

# audio research

H I G H D E F I N I T I O N<sup>®</sup>

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## VT150 TRIM ADJUSTMENT

- 1) WITH POWER OFF, ZERO METER USING MECHANICAL SET SCREW.
- 2) POWER ON, ZERO METER USING TRIM POT (#1) CLOSEST TO CENTER OF UNIT.
- 3) AFTER 20 MIN. WARM UP, CONNECT METER ACROSS 0.2 OHM RESISTOR LABELED V10. BE SURE METER GROUND IS ON GROUNDED SIDE OF RESISTOR. ADJUST FRONT PANEL POT TO READ 13.0mV ACROSS 0.2 OHM RESISTOR. (V10 ADJUST).
- 4) SET TRIMPOT (#2) SECOND FROM CENTER SO THAT THE METER DISPLAYS 65mA. (SET TO "V10 ADJUST)
- 5) CONNECT METER ACROSS V8'S RESISTOR (0.2 OHM). USE 1K OHM TO SPEED UP TIME CONSTANT ACROSS ASSOCIATED (CLOSEST) 1 MEG OHM SERVO RESISTOR (4.64M IN VT150SE R62, 63, 64, 65).ADJUSTG TRIM POT (#3) SO THAT VOM READS 13.0mV. FRONT PANEL METER SHOULD AGREE.
- 6) REPEAT STEP #5 AND ADJUST TRIMPOT (#4) WHEN MEASURING ACROSS V9'S RESISTOR (0.2 OHM) AND USE TRIMPOT (#5) WHEN MEASURING V7'S RESISTOR (0.2 OHM).
- 7) CHECK ALL FOUR TUBES ON THE FRONT PANEL METER. READJUST IF NECESSARY.

## INSTRUCTIONS FOR VT150 INTERNAL ADJUSTMENT POTS

Internal trim pots RV1,2,3,4,5 are factory preset and sealed. They should not be re-adjusted unless one of the ICs U3,4,5,6 or the Meter M1 was replaced.

1. First, check mechanical zero adjustment for the bias meter, with the VT150 power off.
2. Adjust RV1 offset trim for zero meter indication with the meter switch SW2 at "operate".
3. Adjust RV5 sensitivity for 65mA indication on the meter, with the meter switch SW2 set at V10, and the front bias control RV6 set for .013VDC measured directly across R73 ( $0.2\Omega$ ).
4. Adjust RV2 offset trim for 0VDC (less than 0.1mV) between the hot side of R71 and the hot side of R73. This is a very slow-responding servo circuit, and a small change in pot position can make a large delayed change in voltage. Allow time to make a very small change and wait for stabilization. Recheck the adjustment after a few minutes, and reset as needed. For best results, make sure that tubes V5,6,7,8,9,10 are in good condition, and the VT150 has been warmed up for 10-20 minutes.
5. Adjust RV3 offset trim similarly, for 0VDC (less than 0.1mV) between the hot side of R70 and the hot side of R73.
6. Adjust RV4 offset trim similarly, for 0VDC (less than 0.1mV) between the hot side of R72 and the hot side of R73.