

# ECONX – FIT OFF INSTRUCTIONS

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3. Fit Off – Smoke Sensors
4. Fit of Siren and Sounder
5. Partitioning, Night Arm and Panic Buttons
6. Fit Off Temperature Sensors
7. Fit off Light Switch's
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12. Support



# FIT OFF - LABELLING

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To ensure commissioning is straight forward we recommend completing the form included in the instructions and following your project scope.

Alarm circuits must be identified so Entry and Exit delays can be applied.

Temperature sensors must be clearly identified to ensure the correct probe will be controlling the required circuit.

Relay Controls	
Relay 1	Hot water cylinder
Relay 2	Instant Water Heater or In Floor Heating
Relay 3	Under tile Heating Ensuite
Relay 4	Under Tile Heating Bathrooms
Relay 5	Heated Towel Rails
Relay 6	Outdoor Entry Lights
Relay 7	Indoor Night
Relay 8	
Relay 9	
Security and Safety	
1 Smoke or Sensor	Smoke - Hallway
2 Smoke or Sensor	Smoke - Hallway
3 Smoke or Sensor	Smoke - Living
4 Smoke or Sensor	PIR- Entry
5 Smoke or Sensor	PIR- Garage
6 Smoke or Sensor	PIR- Laundry Door
7 Smoke or Sensor	PIR- Hallway 1
8 Smoke or Sensor	PIR - Hallway 2
9 Smoke or Sensor	PIR- Master Bedroom
10 Smoke or Sensor	
11 Smoke or Sensor	
12 Smoke or Sensor	
Panic Button	
Key Switch	
Temperature Input 1	Bathroom
Temperature Input 2	Ensuite
Access	
Control/ Misc. 0	Garage Door
Control/ Misc. 1	Automatic Gate
Control/ Misc. 2	Blinds Up
Control/ Misc. 3	Blinds Down
Control/ Misc. 4	
Control/ Misc. 5	
Control/ Misc. 6	
Control/ Misc. 7	
Control/ Misc. 8	
Heating and Cooling	
IR Output 0	Heat Pump Living
IR Output 1	Heat Pump Hallway
IR Output 2	
IR Output 3	
IR Output 4	

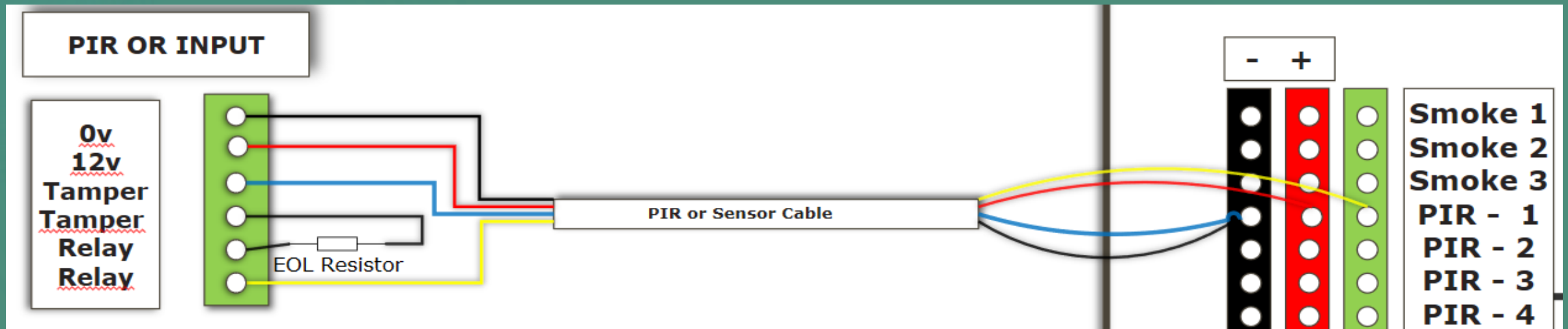
# FIT OFF – PIR SENSOR

2

We recommend one sensor per zone. If additional inputs are required we suggest doubling up the smoke detector zones.

Alarm sensors require a positive, negative and an input into the Econx. Common practice is the 4 wire method. Econx provides the option of 24hr monitored tamper with separate wiring of the tamper input.

End of Line Resistors (EOL) must be a minimum of 1K. Econx recommends 2K - 10K. Econx will learn whatever is installed, different resistors throughout a single installation is acceptable.



