

Universal Expander Module in Low Profile Enclosure. P/N: 995004 INSTALLATION MANUAL

Overview

The Universal Expander Module connects to a Model 3000/Access 4000 system **OR** a Model 2000 system, providing an additional 16 Zone inputs, 8 Auxiliary outputs and 2 Siren drivers. When used in a Model 3000/4000 system, the number of Zones or Auxiliaries can be further expanded using plug-in expansion boards. *See page 12 for details of the expansion options.*
Note that only one type of these expansion options can be fitted at a time.

Up to 5 Universal Expander modules can be installed in a Model 2000, and up to 64 in a Model 3000/4000 system.
(Note: Depends on Memory option fitted to Control module)

IMPORTANT NOTES:

- 1) **Zones 17 to 32.** When a 16 Zone Expander board is NOT fitted to a Universal Expander that is configured as a "B" type, Zones 17 to 32 may appear as being in the Alarm or Tamper state when viewed via the Test menu. (MENU, 4, 1) THIS WILL NOT AFFECT SYSTEM OPERATION. These zones will not physically exist on the module, and would therefore not be assigned to any Areas, or programmed to perform any function. The Zones are processed in this way to provide protection against unauthorized removal of a 16 Zone Expander, in addition to the protection provided by the cabinet tamper switch.
- 2) **Relay Expander Boards Auxiliary numbering.** On Revision H or later, the Auxiliary numbers used on all Relay Boards are now sequential. (On PCB Revision A to G, Auxiliary numbers used on the 2nd & 3rd Relay Boards are non-sequential) If replacing a Revision A to G PCB with a Revision H PCB, the Rev. A to G numbering scheme can be retained by powering down the PCB, setting DIPSwitch SW2, Switch 8 to ON, then re-applying power. *See tables on page 12.*
- 3) **Model 2000.** This product is only available in Australia and New Zealand.
- 4) **Model 2000+.** The Universal Expander CANNOT be used with the Model 2000+. Use 2000 Expander Modules. (The Model 2000+ was discontinued in 1997)

REVISION H ENHANCEMENTS:

The latest Revision of the Universal Expander board, 933004 Revision H, provides a number of new features, an improved connector and component layout and is simpler to configure. The main enhancements are:

1) Selectable End-of-line (EOL) Resistor Values

Selectable End-of-line Resistor values are now supported. This feature caters for installations where the Universal Expander is replacing another system that uses different EOL values. The Inner Range Concept EOL values are enabled by default and 6 alternative EOL schemes are also available. Selection of an EOL scheme is via DIPswitch settings and will effect all Zone Inputs on the Module and the Zone expansion board (if fitted).

2) Field Firmware Upgrades

Firmware upgrades can now be performed in the field using a Concept 3/4000 Port 0 cable and a simple software utility. Refer to the Inner Range Technical Support Web pages for details.

3) Extra "DET+" outputs.

Additional output connectors are provided for Detector power. These are situated with the Zone Input connections.

4) Battery deep discharge protection.

Power supply design now includes a relay circuit for battery deep discharge protection.

5) Enhanced surge protection.

Includes provision of an Earth lug on the PCB to cater for an earth connection to the mains input terminal block or the earth wire on the output of a 3-wire plug-pack.

6) Detailed labelling of DIPswitches and links.

DIPswitches and Links are now labelled with option details.

7) Enhancements to Auxiliary mapping for Relay boards.

Auxiliary numbering on the 2nd and 3rd Relay boards is now sequential. A DIPswitch option is also provided to revert back to the numbering scheme used in Revision A to G boards if required.

e.g. When a Revision H or later PCB is replacing an earlier Revision.

See "DIPSwitch settings" on page 11 and the tables on page 12.

Expander Module Parts List

- Expander Module PCB mounted in metal box with Transformer or Plug-pack.
- Installation Kit containing:
 - 5 x 2 Way plug-on screw terminals. (One may be pre-installed on the AC input)
 - 7 x 8 Way plug-on screw terminals.
 - 2 x 6.3mm Tamper switch connectors.
 - 1 x 2 Amp Fuse. (Spare)
 - 20 x 2k2 End-of-line resistors. (red-red-black-brown-brown). For 16 Zone Inputs plus 4 x spare.
 - 20 x 6k8 End-of-line resistors. (blue-grey-black-brown-brown) For 16 Zone Inputs plus 4 x spare.
 - Tamper switch and Tamper switch bracket.
 - Battery connection cables - 40mm.
 - 1 x 500 milliAmp mains fuse. (Spare - If Mains Transf. fitted)
- Installation Manual. (This document)

AC Supply:

The Universal Expander is supplied with one of the following AC supply options:

- Internal 3Amp Power Transformer with associated mounting, interconnection and fuse hardware.
- 1.5Amp Plug Pack.

In countries where the Mains input cable is not pre-fitted, the following parts are also supplied:

- 1 x Plastic Cable grommet and sufficient mounting screws to assemble all parts to the housing.

Mechanical Specifications

Dimensions: Length: 460 mm. Width: 360 mm. Depth: 85 mm.
 Weight: 9.2 kg. (Includes mains transformer, battery and cover)

Electrical Specifications

Power Supply Input:	Transformer Input Voltage:	240V AC -10% / +10%. 50 Hertz.
	Transformer Output Voltage:	16.5V AC. 50 Hertz.
	Current Consumption:	Maximum 500 milliAmps from 240V AC Source.
	Fuse Protection:	Separate AC mains input fuse. 500 milliAmps. M205 (20mm).
	PCB AC Input Voltage:	16 to 18V AC. 50 Hertz.
	Battery Capacity:	12V 7 AH. Sealed Lead Acid Battery.
	Battery Input Fuse:	5 Amperes.

Power Supply Output:

OUTPUT CURRENT	LK4 Setting	Total Current Limit	Static Expander Current	Allowance for Battery charging	Maximum Ancillary Current
1.5A Plug-pack	NOT fitted	1.3 Amps	150 mA	300 mA	700 mA
3A or 4A Transformer	Fitted	2.2 Amps	150 mA	300 mA	1.2 Amps

Fuse Protection: Separate 2 Ampere fuses provided for: Siren1, Siren2, LAN Power & Detector Power.
 ALWAYS REPLACE FUSES WITH THE SAME FUSE TYPE AND VALUE!

