TYCO SAFETY PRODUCTS (CHCH)
CONFIDENTIAL PRODUCT BULLETIN

PanelX – REMOTE ACCESS SOFTWARE

This bulletin describes Tyco Safety Products' PanelX remote access software. This software enables a user with a standard personal computer running Microsoft Windows to remotely view and control fire alarm systems that support "Tandem Mode" operation.

"Tandem Mode" is a feature of all MX1 and MX4428 fire alarm panel software, F4000 panels with software V2.35 or later, F3200 or Network Display Unit software V2.08 or later, and all ADU (Nurse Station Annunciator (NSA) or Compact FF) software.

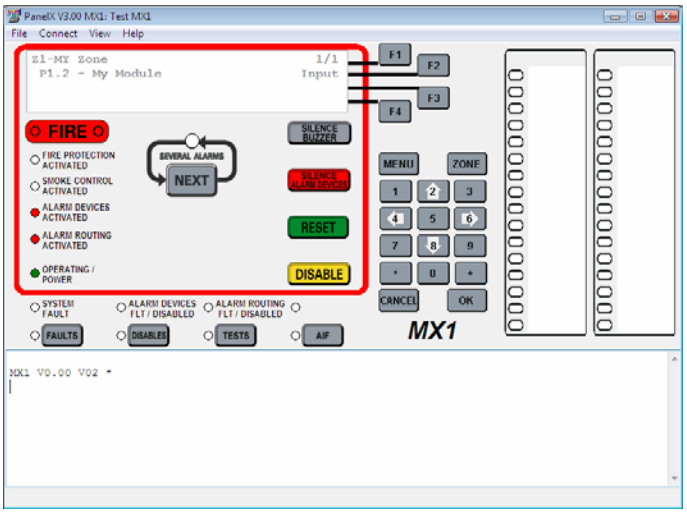

FIGURE 1 - TYPICAL PanelX SCREEN

On a Panel-Link fire alarm system network, a single PanelX connection to the programming port of one of the networked fire alarm panels (or display units) is sufficient to also remotely access any of the other panels on the network.

PanelX is supplied as an executable file, SF0281.exe, which will install PanelX on your computer. The software can be downloaded from the Tyco Safety Products Australasia "Fireplace" website, at www.tycosafetyproducts-anz.com.

TYPICAL USES OF PanelX

- Remote (e.g. dial-in) or across-network diagnosis of fire alarm system faults
- Remote isolation of zone and points
- Remote system testing
- PC-based mimic panel for maintenance and servicing
- Remote or across-network programming of F3200 and NDU using Tandem Mode and file load and save features
- Remote programming of F4000 and MX4428 using PanelX in Terminal Mode and file load and save features
- Programming tool for Nurse Station Annunciator (NSA) and Compact FF
- Demonstration of fire alarm control panels for training purposes

NOTE: Where a fire alarm system is being remotely accessed, precautions must be taken to ensure that the remote operation can be achieved safely, in compliance with the relevant standards and codes, and with appropriate security to ensure system changes (e.g. isolation of zones or points, or programming changes) are authorised. For example, a key-switch may be installed at the panel to disconnect the remote access facility unless authorised on-site by operation of the key-switch. For site-

specific configuration (database) changes the panel's write enable link will need to be installed locally.

PanelX FEATURES

- Panel displayed on the PC automatically matches the panel it is connected to
- Animation shows operation of keys on the PC screen
- Reproduction of steady and flashing control panel LEDs (MX1, MX4428, F3200 & NDU V2.09+, Nurse Station Annunciator and Compact FF)
- Printer events are displayed on screen (if turned on) in the terminal window beneath the control panel (F3200 and NDU V2.08+, Nurse Station Annunciator and Compact FF)
- Keypad entry for programming zone text (F3200 and NDU V2.08+, Nurse Station Annunciator, Compact FF)
- Panel Sounder status displayed (MX1, MX4428, F3200 & NDU V2.09+, Nurse Station Annunciator, Compact FF)
- Database of connection details can be entered for up to 500 panels
- Automatic connection (e.g. dial) and login initiated by selecting from list of panels
- Automatic connection and login to any other panel on the same fire alarm network while maintaining the same communications connection (redial not required)
- Each panel requires a password for access via tandem mode. Program this into the connection information for each panel when automatic connection is required.
- For MX4428, tandem access can be gained using the Information Only password to ensure that programming remains protected
- Terminal facilities with file load and save for sending and receiving fire alarm panel databases
- F3200, NDU, Nurse Station Annunciator and Compact FF databases can be remotely verified
- Can be executed by external program (e.g. Colour Graphics) to load a pre-configured connection and perform automatic login to panel.
- When used with MX1, remote operation occurs independently from the front panel display (i.e. remote use cannot be seen on the front panel and vice versa).
- Supported on Windows 98/2000/XP/Vista.