# FIT OFF – SMOKE

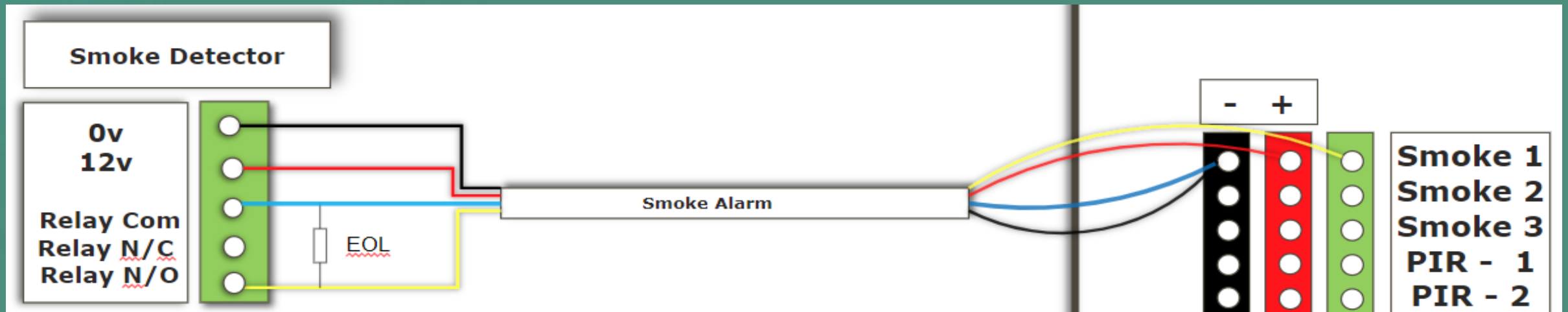
3

We recommend one sensor per zone.

These require a positive, negative and a input into the Econx. Common practice is the 4 wire method.

End of Line Resistors (EOL) must be a minimum of 1K. Econx recommends 2K - 10K. Econx will learn whatever is installed, different resistors throughout a single installation is acceptable.

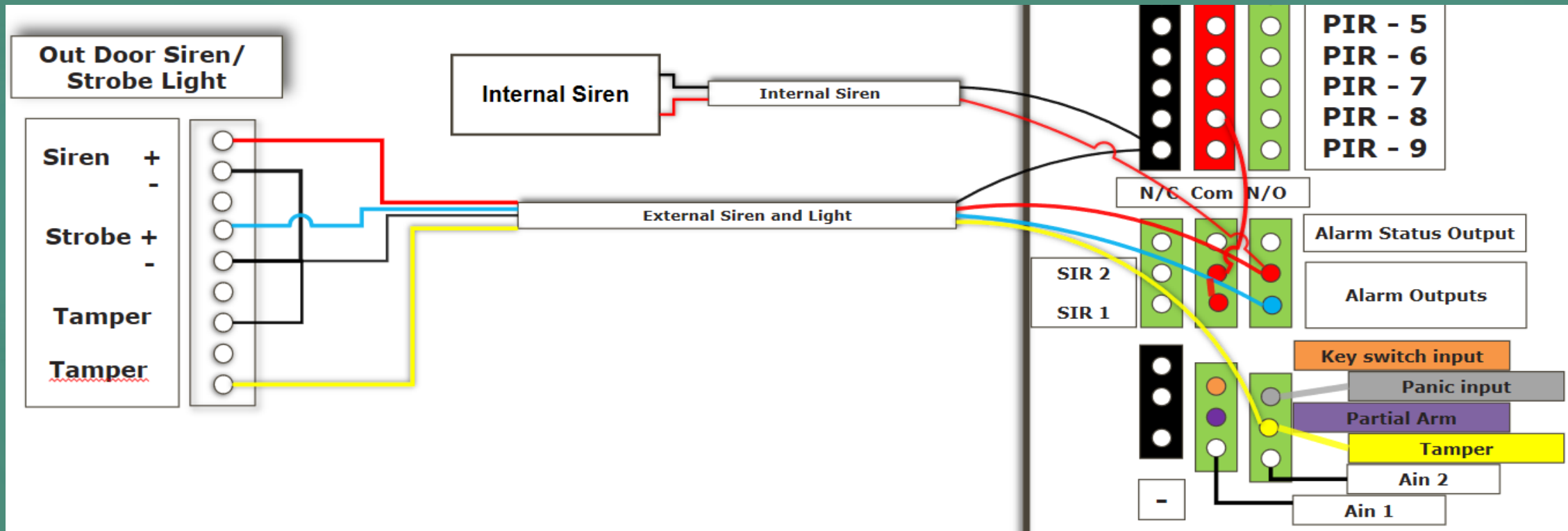
Econx prefers the resistors are installed in parallel with the N/O contact. This provides the ability to fault find should you have damaged wires or a faulty smoke detector.