NOTES:

- 1) "Max Ancillary Current" is the maximum combined current allowed to be drawn from LAN "POS" and "DET+".
- 2) Battery re-charge times will depend on the remaining current available to the Battery charger after the "Static Controller Current" and the "Ancillary Current" are subtracted from the "Total Current Limit".
 To shorten Battery re-charge times, minimise the Ancillary current by using separate battery-backed Power Supplies for Detectors, etc.
- 3) See data supplied with detectors and output devices for actual current consumption of items connected to the module.

Installation and Safety Instructions.

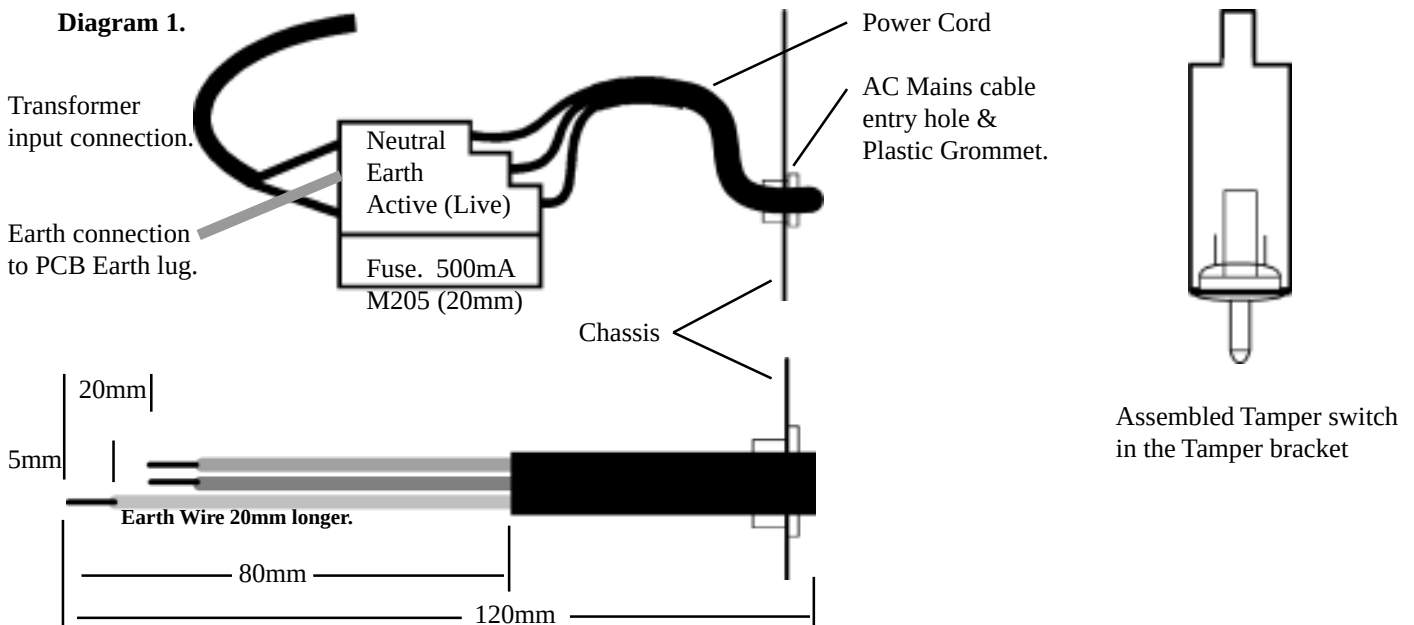
Electrical AC Mains Power connection.

(Only applicable to models fitted with an internal AC Mains Transformer)

In countries where the module is supplied without a mains power cord, a suitable mains power cord for connection to the 240V AC Mains supply must be installed by a suitably qualified electrician or technician.

1. Strip 80mm of the sheath from the end of the power cord. Trim 20mm from the ends of the Active and Neutral conductors so that the Earth conductor remains slightly longer.
2. Strip 5mm of insulation from each of the conductors.
3. Feed at least 150mm of the power cord through the AC mains cable entry hole of the chassis.
4. Terminate the power cord in the terminal and fuse block as illustrated in Diagram 1 below. (Note that the Active wire is always connected into the termination nearest to the fuse)
5. Determine the appropriate length of power cord between the terminal block and the cable entry hole. (Approx. 120mm), fit the plastic grommet (supplied) around the power cord and apply pressure to both sides of the grommet to clamp the cable. The grommet can now be inserted into the AC mains cable entry hole.

IMPORTANT NOTE: An AC Mains socket-outlet shall be installed near the equipment and shall be easily accessible for connection of the mains power cord.



Mounting the Unit. See Diagram 2.

1. Installation environment should be maintained at a temperature of 0° to 40° Celsius and 15% to 85% Relative humidity (non-condensing)
2. CE Control Modules are supplied in metal enclosures which must be secured to a flat, vertical surface using fasteners through the four “keyhole” mounting holes in the chassis.
3. When mounting this product onto flammable surfaces, a fire protection backplate MUST BE INSTALLED. The mounting holes in the backplate align with the mounting holes in the chassis so no additional mounting hardware is required. This backplate is available from your distributor. Please quote part number 926017.
4. Insert the tongue of the tamper switch bracket through the slot in the chassis and the plunger into the hole provided in the base, before the lid is secured to the chassis. (The slot and hole are located at the opposite end to the transformer)
5. In Order to comply with regulations, the screw provided to fix the cover to the chassis must be tightly secured.

Connecting Power to the PCB. See Diagram 2 below.

IF INTERNAL MAINS TRANSFORMER FITTED.

1. The flying lead from the Transformer secondary is pre-wired to the “AC” Input connections on the PCB. This lead should be routed underneath the PCB mounting plate.
2. An EARTH wire must be connected from the EARTH on the “Terminal Block and Fuse” to the EARTH Lug on PCB (E) if not already fitted.

