



MX52 REMOTE RANGE OPTION

- I. Scope
 - A. Field Installation of the M152 and M252 remote range option.
- II. Tools
 - A. Phillips Screwdriver.
 - B. Exacto Knife or equivalent.
 - C. Wire Cutter and stripper.
 - D. Soldering Iron and Solder.
 - E. 30 Ga. Wire
- III. Parts
 - A. TS-8 PS-2505 Optoisolator I.C. Qty=2
 - B. IC-54 74LS138 Qty=1
- IV. Procedure
 - A. Remove Mixer board, Control board and DCPS from chassis.
 - B. Remove Motherboard from chassis.
 - C. Cut trace on Motherboard from U1-13 to U4-2.
 - D. Install a jumper wire on Motherboard from U1-12 to U4-2.
 - E. Install Motherboard into chassis.
 - F. Install TS8 into U3 and U4 sockets on the Motherboard.
 - G. Install 74LS138 into U1 socket on the Motherboard.
- V. How to use this option:

The remote range option allows the customer to select which range the analyzer will operate in based on a dry contact closure. This option will only work properly if the front panel range selector switch is set to range 1. The analyzer will select its range by comparing the front panel switch to the rear panel contacts. It will always be in the higher of the two selected ranges.

On the terminal board located on the rear panel of the analyzer, there are three remote range contacts. Shorting pin 1 to pin 2 will place the analyzer into range 2. Shorting pin 1 and pin 3 will place the analyzer into range 3.

Page 2
Service Note #95-003
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The rear panel terminal board also has a status output for each of the ranges. The output is an NPN transistor with open emitter and collector. The polarity is marked on the rear panel. The transistor output will be "on" or shorted when the selected range corresponds to the output pins on the rear panel. The transistor output is rated to 50 mA, and can be used as a common collector or common emitter (inverting) configuration.

The transistor status output will work properly whether the range is selected remotely, (by the rear panel), or locally (by the front panel switch).