

# PotterNet Installation & Programming BSIU



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## Product Description

PotterNet BSIU is a UL 864 certified system.

BSIU is an acronym for Building System Information Unit. BSIUs are defined in NFPA 72 as “a computer-based electronic device that is intended to display building information and execute system control functions, including fire system information display and control”.

PotterNet can be installed as a BSIU unit under certain circumstances covered in this manual. The PotterNet Fire and Facility BSIU is a graphical desktop application that facilitates the monitoring and control of IPA, AFC/ARC, and PFC-4064 fire alarm control panels. It utilizes a distributed client-server model for communication to reduce or eliminate single points of failure. PotterNet will monitor all compatible Potter panels in a single building, on a local campus, or across multiple sites anywhere in the world.

## Standards Compliance

The PotterNet BSIU has been engineered to meet the standards established by the following regulatory bodies. It is intended for Fire Alarm applications only:

- Underwriters Laboratories UL 864 - Standard for Control Units and Accessories for Fire Alarm Systems (UOJK, S735)
- NFPA 72 National Fire Alarm Code.

This manual contains crucial information and should be stored near the hardware. In the event of a change in building ownership, this manual, along with all testing and maintenance records, must be transferred to the new owner. A copy of this manual was provided with the equipment and is also available from the manufacturer.

PotterNet shall be located in a permanently secured and protected location accessible only to authorized persons.

## 1. Installation and Details

The UL 864 listing as a BSIU allows for the installation of commercially available computer hardware that meets the criteria below.

### Minimum System Configuration

- Windows® 10/11 Professional, 64-bit, English (USA)
- Intel® i5 @ 2.6 GHz
- 256 GB Solid State Drive
- 16 GB RAM
- 22" monitor, 1920 x 1080 resolution
- USB Mouse
- USB Keyboard
- 10/100/1000 Mbps Ethernet port
- System software release level V3.xx

### Location

The BSIU is to be located within the same room as the fire alarm control unit (FACU) controlling the fire alarm system.

### Functionality

The BSIU shall not be permitted to perform fire alarm system control features that cannot be accomplished by the interconnected fire alarm control unit within the same room where a BSIU provides control of the interconnected fire alarm control unit.

### Power & Hardware

The source of power for the BSIU equipment shall be within the rated range of the BSIU.

BSIU equipment including all peripheral equipment (such as display, keyboard, etc.) shall meet the requirements of UL 60950-1 or UL 62368-1.

### Restrictions

The BSIU system is not permitted to initiate and process live voice paging. No other software other than the operating system software, anti-virus/security protection software, and other software specified in the installation instructions shall be installed on the BSIU.

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## Downloading PotterNet Software

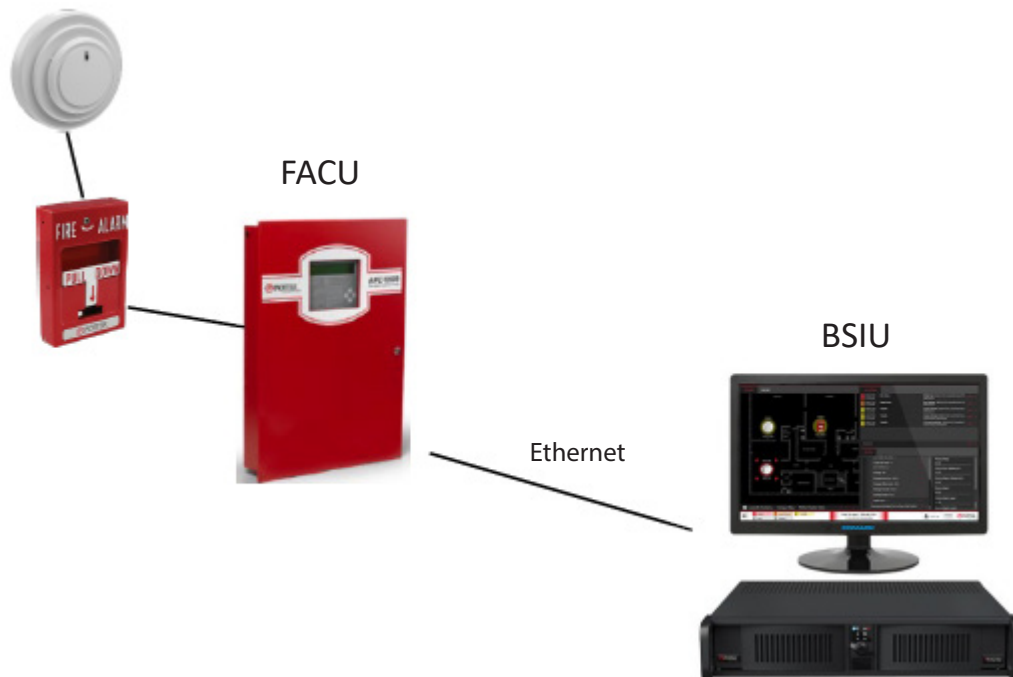
The PotterNet software can be downloaded from the IPA section of the Potter Electric Signal Co. website. It is important that you are logged in as an IPA dealer otherwise you will not see the PotterNet software files. To get to the link:

1. Log into IPA section of [pottersignal.com](http://pottersignal.com).
  2. Type the following into your browser bar after logging in: [www.pottersignal.com/documents/software](http://www.pottersignal.com/documents/software)
  3. On this page scroll down and locate the PotterNet exe and zip software.
  4. Download either the exe or zip file to your computer desktop.
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## 2. System Configurations

The BSIU is to be located within the same room as the fire alarm control unit (FACU) controlling the fire alarm system. When designing your system, consider the following code requirements:

- An FACU is any device that receives signals from initiating devices or other FACUs.
- The FACU may be a full control panel or a network annunciator.
- The BSIU must be installed in the same room as a system FACU.
- The BSIU permitted to perform control functions that are available at the FACU in the same room.

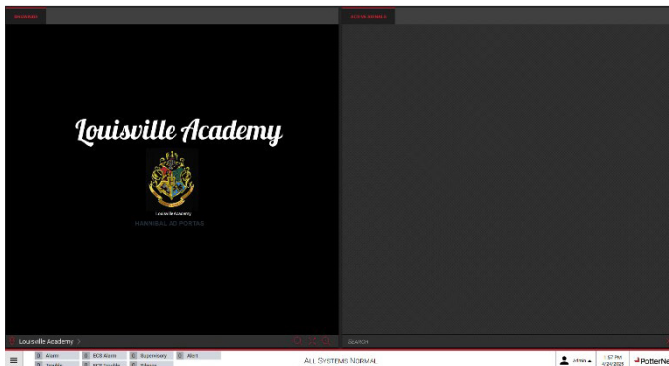


### 3. Screens Overview

The screens below illustrate examples of how PotterNet can be configured. The interface is highly customizable, so the appearance and layout will differ depending on the specific setup and monitor orientation. Core elements—such as the active signals list, signal counters, and highest priority event—*are* always accessible and shown on the screen. The graphic floor plan area is optional and can be tailored to user preferences.

**Overview of the main screen as configured on a landscape monitor. It shows:**

- Floor plan area
- Active Signals
- Signal counters on the bottom left
- Highest priority event/All Systems Normal in the center bottom
- User Login on the bottom right
- Date and time on the bottom right
- Releasing status



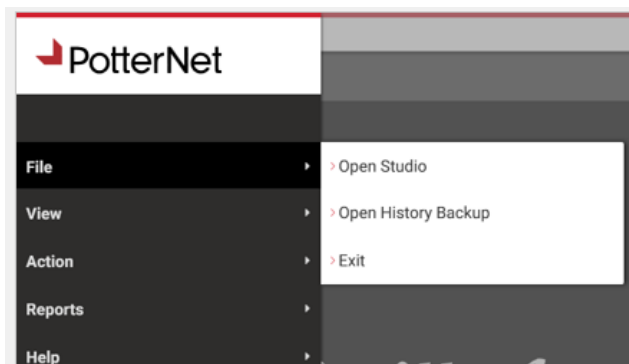
### Downloading PotterNet Software

Menu items are accessible by selecting the hamburger icon in the bottom left corner of the screen.

