

# ESL-2 KIT Quickfit Manual

Simple installation guide

This manual covers the following hardware & programming: ESL-2

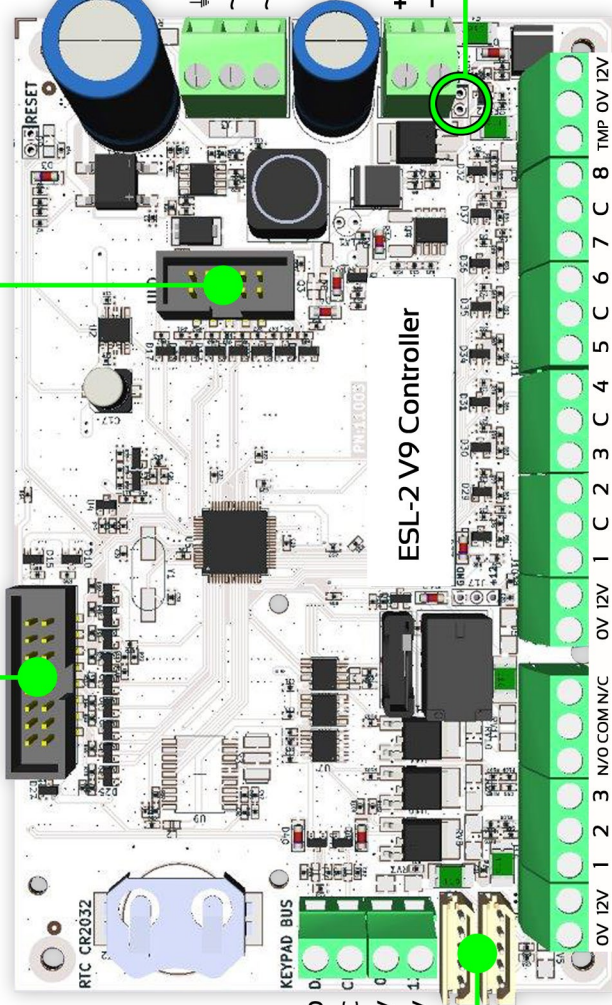
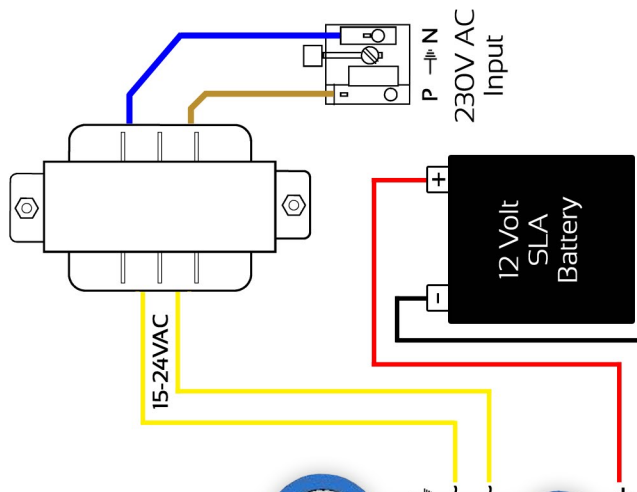


Smarter Security

# Hardware Connection Diagram

ESL-2 IoT (app) module plugs in here (see next page for more information)

KP-ICON-OEM



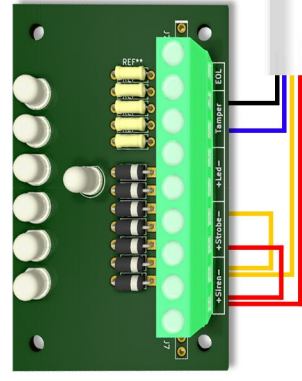
**Quick connect keypad bus terminals**  
- Use with 'ARR14' or 'ARR15' bus cables  
- Ideal for use with receiver cards & expander modules

**AC To Start Battery**  
After programming you can remove this jumper, disconnect the battery, then reconnect the battery. Doing so ensures the system will not draw from the battery until AC power is connected

