

TUNING AND CALIBRATION RICH-MAR ULTRASOUNDS (Models IV, VI, VI-G, VI-HV, HV II)

If crystal is being replaced.

1. Install transducer in wattmeter
2. Turn the intensity control to maximum continuous mode.
3. Adjust C4 on the US Board for maximum deflection.
4. Adjust R6 on Power Board for maximum output of 20 to 25 watts
5. Switch to pulsed mode, maximum output 25% duty cycle.
7. Output should be between 5.1 to 62 watts (if not change R10 on power board to achieve proper output lower resistance higher output.)
8. Close unit, re-check total continuous output, adjust R6 if necessary.

If not replacing crystal.

9. Adjust intensity control to 20 watts on wattmeter
10. Adjust R27 on meter board so meter will correspond with the output.
11. Check tracking of meter at 15, 10, & 5 watts. It should be within 14% of the output.
12. Switch to pulsed at maximum output & 25% duty cycle re-check output.
13. Adjust intensity control to 5.2 watts on wattmeter
14. Adjust R26 on meter board so meter will correspond with output.

Pulsed output is a percentage of continuous (20 watts continuous=5 watts of pulsed at 25% duty cycle.)