#### Menu Items Summary

##### File

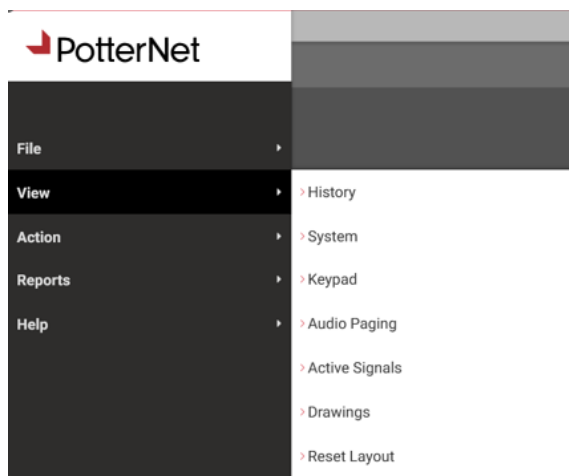
- Open Studio - Used to configure PotterNet
- Open History - Open up backed up versions of history databases
- Exit - Exit software (Admin only)



## View

Used to open new windows on main screen

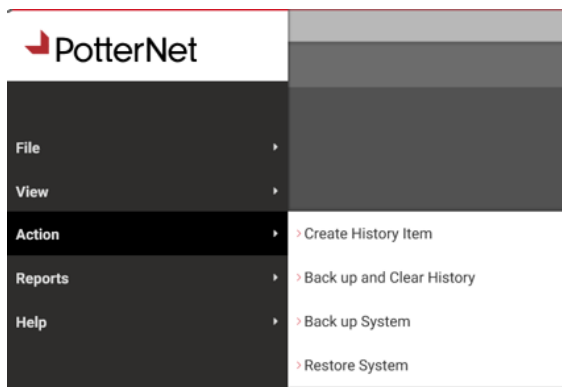
- History - View History Log
- System - Read status on system points
- Keypad - Displays panel keypad
- Audio Paging - Displays audio paging
- Drawings - Displays the floor plans
- Reset layout - Resets system to default screen layout



## Action

Used for maintenance and other functions

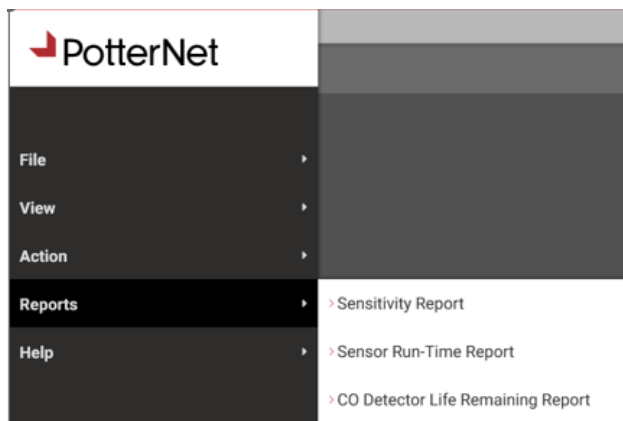
- Create History Item - Allows user to write a message to history
- Back Up and Clear History - Backs up history and clears history list
- Back Up System - Backs up database for security reasons or technical support
- Restore System - Restores a database that was updated externally



## Reports

Used to generate system information and maintenance reports

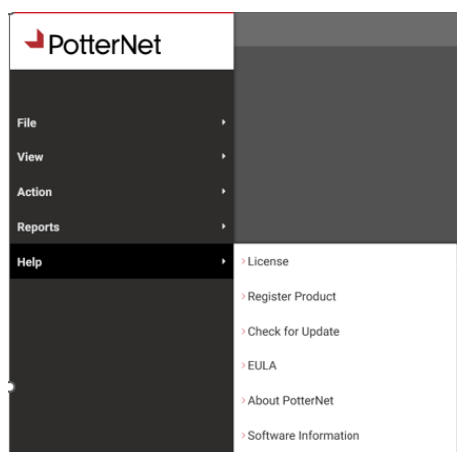
- Sensitivity Report - Used to create a report on cleanliness of all photo sensors
- Sensor Run-Time Report - Documents the how long a device has been installed
- CO Detector Life Remaining Report - Documents life remaining for CO detectors



