

BULLETIN.013

SYNCHRO-PULSE CDT 350: CP34 CP34-41 SHUNT AMP PCB

The GAIN adjustment of this board is factory set for a gain of 160, and normally should not be field adjusted.

However, if it is necessary to check this adjustment, the method below can be used.

Before the gain is adjusted, check the Offset null with the following procedure.

OFFSET NULL

Adjust trimpot RV1 (null) such that while there is no welding current flowing through the current shunt, the output of the current amplifier measured across R6 is as close to zero millivolts as possible.

GAIN

1. Disconnect the shunt (twisted red and black wires) from the pcb.
2. In place of the shunt, connect a source of 50mV DC. Confirm this voltage using an accurate digital voltmeter. (A suitable battery-based circuit is shown on the following page).
3. With the same digital meter, check for 8.00 volts DC 'Current Signal' across resistor R6.
4. If necessary, adjust potentiometer RV2 (marked GAIN) to establish 8.00 volts output.
5. Re-check the input has remained stable at 50 mV, repeat steps 3 and 4 if necessary.
6. Apply a small amount of glue or thick paint to the adjusting screw of RV2.

