930-13478-01 MRC-2 Power Supply

Equipment required
Moseley MRC-2 RT and/or CT
PC with MasterController software (not needed for CT)
Voltmeter (analog or digital)
Frequency Counter

Connections required
Wiring is dependent on test units.

Procedure

1. Verify correct amperage fuse (depends on power input voltage)
2. Connect AC input (120V or 240V, as appropriate).
3. Turn on power supply switch.
4. Verify DC outputs.
    a. +5 = +5 +/- 0.25VDC (red wires, pins 3& 4);
    b. +15 = +15 +/- 1.5VDC (orange wire, pin 7);
    c. –15 = -15 +/- 1.5VDC (yellow wire, pin 9);
    with respect to chassis ground (black wires, pins 1& 2).
5. Set frequency at TP1 to 245.760khz +/- 0.2khz for 60Hz supply (or 204.800khz +/- 0.2khz for 50Hz supply).
6. Verify 60Hz (or 50Hz) at MRC-2 end of Molex connector (gray wire, pin 5).
7. Turn off power supply switch.
8. Plug MRC-2 Molex connector into the power supply 9-pin Molex connector.
9. Turn on power supply switch.
10. Verify the DC voltages under load, same as in step 4, above.
11. Verify the three green LEDs on the CPU board are about the same brightness (Manual section 2.3).
12. Turn the CPU board potentiometer R4 counter-clockwise until the RESET LED lights red; if the potentiometer reaches the end-stop and clicks, push the RESET button to light the red LED.
13. Turn the CPU board potentiometer R4 clockwise until the red LED goes dark then turn the potentiometer three more full turns clockwise
14. Push the CPU reset button one more time and ensure the MRC-2 follows the normal power-up routine (Manual section 3.2.1)
15. Connect together MRC-2 RT and CT units (or use MasterController in the PC).
16. Verify communications link performance.
17. Turn off power supply switch.
18. Disconnect AC input cable.
19. Complete power supply installation with screws, etc. as required and return MRC-2 to normal service.

CPU interface card modification for older MRC-1/2 (replacing old Power-One or Condor Supply).

A. Power-down the MRC.
B. Remove CPU Interface card from chassis (from the back of the unit, not the CPU board inside the door).
C. Locate diode CR-3 approximately top center.
D. Carefully de-solder and re-install diode with polarity reversed.
E. Clean solder flux residue.
F. Return card to chassis.
G. Remove old power supply.
H. Follow procedure steps 1 through 19, above.