CONNECTION OPTIONS

The connection between the PC and the fire alarm system can be any of the following types:

- An RS232 direct connection from the PC to a fire alarm panel programming port via the standard programming lead. Conversion to RS485 will be required for longer wiring or for a permanent connection.
- A remote PSTN connection via a dial-up modem at the fire alarm system and another modem at the PC.
- A TCP/IP connection over a computer network or the Internet using a Serial Port Server at the fire alarm panel and LAN Adaptor or Dial-up Networking at the PC.

See Figure 2 for an overview of these connection options.

To make use of PanelX and Tandem Mode, ensure that this equipment is installed:

(i) Fire alarm system software supporting Tandem Mode as noted above.

(ii) PanelX software installed on a PC and set up with the required communications option (see below).

(iii) A communications connection at the programming port of the fire alarm system.

For a networked fire alarm system, a connection to only one panel is required. The communications option used will depend on the type of connection required.

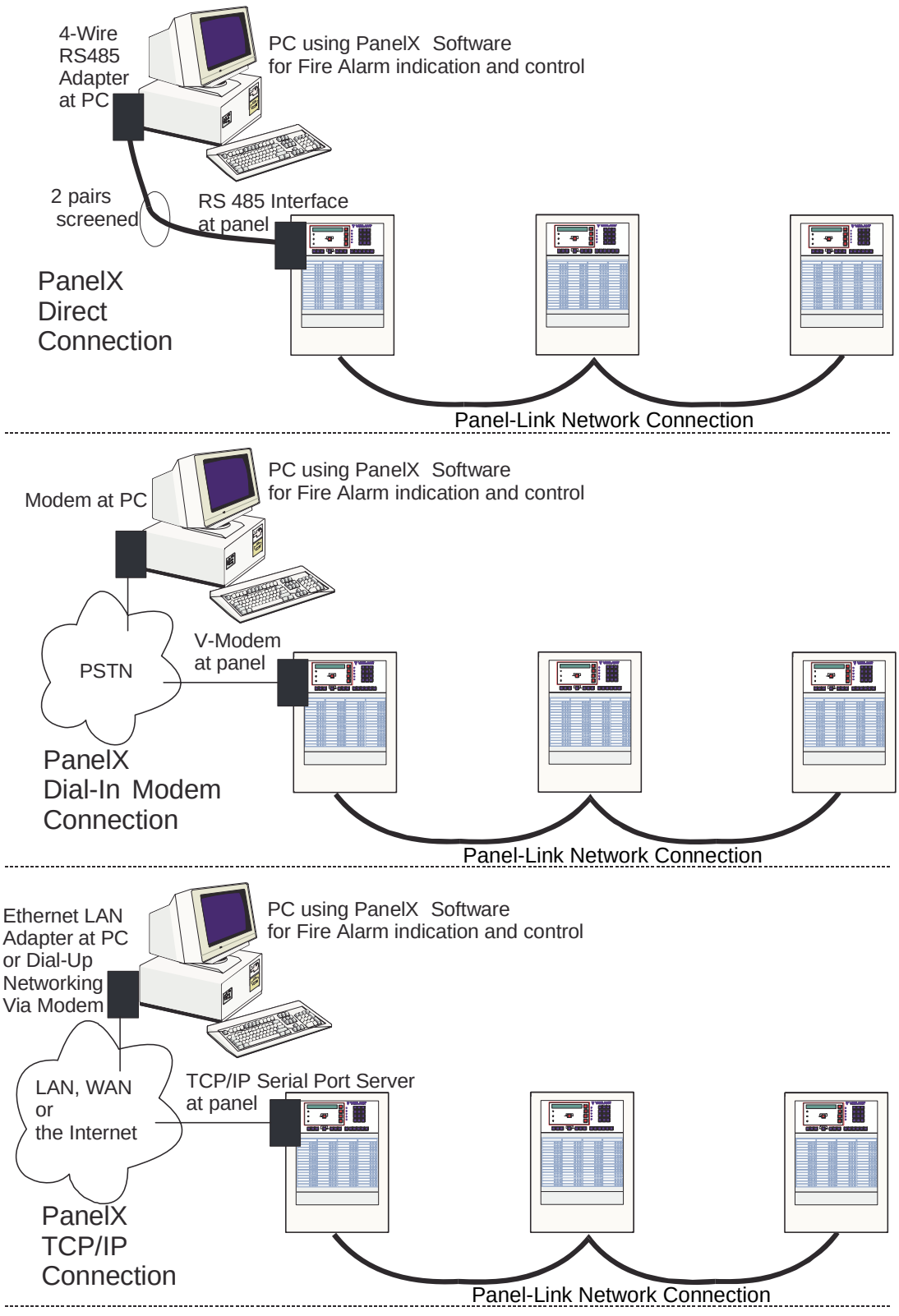

FIGURE 2 - PanelX CONNECTION OPTIONS

Panel can be MX1, MX4428, F3200 (V2.08 or later), F4000 (V2.35 or later), NDU (V2.08 or later), Nurse Station Annunciator or Compact FF

COMMUNICATIONS OPTIONS

More information on the use and set up of PanelX can be found in the Help files that accompany the software.

