture bounce the sounds all over the place, making the music sound like a shooting gallery.

We can't expect you to rebuild and redecorate your room just for music, but we can help you control it. Before, the "room component" just had an input and an output. It carried the signal from the speakers to your ears. But you couldn't do much about it. Now you can put knobs on it.

The Metrotec equalizer is a precision tone control system that breaks up the audible frequency band into five different ranges. Not just bass and treble like your present equipment. It connects to your amp or receiver, or between pre-amp and power amp, and adjusts the sound to compensate for the shape of your room and the things in it.

If any of your other components caused as much distortion as your listening room, you'd replace it or get it fixed. You're stuck with your room. Let us fix it.

The BSR-Metrotec FEW-1 Frequency Equalizer—$99.95

CIRCLE 56 ON READER-SERVICE CARD
Status symbol?

Maybe.

It could be those big professional reels.
Or the obvious precision hand craftsmanship.
Or the studio-standard sound reproduction.
Or just that it's a TEAC.

Status symbol? If it feels like it—it is.

True, 10½" reels look impressive. More important, they give you much more music—up to 16 hours on one reel at 3¾ ips—or studio-master fidelity at 15 ips. You can also choose from three versatile 3300 models. Each with a different head configuration (2 or 4 track) and speed selection (3¾ / 7½ / 15 ips) to fit your specific needs. And each is backed by TEAC's exclusive two year Warranty of Confidence.*

A TEAC 3300 is probably the closest thing to having a custom-made tape deck. In fact, we put so much care, patience and personal engineering into every 3300, it's as if we were custom building them for ourselves.

You'll understand our pride when you experience the TEAC 3300. And we'll understand yours if you call it a status symbol.

The sound of a new generation

TEAC.

*TEAC or one of its authorized service stations will make all necessary repairs to any TEAC TAPE DECK that results from defects in workmanship or material for two full years from the date of purchase, free of charge to the original purchaser.

The three 3300 models with different head and speed configurations are priced at $449.50 each.

For complete information, including locations of the TEAC dealers nearest you, please write to TEAC, 7733 Telegraph Road, Montebello, California 90640.

TEAC Corporation, 1-8-1 Nishi-shinjuku, Shinjuku-ku, Tokyo, Japan
TEAC EUROPE N.V., Kabelweg 45-47, Amsterdam—W. 2, Holland
In Canada: White Electronic Development Corp., Ltd., Toronto
Hi-Fi, S.A. Alta Fidelidad, Hidalgo 1679, Guadalajara, Jal., Mexico

CIRCLE 67 ON READER-SERVICE CARD
Introducing the remarkable new

KENWOOD

4 CHANNEL

AM/FM-Stereo Receiver

...featuring SQ Decoder with Logic Circuits... Ambient Retriever Circuits
...Low-Noise Tuner... High Power... Remote Volume Control

The KENWOOD KR-6140A combines in one attractive component features, performance and flexibility rarely found in even the most expensive 4-channel receivers. It provides complete compatibility with all presently available 4-channel sources: Discrete tape, SQ Matrix, other matrices, and derived 4-channel from stereo broadcasts and recordings.

One of the unit’s many fine features is the built-in SQ decoder with logic circuits that enables the playback of the most popular 4-channel record system and the reception of derived 4-channel broadcasts for an exciting new experience in FM-stereo listening.

The KR-6140A incorporates a powerful amplifier that delivers 320 watts (IHF) Music Power (200 watts at 8 ohms)—ample power that easily drives as many as 8 speakers. The superbly-crafted FM section, with combined FET and tuned circuits, insures maximum sensitivity (1.9μV) for noise-free reception and minimal adjacent-channel interference. The silky feel of the flywheel tuning action and KENWOOD’s long linear dial scale make accurate tuning quick and easy.

You’ll discover new flexibility, too, in the well-arranged control facilities. A full complement of front-and-rear Tone, Balance and Volume Controls provides optimum compensation that permits you to tailor overall response to your own special room and speaker acoustics. Microphone input mixing; a dual tape monitor; and refinements such as High and Low Filters, FM Muting, and Loudness control are just a few of the many extra features that make the KR-6140A a flexible and responsive unit.

The true measure of its remarkable performance, however, lies in your own listening experience. Visit your nearest KENWOOD Dealer soon, and capture the excitement of 4-channel with the quality and value that only KENWOOD can offer.

For complete specifications, write...

KENWOOD 15777 So. Broadway, Gardena, Calif. 90248 • 72-02 Fifty-first Ave., Woodside, N.Y. 11377
In Canada: Magnasonic Canada, Ltd., Toronto, Ontario; Montreal, Quebec; Vancouver, B.C.

CIRCLE 36 ON READER-SERVICE CARD