



# FireCell

## Wireless RIM Programming Guide



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# Introduction

The FireCell Wireless Remote Indicator Module (RIM) is compatible with both the EMS FireCell system and the EMS Fusion Loop Module.

It is possible to add (log on) the RIM to the FireCell system both manually and via FireCell Configuration Tool software, whilst the RIM must be added to the Fusion Loop Module manually. All of the aforementioned methods are detailed in this programming guide.

Also covered within this guide is the adding (logging on) of RIMs to the FireCell control panel, via the Loop Explorer computer software plus two methods of programming the cause and effect rules to link either, a zone of devices, or a single device to a RIM.

This guide has been written for engineers that have completed FireCell product training and therefore have knowledge of the product and the basic programming functionality of the control panel.

It is therefore assumed that the engineer is practised in the methodology of removing, editing and sending Loop Explorer setup files to the FireCell control panel.

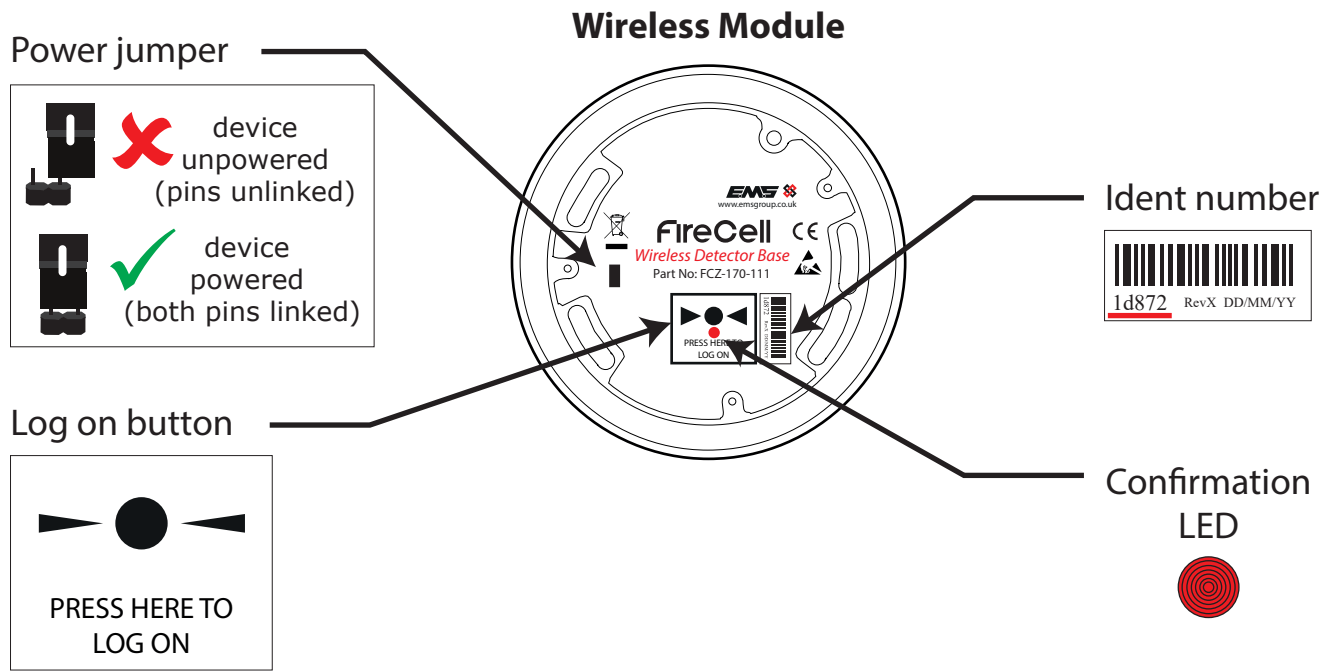
**Note: screenshots shown in this programming guide depict FireCell Configuration Tool version 60082 and Loop Explorer Version 3.0. *Future software releases may vary both visually and in operation.***

## Tools

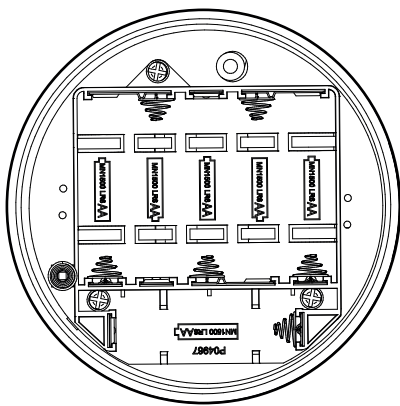
Before starting the programming, the following items MUST be available.

