

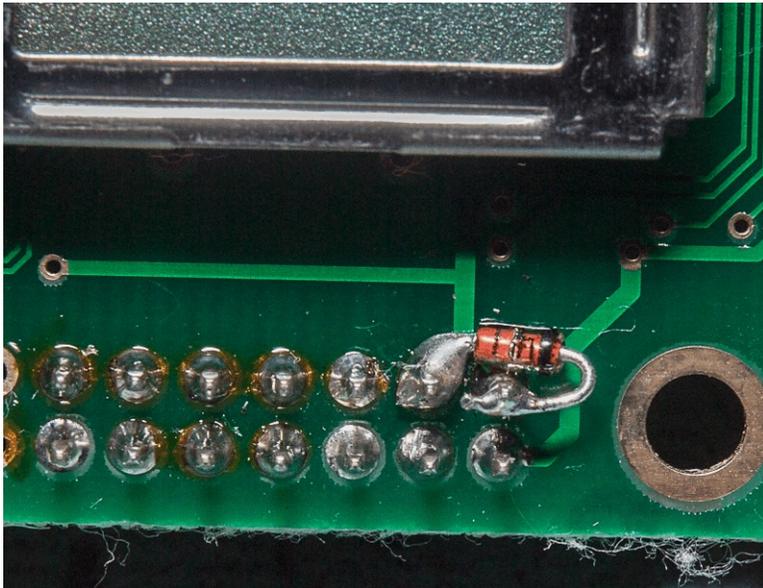
## ***Lil'DMXter - Lil'DMXter2-DMXter4 RDM*** Display Contrast Adjustment

DMXters use a LC Display. It is lighted by an electro luminescent back light. Over the product life we have used two different types of display.

Production product does not include a contrast adjustment control because we have never found one to be needed. We have experimented with the display manufacturer's recommended contrast adjustment circuit and to our way of thinking it provides little benefit. The units were shipped with pin 3 of the display grounded.

DMXter4 RDM is shipped with fixed contrast setting. If needed, a variable adjustment can be fitted.

If you feel that you need to adjust the display contrast, you might wish to experiment with the circuit described below (the circuit that includes the pot).

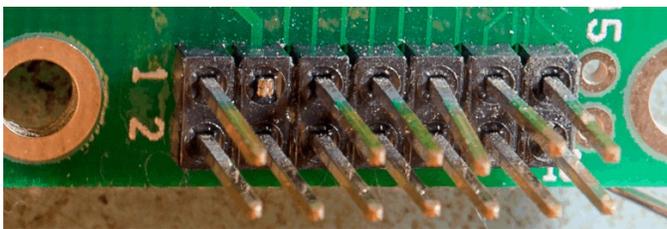


### **Manufacturer's Recommended Contrast Adjustment Circuit**

Place a 10K ohm potentiometer between Pin 1 (GND/Vss) and pin2 (+5VDC/Vcc) with the wiper connected to pin 3 of the display (Vee). Adjust to taste. A page from the Optrex data sheet showing this circuit is attached to this note.

If you wish to install this circuit in your DMXter, you will need to cut the connection of pin 3 to ground. Unfortunately this is not easy to do on the main PCB. We recommend that pin 3 of the male connector on the display be cut off. Note that on all displays the pin numbers for pin 1 and 2 are shown on the etch. Pin 3 is one row into the connector directly above pin 1 (see second photo).

### **Contrast adjustment diode - Pin3 (+) to Pin1 (-)**



On older units (part number FD DMX-1) when we have refitted them with newer Micro Electronics displays, we have found the back ground pixels to be too dark. Biasing pin 3 to about 0.5 volts seems to provide a good operating contrast. This can be done by installing a small signal diode (1n4148) from pin 3 (anode) to pin 1 (cathode). Again pin 3 must be cut off (see second photo) This is simpler than installing the potentiometer circuit, and should be your first try.

### **Identifying which display your DMXter is fitted with**

#### **Optrex displays.**

Older units will have displays from Optrex. On the back of the display PCB are three flat pack integrated circuits. The PCB is labeled 'OPTREX JAPAN'.

#### **Micro displays**

Newer units will have displays from Micro Electronics. On the back of the display PCB are two round epoxy dots covering integrated circuits. The PCB is labeled 'MADE IN TAIWAN'.

These displays tend to be of higher contrast with a brighter back light.