**Ideal for sites where AC is not available upon installation**

Fit a 2K2 resistor in unused zone terminals

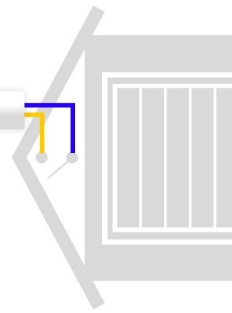
Wiring the external siren tamper is not required, however if not wired you must add this link wire



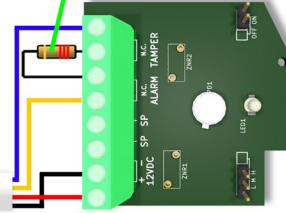
**PS209-R**  
Internal Siren



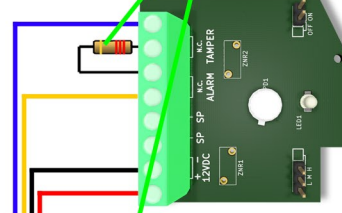
**EC-SIREN**  
External Siren



**Automatic Garage Door**  
Push Button



**OPT-RXC-ST**  
PIR Sensor



**OPT-RXC-ST**  
PIR Sensor

**Resistor Colour Codes:**

- 2K2 = [Red, Red, Red, Gold]
- 4K7 = [Yellow, Violet, Red, Gold]
- 8K2 = [Grey, Red, Red, Gold]
- 4K7 & 8K2 - For Advanced Installations Only

# Simple Programming

## Entering Installer mode

### KP-ICON-OEM

Press 'PROG' followed by your installer code (default - 000000), then press 'ENTER'. You should now see 'IPGM' on the keypad

### EC-TOUCH

Press 'Settings', followed by your installer code (default - 000000), then press the tick icon to confirm  
Now press 'Setup Wizard' & follow the programming prompts

## Exiting Installer Mode

**KP-ICON-OEM** - Press 'PROG' followed by the 'ENTER' button

**EC-TOUCH** - Complete the 'Setup Wizard' to return to the home screen

## Changing/Adding User Codes

- The ESL-2 panel has the ability to store up to 39 user codes
- User codes can be anywhere from 1 to 6 digits long
- User codes are programmed at Address 1 & then entered into slots from 1 to 39. Example of slots 1 to 3 shown below
- To change user codes you must be in 'Installer mode' or 'Client Mode'

Press 'PROG' | 'ENTER' then the slot you wish to change i.e. '1', then press 'ENTER'. The keypad will flash back or display the current code (default code is 123). Now enter your new code i.e. 4 5 6 then press 'ENTER' to confirm. The new code (456 for example) will flash back or display on the screen

**Below are some examples of adding user codes where 'P' represents 'PROG' & 'E' represents 'ENTER'**

P 1 E 1 E [ ][ ][ ][ ][ ] E (This is the master code default = 123)

P 1 E 2 E [ ][ ][ ][ ][ ] E

P 1 E 3 E [ ][ ][ ][ ][ ] E



## Changing Installer code

There is only one installer code which can only be used when the system is disarmed. To change the installer code simply enter installer mode, then press 'PROG' '25' 'ENTER' '1' 'ENTER' and the current code will be displayed. Now enter your new installer code from 1-6 digits and press 'ENTER' to confirm

P 25 E 1 E [ ][ ][ ][ ][ ] E



## Changing Entry delays

This is how long a sensor gives you to get in and disarm the system after it has been triggered. Each sensor has its own delay from 0 to 9999 seconds. If you have to pass a sensor to get to the keypad then it must have an entry delay. In installer mode press 'PROG' '144' 'ENTER' then select the zone you wish to change 1-16 and press 'ENTER'. Now enter the new time 0-9999 seconds and press 'ENTER'. The new entry delay time should display on the screen

P 144 E 1 E [ ][ ][ ][ ][ ] E (Default delay for zone 1 = 20 seconds)

