

INSTALLATION MANUAL: FFT-EXP FIRE FIGHTERS TELEPHONE EXPANDER

NOTICE TO THE INSTALLER

This manual provides an overview and the installation instructions for the FFT-EXP module. All terminals are power limited and should be wired in accordance with the requirements of NFPA 70 (NEC) and NFPA 72 (National Fire Alarm Code). Failure to follow the wiring diagrams in the following pages will cause the system to not operate as intended. For further information, refer to the control panel installation instructions. The module shall only be installed with listed control panels. Refer to the control panel installation manual for proper system operation.

1. DESCRIPTION

The FFT-EXP is an expander module that provides 12 Class B or 6 Class A phone circuits. The expander module connects to the FFT-1000 through the F-Link and Voice terminals and is expandable up to six (6) devices for Class B systems and up to fourteen (14) for Class A systems.

A maximum of two (2) FFT-EXP's can be mounted in the FFT-1000. Additional FFT-EXP's may be mounted in the AE-8 and AE-14 remote cabinets. All FFT-EXP's must be installed in the same room within 20 feet of the FFT-1000 and wiring must run in conduit.

AE-8 (Part Number 3992675) – A maximum of four (4) FFT-EXP's can be stored in the AE-8 enclosure.

AE-14 (Part Number 3992676) – A maximum of six (6) FFT-EXP's can be stored in the AE-14 enclosure.

2. SETTING THE ADDRESS

The FFT-EXP address is set by a five (5) position dip switch, which is used to program the device address ranging from one (1) to fourteen (14).

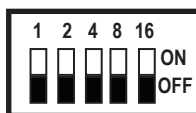
FIGURE 1. DIP SWITCH SETTINGS TABLE (ADDRESSES 1–31)

	1	2	4	8	16
1	Gray	White	White	White	White
2	Gray	Gray	White	White	White
3	Gray	White	White	White	White
4	White	White	Gray	White	White
5	Gray	Gray	White	White	White
6	Gray	Gray	Gray	White	White
7	Gray	Gray	White	White	White
8	White	White	White	Gray	White
9	Gray	White	White	White	White
10	Gray	White	White	Gray	White
11	Gray	White	White	White	White
12	White	White	Gray	White	White
13	Gray	White	White	White	White
14	Gray	Gray	Gray	White	White

Note: Each **"gray" box** indicates that the dip switch is **"On,"** and each **"white" box** indicates **"Off."**

The examples shown below illustrate a P-Link's dip switch settings: the 1st example shows a P-Link module *not addressed* where all dip switch settings are in the *default "Off" position*, the 2nd illustrates an *addressed P-Link module* via the dip switch settings.

FIGURE 2. EXAMPLES OF P-LINK MODULE SHOWING DEFAULT DIP SWITCH SETTING (UNADDRESSED) & ADDRESSED



All dip switches are shown in the "Off" position.



Example shows this P-Link module address = 10. Dip switches #2 & 8 are in the "On" position.

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Before connecting a device to the RS-485 connection, take the following precautions to prevent potential damage to the RS-485 connection.

- Power to the RS-485 connection is removed.
- Field wiring on module is correctly installed.
- Field wiring has no open or short circuits.

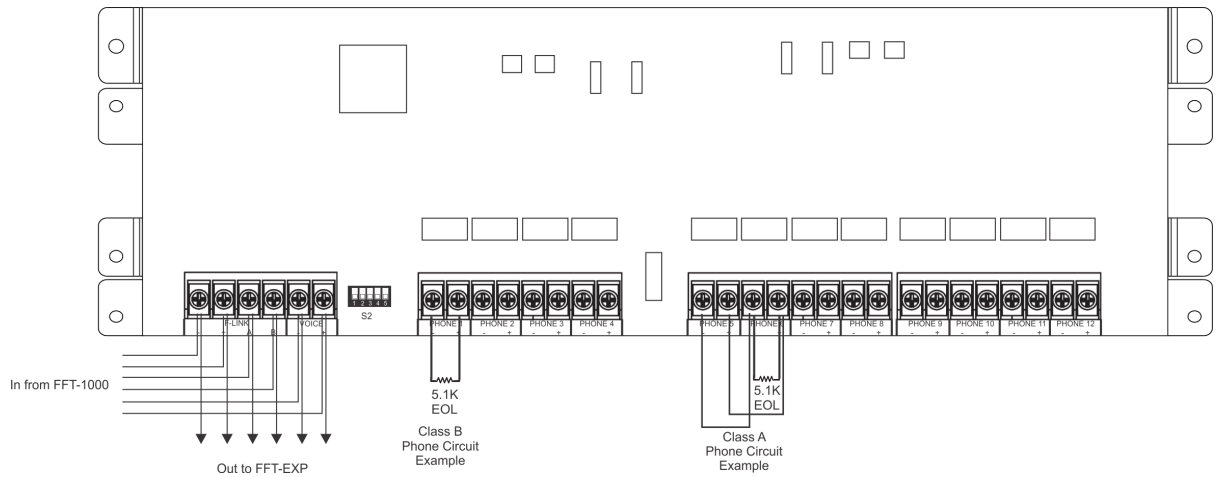
3. TECHNICAL SPECIFICATIONS

Standby Current	56 mA
Alarm Current	116 mA
FFT-EXP Voltage	24VDC
Operating Temperature Range	32° to 120° F (0° to 49°C)
Operating Humidity Range	10% to 93% (non-condensing)