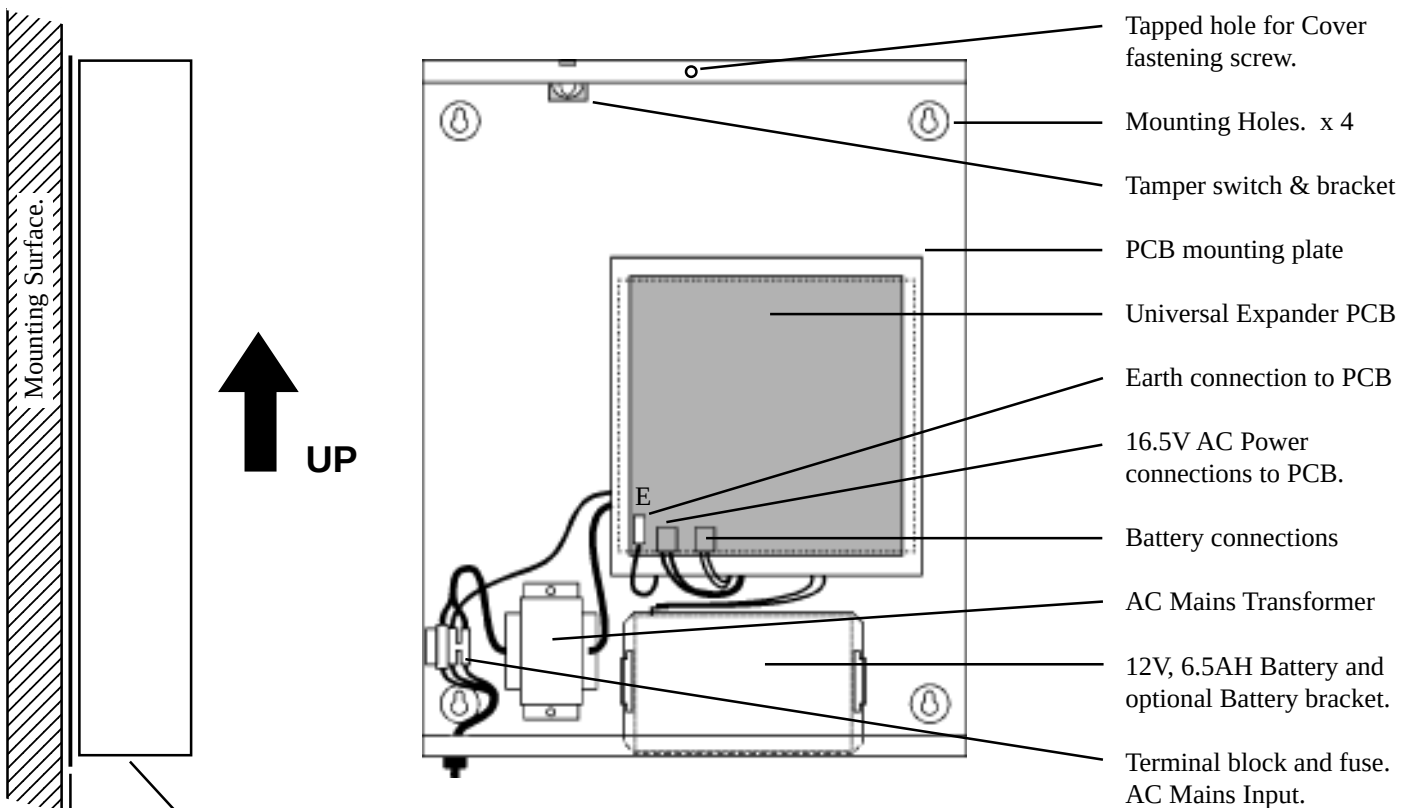
IF PLUG PACK SUPPLIED.

1. Feed the 16V AC cable from the plug pack into the enclosure via one of the cable entry holes. Ensure that 5mm of insulation is stripped from the end of the cables and terminate into the “AC” Input connections on the PCB.
2. When a 3-Wire Plug Pack is used, terminate the Earth Wire with the 6.3mm Quick Connect socket and connect to the EARTH lug on the PCB (E).

Connecting the Battery to the PCB. See Diagram 2 below.

1. Connect the Red Battery cable provided between the “+B” connection on the PCB and the Positive (+) Battery terminal.
2. Connect the Black Battery cable provided between the “-B” connection on the PCB and the Negative (-) Battery terminal.
The cables should be routed underneath the PCB mounting plate to avoid interference with other cables.

Diagram 2.



IMPORTANT NOTE: This diagram shows the recommended orientation for installing the enclosure with the Battery located on the bottom lip. If the enclosure is mounted with the Battery on the left-hand side or right-hand side of the enclosure, the optional Battery bracket must be used. Part number 926005.

Module Numbering

The Expander Module number is set using DIPswitches on SW1.

The Module number equals $n + 1$, where n is the binary number set on the DIPswitches.

DIPswitches 1 to 7 are used for Model 3000/Access 4000.

DIPswitches 1 to 3 only are used for Model 2000. (Australia & New Zealand only)

Module No:	DIPswitch: 1	2	3	4	5	6	7
	Binary value: 1	2	4	8	16	32	64
1	off	off	off	off	off	off	off
2	ON	off	off	off	off	off	off
3	off	ON	off	off	off	off	off
4	ON	ON	off	off	off	off	off
5	off	off	ON	off	off	off	off
Limit of 2000 Expander Module Numbers.							
6	ON	off	ON	off	off	off	off
7	off	ON	ON	off	off	off	off
8	ON	ON	ON	off	off	off	off
9	off	off	off	ON	off	off	off
10	ON	off	off	ON	off	off	off
11	off	ON	off	ON	off	off	off
12	ON	ON	off	ON	off	off	off
13	off	off	ON	ON	off	off	off
14	ON	off	ON	ON	off	off	off
15	off	ON	ON	ON	off	off	off
16	ON	ON	ON	ON	off	off	off
through to							
64	ON	ON	ON	ON	ON	ON	off
...99	off	ON	off	off	off	ON	ON

IMPORTANT NOTE:

In a Concept 3000/4000 system, a DIPswitch option (*see pages 10 & 11*) allows the Universal Expander to be configured as:

- A “B” Type (Big) Expander supporting up to 32 Zone Inputs/Auxiliaries.
- An “E” Type Expander supporting up to 16 Zone Inputs/Auxiliaries.