P 144 E 2 E [ ][ ][ ][ ][ ] E (Default delay for zone 2 = 0 seconds)



## Changing Exit delay

This is how long you have to get out of the premises after 'arming' the system. This time is programmable from 0-255 seconds. In installer mode, press 'PROG' '60' 'ENTER' '1' 'ENTER', now enter the selected time from 0-255 seconds, followed by the 'ENTER' button to confirm

P 60 E 1 E [ ][ ][ ] E (Default time = 30 seconds)



## Changing Time, Day & Date

Enter installer Mode



### Time

P 26 E 1 E (24hr Time) E

### Day

P 26 E 2 E (Day) E - Sunday = 1, Monday = 2, Tuesday = 3, Wednesday = 4, Thursday = 5, Friday = 7, Saturday = 7

### Date

P 26 E 3 E (Date) E - DD/MM/YY

---

## System Test

When the programming configuration is complete, a quick test is required to confirm all hardware and software is working correctly. Run through the steps below to make sure the system is operating as required

Make sure no one is moving around the house as this could affect the test

**1 - The keypad should not have any zone lights on.** If zone lights are present, make sure:

- Your wiring is as per page 2
- The resistors in the sensors are correct - RED, RED, RED, GOLD (unless zone doubling)
- You have used the 2K2 resistors provided to seal any unused zones
- That all covers are correctly placed on sensors

**2 - Sensors Walk Test :-**

**Enter install mode as per page 3. Then press P 200 E 6 E E to enter walk test mode, the keypad should start beeping. Now walk in front of each sensor and when you get back to the keypad the zones that are working correctly will permanently display on the keypad. If some sensors aren't working, do the following:**

- Check your wiring is as per page 2
- Check the resistors in the sensors are correct - RED, RED, RED, GOLD (unless zone doubling)
- That all covers are correctly placed on sensors

**3 - Now test all of the user codes**

Start by typing in user code 1 followed by the enter button and the keypad should start beeping as it arms. Now type user code 1 in again, followed by the enter button and the keypad should go quiet as it disarms. Repeat this test for all of the user codes you have programmed.

Are all user codes operating correctly? If not, please revisit '**Changing/Adding User Codes**' on the previous page

**4 - Press the ARM button to see if there is enough time to get out of the house before the exit delay beeps stop**

If not you will need to extend the exit delay as per '**Changing Exit Delay**' the previous page

**5 - Now with the system armed, see if you can get back inside to the keypad and disarm the alarm before the sirens go off**

If not you will need to increase the entry delay times as per '**Changing Entry Delays**' on the previous page.

**6 - Make sure the sirens and strobe go off after the entry delay has finished**

Arm the system, wait for the beeps to stop then move in front of a sensor. The keypad should start beeping again and as soon as the entry delay is finished the sirens and strobe should go off. Once the sirens have been checked, enter an active user code to disarm the system

- Does the external siren work? If not, recheck wiring as per page 2
- Does the external strobe work? If not, recheck wiring as per page 2
- Does the internal siren work? If not, recheck wiring as per page 2

**Once this checklist is complete and successful, the system is ready for use**

Complete troubleshooting guide found here:



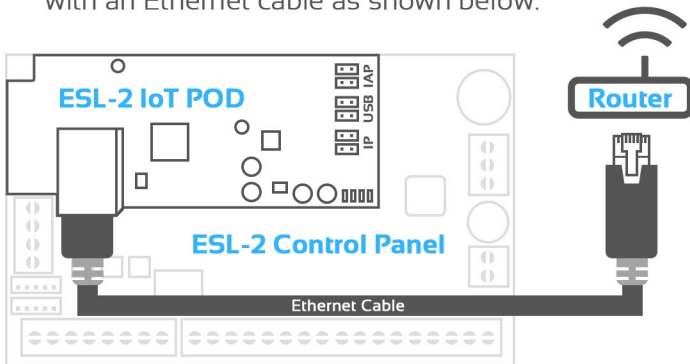
## Smartphone Upgrade (optional)

The 'ESL-2 IoT' module & EliteCloud app allow you to control & monitor the 'ESL-2' alarm from your Apple (iOS 14 & above) or Android (Android 10 & above) smart device.