# FIT OFF – OUTDOOR & INDOOR SIREN

**Please Note** the siren and strobe are wired separately. The Strobe will flash when disarming and arming as a visual indicator.

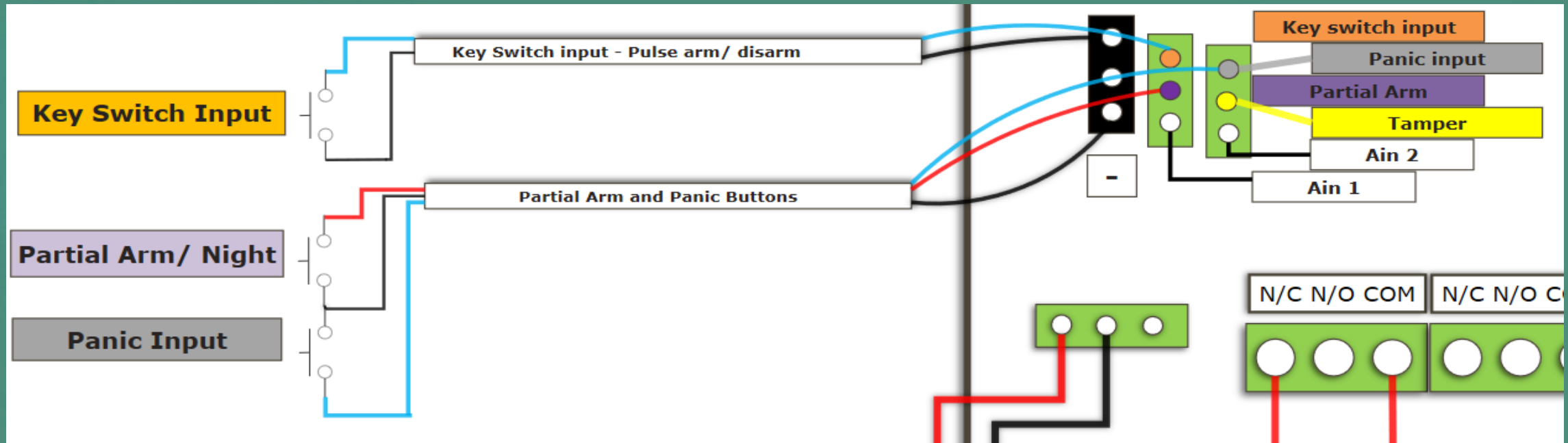
The tamper is 24hr monitored and no other configuration is required



# FIT OFF – PARTITIONING, NIGHT ARM & PANIC

Partitioning/ Night Arming and disarming is typically operated by the clients smart phone App. Manual push buttons can be installed if preferred.

Key Switch input – This can be used to Arm and Disarm the system. This is a momentary action. Should this feature be used no personalised logging is possible.



# TEMPERATURE SENSOR CONNECTION

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Econx is pre-configured to operate with

1. DEVI floor, indoor and outdoor temperature sensors.
2. Hot wire 10K and 100K under tile heating probes

Any of the Smoke 1 – 3, PIR 1 – 9 plus AIN 1 & 2 can be configured as a Temperature inputs.

One room sensor can be used to control multiple outputs  
E.G One Living Room sensor could control

- a) In-slab Heating
- b) Heat Transfer
- c) Electric Blinds
- d) Electric Windows

Any Smoke 1 - 3 , PIR 1 - 9, Ain 1 or Ain 2 inputs can be configured for temperature control.



**DEVIreg sensors**

**Devi floor sensor**

Part number	Temperature (°C)	Length	IP rating
01-140F1091	-10 to +50	3M	65

**Devi outdoor sensor**

Part number	Temperature (°C)	Dimensions (mm)	IP rating
01-140F1096	-10 to +50	70X51X38	44

**Devi wall mount sensor**

Part number	Temperature (°C)	Dimensions (mm)	IP rating
01-19121442	-10 to +50	61X61X10	20

N.B. Complete with small euro-flush box

Part number	Temperature (°C)	Dimensions (mm)	IP rating
01-19121441	-10 to +50	50X50X40	20

N.B. Complete with small surface mounting block

Part number	Temperature (°C)	Dimensions (mm)	IP rating
01-19121443	-10 to +50	105X78X12	20

N.B. Complete with NZ flush box adaptor plate

**Resistance (kOhms) vs Temperature (Celsius) graph**

Celsius	k Ohms
-15	133
-10	98
-5	73
0	55
5	41
10	32
15	24
20	19
25	15
30	12
35	9.5
40	7.6
45	6.2
50	5.1
55	4.1

