SERVICE NOTES

FOR

DU MONT TELESETS

ALLEN B. DU MONT LABORATORIES, INC.

Teleset Service Control Department

MARKET STREET EAST PATerson, N. J.
RA-101 Section

The RA-101 line of Telesets was probably the most elaborate that has ever been made.

Thousands of these Telesets are in operation in various sections of the country all giving excellent results.

We are anxious that these Telesets remain in top-notch operating condition. Remember, these sets are our advertisers.

This section is devoted therefore, to hints on servicing that will assist you in maintaining these sets. Any contributions to this section will be welcome.
Sync Instability

If horizontal sweep breakup is noticed when Teleset has operated for an hour or so, components are changing value under operating temperature conditions.

Check these parts in A.F.C. circuit:

1. 6H6 tube
2. 6AC7 tube
3. C10 .01 ufd.
4. C9 .05 ufd.
5. C3 .01 ufd.

A rough check for proper operation can be made by noting the range of secondary tuning slug adjustment over which sweeps lock in. This should always be at least a full turn.

If ambient temperatures are high, additional ventilation will improve stability. Mounting the synch chassis on spacers, etc., may prove helpful.

Custom Installation Increased Cable Length

It has been determined that the length of the cathode-ray tube cable used in the Custom Teleset can be increased materially without affecting picture quality adversely.

The maximum length which can be used before picture deterioration becomes apparent is approximately 30 to 35 feet. When this cable length is increased beyond the 12 feet supplied with the receiver, a deterioration in definition will be noticed. However, this should not be too important because the average viewing distance in commercial establishments is at least 10 feet.

In extending this cable all leads should be separated by at least one inch and preferably more. In particular, this applies to the cathode-ray tube grid lead and the horizontal deflection leads.

Addition of 4.5Mc (Grain) Trap

Under certain conditions, it is possible that a fine grain type of interference may be present on the RA-101 Telesets.

To reduce this type of interference, it will be necessary to add a special trap tuned to 4.5 Mc and referred to as a "grain" trap.

This 4.5Mc is the "beat" frequency that exists between the video carrier and sound carrier.

The instructions for adding this trap follow:
<table>
<thead>
<tr>
<th>Change</th>
<th>Symbol</th>
<th>Di Mont Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Added</td>
<td>C92</td>
<td>3-1395 or 3-1419</td>
<td>Capacitor, fixed; Ceramic 47 mmfd; ± 5%; 350V</td>
</tr>
<tr>
<td>Added</td>
<td>L47</td>
<td>21A-4903-1</td>
<td>Coil, video peaking, µh; ± 5%</td>
</tr>
<tr>
<td>Added</td>
<td>L48</td>
<td>21A-13098-101</td>
<td>Coil, assembly 4.5 mc trap</td>
</tr>
<tr>
<td>Added</td>
<td>R23</td>
<td>RC21BF103K</td>
<td>Resistor; fixed; composition; 10,000 ohms; ± 10%; 1/2W</td>
</tr>
</tbody>
</table>

![Diagram of circuit connections](image)