Installing your ED88A

Handling care!

Remove the board from the anti-static packaging **only** when ready to deploy.
Decide whether you want to use the enclosed DIN rail mounting tray or to mount the unit using pillars and the provided M3 clearance mounting holes.

Remove the pluggable screw terminal blocks from the board and wire to your system according to the installation wiring diagram (website link). Finally, plug in the terminal blocks.

Use a good USB cable!

Connect the board to your PC using a good quality USB cable, type A - type B. The ED88A can draw up to 500mA of current in order to power all the relays so don't use a thin, poor quality cable and choose the shortest length cable that will do the job.

Use a USB hub?

Ideally plug directly into the computer USB port. Don't try to use a USB hub unless it is a powered one and capable of supplying the required 500mA of current.

Installing a Windows driver

The ED88A requires the installation of a device driver for the FX230X USB interface chip it uses. A driver should be installed automatically when the ED88A is first plugged in.

Shown here in Windows 7:
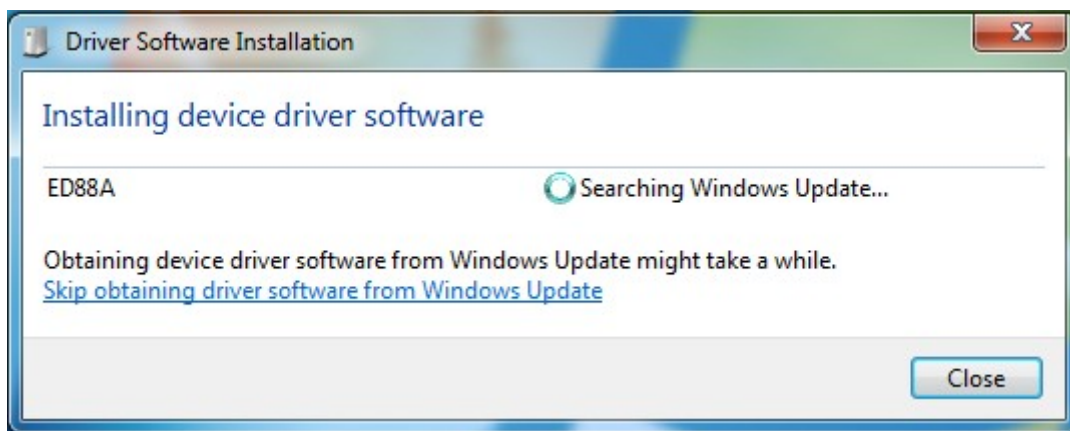
If Windows requests Internet access to find the required driver, please allow this.

When the device driver has been installed, Windows should pop up a notification that the device is ready to use. A serial COM port will then be allocated to the unit.
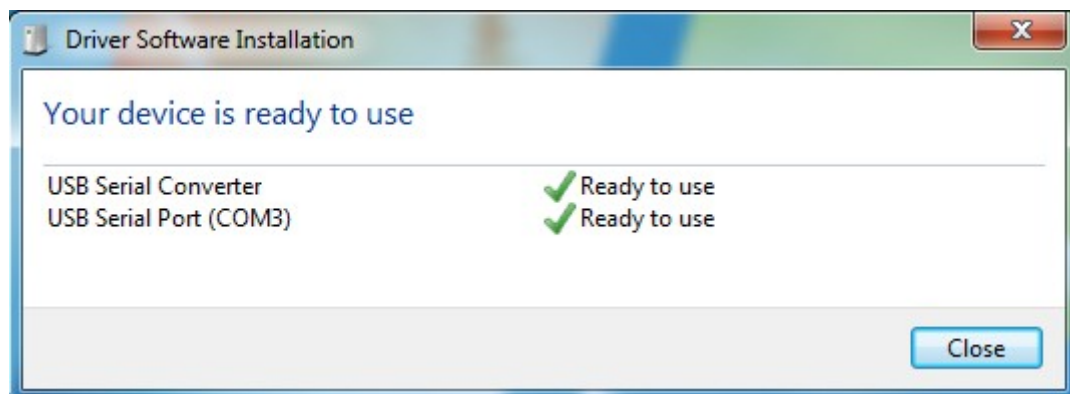
No good?

