

TRC-453 and Uniden PC-122 Alignment Procedure

This alignment procedure has been re-written for the "Experienced Tech."

PLL Section: Clarifier centered

1. Ch 40; AM, RX - TP2; adjust L13 for 4.5VDC.
2. Ch 1 - check for more than 2VDC.
3. Ch 19; USB, RX - TP3; adjust L14 for max.
4. Ch 19; USB, RX - TP3; adjust L16 for 16.4925MHz, ± 20 Hz.
5. Ch 19; AM, RX - TP3; adjust L15 for 16.4900MHz, ± 20 Hz.
6. Ch 19; LSB, RX - TP3; adjust L17 for 16.4875MHz, ± 20 Hz.
7. Ch 19; LSB, TX - TP3; adjust VR3 for 16.4875MHz, ± 20 Hz.
8. Ch 19; ^{USB}~~LSB~~, RX - TP5; adjust ^{L19}~~L20~~ for 10.6925, ± 20 Hz.
9. Ch 19; ^{LSB}~~USB~~, RX - TP5; adjust ^{L20}~~L19~~ for 10.6975MHz, ± 20 Hz.
10. Ch 19; AM, TX (Disconnect "small PCB short board" between TP6, TP7, and TP8.)
 - TP9; adjust L18 for 10.6950MHz, ± 20 Hz.

TRANSMIT Section:

1. Ch 19; USB, TX (Disconnect "small PCB short board" between TP6, TP7, and TP8.)
 - A. Connect ammeter between TP7 and TP8; adjust VR9 for 40ma.
 - B. Connect ammeter between TP6 and TP8; adjust VR8 for 30ma.
 - C. Reconnect small "PCB short board".
2. Ch 19; USB, TX (VR6 fully CW; 2-tone modulation).
 - A. Adjust L37, L36, L35, L34, and L26 for max RF output
 - B. Balance out Ch 1-40, using L34, L35, and L36.
3. Ch 19; AM, TX (with 1K modulation):
 - A. Adjust L26 for max RF.
 - B. Adjust VR5 for 95-98% TX Modulation.
4. Ch 19; (USB and LSB), TX - Adjust VR4 for minimum carrier leakage on both sidebands.

TRC-453/Uniden PC-122 Align. (Cont.)

TRANSMIT Section:

5. Ch 19; USB, TX (2-tone modulation):

A. Adjust VR6 for 12W RF output

B. Adjust VR7 for 3 lights lit on meter.

6. Ch 19; AM, TX - Adjust VR10 for 4W RF output.

RECEIVER Section:

1. Ch 19, AM, RF Gain-CW, Vol-CW, Sq-CCW, NB/ANL-Off; (2V, 1KHz 30% modulated input to unit).

A. Adjust L11, L10, L8, L7, L6, L5, L4, and L3 for maximum. Balance out across Fo range with L3 if needed.

2. Sq-CW, Sig Gen to 1000_mV: Adjust VR2 for audio signal to appear.

3. Sq-CCW, Sig Gen to 100_mV: Adjust VR1 for S9 on meter.

4. Step 1 settings (NB/ANL to ON): Scope TP1 and adjust L2 for max.

TRC-453/Uniden PC-122 Alignment Points

