

Setting up a Serial Comm Port on a PC to work with C-TEC Control Panels

PC/laptops normally do not have a serial port available anymore. This causes issues for engineers who need to connect to, and program, a range of C-TEC control panels, mainly XFP and Quantec.

Both of these panels are programmed using an RS232 serial lead supplied from C-TEC: **Part No. SAF7070000**, this is a 4-way molex to 9-way RS232 convertor (2m).

To connect to a PC using USB an additional lead is required which can be purchased from C-TEC: **Part No. BF232**, this is a USB to 9-way RS232 convertor (35cm).

The BF232 (shown below) is an ATEN UC232A convertor, which has been thoroughly tested to work with C-TEC's XFP and Quantec.



BF232 (USB-to-RS232 Convertor)

The BF232 is Windows XP/Vista/7/8/10 compatible. Free software and drivers are also available via <http://www.aten.com/global/en/products/mobility-&-usb/usb-converters/uc232a/#.WNDIEDul2V4>

Make sure you install the software provided with the convertor onto your PC. If you do not have a disc drive then use the hyperlink above, or scan the Internet for free downloads for the ATEN UC232A. If you do not install this software, the convertor will not work. This is the users responsibility.

Important Note about Technical Support:

There are many USB/RS232 convertors available on the market, built to varying standards. Some may work with C-TEC control panels, most don't. If you use the recommended converter detailed above, this will work. Please do not contact C-TEC Technical Support if you are using a non-recommended converter (or homemade connector) as we only have details for the one we sell and will be unable to assist.

Setting up Comms between a PC and a Control Panel

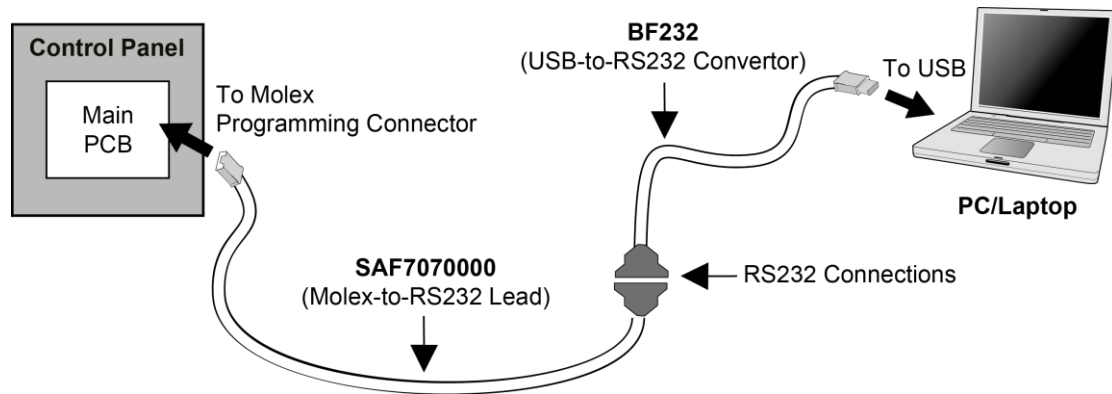


Fig. 1 – Comms Set Up

Caution about Earth Faults:

Some PC/laptops have 0V connection to mains Earth through their PSU. This may cause an Earth fault on the control panel when the PC is connected using programming leads.

Also, if there is a pre-existing Earth fault on the panel this may cause a short-circuit condition and may damage the panel/PC.

Clear any Earth faults on the panel before connecting programming leads, or operate the PC on batteries only with its PSU completely disconnected.

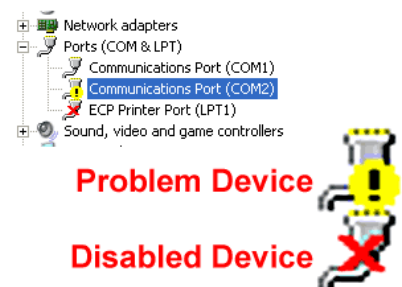
Installing a BF232 (USB-to-RS232 Converter) on a Windows PC

Please note most PC/laptops have different file structures but all will have a Device Manager and will install using a similar method to the Steps listed below:

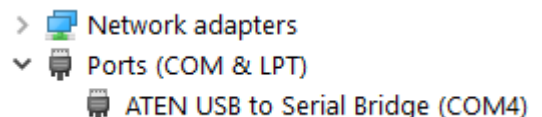
1. Make sure the software and drivers you received with the BF232 are installed on your PC.
2. Referring to Fig. 1 – Comms Set Up, connect the BF232 to a USB port on your PC.
3. At the PC, from the Start menu, go to Control Panel.
4. For earlier versions of Windows to view Device Manager, go to Systems, or Hardware and Sounds.
5. Click on Device Manager and then go to Ports (COM & LPT).