Although the Concept 3000/4000 memory structure allows for 99 of some Module types, the number of Big Expander (“B” type) Modules is limited to 64 or less depending on the Memory size fitted and Memory configuration selected.

Current Concept 3000/4000 Memory configuration settings (V5.0 or later) for Universal Expanders.

	Standard	Access	Enlarged	Apartments	Access 2	Special	Alarms	X Door	IP Door
32k (256kBit)									
Expander Modules 32Z (B type)	1	1	0	0	1	1	2	0	-
Expander Modules 16Z (E type)	3	2	0	0	2	1	2	0	-
128k (1MBit)									
Expander Modules 32Z (B type)	4	2	6	1	2	1	15	2	0
Expander Modules 16Z (E type)	6	6	8	2	4	2	0	2	0
512k (4MBit)									
Expander Modules 32Z (B type)	20	5	8	4	16	16	64	0	0
Expander Modules 16Z (E type)	44	20	24	16	0	16	0	16	0

J1. Expansion Header.

T11. Earth Terminal.

T9. Transformer/Plug pack connection.

AC 16 to 18 V AC input from transformer.

F1. Battery Fuse. F4. LAN Fuse

T7. Battery Connections.

+ To +ve terminal of 12V 6.5AH Battery.

- To -ve terminal of 12V 6.5AH Battery.

LK1 - LK3. LAN System select.

3K For Concept 3000/Access 4000.

2K For Concept 2000 systems. (Aust & NZ only)

LK4. Power Supply Current Limit.

OFF 1Amp for 1.5A Plug pack.

ON 2Amp for 3A or 4A Transformer.

DIPswitches:

SW1. 3/4000: Module number

(See page 5)

2000: Module number and options.

(See page 5)

SW2. 3/4000: Module Options.

(See pages 10 & 11)

2000: AC Fail Delay. (Switch 3)

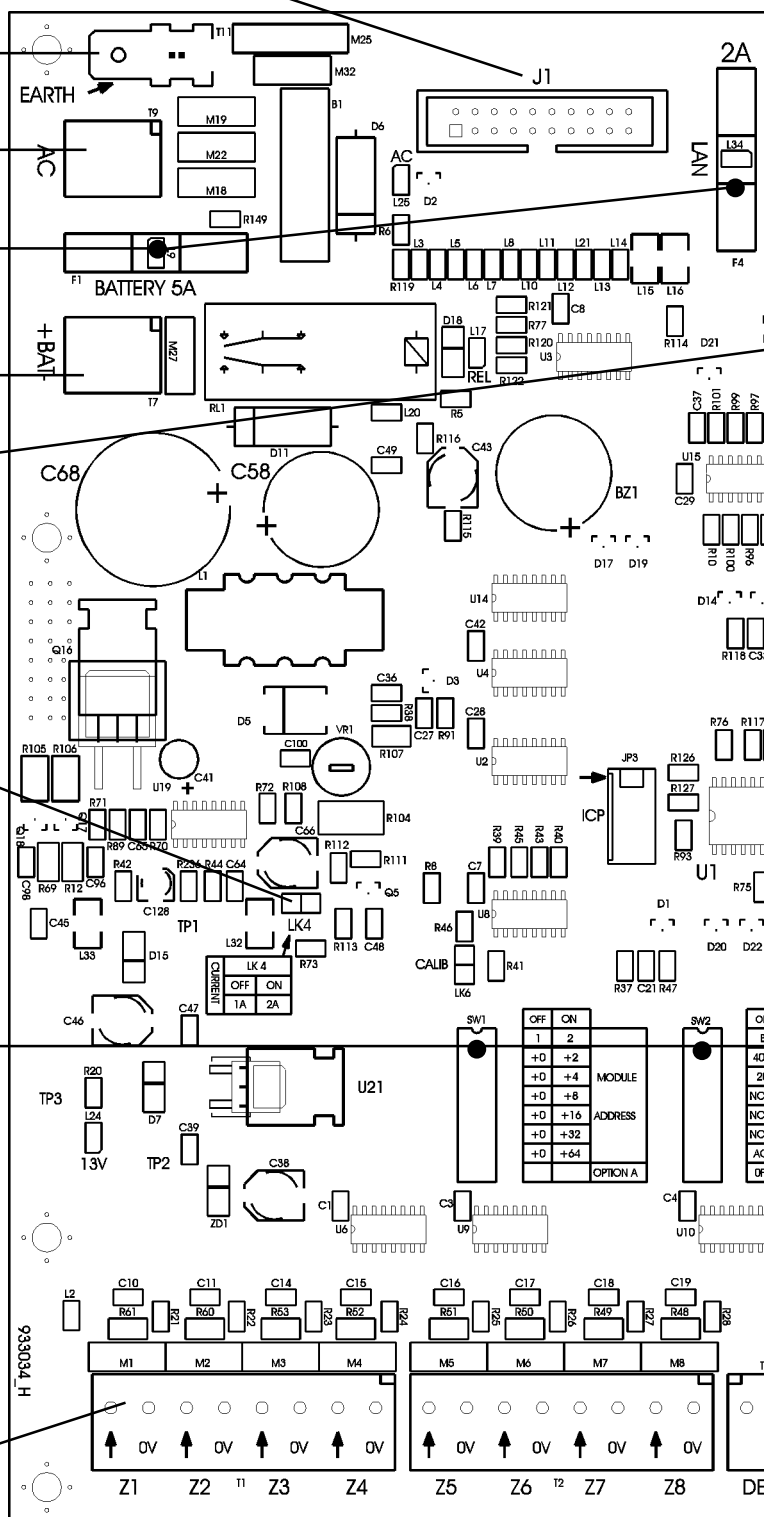
SW3. 3/4000: End-of-line Resistor value and

