462P Printer Interface Card

Description
The 462P card allows you to connect a serial printer to the XR500 Series or XR2500F Command Processor™ panels to provide the customer local system events activity reports. The 462P is suitable for use with any compatible 40-character or 80-character RS-232 DB-25 or DB-9 serial printer.

The 462P card also provides a supervised, power limited 4-wire LX-Bus™ allowing the addition of up to 100 zones by connecting to the following:

• Up to 25 Model 714, 715, and 725 Zone Expanders or 716 Output Expanders

• Up to 100 Model 711 Zone Expanders, 6155LX PIRs, and 5845LX Glassbreak sensors

• Any combination of LX-Bus™ devices

Power for the devices is provided through the 4-wire harness Black and Red wires. Do not connect the wires from the 4-wire LX-Bus to the panel terminals.

Installing the 462P Printer Interface Card
1. Remove AC and battery power from the panel before installing the 462P card.
2. Align the 462P 50 pin connector with the panel J6 connector located on the panel right side.
3. Seat the 462P onto the J6 connector by applying even pressure to both sides.

Installing the Printer Cable
The supplied 462P card printer cable has one 8-pin modular end and one DB-25 or DB-9 male end connector.
1. Plug the cable 8-pin modular end into the 462P Printer Cable Connector.
2. Plug the cable DB-25 or DB-9 male end into the appropriate connector on your serial printer.

Refer to the documentation supplied with your printer equipment for additional system connections. After installing the 462P card and printer cable, restore power to the panel.

Note: RS-232 communication supports a maximum wire distance of 50 ft. The printer connection is supervised and power limited. Ground fault detected at 0 (Zero) Ohms.

Setting the 462P Configuration Jumpers
The 462P is preset for 1200 baud printer operation with eight data bits, one stop bit, and even parity. You can change the baud rate using the 462P card J5 jumpers to accommodate printers with different requirements. See Figure 2.

Figure 1: 462P Installation

TXD (J5) - Set the baud rate pins (300 to 9600) to match the printer. The EXT jumper setting is not used.

Force/CTS (J3) - Place the jumper over CTS (Clear To Send).

Figure 2: 462P Jumper Descriptions

Printer Reports
The 462P prints system reports as they occur. You can also manually print the full contents of the panel event buffer to the printer at any time. To do this, enter the **DISPLAY EVENTS?** option from the User Menu and press the Select key under **PRT** at the **FRST LST PRT SRT** display. Events are then printed in order from the oldest to the newest.
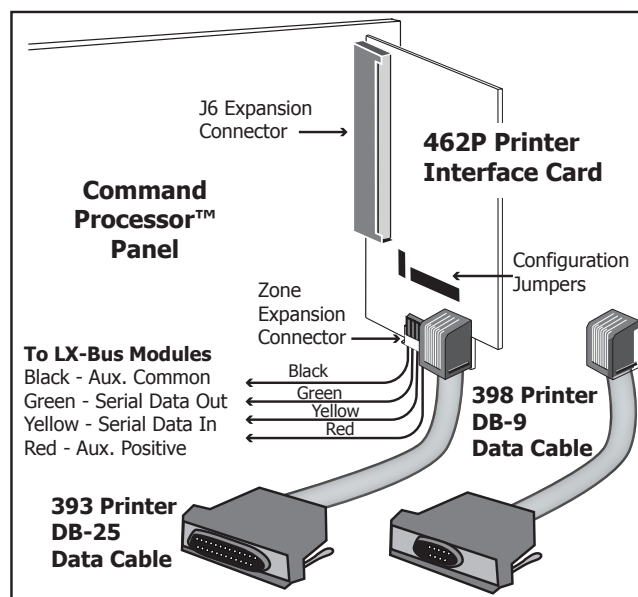
Pin Out Descriptions

DB-9 Connector Pin Out

DB-9 Pin #	Description	DB-25 Pin #
8	Clear to Send	5 & 11
5	Ground	7
3	Transmit Data	3
7	Request to Send	4

DB-25 Connector Pin Out

Panel Programming

The 462P card requires the following panel programming options:

Under **PRINTER REPORTS**, select one or more of the following options:

ARM/DISARM	YES	Arming, disarming, and late to close reports
ZONE	YES	Zone status changes
USER COMMANDS	YES	User code and schedule changes, outputs on/off, and user functions
DOOR ACCESS	YES	Door access reports
SUPERVISORY MSG	YES	System monitors and system events

Refer to the XR500 Series/XR2500F Programming Guide (LT-0679) for complete programming instructions.

Wiring Specifications for LX-Bus

Several factors determine the performance characteristics of the DMP LX-Bus™ and keypad bus: the *length* of wire used, the *number* of devices connected, and the *voltage* at each device. When planning an LX-Bus™ and keypad bus installation, keep in mind the following four specifications:

1. DMP recommends using 18 or 22-gauge **unshielded** wire for all keypad and LX-Bus circuits. **Do Not** use twisted pair or shielded wire for LX-Bus and keypad bus data circuits. To maintain auxiliary power integrity when using 22-gauge wire do not exceed 500 feet. When using 18-gauge wire do not exceed 1,000 feet. Install an additional power supply to increase the wire length or add devices.

2. Maximum distance for any one circuit (length of wire) is 2,500 feet regardless of the wire gauge. This distance can be in the form of one long wire run or multiple branches with all wiring totaling no more than 2,500 feet. As wire distance from the panel increases, DC voltage on the wire decreases.

3. Maximum number of devices per 2,500 foot circuit is 40.
   Note: Each panel allows a specific number of supervised keypads. Add additional keypads in the unsupervised mode. Refer to the panel installation guide for the specific number of supervised keypads allowed.

4. Maximum voltage drop between the panel (or auxiliary power supply) and any device is 2.0 VDC. If the voltage at any device is less than the required level, add an auxiliary power supply at the end of the circuit. When voltage is too low, the devices cannot operate properly.

Refer to the panel's Installation Guide and the LX-Bus/Keypad Bus Wiring Application Note (LT-2031). Also see the 710/710F Module Installation Sheet (LT-0310) for more information.

Printer Setup

When using the 462P and 398 Cable with an SG-DPU-414 thermal printer, the Software DIP Switch 3 settings noted in the table must be changed to OFF.

Software DIP Switch 3	
2 (**OFF**)	Parity Setting = No
3 (**OFF**)	Parity Condition = Odd

Specifications

Operating Voltage	12 VDC from panel
Operating Current	50mA
Dimensions	2.25" W x 5.25" H

Accessories

461 Interface Adaptor Card allows up to five Interface Cards on XR500 Series or XR2500F panels

DMP LX-Bus Devices such as Zone Expansion Modules

Panel Compatibility

XR500 Series and XR2500F

Printer Compatibility

DMP SCS-186T (DB-25) Dot Matrix Printer

SG-DPU-414 (DB-9) Thermal Printer

Any other 40 or 80-character RS-232 DB-25 or DB-9 serial printer.

Certifications

California State Fire Marshal (CSFM)

New York City (FDNY COA #6167)

ANSI/UL 365	Police Connected Burglar
ANSI/UL 609	Local Burglar
ANSI/UL 1023	Household Burglar
ANSI/UL 1076	Proprietary Burglar
ANSI/UL 1610	Central Station Burglar
ANSI/UL 985	Household Fire Warning
ANSI/UL 864	Fire Protective Signaling