# Installation Instructions

The PC5700 is a zone expansion module to be used with any control panel which supports the PC5108 module. In addition to four general purpose zone inputs, the module provides the following features: two Class A supervisory waterflow zones, ground fault detection and dual-supervised telephone lines. The PC5700 connects to a control panel via the 4-wire Keybus using standard 22-gauge unshielded cable.

PC5700 Connection Diagram
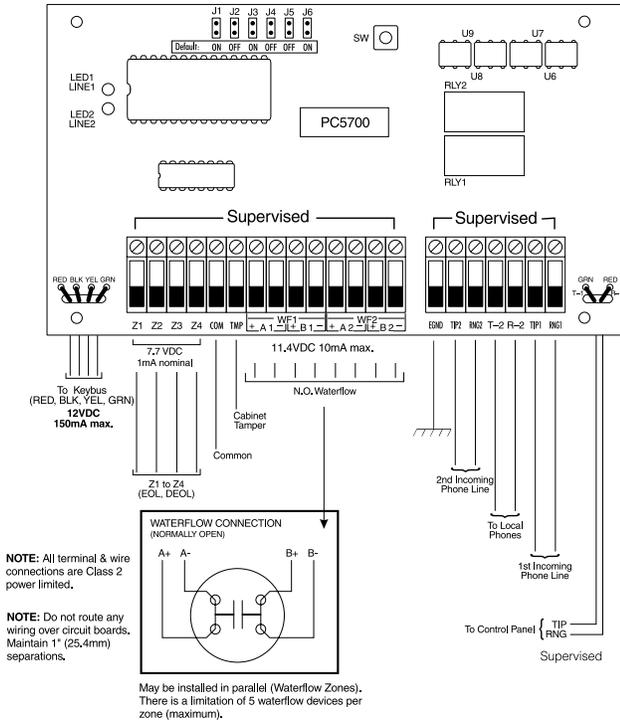
Zone Inputs

The first four zone inputs (Z1-Z4) on the PC5700 are general purpose zones which can be programmed as any zone type offered by the alarm control panel.

The last four zone inputs are as follows:

Zone #	Zone Type	Terminals
Zone 5	Class A (waterflow)	A1+, A1–, B1+,B1 circuit 1
Zone 6	Class A (waterflow)	A2+, A2–, B2+,B2 circuit 2
Zone 7	Ground fault detection zone	EGND
Zone 8	TLM fault	TIP2, RNG2, TIP1, RNG1

The zone definitions for these four zones should be as follows:

Zone 5   [07] Delayed Fire or [08] Standard Fire

Zone 6   [07] Delayed Fire or [08] Standard Fire

Zone 7   [08] Standard Fire

Zone 8   [09] 24Hr Supervisory (LINKS)

! **For Commercial Fire installations, please refer to Section 6 of the PC5020/PC5020CF Installation Manual.**

! **Zone 7 and Zone 8 do not need to be wired and can be programmed as null (00) if the control panel used has a software version of 3.1 or higher.**

! **When installing the PC5700 fire module, ensure that a minimum 1/4" (6.4mm) separation is maintained at all points between power limited and all other non-power limited wiring and connections.**

WARNING: A maximum of 100V RMS may be present on telephone connections. Disconnect prior to servicing.

Jumpers J1-J6

Jumpers are used to determine which zones will be assigned to the PC5700. Jumpers J1-J3 control the first four PC5700 zones. Jumpers J4-J6 control the second four PC5700 zones (two water-flow, ground fault and TLM fault zones).

Jumper Settings

The PC5700 module can be used to add up to 6 additional hardwired zones to the control panel.

For control panels v3.x and higher, please refer to the jumper settings below:

Expander Zones	Jumpers			System Zones
Group A (Zones 1-8) Group B (Not used)	J1	J2	J3	**Assigned**
	ON	ON	ON	Zones Disabled
	OFF	ON	ON	Zones 9 - 16
	ON	OFF	ON	Zones 17 - 24
	OFF	OFF	ON	Zones 25 - 32
	ON	ON	OFF	Zones 33 - 40
	OFF	ON	OFF	Zones 41 - 48
	ON	OFF	OFF	Zones 49 - 56
	OFF	OFF	OFF	Zones 57 - 64

! *On control panels with software versions 3.x and higher, the PC5700 v2.0 will operate in a single group of 8 zones.*

DSC® PowerSeries™

PC5700
Fire Module v2.0

WARNING 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.

For control panels v2.x and lower, please refer to the jumper settings below:

Expander Zones	Jumpers			System Zones Assigned
Group A (Zones 1-4)	J1	J2	J3	
Group B (Zones 5-8)	J4	J5	J6	
	ON	ON	ON	Zones Disabled
	OFF	ON	ON	Zones Disabled
	ON	OFF	ON	Zones 9-12
	OFF	OFF	ON	Zones 13-16
	ON	ON	OFF	Zones 17-20
	OFF	ON	OFF	Zones 21-24
	ON	OFF	OFF	Zones 25-28
	OFF	OFF	OFF	Zones 29-32

❗ ***On control panels with software versions 2.x and lower, the PC5700 v2.0 will operate in two groups of four zones.***

Ground Fault Detection

Ground fault detection must be enabled for Commercial Fire installations by connecting the EGND terminal on the PC5700 to a solid earth ground. Upon detection of a ground fault trouble, the module will cause a fault on module Zone 7.

❗ ***On control panels with software version 3.1 and higher, the module will communicate the ground fault to the panel directly via the keybus. Zone 7 does not need to be used in this case.***

Telephone Line Monitoring by the PC5700

The PC5700 module has the capacity to monitor two telephone lines. When the PC5700 module detects a problem with the main line it will automatically switch to the secondary line. The secondary line will be used by the panel until the problem with the main line is cleared. The PC5700 can detect the problem and switch to the secondary line before the panel generates a TLM Trouble. Whenever the PC5700 detects a problem on either line it will cause a tamper on module zone 8.

The PC5700 has two onboard LEDs that are used to indicate the current status of each of the telephone lines. If a TLM Fault is detected on either line the appropriate LED will be on. When the switch located at the top of the module is pressed and held, the LEDs corresponding to the last telephone line restored from the trouble state will turn on. This function will only work if both lines are currently restored. The LED's will return to normal operation when the switch is released.

❗ ***When using control panels with software versions 3.1 and higher, the module will communicate to the panel which phone line is in TLM Fault. Zone 8 does not need to be used in this case.***