

TEST SPECIFICATION AND ALIGNMENT PROCEDURES FOR MULTIPLEX ADAPTER MA-010 & MA-015

Equipment required:

Multiplex Stereo Generator (Scott Type 830 or equivalent.)

Oscilloscope with low capacity (20pf max.) probe and frequency response to 100 kc/s.

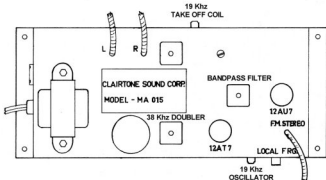
Audio generator with balanced output (Hewlett-Packard or equivalent.)

1. Plug adapter into power supply (respectively AC line) and allow a min. of 5 minutes warm-up.
2. Connect oscilloscope probe (low "C") to junction of the two diodes IN34A. Oscilloscope on external sweep from Scott generator (19Kc). No input to adapter. Adapter switch in fringe position. Adjust oscillator until Lissajou comes to standstill.
3. Scope to internal sweep. 19Kc signal from Scott generator to input of adapter. Probe on same point as in 2. Adjust 38Kc/s doubler coil for maximum.
4. Scope to external (19Kc) sweep as in 2. No signal to input of adapter. Check that oscillator frequency is unchanged, and correct if required.
5. Probe on pin #2 of 12AT7. Short pin #7 of 12AT7 to ground. 19Kc/s signal from Scott generator to input of adapter. Adjust 19Kc/s take-off coil for maximum.
6. Pin #7 of 12AT7 still grounded. Probe (low "C") at junction of diodes IN34A's. Input to adapter 67.5 Kc/s. Adjust Bandpass filter (Bottom coil) for minimum. Input to adapter 38 Kc/s. Adjust Bandpass filter (top coil) for maximum.
7. Input to adapter: "Left" channel composite signal ("+" L, "Right" = O.) Modulation frequency 1000 C/s. Probe on output "R" of adapter.

Local — fringe switch in "fringe" position.

Adjust output for minimum by adjusting potentiometer. If proper minimum cannot be obtained by adjusting potentiometer, a slight adjustment of the 19 Kc/s take-off coil will be required.

8. Check that minimum output is maintained by switching input to "+" R" "L-O" and probe to output "L" on adapter.
9. Check that no phase shift occurs by switching, "local-fringe" switch to local position. Amplitude of output should decrease. If the amplitude of the output increases, the following should be checked:
 - (a) oscillator frequency as in 2.
 - (b) minimum adjust as in 7.
10. Calibrate oscilloscope using input signal to adapter as reference. Check output of adapter (maximum channel). Gain must be +3 db.
11. Check stereophonic separation by taking ratio of "R" and "L" outputs. Ratio must be 10 times minimum. (Modulation 1000 c/s.)



CLARITONE MA-010, MA-015