EC-Z8 Manual (ESX must be firmware 10.2.441 or above)

∞ **infinity** series
powered by EliteControl

8 Input Expander Module For ESX

The EC-Z8 connects directly to the keypad bus of the ESX control panel using the ARR-14 quick connect loom provided or via the on board keypad bus terminals

Each ESX control panel comes fitted with 8 on board inputs & can be expanded up to 64 inputs with the addition of our EC-Z8 expander modules. Each EC-Z8 module comes fitted with 8 inputs, allowing a maximum of 7 x EC-Z8 modules to be connected to 1 x ESX control panel

Each EC-Z8 supports:

- **8 x Individual inputs** - For PIR's, reed switches, smoke detectors & more
- **2 x 12VDC accessory power terminals** - Each 12VDC 1.6A Fused
- **1 x Tamper input**
- **2 x Quick connect keypad bus sockets** - Use with ARR14 bus loom
- **1 x Keypad bus screw down terminals** - 12V - GND - CLK - DAT
- **Sockets** for EC-PSU plug in power supply module

Power Requirements
Voltage In: 12-15VDC
Current: 40mA

Basic Connection Diagram
Below is a simple connection diagram using the ARR-14 quick connect looms provided
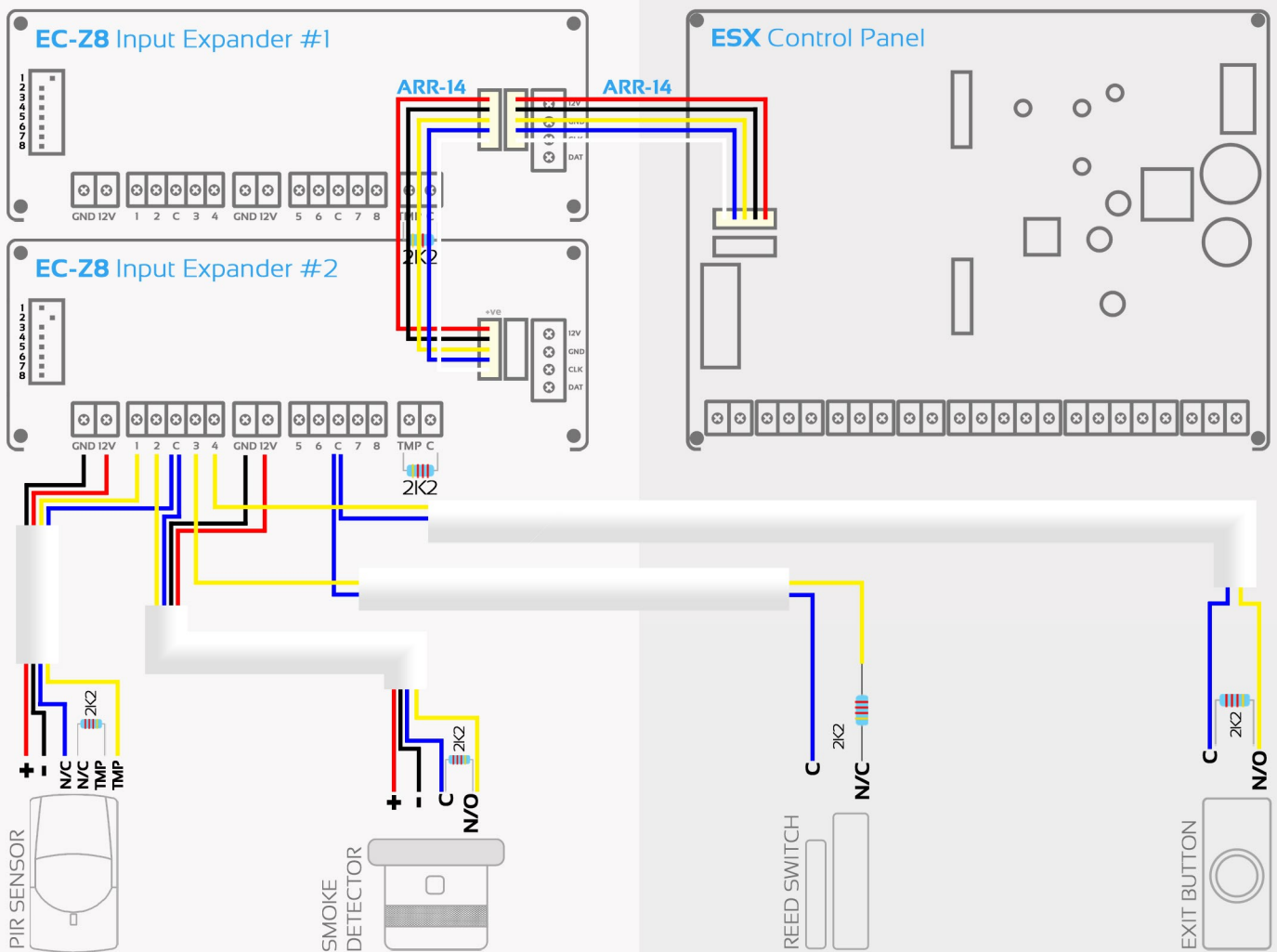
In this example:
- Input expander #1 dipswitch 1 is on, this means it is following inputs 9 - 16 on the system
- Input expander #2 dipswitch 2 is on, this means it is following inputs 17 - 24 on the system

