

Instructions for installation of GPIB for the SR510/SR530

Tools Needed:

- 1. Phillips head screw driver
- 2. Soldering iron
- 3. Hex driver or needle nose pliers (to install GPIB standoffs)
- 4. Pliers or tweezers (to solder the 270 pf cap)

Parts provided:

- 1. MC68488 (GPIB controller IC, 40 pins) (Static sensitive)
- 2. DS75160 (GPIB transceiver, data) (Static sensitive)
- 3. DS75161 (GPIB transceiver, management line) (Static sensitive)
- 4. 270 pf capacitor
- 5. 2- standoffs.
- 6. GPIB connector (handle with care-do not bend the pins)

Instructions for installation

1. Remove top and bottom covers (screws are on the side)

3. Remove the quadrature board (the vertical board, it's held on by 1 screw on the bottom rear, right hand side). SR530 ONLY.

4. Remove the cross bar which was connected to the quadrature board. SR530 ONLY

5. Remove the cover plate on the rear panel where the GPIB connector is to be installed.

6 Push down on the black spacer between the pins on the supplied GPIB connector (the manufacturer installs the spacer to protect the pins during handling) be careful not to bend any of the pins. Install the GPIB connector in the main pc board (you might have to remove the standoffs for the RS232 connector so you can bend the pc board slightly). Note this is difficult to install and has to be lined up correctly prior to insertion or the connector pins will be bent.

7. Solder the GPIB connector onto the peboard.

8. Insert the standoffs onto the GPIB connector on the rear panel.

9. Insert the IC marked DS75160A in the open space on the pc board labeled U808 (make sure notch on IC follows notch on pc board silk screen. This IC is inserted upside down, notch to the right).

10. Solder U808 onto pcboard.

11. Insert the IC marked DS75161A in the open space on the pc board labeled U811 (make sure notch on IC follows notch on pc board silk screen. This IC is inserted upside down, notch to the right).

12. Solder U811 onto the pc board . On the solder side of the pc board solder the 270 pf capacitor between pins 10 and 17 of U811 (Necessary for using National Instruments GPIB cards).

12. Insert the GPIB controller IC (marked MC68488) into the empty socket (U802). Notch to the left.

13. Replace the cross bar, quadrature board and covers.

14. Installation is complete. Before turning the instrument on, be sure to check the switches on rear panel for the GPIB address (see the manual). These switches are read by the processor on turn on only (if you change the switch while unit is turned on, then turn the lock-in off and then on again).



