

# Installation Instructions

**Limited Warranty** Digital Security Controls Ltd. warrants that for a period of twelve months from the date of purchase, the product shall be free of defects in materials and workmanship under normal use and that in fulfillment of any breach of such warranty, Digital Security Controls Ltd. shall, at its option, repair or replace the defective equipment upon return of the equipment to its factory. This warranty applies only to defects in parts and workmanship and not to damage incurred in shipping or handling, or damage due to causes beyond the control of Digital Security Controls Ltd., such as lightning, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration or improper application of the equipment. The foregoing warranty shall apply only to the original buyer, and is and shall be in lieu of any and all other warranties, whether expressed or implied, and of all other obligations or liabilities on the part of Digital Security Controls Ltd. This warranty contains the entire warranty. Digital Security Controls Ltd. neither assumes, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product.

In no event shall Digital Security Controls Ltd. be liable for any direct or indirect or consequential damages, loss of anticipated profits, loss of time or any other losses incurred by the buyer in connection with the purchase, installation or operation or failure of this product.

**Warning:** Digital Security Controls Ltd. recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

#### FCC COMPLIANCE STATEMENT

**CAUTION:** Changes or modifications not expressly approved by Digital Security Controls Ltd. could void your authority to use this equipment.

This equipment generates and uses radio frequency energy and if not installed and used properly, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for Class B device in accordance with the specifications in Subpart "B" of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in any residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to television or radio reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient the receiving antenna
- Relocate the alarm control with respect to the receiver
- Move the alarm control away from the receiver
- Connect the alarm control into a different outlet so that alarm control and receiver are on different circuits.

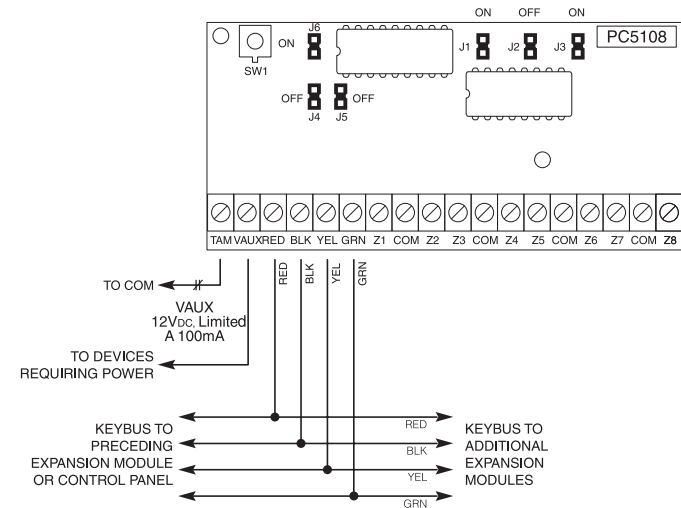
If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the FCC useful: "How to Identify and Resolve Radio/Television Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402, Stock # 004-000-00345-4.

The PC5108 module can be used to add up to 8 additional hardwired zones to the PC5010, PC5015 & PC5020 control panels (see the control panel *Installation Manual* for complete installation instructions).

## Specifications

- Module Current Draw: 35 mA
- Auxiliary Current: 100 mA (PTC protected - fuseless design)

## Terminal Description



**TAM** - This can be used to tamper the cabinet in which the PC5108 is mounted. Connect a normally closed (NC) switch across TAM and BLK. If the tamper is not being used connect a piece of wire across TAM and BLK to remove the trouble condition.



PC5108  
8 Zone Expander  
Version 2.0

**!** *There is a built-in tamper switch on the expander module located in the top left corner of the circuit board. If the cabinet in which the PC5108 Zone Expander is mounted has the hardware required to depress this tamper switch, DO NOT connect anything to the TAM terminal.*

**VAUX** - Used to provide power for devices. Maximum current draw is not to exceed 100 mA. Connect the positive lead of powered devices to VAUX and the negative to BLK or any COM terminal.

**KEYBUS** - The 4 wire KEYBUS connection is used by the panel to communicate with the module. Connect the RED, BLK, YEL and GRN terminals to the KEYBUS terminals on the PC5010, PC5015 & PC5020 main control.

**Z1 to Z8** - Wire the zones according to the description found in the control panel *Installation Manual*.

### Jumper Settings

The PC5108 module can be used to add up to 8 additional hardwired zones to the PC5010, PC5015, or PC5020 control panel (see *Installation Manual* for complete installation instructions).

#### Jumpers

Jumpers are used to determine which zones will be assigned to the expander.

**!** *On control panels with software versions 3.X and higher, the PC5108 v2.0 will operate in a single group of eight zones.*

For control panels V3.x and higher, please refer to the jumper settings below...

Expander Zones	Jumpers			System Zones Assigned
Group A (Zones 1-8) Group B (Not used)	J1	J2	J3	
	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 2.X and lower, the PC5108 v2.0 will operate in two groups of four zones.*

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

### To Add Hardwired Zones to a Control Panel

1. Connect module to the Keybus (with the panel powered down).
2. Set the jumpers on the module.
3. Power up the system.
4. Enter section [902] and wait 1 minute.
5. Enter section [903] to verify that the module is supervised.
6. Define the zones in sections [002]-[004], [109]-[164] for PC5020.
7. Add the zones to the appropriate partition in sections [202]-[265].