## Help

Used to get version information, licensing info, and other system information

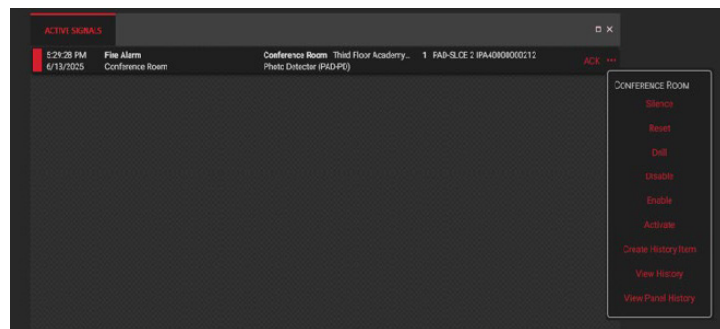
- License - Details on the system license settings
- Register Product - Used for systems that need license updates
- Check for Update - Checks for more recent PotterNet fix releases
- Eula - End User Licence Agreement
- About PotterNet - Shows version information
- Software Information - Shows BSIU UL 864 listing label (menu only shown in BSIU Models)



## 4. System Configurations

Control of the fire system is dependent on following the requirements of a BSIU system and having user permissions. Commands are dependent upon the type of device, therefore all options may not be available. Commands are accessible from the graphic icon or by pressing the “...” next to the event in the signals list.

- Silence - Silences panels
- Reset - Resets panel
- Drill - Drills the panel
- Disable - Disables the point on the panel
- Enable - Enables the point on the panel
- Activate - Activates an input/output on the panel. Not intended for releasing operations.
- Acknowledge - Acknowledges panel
- Create History Item - Adds a user message to history
- View History - View the history for this device
- View Panel History - View the panel history for this device



### BSIU - Control

## 5. System

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 qualified distributor in your region.

## 6. Functionality

### Signals and Signal Reporting

The Active Signal allow the user to easily understand the state and status of PotterNet and its monitored panels by viewing the Active Signal window mentioned above as well as via device icons and hyperlink areas.

Each item will have a color associated with them depending on the signal received:

- Alarm - Red
- Supervisory - Orange
- Trouble - Yellow
- Restore - Green
- Alert - Blue
- Silence - Purple
- ECS Alarm - Red
- ECS Trouble - Yellow

When a signal comes in, there is an order/priority associated with it. MNS can be configured in PotterNet as a higher priority. Priority/order is as follows by default:

- Alarm
- ECS Alarm
- Supervisory
- Alert
- Trouble/Disable
- ECS Trouble
- Silence
- Acknowledged Alarm
- Acknowledged Supervisory
- Acknowledged Alert
- Acknowledged Trouble/Disable
- Acknowledged Silence

The Active Signal tab automatically sorts the items with higher priority signals placed at the top of the list with multiple events activated

Icons that have locally unacknowledged signals will have a pulsing background of the associated signal's color. Icons that have locally acknowledged signals will have a solid background of the associated signal's color. The icon associated with the highest priority, unacknowledged signal will also indicate that it is of highest priority by four animated chevrons pointing in towards the icon.

As signals are received, they will appear as shown. The table below describes the layout of each item. Further,

device(s) indicated in the signal that have an icon associated with them on a drawing will graphically indicate the signal, and, depending on the Signal Navigation Behavior, navigate to the designated location based on the setting.

If a signal in the Active Signal window contains a device with an associated icon placed on a drawing, it can be clicked on to navigate to the drawing that icon exists on and zoom in to that icon.