### Hardware Connection

- ESL-2 must be powered down before proceeding.
- Plug the 'ESL-2 IoT' directly into the 'ESL-2' control panel (no bus cabling/loom required).
- Supply an internet connection to the 'ESL-2 IoT' with an Ethernet cable as shown below:



It is recommended to use the plastic supports provided to help secure the 'ESL-2 IoT' module to the 'ESL-2' control panel. **See complete ESL-2 IoT manual for more information**

### EliteCloud App

Search EliteCloud on your smartphone 'app store' or scan the relevant QR code below:

#### iOS 14 & Above



#### Android 10 & Above



#### ESL-2 IoT Full Manual

#### Web Link:

[aap.co.nz/esl2iot](http://aap.co.nz/esl2iot)

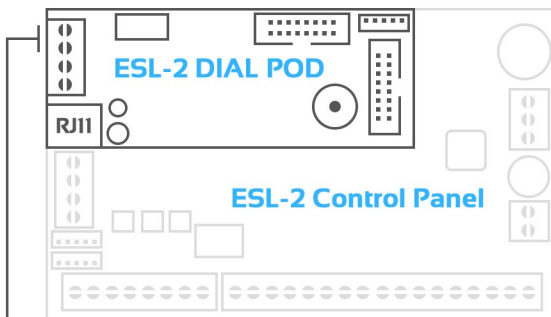


## Land Line or Third Party Monitoring (optional)

The ESL-2 requires a plug in dialler ('ESL-2 DIAL POD') to connect land line or third party monitoring devices.

### Hardware Connection

- ESL-2 must be powered down before proceeding.
- Plug the 'ESL-2 DIAL POD' directly into the 'ESL-2' control panel (no bus cabling/loom required).



- Connect to phone line or 3rd party monitoring device. See 'ESL-2 DIAL POD' paperwork for more information

#### ESL-2 DIAL POD Full Manual

#### Web Link:

[aap.co.nz/dialpod](http://aap.co.nz/dialpod)



### Programming - Enabling Dialler Monitoring:

- 'P' = PROG & 'E' = ENTER
- Enter installer programming - P 000000 E (default)
- Turn on dialler - P 175 E 1 E (turn option 1 ON) E
- Enter 1 or more phone numbers you require the system to dial
  - P 181 E 5 E (phone number) E *phone number 5*
  - P 181 E 6 E (phone number) E *phone number 6*
  - P 181 E 7 E (phone number) E *phone number 7*
  - P 181 E 8 E (phone number) E *phone number 8*
- Exit program mode - P then E

#### Important for Address P 181 E:

- Phone numbers for 'third party monitoring' devices need to be programmed into slots 1 to 4.
- Phone numbers for 'land line monitoring' need to be programmed into slots 5-8 as detailed above.

## Remote Upgrade (Optional)

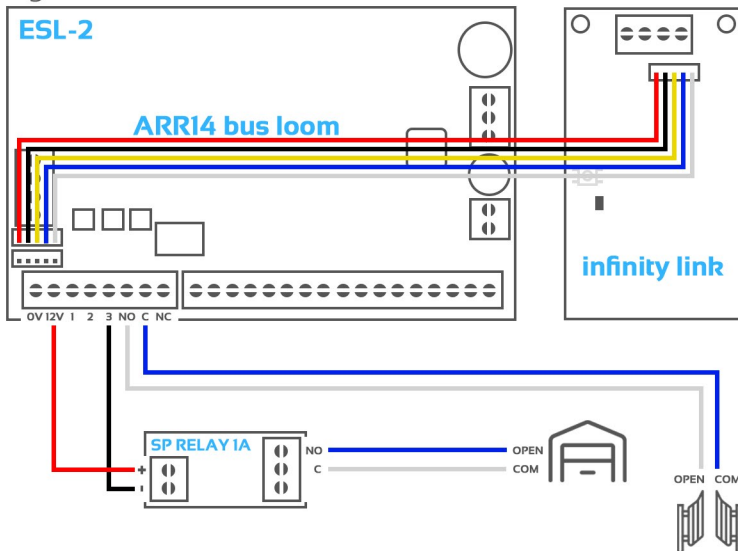
Remotes & other wireless devices can be added to the ESL-2 KIT with the additional 'infinity link' transceiver module as detailed below:

### Hardware Connection

Connect the infinity link to the ESL-2 using the **ARR14** bus loom provided with each module.

Alternatively, connection can be made using the D, C, 0V & 12V screw terminals like any other 'bus device'.

Figure 1



### Garage Doors & Gates

Outputs 3 & 4 on the ESL-2 can be wired to garage doors or gates & controlled by remotes, keypads or the EliteCloud app.

Output 4 is a clean contact so can generally be wired directly, however output 3 may require a separate relay as shown in 'Figure 1'.

### Output Expansion

The ESL-2 supports a maximum of 8 outputs in total. These can be hardwired, wireless or a mixture of both as detailed below:

#### Hardwired - ESL-OUTPUT

The 'ESL-OUTPUT' is a 4 x relay output expander module that plugs into the ESL-2 bus. Scan QR to find out more:

Full Manual



#### Wireless - infinity output

The 'infinity output' can be learnt into any of the 8 x ESL-2 outputs for controlling doors, gates & more. Scan QR to find out more:

Full Manual



### infinity remote kit



**It is recommended to default each wireless device before learning into a new system.**

### infinity remote Default Procedure

Press & hold button 1 (shown in 'Figure 2') & the LED will display **solid red**

As soon as the **solid red** LED turns off, keep holding button 1 while pressing button 2, then 4, then 3 in quick succession.

After pressing the last button (button 3), a **green LED** should display to confirm that the default has completed successfully.

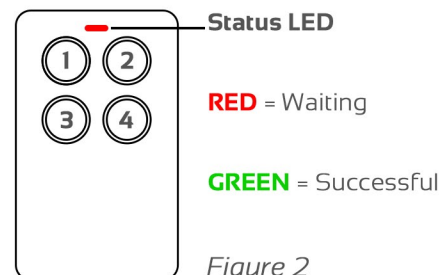


Figure 2

### infinity link Default Procedure

Press and hold the gold 'Default Button' shown in 'Figure 3' while powering up the unit & continue to hold.

The LED will display **solid red** and **turn green** when default is successful

**Warning:** Defaulting the infinity link will lose connection with all previously paired products

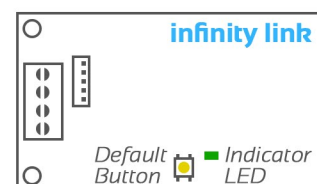


Figure 3

### infinity link Indication LED

The indication LED shown in 'Figure 3' will illuminate **green** when receiving a wireless signal & also flash during system learn beeps.

## Learning Remotes *(consult control panel installation manual for advanced programming)*

ESL control panels have pre configured user slots to simplify learning & function of wireless remotes. These are located from users 40 to 89 as shown in 'Pre-Configured User Slots' table below:

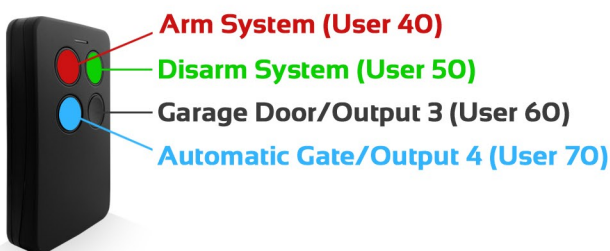
- Enter Installer Programming mode as detailed on page 3 of this quickfit manual.
- Press PROG 18 ENTER followed by the User Number you wish to learn, then ENTER. Next press ENTER again to start the keypad beeps, indicating that the system is waiting to learn a remote button.
- Press the remote button you wish to learn and the keypad should stop beeping to indicate a successful learn.
- To learn another button, press the right or left arrows on the keypad to go to next or previous user slot, then press ENTER, or press PROG then ENTER to exit installer programming.

