

Technical Support
Knowledge Center Open

VEE: How Do I Configure Direct IO for RS-232?

Notices

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Here are the steps to configure Direct IO for the SERIAL interface:

Make sure you install I/O Libraries.

Run I/O Config utility.

Configure the serial ports with the utility. Make sure you make note of the Logical Unit Number (something like 1, or 9, or whatever ... it's more or less arbitrary) in the configuration entry. This is what VEE uses to recognize the utility.

You might reboot Windows, just to make sure things are configured.

Run VEE, run Instrument Manager, do a refresh (Find Instrument) at the highest level of the instrument tree to see if the serial ports come up. You should get entries like "serial1" or "serial9".

However, what you use for "Address" when you "Add" or "Edit" an instrument is just the logical unit number ... like 1 or 9. Make sure you have the proper serial parameters set up, and you should then be able to use Direct I/O to perform test communications with your instrument. Note that you set up the serial parameters by performing an "edit" under Instrument Manager. When you do, you get a dialog box like this:

```
+-----+
| Advanced Device Configuration [x]|
+-----+-----+-----+-----+
| General | Serial | Direct I/O | Panel Driver |
+-----+ +-----+-----+-----+
| |
| Baud Rate: [ 9600 ] |
| Character Size: [ 8 v] |
| Stop Bits: [ 1 ] |
| Parity: [ None v] |
| Handshake: [ DTR/DSR ] |
| Receive Buffer Size: [ 4096 ] |
| |
| |
+-----+
```

| [OK] [Cancel] [Help] |

+-----+

The "Direct I/O" panel also provides some important parameters, such as the input termination character.

You must make sure these parameters match those on the receiving device or communications may prove difficult.

In any case, if your instrument is IEEE 488.2 compatible (as is often the case for modern instruments), you can then verify communications with Direct I/O by querying the device for its ID string:

+-----+

| Direct I/O | +-----+

+-----+ | AlphaNumeric |

| WRITE TEXT "*IDN?" EOL | | +-----+

| READ TEXT X STRING | X +--> | |

| | | +-----+

+-----+

If this times out, then you need to confirm that your serial cable has the appropriate wiring and that the serial parameters set in VEE match those required by the instrument. One useful trick is to use another PC with a terminal emulator and connect to it over a null-modem cable to see if you can communicate with that.

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