VOLUME I

PERPETUAL

TROUBLESHOOTER'S

MANUAL

JOHN F. RIDER
COLIN B. KENNEDY CORP.

Model 5

Model 6 Type 421

Model 6 Type 42C

Model 6 Type 421

Model 6 Type 420

www.americanradiohistory.com
COLLIN B. KENNEDY CORP.

MODEL 7-Cornet DC
MODEL 20 Type 440
MODEL 30 Type 435

Model 7-Cornet DC

Model 20
Type 440
Tube Order
4,-3,-2,-1,-5.

Model 30
Type 435

KENNEDY—Model 30-32
Line Voltage 120—Volume Control Full Or.

www.americanradiohistory.com
Circuit Alterations

**Short Wave Chassis Model 34**

Certain minor alterations in wiring, as well as the addition of a few small parts, have been made in the production of the short wave chassis, model 34.

These changes have been made as they increase the ease in handling and the efficiency of the unit, but are not recommended for units built prior to the time of their adoption in production.

Variations in the circuit diagram in this booklet are shown in the illustration on this page. It will be noted that the changes have been made in the oscillator and external wiring circuits only—the short wave radio frequency stage and detector remaining entirely as previously indicated. The changes are as follows, numbers corresponding to those on illustration.

1. The short wave oscillator output is now taken from the cathode of the oscillator tube instead of the screen.
2. A 3,000-ohm biasing resistor replaces the 1,500-ohm resistor previously indicated at the oscillator cathode.
3. A 25,000-ohm graphite resistor has been placed in the screen circuit between the R.F. choke and screen.
4. A .0001 mfd. condenser has been placed in the long wave R.F. unit, at the ungrounded end of the volume control.
5. A .002 mfd. condenser is placed across the 25,000-ohm screen grid series resistor.
6. The long wave-short wave changeover switch is rewired as indicated in the accompanying diagram. The portion of the switch utilized in turning the filaments of the S.W. unit on and off remains unchanged. The other portion, single pole-double throw, is now rewired so that the antenna is thrown to either short wave or long wave units as required, being entirely disconnected from the unit it is not intended to connect to. The antenna is now connected to the center pole of this switch, as per diagram.

It will be noted that the short wave unit output now connects permanently to the long wave antenna coil primary through the .0001 mfd. condenser located in the long wave R.F. unit, without being cut in and out by the changeover switch, as formerly. This does not add a noticeable load to this circuit, for long wave reception, so does not need to be switched.

Shielding braid is used over the short wave output wire, and the wire from the switch to the antenna post of the long wave unit.

The 10,000-ohm wire wound regeneration and volume control, in the short wave unit, has been replaced by a 10,000-ohm graphite control. This provides a smooth control—less inclined to be noisy.

The ground wire is connected to the ground post of the short wave unit, as formerly indicated.

The antenna is now connected to the wire leading from the changeover switch.
KING MFG. CORP.

**MODEL Monarch (101)**

Schematic - Voltage

**MODEL Royal (97)**

Voltage

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### MONARCH Model 101.

<table>
<thead>
<tr>
<th>Tube</th>
<th>Stage</th>
<th>Fil. V.</th>
<th>Plate V.</th>
<th>Screen.</th>
<th>Control Grid V.</th>
<th>Control Grid V.</th>
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<tr>
<td>'24</td>
<td>1 R.F.</td>
<td>2.5</td>
<td>180</td>
<td>85</td>
<td>3.5</td>
<td></td>
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<tr>
<td>'24</td>
<td>2 R.F.</td>
<td>2.5</td>
<td>180</td>
<td>85</td>
<td>3.5</td>
<td></td>
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<tr>
<td>'27</td>
<td>Det.</td>
<td>2.5</td>
<td>90</td>
<td></td>
<td>---</td>
<td>10.</td>
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<td>'27</td>
<td>1 A.F.</td>
<td>2.5</td>
<td>170</td>
<td>---</td>
<td>13.</td>
<td></td>
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<tr>
<td>'45</td>
<td>2 A.F.</td>
<td>2.5</td>
<td>220</td>
<td>---</td>
<td>50.</td>
<td></td>
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<tr>
<td>'45</td>
<td>2 A.F.</td>
<td>2.5</td>
<td>220</td>
<td>---</td>
<td>50.</td>
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### MONARCH Model 97

Line: 106 Volts.

<table>
<thead>
<tr>
<th>Tube</th>
<th>Stage</th>
<th>Fil. V.</th>
<th>Plate V.</th>
<th>Grid V.</th>
<th>Cath. V.</th>
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<tbody>
<tr>
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<td>1 R.F.</td>
<td>2.4</td>
<td>136</td>
<td>11.</td>
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<td>1.6</td>
<td>136</td>
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<td>1.6</td>
<td>136</td>
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<tr>
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<td>Det.</td>
<td>2.4</td>
<td>52</td>
<td>---</td>
<td>---</td>
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<tr>
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<td>1 A.F.</td>
<td>1.6</td>
<td>127</td>
<td>8.</td>
<td></td>
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<tr>
<td>'71</td>
<td>2 A.F.</td>
<td>5.1</td>
<td>184</td>
<td>36</td>
<td></td>
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<tr>
<td>'71</td>
<td>2 A.F.</td>
<td>5.1</td>
<td>184</td>
<td>36</td>
<td></td>
</tr>
</tbody>
</table>

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KOLSTER RADIO, INC.

MODEL 6-F, 6-J, 6-K
6-L, 6-M, 6-R

MODEL K-23
Reproducer
Schematic.
Model K-24 with 250 type tubes.

Model K-24 with 210 type tubes.
MODELS K-43, K-43A (1929)
Schematic, Voltage

To use type '171 tubes in output stage, filament lead must be connected to tap 2 & 3. filament lead connected to tap 1 & 3.

K-43

Line Voltage 112—Volume Control Position Max

www.americanradiohistory.com
KOLSTER — INTERNATIONAL RADIO MODELS K-80—K-82

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**Model K-80, K-82**

**KOLSTER RADIO, INC.**

**Power Consumption 95 Watt**

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**Model K-80, K-82**

**KOLSTER RADIO, INC.**

**Power Consumption 95 Watt**
C. R. LEUTZ, INC.

MODEL C-10
MODEL Silver-Ghost
MODEL C

The Experiments' Information Service Navy Model C-10 super-heterodyne designed for a wave-length range from 600 meters down to 30 meters, the band being covered through the means of interchangeable coils.

Circuit Diagram of New "Silver Ghost" Receiver
Universal Trans-Oceanic Receiver.

Seven Seas Console.

Seven Seas (A.C.)

CX-350
2nd A.F.

CX-350
2nd A.F.

CX-381
Rect.

CX-381
Rect.

MODEL Trans-Oceanic
MODEL Seven Seas

C. R. LEUTZ, INC.