### Pre-Configured User Slots

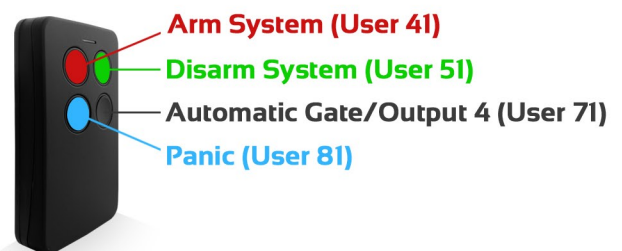


<b>Arm</b> Users 40 - 49	<b>Users 40 to 49 will ARM only</b> <b>Example:</b> P 18 E 40 E E <i>(learn beeps start)</i> Press the remote button you wish to learn <i>(learn beeps stop)</i> <b>This button will now ARM the system</b>
<b>Disarm</b> Users 50 - 59	<b>Users 50 to 59 will DISARM only</b> <b>Example:</b> P 18 E 50 E E <i>(learn beeps start)</i> Press the remote button you wish to learn <i>(learn beeps stop)</i> <b>This button will now DISARM the system</b>
<b>Output 3</b> Users 60 - 69	<b>Users 60 to 69 will operate OUTPUT 3 &amp; DISARM at the same time</b> <b>Example:</b> P 18 E 60 E E <i>(learn beeps start)</i> Press the remote button you wish to learn <i>(learn beeps stop)</i> <b>This button will now DISARM the system &amp; control output 3 at the same time</b>
<b>Output 4</b> Users 70 - 79	<b>Users 70 to 79 will operate OUTPUT 4 &amp; DISARM at the same time</b> <b>Example:</b> P 18 E 70 E E <i>(learn beeps start)</i> Press the remote button you wish to learn <i>(learn beeps stop)</i> <b>This button will now DISARM the system &amp; control output 4 at the same time</b>
<b>Panic</b> Users 80 - 89	<b>Users 80 to 89 will operate as a PANIC button</b> <b>Example:</b> P 18 E 80 E E <i>(learn beeps start)</i> Press the remote button you wish to learn <i>(learn beeps stop)</i> <b>This button will now perform a PANIC function</b>