**Devi Heating Systems Limited**  
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0800 827 635

**Devi Heating Systems Limited**  
Unit B, 28 Sande Road  
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Christchurch  
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[www.devi.co.nz](http://www.devi.co.nz)



# FIT OFF – LIGHT SWITCHES

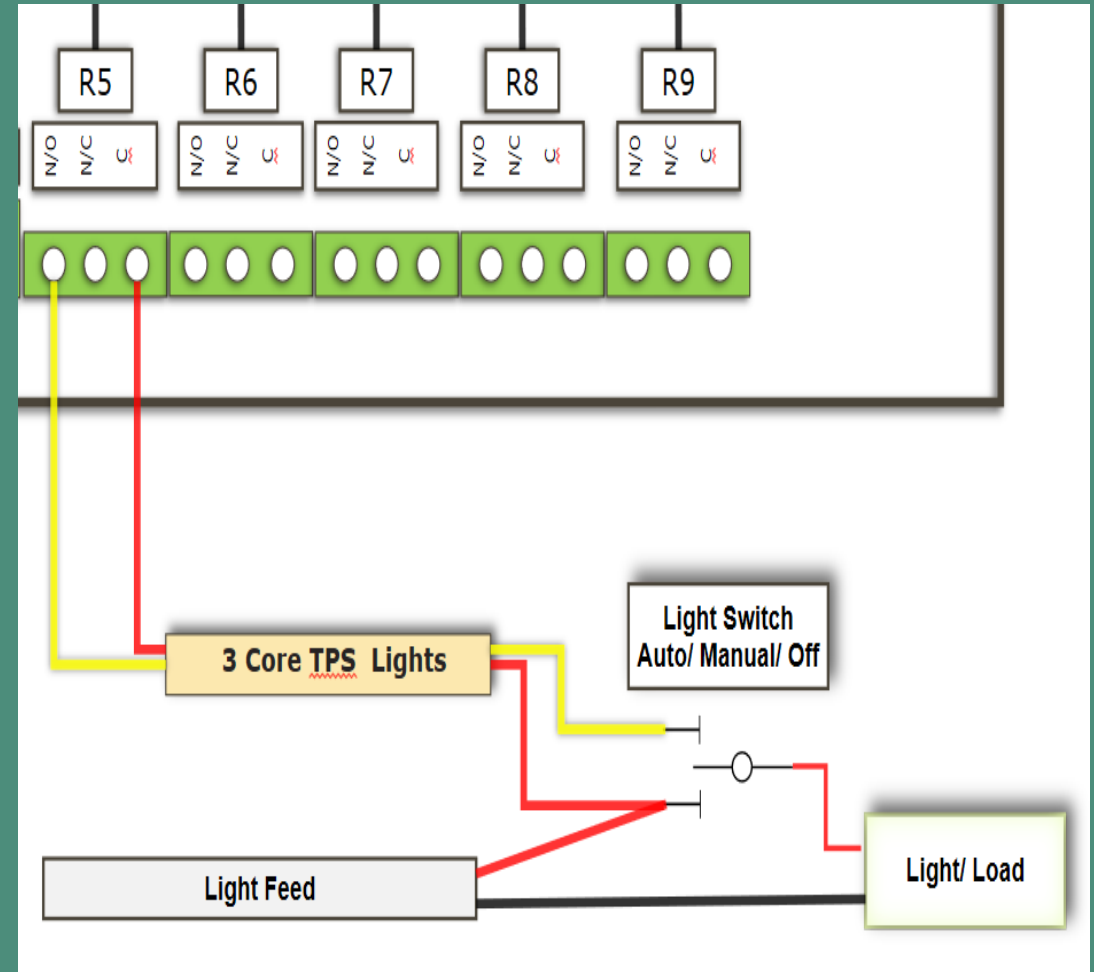
Econx recommends Auto/ Manual/ Off Mechs are installed for all lighting loads connected to Econx, This provides manual operation and the ability to isolate when required.

N/O wiring into Econx is recommended. This ensures lights will be off if the Econx system is isolated.

Outdoor Motion sensors can be installed in Parallel with Econx – Econx will NOT be effected by parallel switching.

**Light switches, where auto/man/off is NOT available in the selected range you can either**

1. Wire Econx relay in parallel with light switch – this may cause confusion with client
2. Install auto/man/off mech in garage by Econx panel or in a discrete and practical location
3. Install a LV press mech and wire into a Econx Misc. input. This provides app and manual control





# FIT OFF – DEDICATED CIRCUITS

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The following is recommended to ensure operation before commissioning and protection from non-essential heating loads be left On.