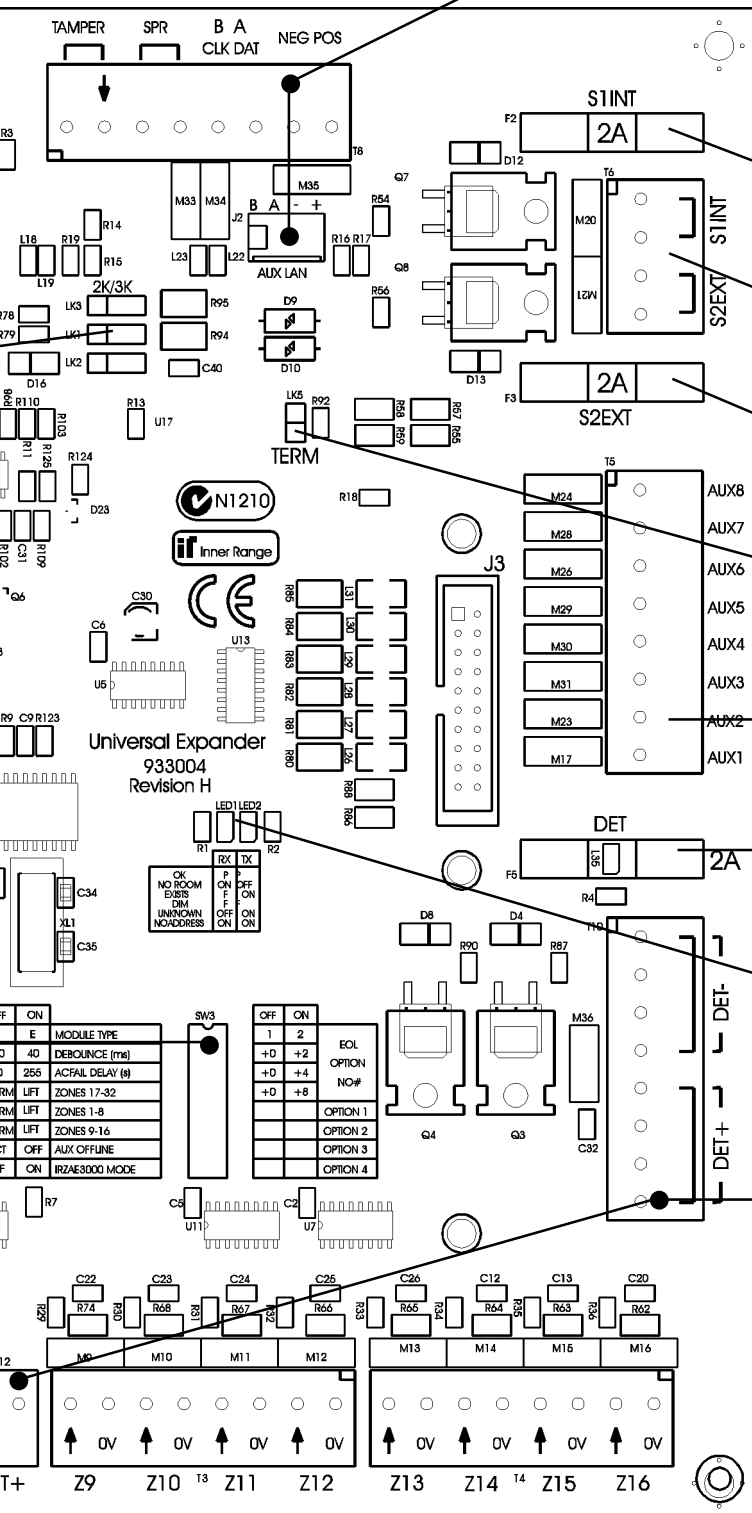
Auxiliary 1 - 8 options.

(See page 11)

2000: LAN Key. (See Model 2000)

Supplement. Aust. & NZ only)



**T8 / J2. LAN & Tamper Switch Connections.**

POS: Connect outgoing LAN +ve to power subsequent modules if required.

NEG: Connect LAN Common (-VE)

LAN A/DATA: LAN Data A OR DATA connection.

LAN B/CLOCK: LAN Data B OR CLOCK connection.

SPR: "Spare". Connect incoming LAN +ve.

TAM: Connections for Tamper Switch (Supplied).
No End-of-Line resistors required.

Normally Open switch.

J2 is provided for temporary connection of an LCD Terminal for commissioning and fault finding, etc.

F2. Internal Siren Fuse M205.

REPLACE WITH FAST BLOW FUSE OF THE SPECIFIED VALUE ONLY.

T6. Siren Connections. (See page 8)

S1INT: To internal 8 Ohm Siren speaker.

S2EXT: To external 8 Ohm Siren speaker.

F3. External Siren Fuse M205.

REPLACE WITH FAST BLOW FUSE OF THE SPECIFIED VALUE ONLY.

JP3. LAN Termination.

Fitted if unit is one of the two furthest modules from the Control Module or a LAN Isolator.

T8. Auxiliary outputs.

Auxiliaries 1 to 8. "Open Collector" outputs.
(See page 9)

F5. Detector Power Fuse M205.

REPLACE WITH FAST BLOW FUSE OF THE SPECIFIED VALUE ONLY.

LED1/RX LAN Data Receive / Poll.
& FAULT DIAGNOSIS

LED2/TX LAN Data Transmit / Clock
& FAULT DIAGNOSIS
See page 10 for details.

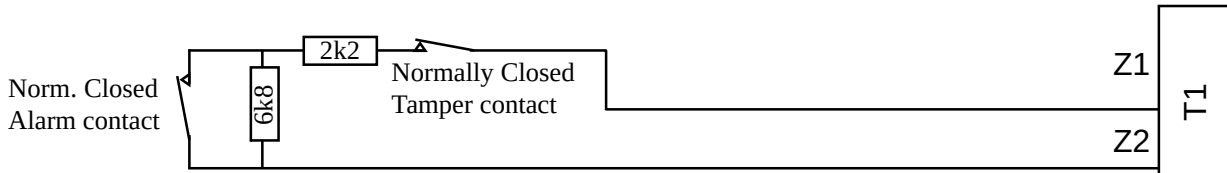
T10 / T12. Detector Power.

Fuse protected Power Supply output for +12V Detector Power.

Zone Input Wiring

Zone Inputs must be wired using dual end-of-line (EOL) resistors to provide 4-state monitoring for fault &/or tamper detection. The end-of-line resistors must be installed at the detection device.

NORMALLY CLOSED ALARM CONTACTS.



NORMALLY OPEN ALARM CONTACTS.