All status-change signals are automatically and permanently recorded, then displayed in a form that will expedite prompt operator interpretation.

|                          |                     |                                                                        |                                                                           |         |
|--------------------------|---------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------|---------|
| 9:40:28 AM<br>11/12/2018 | Fire Alarm<br>Alarm | Reception Desk Pull Built-in SLC Main...<br>Contact Input Pull Station | 3 Built-in SLC IPA40000001436<br>First Floor Library Main Campus World... | ACK ... |
|--------------------------|---------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------|---------|

| Time | Signal Type        | Point Name, P-Link Module Name, Panel Name | Complete Address                                                   |
|------|--------------------|--------------------------------------------|--------------------------------------------------------------------|
| Date | Signal Description | Device Type                                | Hierarchy of drawings that the device is on up to the root drawing |

Signal counters give an overall summary of the system by providing a count for the individual signals received at PotterNet. When there is an unacknowledged signal, the associated signal counter will blink the color associated with the signal. When the signals are acknowledged, the signal counter remains solid with the color associated with the signal.

|             |               |           |               |               |
|-------------|---------------|-----------|---------------|---------------|
| 0 ECS Alarm | 0 Alarm       | 0 Release | 0 Pre-release | 0 Supervisory |
| 0 Alert     | 0 ECS Trouble | 2 Trouble | 0 Silence     |               |

Each incoming signal requiring action to be taken by the operator will result in:

1. An audible signal
2. Color-coded signal in the Active Signal box
3. Displaying the signal on a graphical drawing floor plan (graphic also has status and location information)
4. Incrementing the permanently displayed signal counters
5. Recording the signal to a detailed and user accessible color coded history database

Each incoming signal is automatically recorded on screen and to history. The history and Active Signal box provide the type of signal, condition, and location, in addition to the time and date the signal was received.

Failure to acknowledge or act upon an incoming signal does not prevent subsequent signals from being received, indicated or displayed, and recorded.

Each incoming signal initiates an audible signal that persists until manually acknowledged.

If the number of signals exceeds the capability of the Active Signal box to display all the signals concurrently then a scroll bar will appear to let you know there are additional signals to be viewed. Every signal will remain in the Active Signal box until manually acknowledged.

When concurrent signals are received, the signals will be displayed in the following priority:

1. Signals Associated with life safety
2. Signals associated with property safety
3. Supervisory or associated life and/or property safety trouble signals,
4. All other signals

Multiple status changes for the same point will be displayed in the Active Signal box. In addition the graphical icon will indicate the number of signals for that device.

Active Signal will remain in the signals box until the signal has been restored or a return to normal condition occurs and that restoration or return to normal condition is acknowledged.

### Releasing Status

PotterNet displays the status of releasing zones—Pre-Release, Abort Active, and Release Zone—on the status bar at the bottom of the screen. This information will mimic the fire panel annunciation.

|                  |                                                                                         |                       |                                                                                               |
|------------------|-----------------------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------|
| Pre-Release: 26  |  Bob ▲ | 12:37 PM<br>7/15/2025 |  PotterNet  |
| Release-Zone 21  |  Bob ▲ | 12:37 PM<br>7/15/2025 |  PotterNet |
| Abort Active: 10 |  Bob ▲ | 12:38 PM<br>7/15/2025 |  PotterNet |

### Responsibility Groups

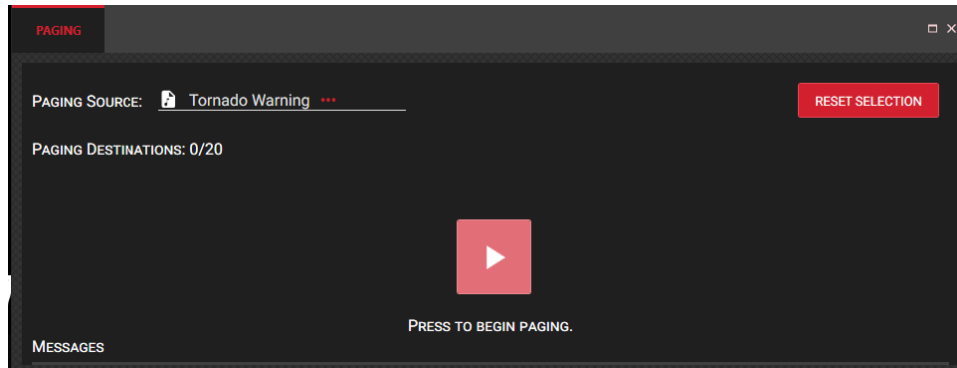
Responsibility Groups provide a mechanism for which users of a multiple PotterNet Client system can understand the panels in which that specific user at the PotterNet Client are responsible for.

