

### Installation Instructions

#### 1. Introduction

The PC4612 is a 12-zone fire annunciator for use with PC4010/PC4020 security systems. You can install a combined total of 9 PC4612 and PC4216 modules on each PC4010/4020 system.

#### 2. Specifications

- 16 programmable LEDs
- Four wire (QUAD) hook-up to Combust
- Nominal current draw of 15mA
- Tamper and Trouble Reporting
- Supervision by control panel via Combust

#### 3. Installation

Connect the PC4612 to the panel via the Combust. Be sure to include the current draw of the PC4612 (15mA) in your Combust current calculation. Refer to your PC4010/4020 Installation Manual for more information on Combust wiring.

#### 4. Enrolling and Programming the PC4612

Follow the instructions below for enrolling and programming your PC4612 module. If you are enrolling the module on a PC4010/4020 v3.0 or greater system, you can use the reference numbers (indicated by the square brackets, eg. [0200]) to jump to a programming section. Refer to your system's installation or programming manual for more information on programming.

##### 4.1 Enrolling

You must enroll the PC4612 module with your panel before you can program it. The PC4612 is enrolled exactly as if it were a PC4216 module. Follow these steps:

- 1 At a PC4010/4020 system LCD keypad, enter Installer's Programming ([\*][8][Installer's code]).
- 2 Enter Ref #[0200][\*] OR scroll to **Module Hardware**, press [\*], then, scroll to **Enroll Module**, press [\*].
- 3 Scroll to **PC4216 Module**, press [\*]. The LCD keypad displays **Create Tamper on Desired Unit**.
- 4 Tamper and then restore the PC4612:
  1. Remove the screws on the bottom of the unit.
  2. Pull the front plastic of the unit approximately ¼" away from the backplate.
  3. Replace the front of the unit and the screws in their original locations.

The LCD keypad displays **PC4216 Mod 01 Enrolled**.
- 5 Record the module number in the worksheet area on the back of this instruction sheet.
- 6 To exit Module Enrollment, press [#].

##### 4.2 Programming

On the PC4612, each of the 16 outputs controls a particular LED. Outputs 1-12 control the LEDs which light up numbers 1-12 on the Annunciator. Outputs 13-16 control the LEDs which light up the Zone Trouble, Bell Trouble, System Trouble and AC On indicators, respectively.

A Custom Group is a set of 16 programming choices which correspond to the 16 programmable outputs on each PC4612



module. Each LED will function according to the programming of its output in the assigned custom group. To program the PC4612, you need to assign a custom group to the module, and to make sure that the outputs of the assigned custom group are programmed appropriately.

*Example:* the PC4612 is assigned to custom group (01). In this custom group, output (05) is programmed to follow zone (020), which is a fire zone. This was done by programming output (05) for option (22) zone follow. When zone (020) is in alarm, LED 5 turns on. When zone (020) is restored and a fire reset is performed, LED 5 turns off.

The PC4612 uses the same programming as the PC4216, and is therefore done in the same programming sections. These sections are described below as they relate to the PC4612. For instructions on how to program the PC4010/4020 and its modules, refer to your PC4010/4020 Installation Manual. For information on programming PC4216 modules, refer to your PC4216 Installation Instructions.

##### 1. Choose a Custom Group

Ref #: [000703XX] where XX = 01-09 (PC4612 number)

Program each PC4612 to use one of nine custom groups. More than one module may follow the same custom group. Enter the number of the custom group the PC4612 will follow (enter 01-09). To exit, press [#].

##### 2. Program a Custom Group

Ref #: [000704XX] where XX = 01-09 (Custom Group 01-09)

A custom group is a set of 16 programmed output options. Each output in a custom group can be programmed to operate according to a different output option.

- 1 Choose the output to be programmed (01-16)
- 2 Enter the number of the output option to be used for that output.
- 3 To exit, press [#].

**Please refer to the System Installation Manual for information on limitations regarding product use and function and information on the limitations as to liability of the manufacturer.**

The recommended output options for the PC4612 are (22), (48), (55), (56), (57). Their descriptions are listed below.

