The HP 18180A Interface

(Combination RS-232C/V.24 and RS-449 Interface)

The HP 18180A is an RS-232C/V.24 interface pod as well as RS-449/422A/423A. The HP 18180A has slightly less capability than the HP 18179A pod. Its LCD indicators show only "on" or space states. Also, unlike the HP 18179A, the HP 18180A does not contain a full breakout box.

Connectors

The top connector, labeled PROTOCOL ANALYZER, connects the interface pod to the HP 4952A via the Pod-Instrument cable supplied with the instrument. The bottom connector, labeled RS-232C/V.24 connects the Interface to the line for monitoring or simulation.

Jumper Pins

All 25 pins of the bottom connector are brought out for jumpering. If your network cable has different pin assignments from the interface standard, you can use the supplied jumper wires to connect the interface lines to the desired pin on your cable. Pins 2, 3, 4, 5, 6, 8, 15, 17, 20, and 24 are also brought out on the other side of the breakout switches for jumpering.

Source Pins

The six Source Pins supply +12 volts and -12 volts. You may set any signal line ON or OFF by jumpering that line to the Source Pins.

Disconnect (breakout) Switches

Pins 2, 3, 4, 5, 6, 8, 15, 17, 20, and 24 may be individually disconnected from the data link by means of switches. This lets you isolate non-driven interface lines from the HP 4952A.

LCD Indicators

The LCD indicator for a signal line is dark when that line is On or Spacing. The LCD indicator is blank when a line is OFF, Marking, or in tri-state. For the indicator to be dark the voltage on that line must be greater than +2.75 volts. Once the indicator is dark, it will not go blank until the voltage becomes less than +0.25 volts. Therefore, the LCD for individual lines do not distinguish Marking and tri-state. Use the Mark/Space Monitor to do this.

LCD Indicator	Interface Line
Dark	Logical "0" (Space, On, positive voltage)
Blank	Logical "1" (Mark, Off, negative voltage, tri-state)

Mark/Space Monitor

Use the Mark/Space Monitor Pin to check the level of any signal line. Jumper this pin to any signal pin and observe the ON/OFF LCD indicators. The On indicator is darkened for levels greater than +3 volts; the OFF indicator is darkened for levels less than -3 volts. The other LCD indicators do not distinguish between Marking and tri-state conditions (they are blank below +0.25 volts). The Mark/Space Monitor lets you check these lines, or any other signal lines for mark/space levels.
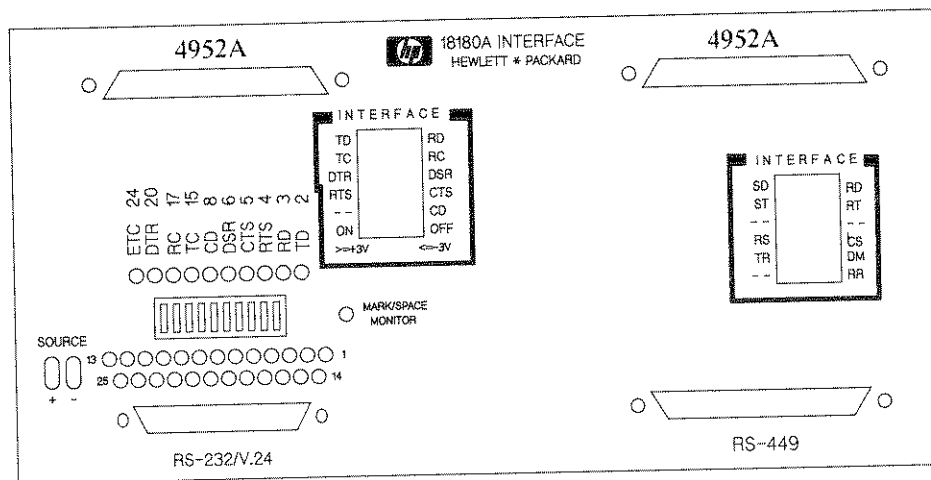
The Pod

Figure   18-3. The HP 18180A Interface