4. INSTALLATION

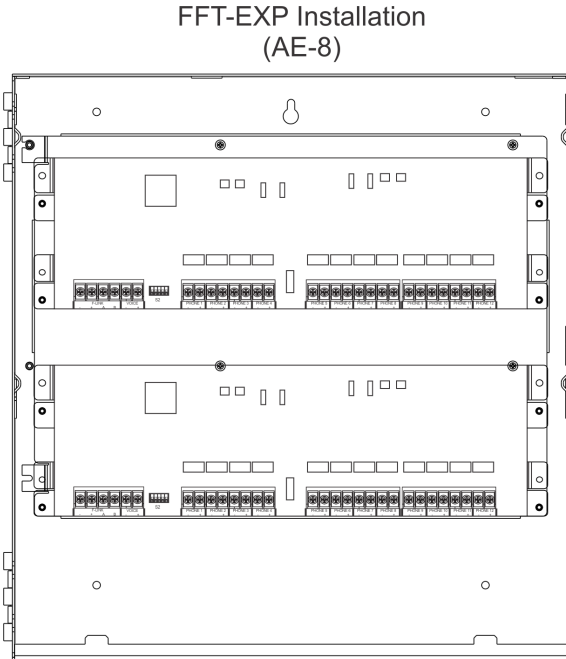
The FFT-EXP connects to the FFT-1000 using the F-Link and Voice terminals to establish communication. The connections are power limited and supervised. Each board is equipped with stacker bracket for secure and accessible mounting. The FFT-EXP must be installed within 20 feet of the FFT-1000 and the wiring must run through conduit.

FIGURE 3. FFT-EXP MODULE

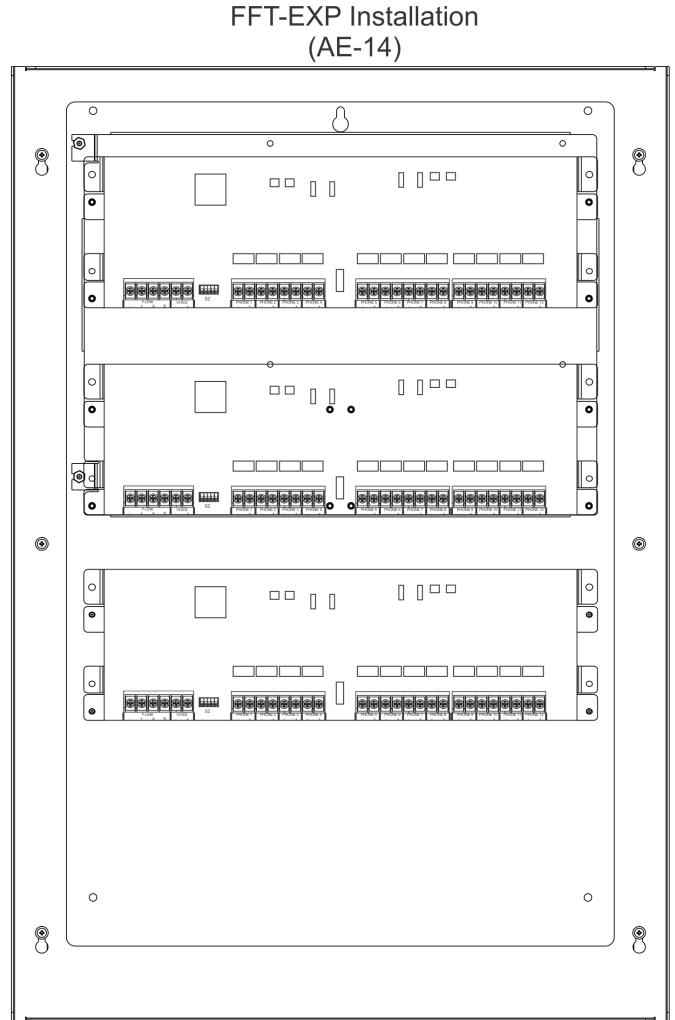


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FIGURE 4. FFT-EXP INSTALLATION IN CABINET



AE-8 (P/N 3992675) - MAXIMUM FOUR (4) FFT-EXP'S
CAN BE STORED IN THE AE-8 ENCLOSURE.
AE-14 (P/N 3992676) - MAXIMUM SIX (6) FFT-EXP'S
CAN BE STORED IN THE AE-14 ENCLOSURE.



NOTES:

- RS-485 wiring style supports class A and class B.
- RS-485 is power limited.
- Wiring for terminals (A, B) and (+, -) are supervised.
- All wiring is between #12 (max.) And #18 (min.).
- Wire preparation – strip all wires 1/4 inch from their edges as shown here:
 - Stripping too much insulation may cause a ground fault.
 - Stripping too little may cause a poor connection and subsequently an open circuit.



These instructions do not purport to cover all the details or variations in the equipment described, nor provide for every possible contingency to be met in connection with installation, operation and maintenance.

Specifications subject to change without prior notification.

For Technical Assistance contact Potter Electric Signal Company at 866-956-1211.

Actual performance is based on proper application of the product by a qualified professional.

Should further information be desired or should particular problems arise, which are not covered sufficiently for the purchaser's purpose, the matter should be referred to a distributor in your region.