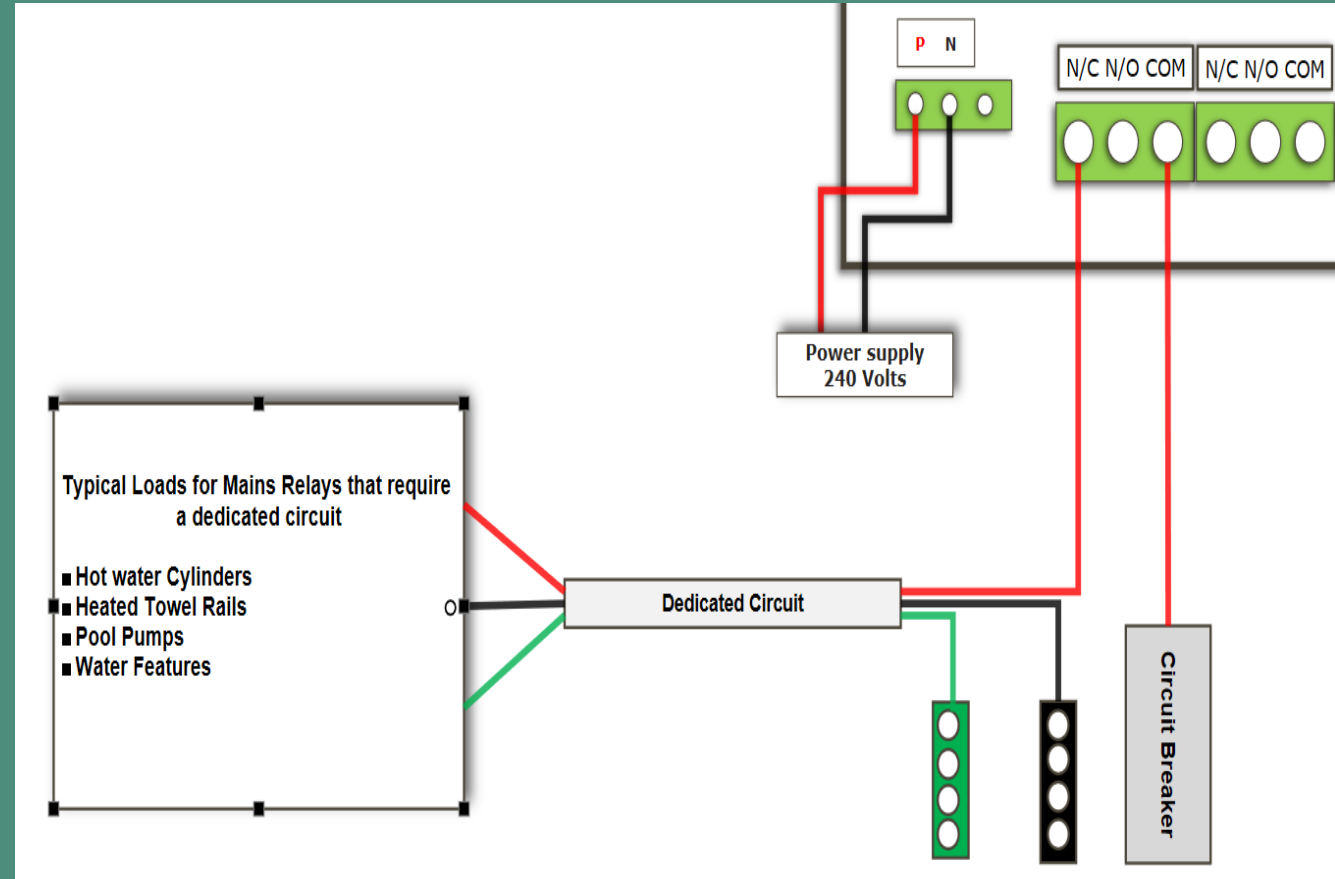
Econx recommends N/C connection is used for the following

- a) Hot water
- b) Heated Towel Rails
- c) Pool Pumps
- d) Water Features

Econx recommends N/O connection is used for the following

- a) Under tile Heating
- b) In-Slab Heating
- c) Heat Transfer Econx recommends Auto/ Manual/ Off Mechs are installed for all lighting loads connected to Econx, This provides manual operation and the ability to isolate when required.