### 4.3 Recommended Output Options

#### Zone Follow (22)

For zones that are programmed as Fire or Fire Supervisory, the zone follow output will turn on the LED when the fire zone is in alarm, or when the fire supervisory zone is off-normal (zone shorted). The LED will only turn off when the zone has been restored and a fire reset has been performed. *Use this option for PC4612 output numbers 01 - 12.*

Outputs 1-10 have red LEDs and are intended for fire alarm zone annunciation. Outputs 11-12 have yellow LEDs and are intended for fire supervisory zone annunciation.

Use only the red LEDs for fire alarms and only the yellow LEDs for fire supervisory. This annunciator is intended for fire related outputs only. Do not use the module for other kinds of system annunciation.

#### Fire Zone Tbl. (48)

The output will activate when a fire zone is bypassed, or when a fire zone trouble condition is detected. The output will deactivate when the zone is unbypassed or the trouble is restored. *Use this option for PC4612 output number 13.*

#### Common Fire Tbl. (55)

The output activates when any of the following troubles are detected by the panel. The output deactivates when the trouble is cleared:

- Any system AC or battery trouble (PC4020, PC4820, PC4204, PC4701)
- Any system communicator trouble (TLM1, TLM2, FTC, LINKS)
- Ground Fault trouble

*Use this option for PC4612 output number 15.*

#### Bell Trouble (56)

The output activates for a trouble (open or short) on any supervised system bell output (PC4010/4020 or PC4702). The output deactivates when the trouble is cleared. *Use this option for PC4612 output number 14.*

#### AC Status (57)

The output will be ON when AC power is present on the PC4010/4020, as well as all enrolled modules (PC4204, PC4820, PC4702). If the PC4010/4020 or any module loses AC power, the AC Fail Delay timer will start (see your PC4010/4020 Installation Manual for more information). When the timer expires (or if it is programmed to be 0), if the AC is still missing, the output will turn OFF. An AC Fail trouble condition will be generated. When AC power is restored, the output will again wait for the AC Fail Delay timer to expire. If the AC power is still on at the end of the delay, the output will turn ON. *Use this option for PC4612 output number 16.*

### 4.4 Finishing

Make sure you label each of the 12 zone lights in the space provided on the annunciator. When you have finished installing and programming the PC4612, instruct the end-user of the system how to interpret events using the annunciator.

### PC4612 Programming

PC4612 Module No.:

[000703XX]

PC4216 Options

NOTE: XX = module # (Enter 01 - 09)

Custom Group No.:

[000704XXYY]

PC4216 Custom

NOTE: XX = custom group # (Enter 01 - 09); YY = output # (Enter 01-16)

Output No.	PC4612LED		Recommended Option	Output Option	Zone
1	1	For Fire Zones (Red)	22	<input type="text"/>	Select Zone 001-128 (PC4020), 001-064 (PC4010)
2	2		22	<input type="text"/>	Select Zone 001-128 (PC4020), 001-064 (PC4010)
3	3		22	<input type="text"/>	Select Zone 001-128 (PC4020), 001-064 (PC4010)
4	4		22	<input type="text"/>	Select Zone 001-128 (PC4020), 001-064 (PC4010)
5	5		22	<input type="text"/>	Select Zone 001-128 (PC4020), 001-064 (PC4010)
6	6		22	<input type="text"/>	Select Zone 001-128 (PC4020), 001-064 (PC4010)
7	7		22	<input type="text"/>	Select Zone 001-128 (PC4020), 001-064 (PC4010)
8	8		22	<input type="text"/>	Select Zone 001-128 (PC4020), 001-064 (PC4010)
9	9		22	<input type="text"/>	Select Zone 001-128 (PC4020), 001-064 (PC4010)
10	10		22	<input type="text"/>	Select Zone 001-128 (PC4020), 001-064 (PC4010)
11	11	For Fire Supervisory (Yellow)	22	<input type="text"/>	Select Zone 001-128 (PC4020), 001-064 (PC4010)
12	12		22	<input type="text"/>	Select Zone 001-128 (PC4020), 001-064 (PC4010)
13	Zone Trouble	Yellow	48	<input type="text"/>	
14	Bell Trouble		56	<input type="text"/>	
15	System Trouble		55	<input type="text"/>	
16	AC On		57	<input type="text"/>	