

## Installation Manual: PAD100-PSSA/PSDA Pull Station (Single & Dual Action)

### NOTICE TO THE INSTALLER

This manual provides an overview and the installation instructions for the PAD100-PSSA / PSDA (Single Action / Dual Action) module. This module is only compatible with addressable fire systems that utilize the PAD Addressable Protocol.

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 PAD100-PSSA (Single Action) is activated by pulling the white "T" bar handle down. The PAD100-PSDA (Dual Action) is activated by lifting the front cover and then pulling the white "T" bar handle down. Once activated, the "T" bar cannot be reset without opening the front cover. Opening the front cover will also activate the pull station. To reset the PAD100-PS series, use the Potter WS-93 key to unlock and open the front cover. Once the cover is open, push the "T" bar back into the normal position and re-secure the front cover. It is a non-coded addressable pull station and installs on a single gang box or surface mounts using the P32-BB or P32-DBB (deep) back box.

### 2. Setting the Address

All PAD protocol detectors and modules require an address prior to connection to the panel's SLC loop. Each PAD device's address (*i.e.*, detector and/or module) is set by changing the dip switches located on the device. PAD device addresses are comprised of a **seven (7) position dip switch** used to program each device with an address ranging from 1–127.

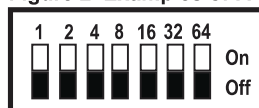
Figure 1. PAD Device Dip Switch Addresses Table (Addresses 1–127)

|    | 1 | 2 | 4 | 8 | 16 | 32 | 64 |    | 1 | 2 | 4 | 8 | 16 | 32 | 64 |    | 1 | 2 | 4 | 8 | 16 | 32 | 64 |     | 1 | 2 | 4 | 8 | 16 | 32 | 64 |     | 1 | 2 | 4 | 8 | 16 | 32 | 64 |
|----|---|---|---|---|----|----|----|----|---|---|---|---|----|----|----|----|---|---|---|---|----|----|----|-----|---|---|---|---|----|----|----|-----|---|---|---|---|----|----|----|
| 1  |   |   |   |   |    |    |    | 27 |   |   |   |   |    |    |    | 53 |   |   |   |   |    |    |    | 78  |   |   |   |   |    |    |    | 103 |   |   |   |   |    |    |    |
| 2  |   |   |   |   |    |    |    | 28 |   |   |   |   |    |    |    | 54 |   |   |   |   |    |    |    | 79  |   |   |   |   |    |    |    | 104 |   |   |   |   |    |    |    |
| 3  |   |   |   |   |    |    |    | 29 |   |   |   |   |    |    |    | 55 |   |   |   |   |    |    |    | 80  |   |   |   |   |    |    |    | 105 |   |   |   |   |    |    |    |
| 4  |   |   |   |   |    |    |    | 30 |   |   |   |   |    |    |    | 56 |   |   |   |   |    |    |    | 81  |   |   |   |   |    |    |    | 106 |   |   |   |   |    |    |    |
| 5  |   |   |   |   |    |    |    | 31 |   |   |   |   |    |    |    | 57 |   |   |   |   |    |    |    | 82  |   |   |   |   |    |    |    | 107 |   |   |   |   |    |    |    |
| 6  |   |   |   |   |    |    |    | 32 |   |   |   |   |    |    |    | 58 |   |   |   |   |    |    |    | 83  |   |   |   |   |    |    |    | 108 |   |   |   |   |    |    |    |
| 7  |   |   |   |   |    |    |    | 33 |   |   |   |   |    |    |    | 59 |   |   |   |   |    |    |    | 84  |   |   |   |   |    |    |    | 109 |   |   |   |   |    |    |    |
| 8  |   |   |   |   |    |    |    | 34 |   |   |   |   |    |    |    | 60 |   |   |   |   |    |    |    | 85  |   |   |   |   |    |    |    | 110 |   |   |   |   |    |    |    |