### Remote 1 Example *(button colours are indicative only)*



### Remote 2 Example *(button colours are indicative only)*

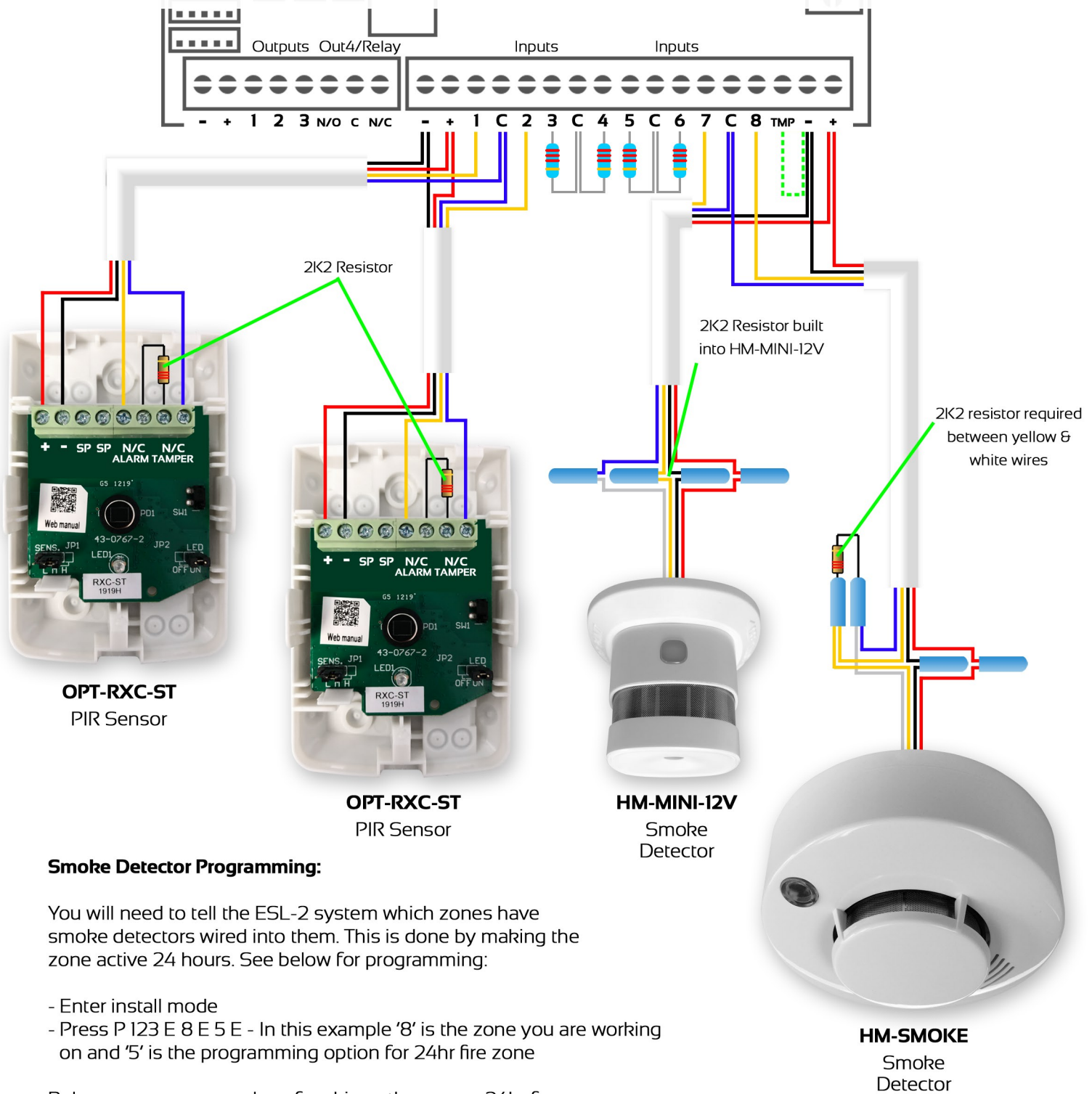


### Battery Low Reporting & Haptic Feedback

- P 7 E must be set to option 1 (Freelink) to enable battery low reporting & for the remote to operate correctly.
- Haptic feedback is disabled when battery is low is reported due to the remote entering power save mode. Battery low will be indicated at 2.2V & under

# Integrated Smoke Detection (optional upgrade)

12VDC smoke detectors can also be added to the ESL-2 system to monitor fire. See below for some examples:



## Smoke Detector Programming:

You will need to tell the ESL-2 system which zones have smoke detectors wired into them. This is done by making the zone active 24 hours. See below for programming:

- Enter install mode
- Press P 123 E 8 E 5 E - In this example '8' is the zone you are working on and '5' is the programming option for 24hr fire zone

Below are some examples of making other zones 24hr fire zones:

- P 123 E 7 E 5 E - This would make zone 7 a 24hr fire zone
- P 123 E 5 E 5 E - This would make zone 5 a 24hr fire zone



Scan the QR or visit the link below for **more ESL-2 related manuals**

**Web Link:** [www.aap.co.nz/esl2](http://www.aap.co.nz/esl2)



## Cabinet & Transformer Specifications & Installation

**This product is to be installed by a 'Skilled person'** and must have training or experience in this equipment technology. A skilled person is expected to use their training or experience to identify energy sources that may cause pain or injury and take appropriate action to prevent unintentional harm to themselves & others

