

Digital Potentiometer Control IC

The HCTL2016 digital pot decoder IC is a key component of the front panel circuit.

If the calibrator will not 'start up' correctly, this may indicate that a fault condition applies to this IC, causing data lines to be shorted out.

Removal / Replacing the Digital Pot IC

To determine if the HCTL2016 IC is the cause, open the front panel and remove the IC.



Removing this IC allows a check to see if the calibrator will now start up OK (the digital Pot will not be operational at this time)



ENSURE THE CALIBRATOR IS DISCONNECTED FROM THE MAINS SUPPLY BEFORE PROCEEDING

Remove the front panel as shown below :

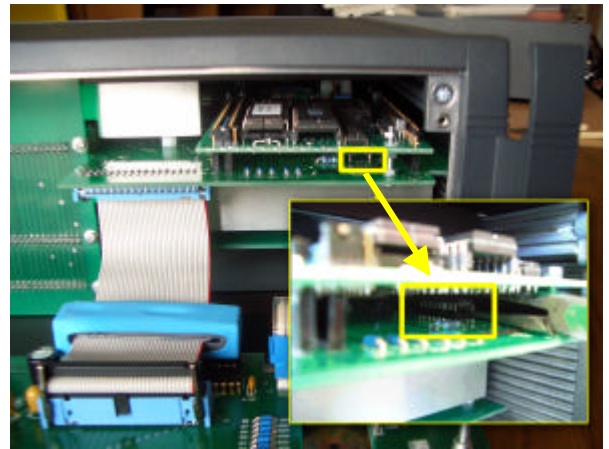
Firstly pull away plastic cover strip at each end of front panel as shown below.



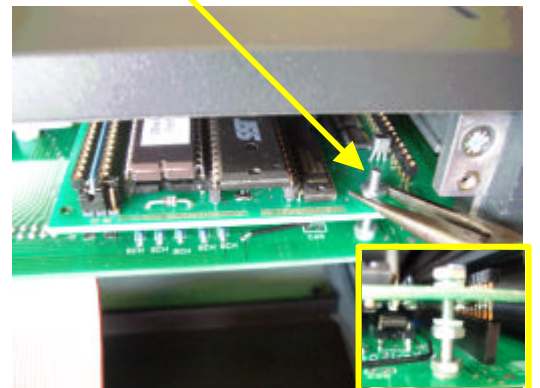
Then remove the 2 screws at each end of panel, as below



The pot IC is located *below* the processor board, highlighted here in yellow :



To remove the IC, it is necessary to carefully *lever up* the processor board on the right hand side – newer calibrators have the processor board fixed down – remove the nut to proceed.



Use a set of long nosed pliers to extract the IC from its holder :



Finally, check the operation of the calibrator – if it starts up OK, then IC is faulty and requires replacement.