This is a recommendation only, Econx provides configuration for either N/O or N/C



# FIT OFF – HEAT PUMPS

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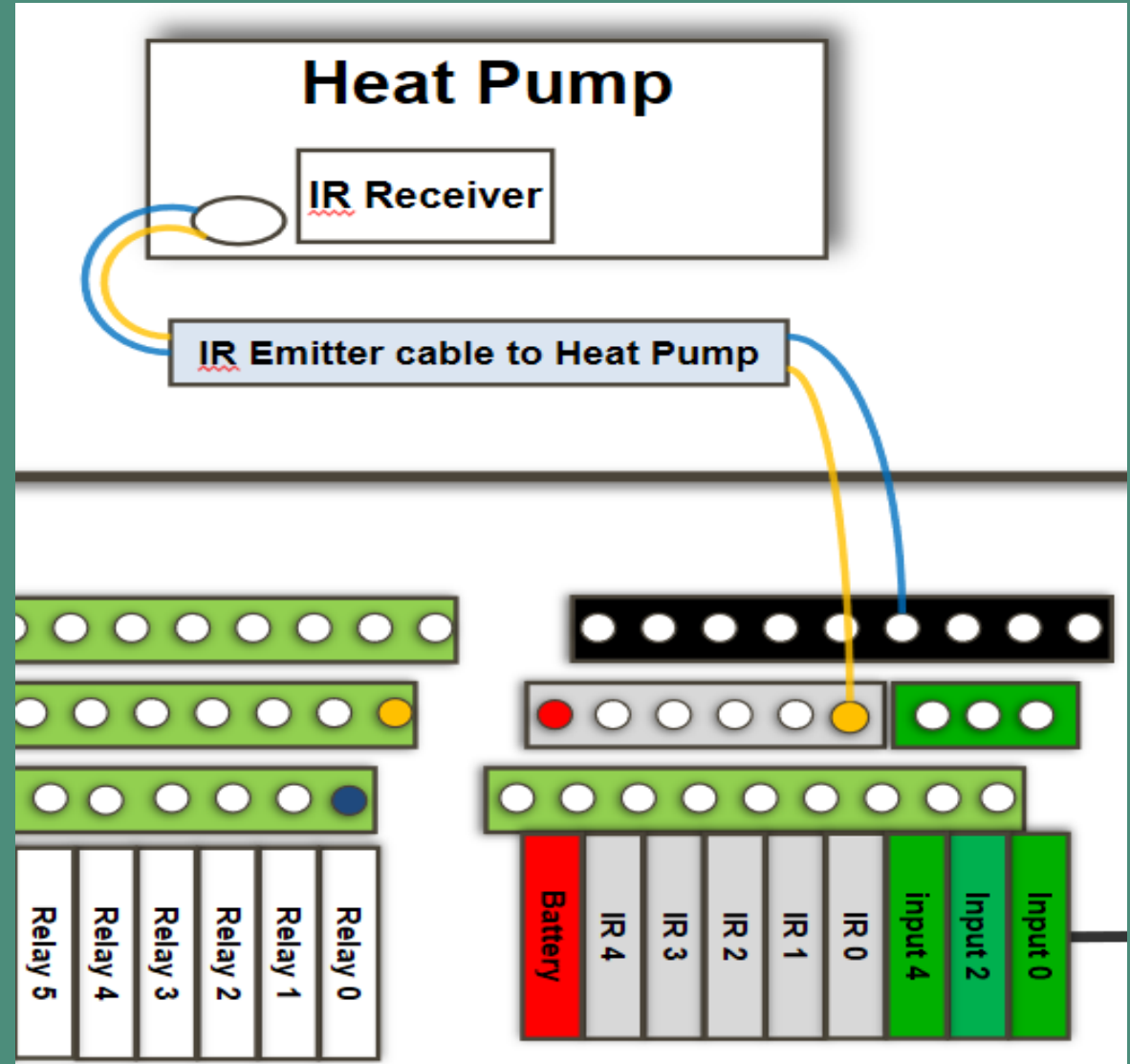
Heat Pump control is via infra red, Each Econx can control up to 5 zones from one system. The Econx software includes most major brands IR codes, new models and other brands can be added at any time.

Functionality includes

- a) On/Off
- b) Heating and Cooling
- c) Set Temperatures
- d) Automation of Operation

**Testing** – Should your system not operate straight away and the codes on the remote do not match any in the system we will require the remote to load codes onto Econx. We encourage to test before shipping the remote to us.

**To Test** – Hold Down Buttons 1 and 4 in the middle of the Econx panel, you will see 5 LED's flash On then Off. Go to indoor unit and look at IR emitter using the cameras on the phone, you should see it flash on then off. Please call with questions 0800 12 33 12



# FIT OFF – GARAGE DOORS, GATES & FRONT DOORS

These 9 miscellaneous inputs and outputs can be configured to operate Garage Doors, Automatic Gates, Mortice or Mag Locks, Electric blinds, Irrigation and .....

