

Universal Serial HP 82939A Interface

HP sold three versions of their Series 80 Serial interface but the only difference between them is in the output leads and internal jumpers. By making a small modification to the internal wiring it is possible to make this interface usable as either Standard or OPT 001 when used in conjunction with external adaptors. (OPT 002 would need its cable replaced to make this conversion). Here's how: -

N.B. The numbers here are those on the interface board connector, not the external connector.
Remove the link between 2 and 16
Move the unassigned lead (Black/White) from 14 to 2
Move the unassigned lead (Brown/White) from 18 to 16
The result of this mod is that we can now access the 2 – 16 link externally. These are linked in the Standard interface but not in OPT 001.

These pins now appear as 12 and 19 on the EXTERNAL connector.

N.B. The following numbers are those on the external connector.
Make up two adapters each consisting of 2 D-type 25 pin connectors. (these can be bought with a removable cover and user configurable links). Gender is not critical and depends on which option you are modifying. (Gender changers are readily available and useful accessories to have anyway).

How you use and mark your adapters depends on the option you started with.

To use as your original option: Link pins 1 to 7 and 20 to the same numbers on the opposite connector. If it is standard then Link 12 and 19, otherwise leave open.

To use as the other option: Link the two connectors as follows: 1 to 1, 2<>3, 4<>8, 5<>20, 6<>23, where <> means both ways. If this makes it OPT 001 then do not link 12 to 19, otherwise do.

A similar adapter could be made for OPT 002 by making the appropriate links as listed in the 82939A manual (Available from <http://www.series80.org>).

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