In the list you will see the ATEN USB converter (or the name of another converter you have purchased).

- If you see a yellow exclamation mark (shown right), the converter software you received with the unit has not been installed correctly.
- If you see a red X (shown right), the converter has been disabled on your PC.



6. Check to see which comm port the BF232 converter has been assigned to (Comm Port 'COM4' is shown in the example right).



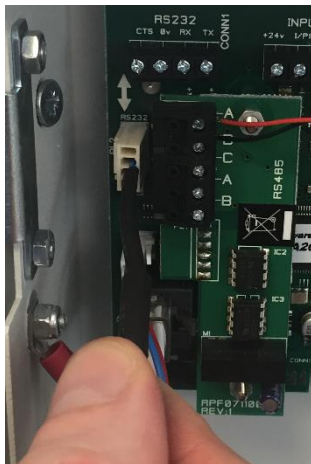
Connecting the SAF7070000 Programming Lead to the Control Panel

Referring to Fig. 1 – Comms Set Up, connect one end of the SAF7070000 lead to the molex programming connector on the panel's main PCB (examples shown below) and the other end to the RS232 connector on the BF232.

Important Note: Take great care when removing and fitting connectors to avoid damage to the main PCB.



Programming connector on the 16 Zone XFP panel



Programming connector on the 32 Zone XFP panel

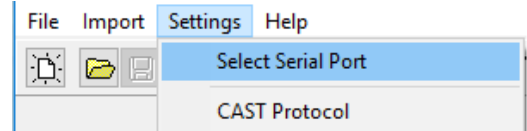


Programming connector on the Quantec panel

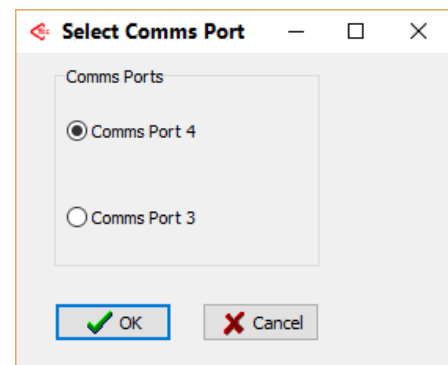
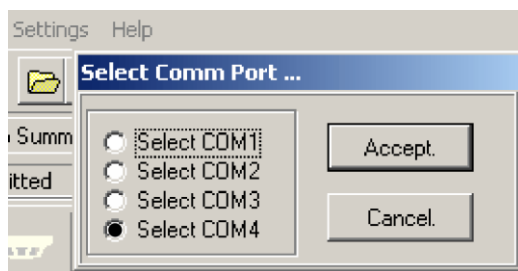
Selecting the Serial Port for the SAF7070000 Programming Lead

1. Ensure you have installed the control panel's Programming Tools on your PC/laptop.
2. At the PC, open the Programming Tools.

3. On the menu bar, select **Settings** menu, then **Select Serial Port** menu option (shown right).



4. Select the serial port for the connected SAF7070000 programming lead to match the comm port assigned to the BF232 converter, as shown previously on Page 2, Step 6. Comm Port 'COM4' is shown in the examples below.



Note: The Programming Tools will remember the settings from the last time the tools were run. Therefore, the comm port need only be selected the first time the tools are run on that PC (unless new drivers are installed).

Setting up the Panel

For the XFP panel only, enter **Access Level 3** and select the **Connect to PC** menu option. The panel's NVM link (jumper) must be fitted on the panel's main PCB to allow data transfer.

YOU ARE NOW READY TO TRANSFER DATA BETWEEN THE PANEL AND PC.

Important Note about Technical Support:

If the procedure detailed in this document is followed carefully, then everything should work correctly. If you are still struggling to set up your USB/RS232 convertor we recommend you seek help and advice from an IT expert. C-TEC Technical Support are not PC experts and cannot answer questions on Windows related products/updates/drivers, etc.