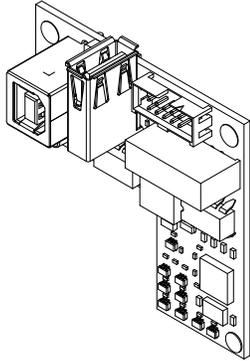




# SA-USB Interface Card Installation Sheet



## Description

The SA-USB Interface Card provides a USB connection to a supported printer or a connection to a PC. The card can be used for connecting a printer to the control panel to print system events. The card can also be used for PC communications, including the configuration utility (CU) and Firmware update utility (FUU).

The default printer baud rate is 9600.

### SA-USB connectors and LEDs

Refer to Figure 1 and Table 1 for a description of the SA-USB components.

Figure 1: SA-USB LEDs and connectors

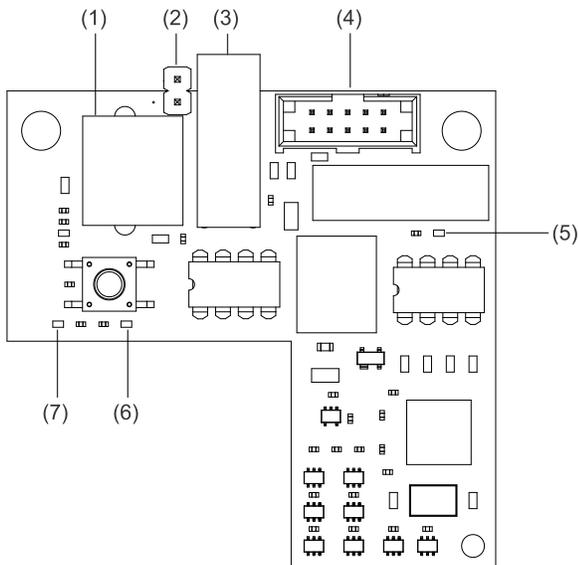


Table 1: SA-USB connectors and LEDs

Item	Label	Description
(1)	J4	USB 2.0, Type B device port: Used as a temporary connection to a PC.
(2)	JP1	Programming jumper: Shown in the not installed position. When installed over both pins, the jumper is used during programming the SA-USB to update firmware. This can <i>only</i> be accomplished with assistance from Technical Support.
(3)	J3	USB 2.0, Type A host port: Used to connect supported printers.
(4)	J1	Used to connect the SA-USB to the panel electronics board.
(5)	DS2	TXD LED: Used to indicate all communications to the panel for both the printer and all PC applications.
(6)	DS1	RXD LED: Used to indicate all communications from the panel for both the printer and all PC applications.
(7)	DS4	TRBL LED: Used to indicate when it detects any printer trouble, such as off-line, out of paper, or the printer disconnected.

**Note:** The panel will only display a printer trouble if the mode is set to supervised.

## LED operation

Table 2: LED operation

LED	Operation
DS1	On steady. Flashes when the SA-USB is receiving data from the printer or PC applications.
DS2	On steady. Flashes when the SA-USB is transmitting data to the printer or PC applications.
DS4	On steady when a trouble exists between the SA-USB and the attached printer.

## Installation

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

**Caution:** Equipment damage hazard. This product is sensitive to electrostatic discharge (ESD). To avoid damage, follow accepted ESD handling procedures.

**Note:** The SA-USB is installed in the same location as the SA-232, therefore the SA-232 card must be removed prior to installing the SA-USB card.

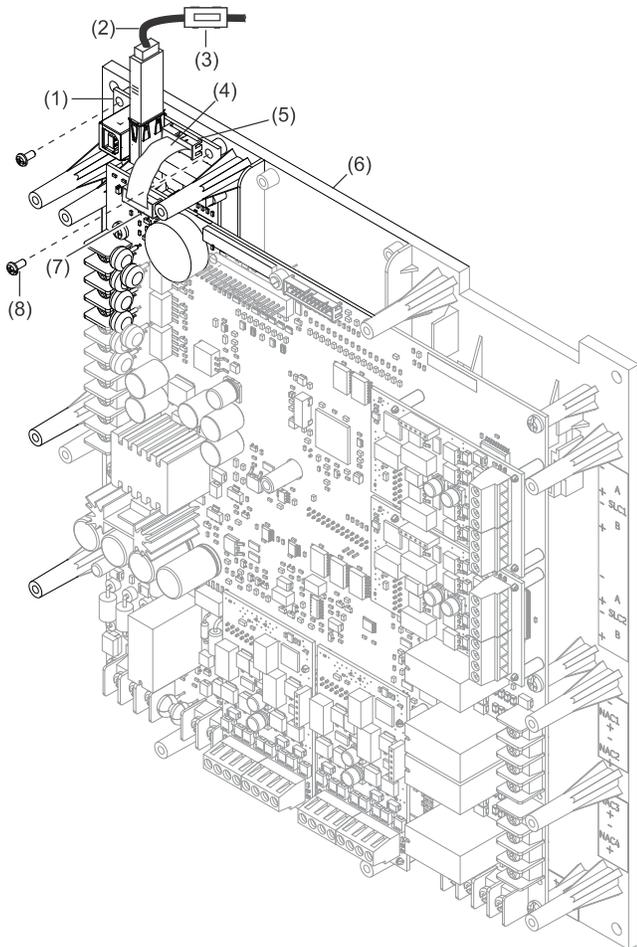
### To install the SA-USB:

1. Power down the panel and disconnect the batteries.
2. If installed, remove the SA-232 card from the panel. Refer to *SA-232 RS-232 Interface Card Installation Sheet*, P/N 3101095 for details.
3. Locate the SA-USB card location on the plastic assembly behind the main circuit board and connector J3 on the main circuit board (at the top-left of the main board).
4. Attach the SA-USB to the plastic assembly using two #6 plastite screws as shown in Figure 2.
5. Connect one end of the ribbon cable (P/N 7140187) to connector J1 on the SA-USB card and the other end to connector J3 on the main circuit board as shown in Figure 2.
6. Connect the applicable USB cable to the SA-USB. See "Wiring."



- Power up the panel, and then connect the batteries.

**Figure 2: SA-USB installation (typical, LCD removed for clarity)**



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|-----------------------|--|
| (1) SA-USB card       | (6) Plastic assembly behind the main circuit board |
| (2) USB cable         | (7) J3 on the main circuit board                   |
| (3) Ferrite clamp     | (8) #6 plasitite screw (2X)                        |
| (4) Ribbon cable      |  |
| (5) J1 on SA-USB card |  |

## Wiring

### Printer wiring

#### Notes

- The printer must be enabled and configured through programming for proper operation.
- Do not install JP1 (item 2, Figure 1). If jumper JP1 is installed (placed on both pins), the printer will not function. The panel will only display a printer trouble if the mode is set to supervised.

#### To wire to a printer:

- If you have a computer connected to the SA-USB card, disconnect it.
- Locate the USB port on the back of the printer. Refer to *PT-1S Fire Alarm Printer Installation Sheet*, P/N 3100989 for details.
- Connect a USB 2.0 A to B cable, purchased separately, to the printer USB port.
- Connect the other end of the USB 2.0 cable to the SA-USB card, connector J3 (item 3, Figure 1).

- If installed on both pins, remove jumper JP1 (item 2, Figure 1) from one pin on the SA-USB card as shown in Figure 1.
- Install the included ferrite clamp (item 3, Figure 2) onto the USB cable by opening and then snapping it in place over the USB cable as shown in Figure 2.

## Computer wiring

### To wire to a computer:

- Locate a powered USB 2.0 port on the computer.
- Connect a USB 2.0 A to B cable, purchased separately, to the computer USB port.
- Connect the other end of the USB 2.0 cable to the SA-USB card, connector J4 (Figure 1).

## Driver installation

The required driver for the SA-USB will install automatically on most operating systems when you connect it to a computer. If the driver does not install automatically, perform the following.

- Make sure that the SA-USB is connected to the computer.
- iO and VS systems:** Download the SA-USB driver from the My-Eddie website (<http://my-eddie.com/>) to your computer.
- FX systems:** Download the SA-USB driver from the FX series website (<http://kiddefx.kidde.com/>) to your computer.
- Open Device Manager, and then select the USB device listed under Other devices.
- Right-click on the USB device, and then select Update driver.
- Select "Browse my computer for driver software" and then browse to the SA-USB driver folder.
- Click Next. After the driver installs it is listed under Ports, USB-SERIAL CH340.

The COM port will be listed as an available port in the CU and the FUU.

## Specifications

Operating voltage	24 VDC
Current	
Standby/Alarm	14 mA , max 20 mA
Universal Serial Bus (USB) ports [1]	1 USB Type A –host port J3 (printer connection) 1 USB Type B – device port J4 (CU connection)
Supported printer	PT-1S, MIR-PRT/S
Printer cable length	Locate supervised USB printers in the same room as the equipment to which they connect.  Locate unsupervised 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.
Printer communication speed	9600 baud
Operating environment	
Temperature	32 to 120°F (0 to 49°C)
Relative humidity	0 to 93% noncondensing

[1] USB port connections are hot pluggable.

**Regulatory information**

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FCC compliance	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
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Environmental class	UL: Indoor dry
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**Contact information**

For contact information, see [www.edwardsfiresafety.com](http://www.edwardsfiresafety.com).