The inputs and outputs are linked within the Econx software.

**PLEASE NOTE** Inputs and outputs must correspond

Example 1

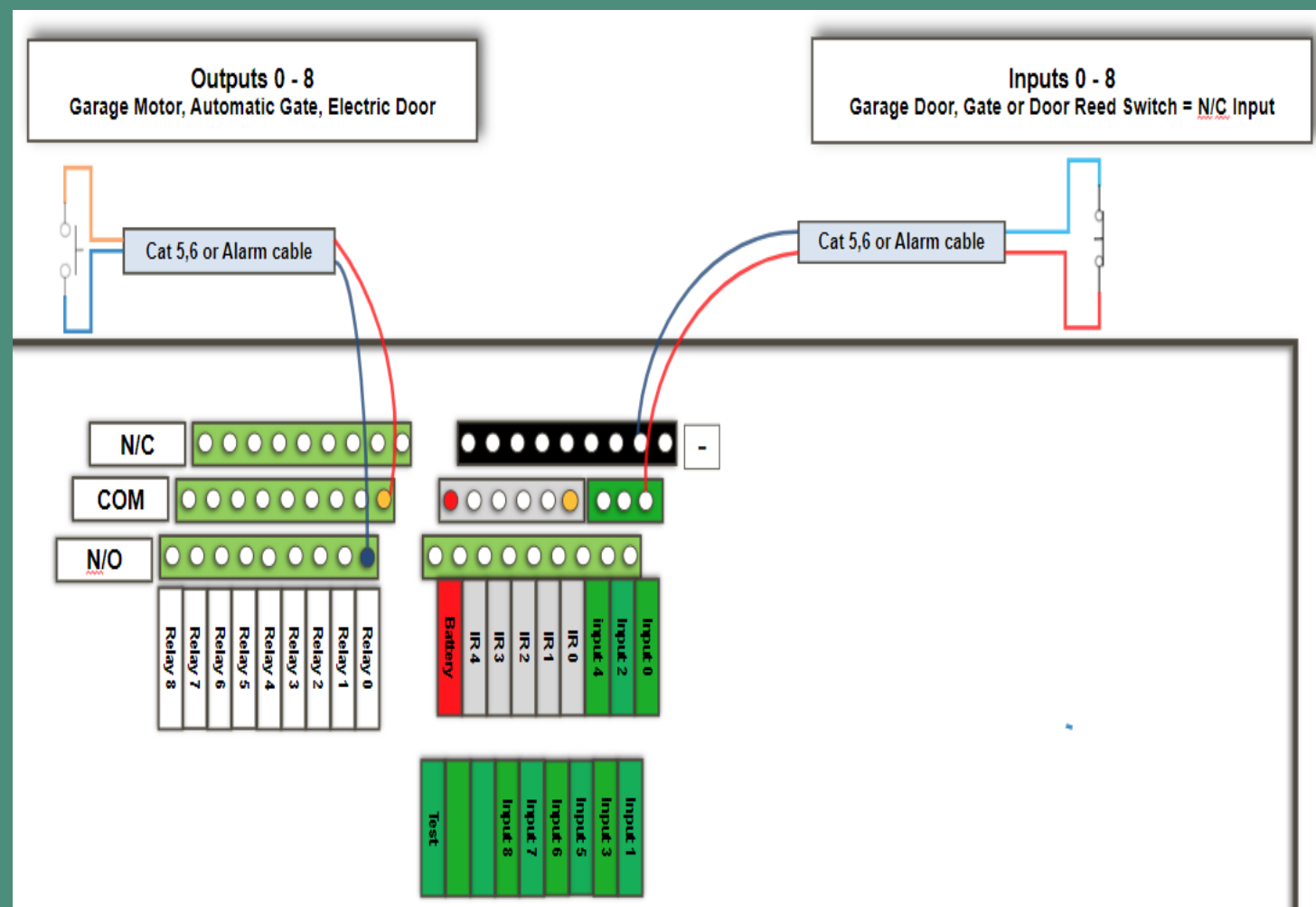
Garage Door Motor = Relay 0

Garage Door Reed Switch = Input 0

Example 2

Auto Gate Motor = Relay 1

Auto Gate Reed Switch = Input 1



# FIT OFF – ELECTRIC BLINDS AND WINDOWS

These 9 miscellaneous inputs and outputs can be configured to operate electric blinds and windows.

Functionality includes full opening and closing via the browser, smart phone app and schedules. Manual push buttons are installed for part opening and closing.