If the above doesn't work for some reason, you can download and install a suitable driver from here: http://www.ftdichip.com/Drivers/VCP.htm

If you need more driver installation details, see these more detailed guides:
http://www.ftdichip.com/Support/Documents/InstallGuides.htm

Which driver to use?

You need to know which version of Windows you are running on the install PC. In Windows 7 go to Control Panel and click on System. The information window will show System Type as 32bit or 64bit operating system. Now select and install the matching FTDI driver from the web page above.

USB power management
Some PCs seem to have been shutting down the USB port to save power. This will stop the ED88A from working reliably, so please check that the **tickbox pictured below is NOT ticked**.

The USB Root Hub Properties can be found in Device Manager in the USB Root Hub section.
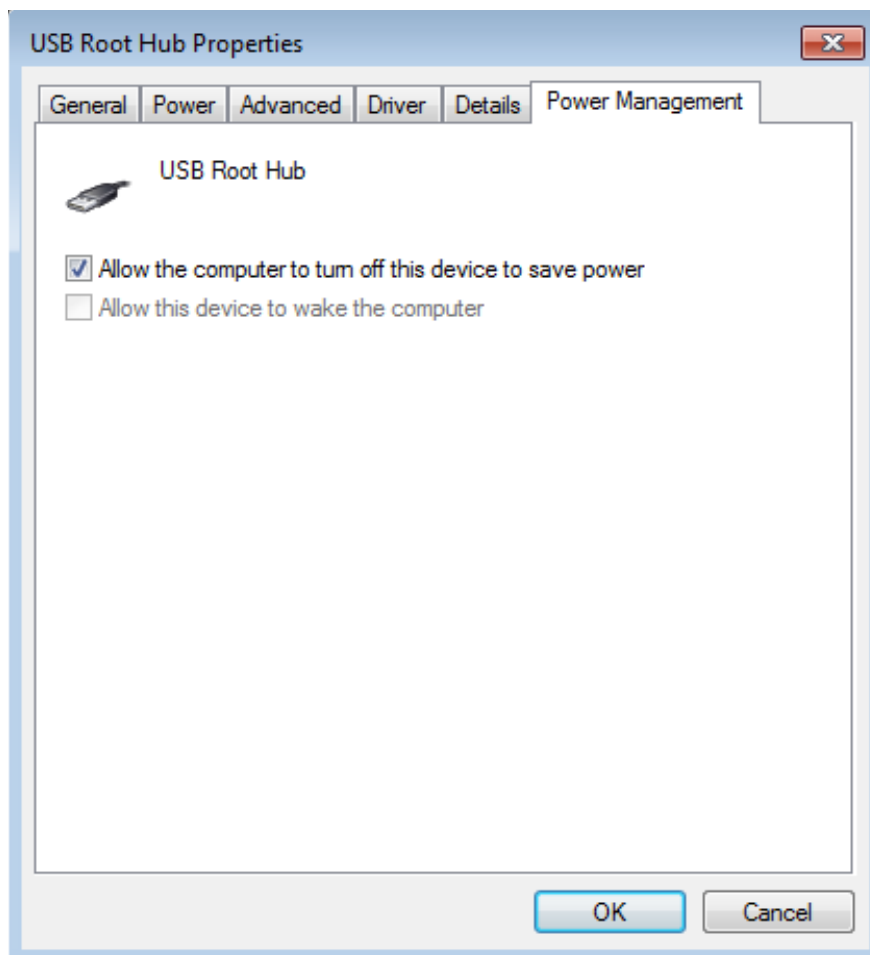
Success?

On the ED88A, the Status LED should now be flashing to show it has power.
Shutdown and restart Studio Pro and it should detect the board.

Communicating with Studio Pro

You need to be running Studio Pro V5.0 or later in order to use the ED88A.