### Specifications

<b>Manufacturer</b>	Arrowhead Alarm Products Ltd
<b>Product Name</b>	EC-CAB 1A
<b>Transformer Input Voltage</b>	230 ~ 250VAC
<b>Rated Current</b>	150mA
<b>Frequency</b>	50Hz
<b>Transformer Output Voltage</b>	17VAC
<b>Transformer Output Current</b>	1.4A
<b>Fuse</b>	250mA, 5 x 20mm Slow Blow
<b>Cabinet Material</b>	ABS
<b>Environment</b>	-20°C ~ 60°C, 10% ~ 90% Relative Humidity
<b>Dimensions:</b>	W323 x H293 x D87mm
<b>Max Weight incl 12V 7.5A Battery</b>	3.9Kg
<b>Fixings</b>	Lid, cabinet & circuit boards screws

### Mounting Location

Mount in a secure location, ideally out of sight & out of reach

This product is IPX0 & therefore is designed for internal applications only

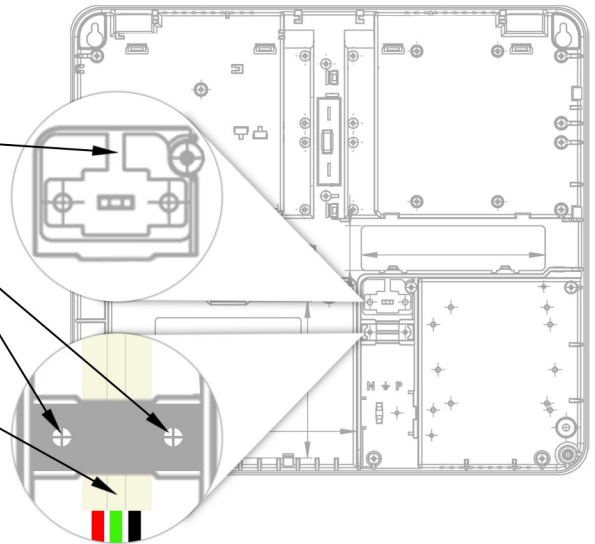
Make sure cabinet vents are clear of any potential obstructions. This includes linen & insulating material

Where possible, do not mount in a ceiling cavity or area that is likely to exceed 50°C

### Strain Relief Mechanism

This cabinet includes a strain relief mechanism which must be used for both fixed & portable applications

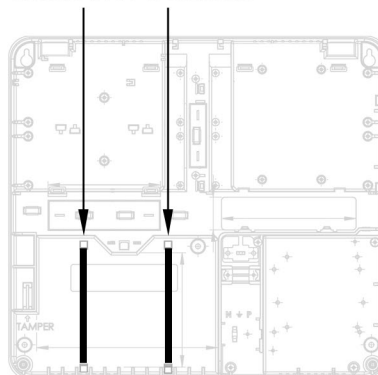
- First remove mechanism by breaking the tab shown here
- Once removed, place the strain relief mechanism over the 230V cable & fix using the screws provided as shown
- Make sure the sheath or jacket of the 230V cable extends at least one-half the diameter of the cord or cable past the strain relief mechanism shown here
- We also recommend installation of a disconnect device or isolator switch near the alarm cabinet for safety & servicing purposes



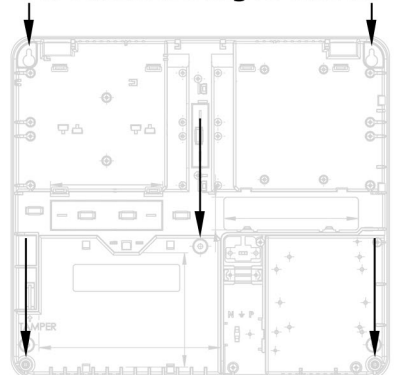
### Securing The Cabinet & Back Up Battery

- All SLA (sealed lead acid) batteries that are mounted in this cabinet must be secured using the 2 x cable tie locations provided

#### Cable Tie Locations



#### 5 x Cabinet Fixing Locations



Manufactured by AAP Ltd  
www.aap.co.nz