Model 3000/Access 4000. Wired in exactly the same manner as above. When programming the Zone Input, however, the option to “Swap Seal and Alarm conditions” must be set to [Y]es. [MENU], 7, 0.

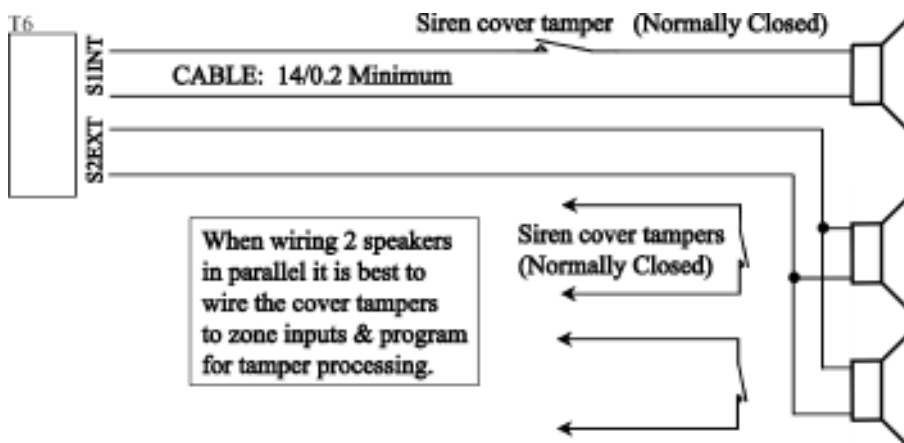
e.g.

E01:Z01	S	I	X	S	R	A	N	T
Options ->	n	n	n	Y	n	n	n	n

Model 2000. (Australia and New Zealand only) See page 8-13 of the Model 2000 Installers Manual for wiring method.

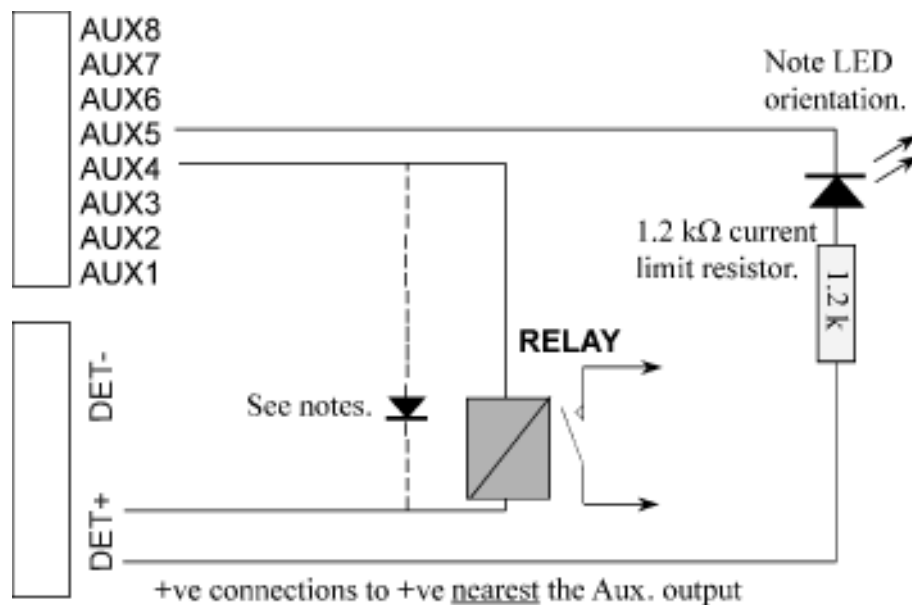
Siren Wiring

Maximum of two 8 Ohm Siren speakers may be connected to each siren driver, wired in parallel. Normally Closed Siren cover Tamper switches may be wired in series with the speaker cable. This method utilizes the siren speaker circuit monitoring. Siren tamper input/s should be disabled if siren/s not connected.

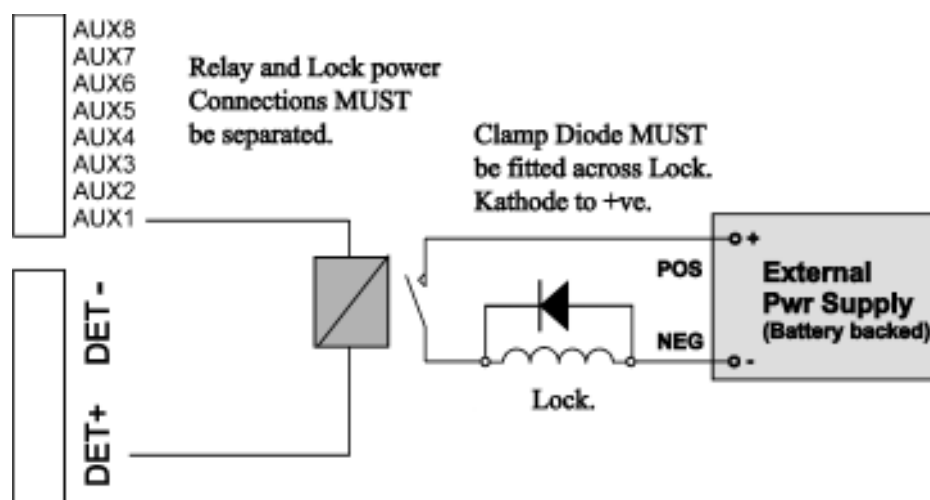


Auxiliary Output Wiring

- Auxiliaries 1 & 2 can switch up to 500mA continuous, and are suitable for inductive loads provided that a clamp diode is fitted across the load as shown below. (Cathode (bar) to +ve)
- Max current on any other individual Auxiliary must be less than 200mA.
- Total current drawn by Auxiliaries + LAN + Detectors must be less than:
 - a) 1.2 Amps if 3A/4A Transformer is used.
 - b) 700mA if 1.5A Plug-pack is used.
- When an external power supply is used to power auxiliary devices, a good common Negative connection **MUST** exist between the power supply and the module.
- Clamp diode should be fitted across inductive loads. Cathode (bar) to +ve.



Locks are activated via a relay. External power supply is used for lock power to prevent voltage spikes reaching the equipment, provide longer battery backup & minimise the possibility of earth loops.