Should more than 3 – 4 zones be required we recommend the installation of the manufactures controls along with a group controller, Econx will provide automation and room/zone control.

**PLEASE NOTE** Inputs and outputs must correspond

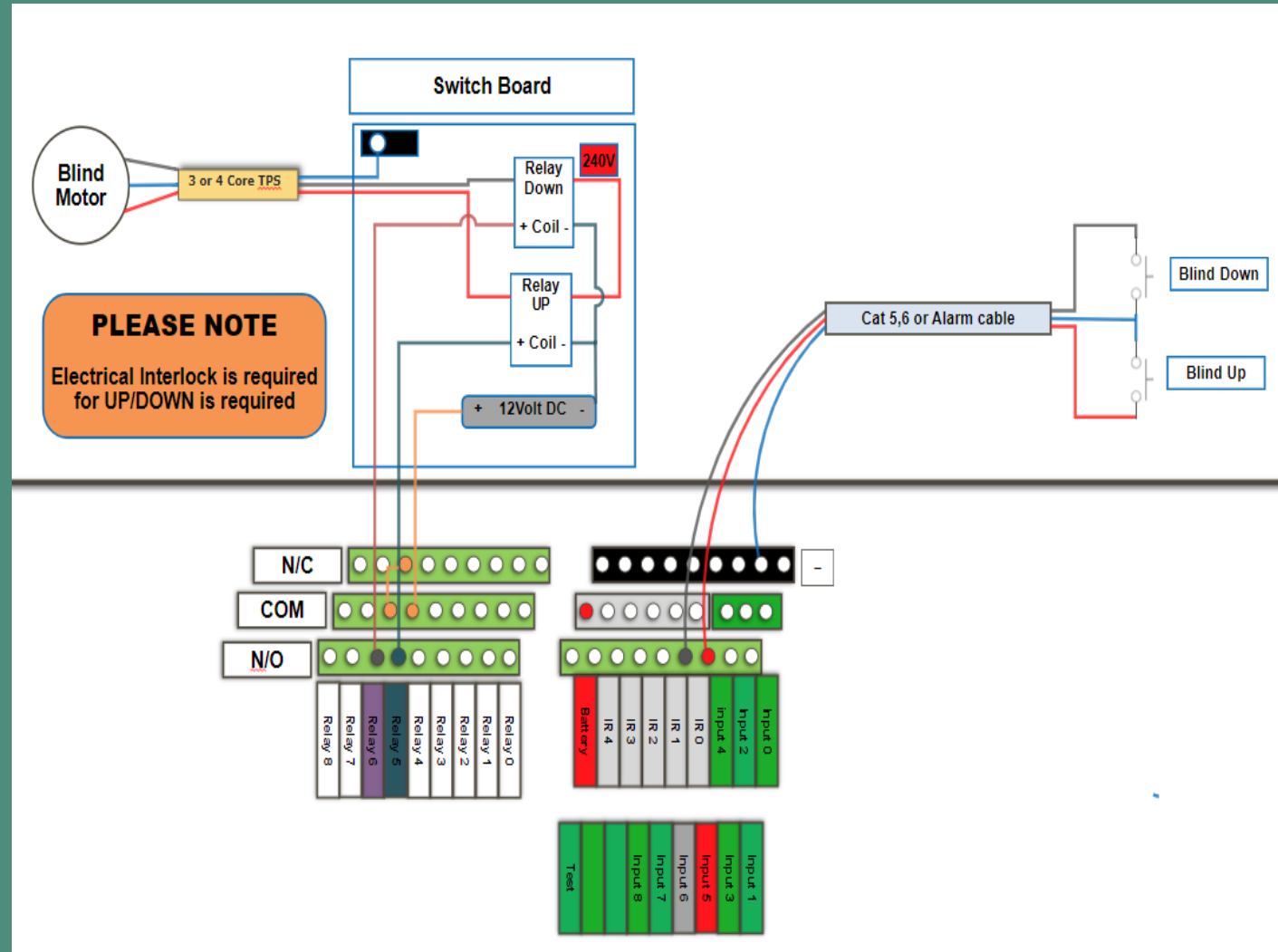
Example 1 –

Blind motor up Zone 1 = Relay 5

Manual button up = Input 5

Blind motor down Zone 1 = Relay 6

Manual button down = Input 6



# SUPPORT

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## More wiring Information

- a) Wiring diagrams are supplied with your Econx system and are available at [www.econx.co.nz/technical-information](http://www.econx.co.nz/technical-information)
- b) Step by Step Fit Off and Configuration Guides are available at [www.econx.co.nz/technical-information](http://www.econx.co.nz/technical-information)



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