- Laptop c/w Loop Explorer software
- FireCell control panel programming lead (FC-000-KEN)

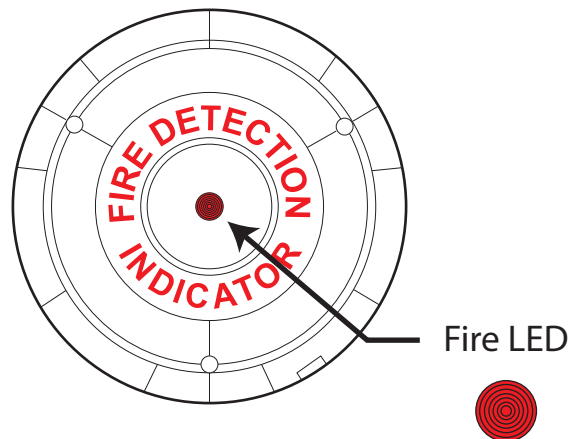
# Wireless RIM familiarisation



### Battery compartment



### Remote Indicator



# Adding a Wireless RIM to a Fusion Loop Module

Take the device to the Loop Module and follow the steps below:

With the loop module in its normal state, the screen will display:

```
DEV01 AL00 FT00
```

Press the rotary control and the screen will display:

```
Device Status
```

Turn the rotary control until the screen displays:

```
Add New Device
```

Press the rotary control and the screen will display:

```
Press Dev Log On
```

Press the device's log on button for 2 seconds (*the device's confirmation LED will illuminate*). The screen will display:

```
Add Dev xxxxx N?
```

If the ident shown does not match the ident of the new device to be added, press the rotary control (with the above Add Dev xxxxx N? display shown). This will return the display to the previous menu.

If the device ident is correct, turn the rotary control until the screen displays:

```
Add Dev xxxxx Y?
```

Press the rotary control and the screen will display:

```
Addine
```

Followed by:

```
Address 002
```

Turn the rotary control, until the desired device address is shown:

```
Address 007
```

Press the rotary control to confirm the device address. The screen will display:

```
I/O Added
```

Press the BACK button, to return to the front display:

```
DEV02 AL00 FT00
```

# Adding a Wireless RIM to a FireCell Radio Hub (*manually*)

Take the device to the Radio Hub and follow the steps below:

With the radio hub in its normal state the screen will display:

```
DEV15 AL00 FT00
```

Press the rotary control and the screen will display:

```
Device Status
```

Turn the rotary control until the screen displays:

```
Add New Device
```

Press the rotary control and the screen will display:

```
RCC01=06 Max 31
```

Turn the rotary control, until the screen displays the required RCC to programmed the device to:

```
RCC02=03 Max 31
```

Press the rotary control and the screen will display:

```
Loop 1 Addr 016
```

Turn the rotary control until the screen displays the required Loop to be programmed and press the rotary control to select.

```
Loop 2 Addr 007
```

Turn the rotary control until the screen displays the required address shown and press the rotary control to select. The

```
Add By Loø On
```

Press the rotary control and the screen will display:

```
Press Dev Loø On
```

Press the device log on button for 2 seconds. The device's confirmation LED will illuminate and the she screen will display:

```
Add Dev xxxxx N?
```

If the ident shown does not match the ident of the new device to be added, press the rotary control (with the above Add Dev xxxxx N? display shown). This will return the display to the previous menu.

Confirm the ident number displayed is the same as located on the device. If correct, turn the rotary control until the screen displays:

```
Add Dev xxxxx Y?
```

Press the rotary control and the screen will now confirm the new devices loop and address number:

```
New Addr L2 A007
```

Press the BACK button until the screen displays:

```
Unassigned Dev
```

Press the rotary control and the screen will display:

```
Device Status
```

Turn the rotary control until the screen displays:

Assign Device

Press the rotary control and the screen will display:

Assign ALL

Press the rotary control and the screen will display:

Dev 000 of 001

Followed by:

Done 001 of 001

***Note: If unsuccessful when operation is carried out next to the Radio Hub, re-try steps 16-19 with the device installed in its correct installed location.***

Once complete, press the BACK button until the screen displays:

DEV16 AL00 FT00

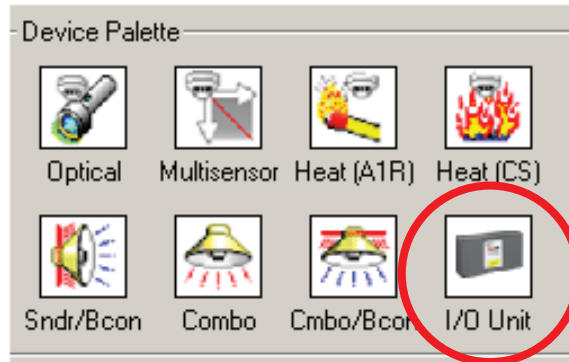
# Adding a Wireless RIM to a FireCell Radio Hub (*via software*)

When programming the Wireless RIM to a FireCell system via the configuration tool software, the device should be added as an Input/Output unit.