Model 3000 / ACCESS 4000

See “Model 2000 Supplement” for LAN wiring, DIPswitch settings & Fault LED details when used on a Model 2000 system. (Australia and New Zealand only)

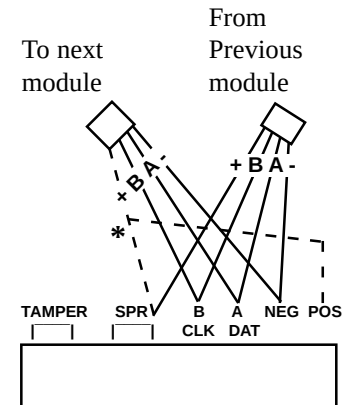
LAN Wiring - 3000 / Access 4000

- The POS terminal may be used to provide power to LCD Terminals, etc. in the vicinity of the Expander module, but note that this terminal must not be connected to the POS terminal on other Expanders, Control module or Power Supplies.
- If required, the LAN to subsequent Modules may derive +12V from the incoming LAN cable via the “SPARE” terminal.
* See diagram below.
- Current drawn from LAN POS and DET+ must not exceed 1.2 Amps.

The LAN is connected using twisted pair cable. One pair is used for Data A & B, and the other pair is used for POS & NEG.

Links: LK3, LK4 & LK5 MUST be set to “3000”

JP3 (LAN Termination) is fitted if unit is one of the two furthest modules from the Control Module or a LAN Isolator. (See “Model 3000/4000 Installation manual” or “LAN Installation & Troubleshooting” for more details.)



Expander Module Fault LEDs - 3000 / Access 4000

During normal operation, the REC & XMIT LEDs indicate LAN activity. At power-up, they also aid with the diagnosis of possible faults. The table below describes fault LED conditions and the suggested course of action to remedy any fault which may occur.

REC	XMIT	EXPLANATION / REMEDY
ON	ON	Module is un-addressed.
OFF	ON	Module type unknown. Control Module Firmware upgrade required.
Flash	ON	Duplicate Module. This module number already in use by a module of the same type.
Flash	Flash	Module number selected is too big for Control Module RAM size. Select a lower Module number.
ON	OFF	Too many modules on Network for Control Module RAM size. (32k = 16 Modules, 128k = 128 & 512k = 250.)

EXPANDER TYPE SELECTION - 3000 / Access 4000

In Model 3000 and Access 4000 systems V2 or later, the Universal Expander module must be configured as an “E” type or “B” type Expander to allow for more efficient use of Memory. The “type” is selected with DIPswitch 1 on SW2 as follows:

Off = “B” type Expander. (16 to 32 Zones) On = “E” type Expander. (16 Zones only)

A Zone Expander that can have from 16 to 32 Zones, and from 8 to 32 Auxiliaries is designated a “B” type module. (**B**ig Expander). The “E” type Module refers to the same physical Zone Expander product, but limited to the basic 16 Zones and up to 16 Auxiliaries. I.e. The 16 Zone Expansion board cannot be used, and only 8 additional Auxiliaries can be used.

If an Expander installation requiring only up to 16 zones initially may be expanded to more than 16 zones at a later date, it is recommended to make the Module a “B” type to allow for future expansion. (NOTE: This is not applicable to V1 systems, where all Expanders are “E” type and can be used with 16 or 32 Zones fitted. S1 on DIPswitch 1 must be left OFF in 3000 V1 systems.)

IMPORTANT NOTE:

When a 16 Zone Expander board is NOT fitted to a Universal Expander that is configured as a “B” type, Zones 17 to 32 may appear as being in the Alarm or Tamper state when viewed via the Test menu. (MENU, 4, 1)

THIS WILL NOT AFFECT SYSTEM OPERATION. These zones will not physically exist on the module, and would therefore not be assigned to any Areas, or programmed to perform any function. The Zones are processed in this way to provide protection against unauthorized removal of a 16 Zone Expander, in addition to the protection provided by the cabinet tamper switch.

Siren Operation

Expander Siren numbers will control sirens on both the “B” and “E” type Expanders. i.e. S00 = Control Module Siren; S01 = Sirens on E01 and B01; S02 = Sirens on E02 and B02; S03 = Sirens on E03 and B03, etc.

DIPSwitch settings - 3000 / Access 4000

SW1 Module number. *See details on page 5.*

SW2 Module Options.

SW	FUNCTION	OFF	ON
1	Expander type.	B type Expander. (32 Zones)	E type Expander (16 Zones)
2	Input Debounce time.	400mS (normal)	40mS (fast) Recommended setting when Lift button feedback is used.
3	AC Mains fail delay time.	20 seconds	255 seconds
4	Zones 17-32 in Lift Mode.	No Lift I/F boards.	Lift Interface board/s connected.
5	Zones 1 to 8 location (In Lift mode)	Onboard Zones 1-8 used.	Zones 1-8 external.
6	Zones 9 to 16 location (In Lift mode)	Onboard Zones 9-16 used.	Zones 9-16 external.
7	Offline Auxiliary states. (Universal Expander Firmware V5.03 or later only)	Auxiliary states will be maintained when offline.	If Module is offline for more than 15 seconds, all Auxiliaries are turned Off.
8	IRZAE3000 mode. (Auxiliary 17 to 32 mapping options.) <i>See table on page 12.</i>		24 Auxiliary Expander (995007) or Lift Interface board/s (994020 / 994020HV) connected.
		8 Relay Expander (995082E): Auxiliary mapping for the 2nd & 3rd Relay boards is sequential. (1 to 1)	8 Relay Expander (995082E): Auxiliary mapping for the 2nd & 3rd Relay boards reverts to the scheme used in Revision A to G PCBs.

SW3 End-of-line Resistor value options and Auxiliary 1-8 output options.