A PotterNet Client's Responsibility Group can be viewed by clicking the User Popup, and is only applicable to the PotterNet Client that it has been configured on. With a Responsibility Group active, the Active Signal pane will reflect that group. Signals which the current user is responsible for appear normally in the Active Signal list. Signals which the current user is not responsible for appear greyed out in the Active Signal list. See Programming Options section (below) for settings allowable per UL 864.

## 7. Audio Paging

PotterNet Audio is a licensed feature in PotterNet that enables a user to pages over IP to an analog paging system/speaker. Audio groups can be configured to page to multiple zones. PotterNet uses the 011233 Cyberdata SIP audio adapter. Recorded audio can be imported through the Audio Recordings tab found in PotterNet Studio.

Live voice paging is not permitted in BSIU systems.



## 8. Programming Options

### NOTICE

#### FOR USERS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHER INVOLVED PARTIES

This product incorporates field-programmable software. In order for the product to comply with the requirements in the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864, certain programming features or options must be limited to specific values or not used at all as indicated below.

| Program Feature or Option     | Permitted in UL 864 (Y/N) | Possible Settings                                            | Settings Permitted in UL 864                                                                                                                                                            |
|-------------------------------|---------------------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Resetting and Silencing       | Yes                       | Yes/No                                                       | Yes                                                                                                                                                                                     |
| Operating Mode                | Yes                       | Supervising Station<br>Network Display Unit BSIU             | BSIU                                                                                                                                                                                    |
| Responsibility Groups         | Yes                       | Assign each panel to one<br>or more responsibility<br>groups | Assign each panel to one<br>responsibility group. All<br>BSIU must be located within<br>the same room as the fire<br>alarm control unit (FACU)<br>controlling the fire alarm<br>system. |
| On Premises System<br>Control | Yes                       | Yes/No                                                       | Yes                                                                                                                                                                                     |
| Live Audio Paging             | No                        | Yes/No                                                       | No - Only recorded audio<br>allowed in BSIU                                                                                                                                             |

## 9. Testing/Maintenance

- PotterNet is required to be installed in accordance with local and state building codes and NFPA 72 (National Fire Alarm Code).
- PotterNet and related systems are required to be inspected and tested in accordance with NFPA 72.
- When changes are made to site-specific software, the following shall apply:
  - All functions known to be affected by the change, or identified by a means that indicates changes, shall be 100 percent tested.
  - In addition, 10 percent of initiating devices that are not directly affected by the change, up to a maximum of 50 devices, also shall be tested and correct system operation shall be verified.
  - A revised record of completion in accordance with 7.5.6 shall be prepared to reflect these changes.
- Changes to the system executive software shall require a 10 percent functional test of the system, including a test of at least one device on each input and output circuit to verify critical system functions such as control functions such as notification appliances, control functions, and off-premises reporting.
- Keep all computer equipment free of dust.

## 10. Compatible Equipment

| Manufacturer                   | Model           |
|--------------------------------|-----------------|
| Potter Electric Signal Co. LLC | IPA-4000 (V, E) |
| Potter Electric Signal Co. LLC | IPA-100         |
| Potter Electric Signal Co. LLC | IPA-60          |
| Potter Electric Signal Co. LLC | AFC-1000 (V, E) |
| Potter Electric Signal Co. LLC | AFC-100         |
| Potter Electric Signal Co. LLC | AFC-50          |
| Potter Electric Signal Co. LLC | ARC-100         |
| Potter Electric Signal Co. LLC | PFC-4064        |
| Potter Electric Signal Co. LLC | GTSA-7          |

## 11. System Power/Size

| Accessories/subassemblies/networked panels | Maximum Capacity |
|--------------------------------------------|------------------|
| PotterNet Clients                          | 15               |
| Monitored Panels                           | 1000             |
| PotterNet Users                            | 1000             |