PIR = Input 17   Smoke Detector = Input 18   Reed Switch = Input 19   Exit Button = Input 20

Dipswitch Addressing

- The EC-Z8 uses dipswitches 1 - 3 to address each module shown here
- Dipswitches 4 - 7 are unused on the EC-Z8 module

Use the chart below to set the EC-Z8 input address:

Expander	EC-Z8 Follows:	DIP 1	DIP 2	DIP 3
1	Inputs 9 - 16	ON	OFF	OFF
2	Inputs 17 - 24	OFF	ON	OFF
3	Inputs 25 - 32	ON	ON	OFF
4	Inputs 33 - 40	OFF	OFF	ON
5	Inputs 41 - 48	ON	OFF	ON
6	Inputs 49 - 56	OFF	ON	ON
7	Inputs 57 - 64	ON	ON	ON
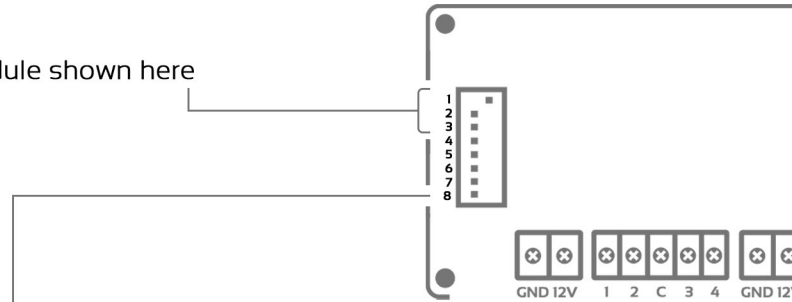
Important:
Dipswitch 8 controls the tamper function:

Dipswitch 8 Off = **Tamper input is active**
Requires a 2K2 resitstor shorted to common

Dipswitch 8 On = **Tamper input is inactive**
System ignores tamper input on this module

Input Programming (Basic)

- By default all inputs are configured for a PIR, reed switch or similar & require a 2K2 resistor to 'seal' the input

- There is a blue LED above each input to show the input state. If the LED is off the zone is sealed and ready

- Before programming you must first enter installer mode. This is done by pressing PROG followed by your installer code, then ENTER. The default installer code is 000000

Enable/Disable An Input in Programming(P122E)
Press PROG 122 ENTER (input number) ENTER (toggle option 1 on or off) ENTER. After entering the address & the input number as detailed above, you can toggle option 1 on or off. This enables or disables the input you are working on, then press enter to confirm. Note: Options 4 & 5 at address 122 must be off if using ESX-Z8

Push the right arrow to go to the next input or continue to another programming address
Overview
P 122 E 1-64 E 1 ENTER
— **Toggle 1 on or off (**1 on enables the input, 1 off disables the input**)**
— **Input number you wish to work on**
— **Address**

24 Hour Fire Input (P123E) Use for inputs that are connected to smoke or heat detectors
Press PROG 123 ENTER (input number) ENTER (toggle option 5 on or off) ENTER. After entering the address & the input number as detailed above, you can toggle option 5 on or off. This enables or disables the 24 hour input function, then press enter to confirm. Note: The input must also be enabled as explained above

Push the right arrow to go to the next input or continue to another programming address
Overview
P 123 E 1-64 E 5 ENTER
— **Toggle 5 on or off (**5 ON enables 24 hour fire, 5 OFF disables 24 hour fire**)**
— **Input number you wish to work on**
— **Address**

Troubleshooting Inputs (Basic) See complete troubleshooting guide or full manual for more information
- Metering between an input & common should give a voltage between 0.7VDC & 1.1VDC

- If the voltage is outside this range, check your wiring and that the resistor used matches the setting at address 125 in the full manual

EC-Z8 Inputs 1-4

1 2 C 3 4