PT-1S Fire Alarm Printer Installation Sheet

Description

These installation instructions are for the PT-1S printer models listed in Table 1.

Table 1: Models

Number	Description
PT-1S	Printer, serial/USB, 120V
PT-1S-220	Printer, serial/USB, 220V
MIR-PRT/S	Printer, serial/USB, 120V

PT-1S printers use standard, continuous feed, fanfold paper, and provide serial and USB cable connections (see Table 2). The paper can be fed from the rear or from the bottom of the printer.

Each printer is shipped with the following:

- A power cord
- A ribbon cartridge
- A paper separator
- A platen knob
- A CD containing print drivers and user documentation
- A DB-25P connector and hardware for making field wiring connections to control unit serial ports
- A DTK-DL120/240 surge protective device (220V model only)

Note: Printer cables are not included with the printer and must be purchased separately.

Table 2: Compatible equipment

Model	Serial	USB
EST3	✓	
EST3X	✓	
iO64/iO1000	✓	
VM-1	✓	
VS-1/VS-4	✓	
FX Addressable	✓	
FW-UL6W/FW-UL6S		✓

Configuring the serial interface

The printer's serial interface default settings are as follows:

Item	Default settings	Permissible settings
Parity	None	None, Even
Serial Data 7/8 bits	8 bits	8 bits
Protocol	Ready/Busy	Ready/Busy [1], X-ON/X-OFF [2]
Diagnostic Test	No	No
Busy Line	SSD–	DTR
Baud rate	9600 bps	9600, 4800, 2400, 1200
DSR Signal	Valid	Invalid
DTR Signal	Ready on Power Up	Ready on Power Up
Busy Time	200 ms	200 ms

[1] For supervised printers

[2] For unsupervised printers

Instructions for configuring serial interface settings are provided below. For more information, refer to the printer manufacturer's documentation and the control unit documentation.

Note: If the printer and a CDR-3 module share the same serial port connection, configure both to match the control unit's serial interface baud rate and parity settings. For more information, refer to the control unit documentation.

Note: Load paper into the printer before performing the instructions below.

To configure the serial interface:

1. Press and hold the **SELECT** button at the same time you turn on the printer.

   Press the **SELECT** button again to print the current settings.

2. Press the **LINE FEED** button until the printer prints the following:

   ```
   Serial I/F      Parity      None
   ```

   To change the parity setting, press the **TOF SET** button until the printer prints the required parity.

3. Press the **FORM FEED** button until the printer prints the following:

   ```
   Serial I/F      Protocol      Ready/Busy
   ```

   For an unsupervised printer connection, press the **TOF SET** button until the printer prints the following:

   ```
   Serial I/F      Protocol      X-ON/X-OFF
   ```

4. Press the **FORM FEED** button until the printer prints the following:

   ```
   Serial I/F      Busy Line       SSD-
   ```

   Press the **TOF SET** button until the printer prints the following:

   ```
   Serial I/F      Busy Line       DTR
   ```

5. Press the **FORM FEED** button until the printer prints the following:

   ```
   Serial I/F      Baud rate     9600 bps
   ```

   To change the baud rate setting, press the **TOF SET** button until the printer prints the required baud rate.

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6. Press the **FORM FEED** button until the printer prints the following:

   ```
   Serial I/F        DSR Signal        Valid
   ```

   Press the **TOF SET** button until the printer prints the following:

   ```
   Serial I/F      DSR Signal      Invalid
   ```

7. Press the **PITCH** and the **MODE** buttons at the same time to save your settings and exit Menu Mode.

Installation

Install and wire this product in accordance with applicable national and local codes, ordinances, and regulations.

For detailed assembly, setup, and test instructions not provided here refer to the printer manufacturer's documentation.

WARNING: Electrocution hazard. To avoid personal injury or death from electrocution, remove all sources of power and allow stored energy to discharge before installing or removing equipment.

Cautions

- Do not plug the printer into a power outlet until after all packing materials have been removed and the printer has been assembled.
- Be sure the voltage rating of the power outlet matches the power requirements of the printer.
- To avoid print-head damage and paper jams, set the head gap as instructed in the manufacturer's documentation.

Notes

- Perform a printer self-test by loading paper and holding down the Line Feed button while turning on printer power.
- If the printer is required to operate during brownout conditions and AC power failures, install a UL Listed (UTRZ) uninterruptible power supply that can maintain printer operating voltage for at least 24 hours.
- For ULC applications in which a UPS is used as the emergency power supply, install the printer and the UPS in a lockable enclosure in accordance with CAN/ULC-S527.
- Install the DTK-DL120/240 surge protective device shipped with the printer onto the circuit supplying AC power to the printer. Follow the SPD manufacturer's installation instructions.
- Use the 25-pin serial connection or the USB connection, but not both.
- Serial/USB printer connections are power-limited and may or not be supervised depending on configuration.
- Locate supervised serial/USB printers in the same room as the equipment to which they connect.
- Locate unsupervised serial/USB printers in the same room and within 20 ft. (6.1 m) of the equipment to which they connect. Enclose wiring in conduit or equivalent protection against mechanical injury.
- Connecting a serial/USB printer may cause a ground fault on some control units. If this happens, install an IOP3-A isolator module between the printer and the control unit.