## 12. Operating Instructions

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Normal Standby                  | The highest priority signal at the bottom, center, of the main screen will indicate "All Systems Normal". The signals box will either have no signals or (green) return to normal signals. The signal counters will all be at "0"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Acknowledging                   | Off normal signals are acknowledged by pressing the ACK button while reviewing signals. After all events have been acknowledged, the buzzer will deactivate, and the associated event counter and icon will stop flashing and remain on continuously.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Alarm Condition                 | The red ALARM signal counter will be illuminated, blinking and show the total number of alarm conditions anytime an alarm is occurring in the system. The associated icon in the drawings pane will be illuminated in red and blinking anytime an alarm is occurring in the system. The signal list will have a red LED lit and display detail about the inputs in alarm. The buzzer will be activated. The buzzer will remain active until all alarms have been acknowledged. The icon and counters will stop blinking following an acknowledgement.                                                                                                                                                                                                                                                                      |
| Silencing Alarm                 | When a panel is in Alarm, the notification circuits (strobes and horns) can be shut off by clicking on the icon in the drawings pane or selecting the "..." in the signals list and pushing the SILENCE button. The purple SILENCE signal counter will be illuminated and show the total number of silence conditions anytime a panel is silenced. There will be a silenced signal in the active signals box for each panel that has been silenced.                                                                                                                                                                                                                                                                                                                                                                        |
| Resetting Alarm                 | After the condition that caused the alarm has been identified and corrected, the system may be reset to the Normal Standby by clicking on the icon in the drawings pane or selecting the "..." in the signals list and pushing the RESET button. All reset points will show a return to normal event with a green LED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Supervisory Condition           | The orange SUPERVISORY signal counter will be illuminated, blinking and show the total number of supervisory conditions anytime a supervisory is occurring in the system. The associated icon in the drawings pane will be illuminated in orange and blinking anytime a supervisory is occurring in the system. The signal list will have an orange LED lit and display detail about the inputs in supervisory condition. The buzzer will remain active until all supervisorys have been acknowledged. The icon and counters will stop blinking following an acknowledgement.                                                                                                                                                                                                                                              |
| Restoring Supervisory Condition | If the Supervisory condition is non-latching, once the device is restored to the normal condition, the supervisory event will return to normal. If the supervisory condition is latching, the device that was activated must be restored and the RESET pressed. All reset points will show a return to normal event with a green LED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Trouble Condition               | The yellow TROUBLE signal counter will be illuminated, blinking and show the total number of trouble conditions anytime a trouble is occurring in the system. The associated icon in the drawings pane will be illuminated in yellow and blinking anytime a trouble is occurring in the system. The signal list will have a yellow LED lit and display detail about the inputs in trouble condition. The buzzer will be activated. The buzzer will remain active until all troubles have been acknowledged. The icon and counters will stop blinking following an acknowledgement.                                                                                                                                                                                                                                         |
| Silencing Troubles              | When a trouble is occurring, the local buzzer will sound until all troubles have been acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Testing and Maintenance         | Test this system monthly or more frequently as required by the AHJ. Before conducting any testing contact the building personnel and the monitoring facility as applicable. When testing a system configured for releasing, activate the releasing disconnect switch to prevent accidental discharge of a suppression system. Test the circuits as outlined in the Installation Manual. Test in accordance with NFPA 72 Inspection, Testing and Maintenance Chapter(s) and any local requirements. The batteries should be marked with the date of installation and replaced every four years or sooner if battery trouble occurs. Batteries should be checked with a tester acceptable to the AHJ such as a Stone Technologies model STC612A or equivalent. Contact the agency below for service or operational questions |

For Service, contact:

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

Frame and display instructions adjacent to the PotterNet system

Manual #5403813 - Rev A - 7/17/2025

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## Ordering Information

| Model             | Description                                                                                     |
|-------------------|-------------------------------------------------------------------------------------------------|
| Potter-Net        | BSIU Listed PotterNet. Software Only.                                                           |
| PotterNet-Lite    | BSIU Listed PotterNet. Software Only.                                                           |
| PotterNet-FOW     | BSIU Listed PotterNet. Shipped With UL 60950-1 Hardware.                                        |
| PotterNet-Connect | PotterNet fire panel connection licenses. Each panel connected to PotterNet requires a license. |