SW	FUNCTION	OFF	ON
1 - 4	EOL OPTIONS.	<i>See table below.</i>	
5	Aux 1 to 8 location	Onboard Auxiliaries 1-8 used.	Lift Interface board/s connected. (Aux 1-8 external.)
6 - 8	Spare		

Mode	Switch setting				Series EOL ("Sealed" value)	EOL across NC alarm contact	Purpose
	Sw 1	Sw 2	Sw 3	Sw 4			
0	OFF	OFF	OFF	OFF	2k2	6k8	Inner Range Concept (Default)
							Emulates (See note below)
1	ON	OFF	OFF	OFF	1k0	1k0	Digplex/Galaxy/Ademco
2	OFF	ON	OFF	OFF	2k2	2k2	C&K
3	ON	ON	OFF	OFF	2k2	4k7	Menvier/Scantronic
4	OFF	OFF	ON	OFF	4k7	4k7	Cardax
5	ON	OFF	ON	OFF	10k	10k	Pacom
6	OFF	ON	ON	OFF	10k	10k	Tecom
7 - 15	-	-	-	-	-	-	Spare (Do not use)

Note: This list of the EOL values commonly used in products from the specified manufacturers is provided as a guide only. Always check the actual values used in the installation before selecting one of these options.

Expansion Options (see note in Overview page 1)

16 Zone Expander board. 995006. Provides an additional 16 Zone Inputs when the Universal Expander is configured as a “B” type (Big) Expander. The board is installed on additional standoffs fitted to the chassis using the ribbon cable supplied.

OR

24 Auxiliary Expander board. 995007. Provides an additional 24 Auxiliary Outputs. Universal Expander must be configured as a “B” type (Big) Expander if Auxiliaries 17 to 32 are to be used. The board is installed on additional standoffs fitted to the chassis using the ribbon cable supplied.

NOTE: DIPSwitch SW2, Switch 8 (IRZAE3000 MODE) must be set to ON.

OR

8 Relay Expander board. 995082E. Provides 8, 16 or 24 Relay Outputs. Universal Expander must be configured as a “B” type (Big) Expander if 2 or 3 Relay Expander boards are connected. Up to 2 boards can be installed on additional standoffs fitted to the chassis. One board can be connected using the ribbon cable supplied. The 44cm Relay extension cable (P/N: 605019) is used to connect one or two additional Relay boards mounted in another enclosure.

NOTE: Auxiliary numbering on the 2nd and 3rd Relay boards is now sequential. When a Revision H or later PCB is replacing an earlier Revision A to G PCB, DIPSwitch SW2, Switch 8 (IRZAE3000 MODE) can be switched ON to revert back to the numbering scheme used in Revision A to G boards if required. See “Relay Board Auxiliary Mapping” tables below.

OR

Lift Interface board. 994020 (16-48VDC Button Voltage) & 994020HV (60-120VDC Button Voltage).

(Access 4000 systems ONLY) Provides low-level interface to Lift Control systems, including Lift button feedback, via 8 to 32 Relay outputs and Opto-isolated Zone Inputs. This allows for control and monitoring of User access to Lift floors. Each board controls up to 8 floors and up to 4 boards can be connected to a Universal Expander via the Lift Interface Extension Cable (P/N: 605020). Up to 64 floors may be controlled by using two consecutively numbered Expanders per Lift Car. The Lift Interface board/s can be installed on standoffs in the existing enclosure or mounted in a separate enclosure adjacent to the Universal Expander Module.

NOTE: DIPSwitch SW2, Switch 8 (IRZAE3000 MODE) and DIPSwitch SW3, Switch 5 (OPTION 1) must be set to ON.

Setting of DIPSwitch SW2, Switches 4, 5 and 6 (LIFT ZONES) depend on the number of Lift Interface boards connected.

RELAY BOARD AUXILIARY MAPPING WITH SW2 SWITCH 8 LEFT AT THE OFF SETTING. (Sequential numbering)

<u>1st Board</u>	<u>AUX. No.</u>	<u>2nd Board*</u>	<u>AUX. No.</u>	<u>3rd Board*</u>	<u>AUX. No.</u>
RL1	B/E??:X09	RL1	B??:X17	RL1	B??:X25
to	to	to	to	to	to
RL8	B/E??:X16	RL8	B??:X24	RL8	B??:X32

RELAY BOARD AUXILIARY MAPPING WITH SW2 SWITCH 8 ON. (Non-sequential numbering on 2nd & 3rd Relay boards.)

<u>1st Board</u>	<u>AUX. No.</u>	<u>2nd Board</u>	<u>AUX. No.*</u>	<u>3rd Board</u>	<u>AUX. No.*</u>
RL1	B/E??:X09	RL1	B??:X24	RL1	B??:X25
RL2	B/E??:X10	RL2	B??:X17	RL2	B??:X32
RL3	B/E??:X11	RL3	B??:X22	RL3	B??:X27
RL4	B/E??:X12	RL4	B??:X19	RL4	B??:X30
RL5	B/E??:X13	RL5	B??:X20	RL5	B??:X29
RL6	B/E??:X14	RL6	B??:X21	RL6	B??:X28
RL7	B/E??:X15	RL7	B??:X18	RL7	B??:X31
RL8	B/E??:X16	RL8	B??:X23	RL8	B??:X26

Reporting - 3000 / Access 4000

Reporting with most Contact ID maps will treat the Mini Expander, Exp32 and Exp16 as the same. (With the exception of the SIMSII map, which identifies all Module types) This means that care needs to be taken in a reporting system that the same module number is not used if you want unique reporting.

E.g. B01, B02, E03, B04, M05, E06, etc. ensures that all zones are reported individually.

Installing modules B01, E01 and M01, will mean that only zones 17 to 32 on Expander B01 will be reported uniquely. Expander 1, Zones 1 to 8 will represent Zones 1 to 8 on all three of the modules and Zones 9 to 16 will represent those Zones on both B01 and E01.

In SIMSII mapping, the following type numbers will apply:

Type 3= “B” type Expanders. Type 6= “M” type Expanders. (8 Zone Mini Expanders)
Type 7= “E” type Expanders.

Disclaimer: 1. The manufacturer &/or it’s agents take no responsibility for any damage, financial loss or injury caused to any equipment, property or persons resulting from the correct or incorrect use of the system or it’s peripherals. The purchaser assumes all responsibility in the use of the system and it’s peripherals.

2. While every effort has been made to ensure the accuracy of this manual, the manufacturer assumes no responsibility or liability for any errors or omissions. Due to ongoing development, this manual is subject to change without notice.