Connecting EST3, EST3X, and VM-1 control units

Connect the printer to the control unit's serial printer port as shown in Figure 1 or Figure 2.

Figure 1: Wiring diagram (unsupervised connection)

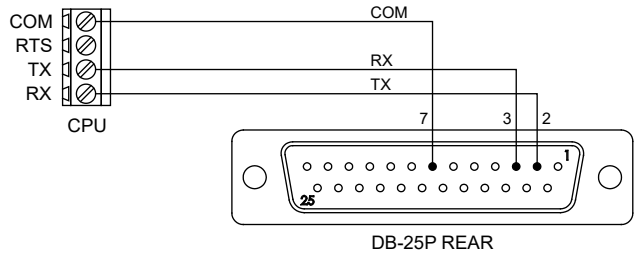
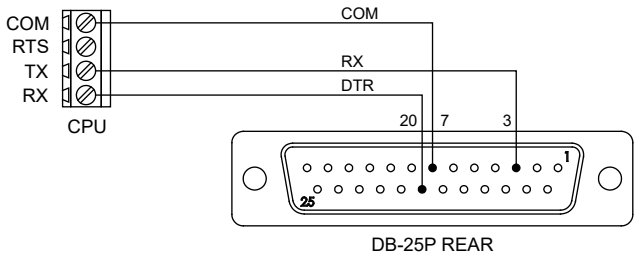


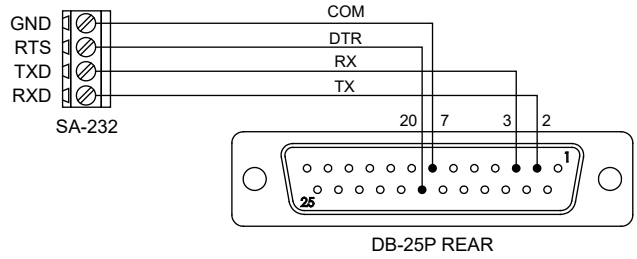
Figure 2: Wiring diagram (supervised connection)



Connecting iO, VS, and FX Addressable control units

Connect the printer to the control unit's serial printer port as shown in Figure 3.

Figure 3: Wiring diagram (supervised and unsupervised connection)



Connecting FW-UL6W workstations and FW/UL6S servers

Connect the printer to a USB port on the back of the workstation/server as shown in Figure 4 and Figure 5. Use a USB 2.0 A to B cable, purchased separately.

Figure 4: FW-UL6W connection

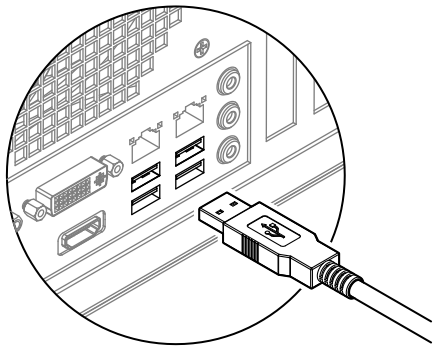
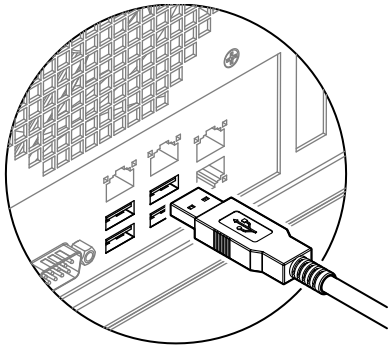


Figure 5: FW-UL6S connection



Specifications

Voltage	
120-volt models	120 V, 50/60 Hz
220-volt models	220 to 240 V, 50/60 Hz
Current	1 A
Interface	USB 2.0 RS-232C Serial
Wire size	22 AWG (0.50 mm²)
Dimensions (W × H × D)	14.65 × 3.15 × 10.83 in. (37.2 × 8.0 × 27.5 cm)
Weight	
120-volt models	8.6 lb. (3.9 kg)
220-volt models	9.9 lb. (4.5 kg)
Ribbon cartridge	Oki 52102001
Operating environment	
Temperature	32 to 120°F (0 to 49°C)
Relative humidity	0 to 93% noncondensing

Contact information

For contact information, see www.edwardsfiresafety.com.