| 9  |   |   |   |   |    |    |    | 35 |   |   |   |   |    |    |    | 61 |   |   |   |   |    |    |    | 86  |   |   |   |   |    |    |    | 111 |   |   |   |   |    |    |    |
| 10 |   |   |   |   |    |    |    | 36 |   |   |   |   |    |    |    | 62 |   |   |   |   |    |    |    | 87  |   |   |   |   |    |    |    | 112 |   |   |   |   |    |    |    |
| 11 |   |   |   |   |    |    |    | 37 |   |   |   |   |    |    |    | 63 |   |   |   |   |    |    |    | 88  |   |   |   |   |    |    |    | 113 |   |   |   |   |    |    |    |
| 12 |   |   |   |   |    |    |    | 38 |   |   |   |   |    |    |    | 64 |   |   |   |   |    |    |    | 89  |   |   |   |   |    |    |    | 114 |   |   |   |   |    |    |    |
| 13 |   |   |   |   |    |    |    | 39 |   |   |   |   |    |    |    | 65 |   |   |   |   |    |    |    | 90  |   |   |   |   |    |    |    | 115 |   |   |   |   |    |    |    |
| 14 |   |   |   |   |    |    |    | 40 |   |   |   |   |    |    |    | 66 |   |   |   |   |    |    |    | 91  |   |   |   |   |    |    |    | 116 |   |   |   |   |    |    |    |
| 15 |   |   |   |   |    |    |    | 41 |   |   |   |   |    |    |    | 67 |   |   |   |   |    |    |    | 92  |   |   |   |   |    |    |    | 117 |   |   |   |   |    |    |    |
| 16 |   |   |   |   |    |    |    | 42 |   |   |   |   |    |    |    | 68 |   |   |   |   |    |    |    | 93  |   |   |   |   |    |    |    | 118 |   |   |   |   |    |    |    |
| 17 |   |   |   |   |    |    |    | 43 |   |   |   |   |    |    |    | 69 |   |   |   |   |    |    |    | 94  |   |   |   |   |    |    |    | 119 |   |   |   |   |    |    |    |
| 18 |   |   |   |   |    |    |    | 44 |   |   |   |   |    |    |    | 70 |   |   |   |   |    |    |    | 95  |   |   |   |   |    |    |    | 120 |   |   |   |   |    |    |    |
| 19 |   |   |   |   |    |    |    | 45 |   |   |   |   |    |    |    | 71 |   |   |   |   |    |    |    | 96  |   |   |   |   |    |    |    | 121 |   |   |   |   |    |    |    |
| 20 |   |   |   |   |    |    |    | 46 |   |   |   |   |    |    |    | 72 |   |   |   |   |    |    |    | 97  |   |   |   |   |    |    |    | 122 |   |   |   |   |    |    |    |
| 21 |   |   |   |   |    |    |    | 47 |   |   |   |   |    |    |    | 73 |   |   |   |   |    |    |    | 98  |   |   |   |   |    |    |    | 123 |   |   |   |   |    |    |    |
| 22 |   |   |   |   |    |    |    | 48 |   |   |   |   |    |    |    | 74 |   |   |   |   |    |    |    | 99  |   |   |   |   |    |    |    | 124 |   |   |   |   |    |    |    |
| 23 |   |   |   |   |    |    |    | 49 |   |   |   |   |    |    |    | 75 |   |   |   |   |    |    |    | 100 |   |   |   |   |    |    |    | 125 |   |   |   |   |    |    |    |
| 24 |   |   |   |   |    |    |    | 50 |   |   |   |   |    |    |    | 76 |   |   |   |   |    |    |    | 101 |   |   |   |   |    |    |    | 126 |   |   |   |   |    |    |    |
| 25 |   |   |   |   |    |    |    | 51 |   |   |   |   |    |    |    | 77 |   |   |   |   |    |    |    | 102 |   |   |   |   |    |    |    | 127 |   |   |   |   |    |    |    |
| 26 |   |   |   |   |    |    |    | 52 |   |   |   |   |    |    |    |    |   |   |   |   |    |    |    |     |   |   |   |   |    |    |    |     |   |   |   |   |    |    |    |