Direct Connection

A direct connection between the panel and computer can be arranged very simply using the fire alarm panel programming lead LM0041 for F4000, MX4428, F3200 and NDU, or the null-modem lead LM0076 for MX1 or the Nurse Station Annunciator / Compact FF. This type of connection is only suitable for temporary connections, such as use during training, programming or diagnostics, because the PC will be earthed at the panel. An isolated RS485 connection should be used for permanent connections. This will require an RS485 Interface PCB to be fitted at the panel.

Parts Required for a Permanent Direct Connection

1 x PA0712 RS232/ RS485 Comms Board (to provide electrical isolation at the panel)

1 x LM0065 10W FRC to DB9 cable (to connect to the RS485 Board at the panel)

1 x RS485 card or serial port adaptor at the PC.

Additional for F4000, MX4428, F3200 and NDU:

1 x LM0168 DB9 male to 4-way Molex cable (to connect the LM0065 to the panel's programming port).

The third item will need to be connected to a serial port at the PC. It could be a card installed in the computer, or an external RS232/RS485 converter, such as the PA0712 RS232/ RS485 Comms Board, connected to an existing computer serial port. The RS485 connection must be full duplex; so a **four-wire** connection is required between the panel and the computer.

Dial-Up Modem

A dial-up modem connection requires a PSTN-approved modem to be fitted at each end of the connection. The Tyco Safety Products V-Modem is recommended for use at the fire alarm panel end as it can operate off the panel 24V dc supply and is easy to set up for dial-in use. An analogue telephone connection must be used - a modem cannot be connected directly into a digital telephone system.

A modem will also be required at the PC. A V-Modem is not necessary at this end and virtually any standard PC internal or external modem should do what is required.

Parts Required at the Fire Alarm Panel for Modem Connection

1 x FP0778 V-Modem

1 x KT0199 KIT,ASE,3U 19" Rack Mounting Front Panel. (This requires 3U of 19” rack space and is only necessary if required for mounting V-Modem in the panel.)

1 x PSTN Lead to connect the V-Modem RJ11 connector to the telephone system. This is a standard telephone type lead obtained from local telephone system

providers or electronic equipment suppliers.
Usually RJ11 to RJ11 for Australia, RJ11 to BT for NZ.

Additional for F4000, MX4428, F3200 and NDU:

1 x LM0168 DB9 male to 4-way molex connector (to connect to the panel's programming port).

TCP/IP Connection

A TCP/IP connection can be used over a local area network (LAN), a wide area network (WAN) or over the Internet. A Serial Port Server will need to be installed at the panel, and a connection made from this to the TCP/IP network (e.g. LAN). The Serial Port Server will need to be allocated a permanent TCP/IP Internet Address (unless it has a name allocated) as this is the IP address to which PanelX will need to be programmed to connect. The address allocation will need to be arranged with the IT Network Administrator at the place of installation.

A range of Serial Port Servers is available from Lantronix, and a suitable one will need to be selected. The Lantronix UDS-10 is one that has been successfully used for this purpose. If a PC can be installed or is available near the fire alarm panel and the PC can be connected to the network (LAN etc), another option is to use the port server feature of WinComms V1.21 (or later) software. This will enable the PC to act as the Port Server, with the fire alarm panel connected to a serial port of the PC.

Parts Required for TCP/IP Connection

1 x Suitable serial port server such as Lantronix UDS-10. If in doubt about what to use check with TSP Product Support.

1 x Cable to connect from the Serial Port Server serial port to the panel's programming port. The Tyco Safety Products cable LM0171 (LM0277 for MX1) should be suitable for the UDS-10.

1 x Power Supply to power the Serial Port Server.

The UDS-10 comes with a 12V dc Power adapter, but the power socket on the current version of the unit can be powered from a dc supply in the range 9 to 30V.

PanelX Versions

Version 3.00 was released in January 2008. It has the following new features and problems fixed –

- Support for new MX1 Australian panels with FBP.
- Compatibility with Windows Vista.
- Serial port settings are now defined on a per-connection basis.
- Numerous user interface enhancements and a large number of general stability improvements.

Version 2.01 was released in February 2005 and included the following features–

- Command line execution with connection name added.

Version 2.00 was released in January 2005. It had the following new features and problems fixed –

- Support added for remote access to MX1 panels.
- PanelX can now be executed from the command line, with a connection name, so that external programs can initiate a connection and automatically login to a panel.
- Operation on computers with Windows XP operating system (in addition to Windows 2000, 98, 95).

Version 1.00 was released in January 2003. It had the following features –

- Panel displayed on the PC automatically matches the panel it is connected to
- Animation shows operation of keys on the PC screen
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