Studio checks for the presence of the board when it first starts up, so if it is already running, close down fully and then restart Studio. Studio should then detect the "PIP" board during startup
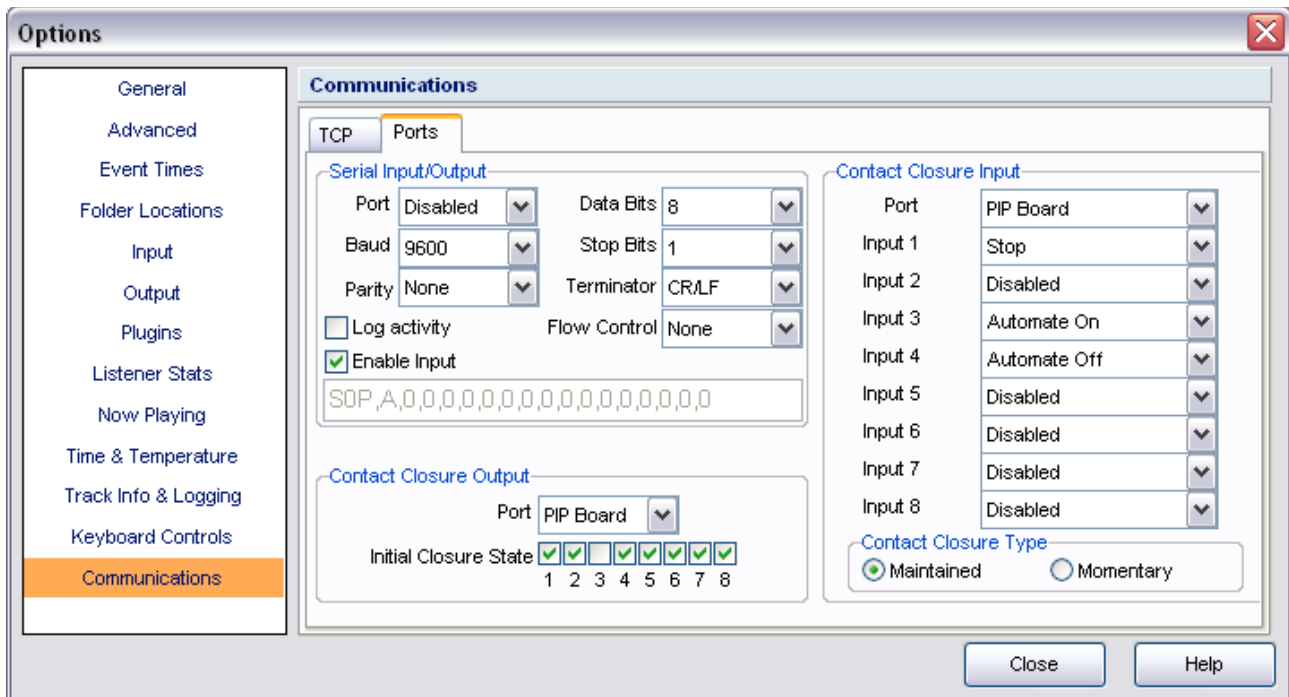
In Studio, select "View" | "Options" from the menu bar.
Select "Communications" in the left hand pane.
Select the "Ports" tab. See below.

Under the Contact Closure Input Port dropdown menu you should find "PIP board" available.
Under the Contact Closure Output Port dropdown menu you should find "PIP board" available.

The board should now communicate with Studio and by connecting contacts/switches to the input sockets and selecting desired actions in the contact closure input section, Studio can be remote controlled.

The relays may be set by clicking the Contact Closure outputs "Initial closure state" and the relays will respond when the Communications window is closed by clicking "Close".

Wiring up

Refer to the Wiring Diagram (see website link) for switch and relay contact connections.

Contact closure inputs
Input switch common (ground) is on pins marked "C" so wire each switch between, for example "C" & "1", "C" & "2" etc.

Numbered leds on the board show the state of the corresponding input contacts.
Contact closed = Led ON.

Relay contacts
The relay contacts are marked "C" "NC" and "NO".
Numbered leds on the board light to show the state of the corresponding relays.

Relay ON = Led ON