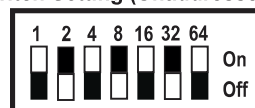
**Note:** Each "gray" box indicates that the dip switch is "On," and each "white" box indicates "Off."

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

Figure 2. Examples of PAD Device Showing Default Dip Switch Setting (Unaddressed) & Addressed PAD Device



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



Example shows this PAD device's address = 42. Dip switches #2, 8 & 32 are in the "On" position.

## INSTALLATION MANUAL: PAD100-PSSA / PSDA PULL STATION (SINGLE & DUAL ACTION)

Before connecting a device to the SLC loop, take the following precautions to prevent potential damage to the SLC or device.

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

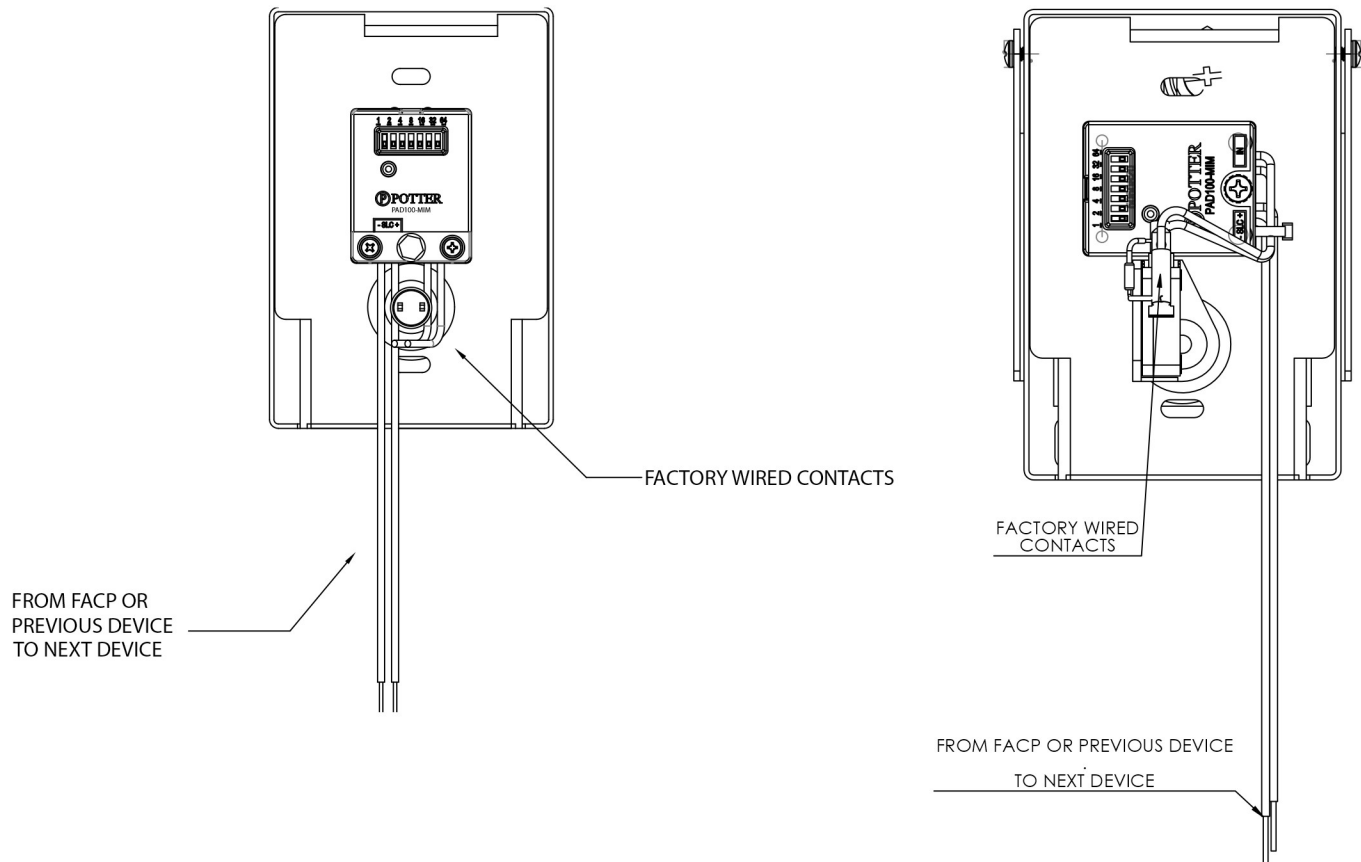
### 3. Technical Specifications

|                         |                                                  |
|-------------------------|--------------------------------------------------|
| Operating Voltage       | 24.0V                                            |
| Max SLC Standby Current | 200 $\mu$ A                                      |
| Max SLC Alarm Current   | 200 $\mu$ A                                      |
| Temperature Range       | 32° to 120° F (0° to 49° C)                      |
| Relative Humidity Range | 0 to 93% (non-condensing)                        |
| Dimensions              | 4.75" L x 3.25" W x 1.75" D                      |
| Mounting Options        | Single gang box or Potter P32-BB/DBB             |
| Shipping Weight         | PAD100-PSSA – 1.22 lbs<br>PAD100-PSDA – 1.46 lbs |

### 4. Wiring Diagrams

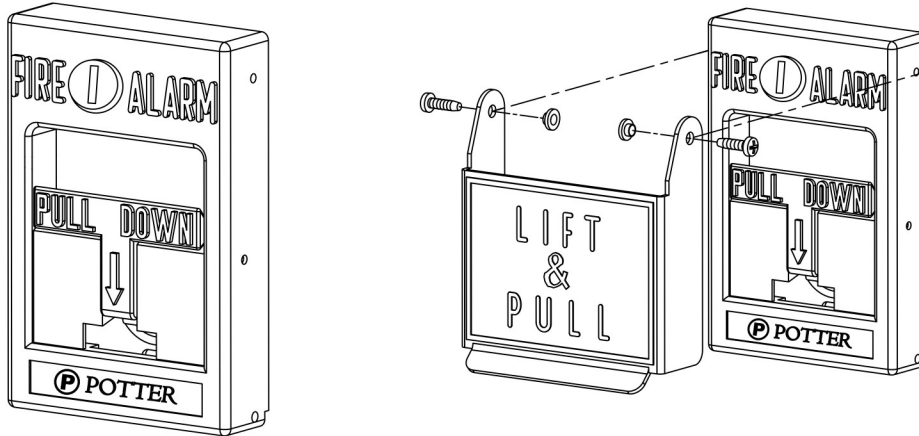
The wiring diagram shown below illustrates how to wire a PAD100-PSSA / PSDA module. Additionally, two drawings are provided showing the front view of each module.

Figure 3. Example of Back View and Wiring a PAD100-PSSA / PSDA



NOTE: Modules shall be one of the mounting configurations shown above.

Figure 4. Examples of PAD100-PSSA / PSDA's Front Views



**Notes:**

- SLC wiring style supports the Class A, Class B and Class X.
- SLC loop wiring (SLC+, SLC-) are power limited.
- Wiring for terminals SLC+, SLC- are supervised.
- All wiring is between #12 (max.) and #22 (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.