All of the standard programming features for the device remain the same.

Details are explained below:

Add the Wireless RIM, by clicking on the 'I/O Unit' icon from the 'Device Palette'.

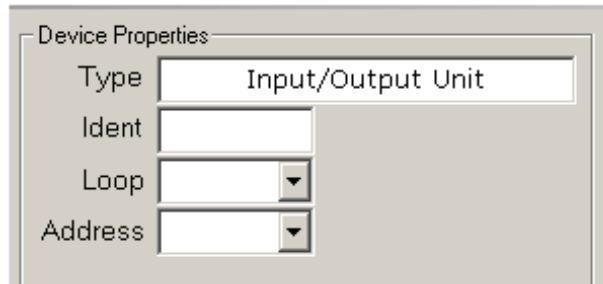


The new device will be shown in the main window, allocated to the RCC as shown.





Complete the device's 'Ident', 'Loop' and 'Address' fields shown below.



Device Properties

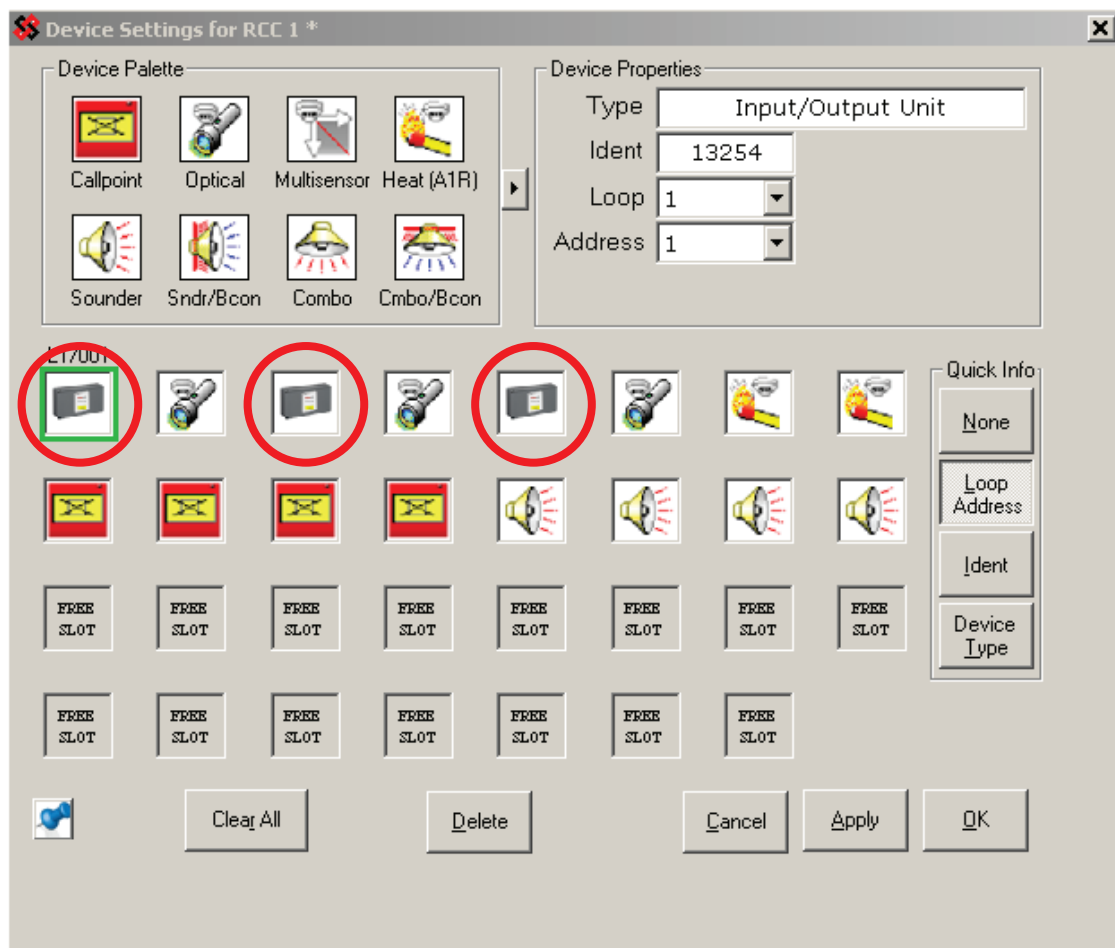
Type

Ident

Loop

Address

An example of an RCC programmed with three Wireless RIMs is shown below:



Device Settings for RCC 1 \*

Device Palette

- Callpoint
- Optical
- Multisensor
- Heat (A1R)
- Sounder
- Sndr/Bcon
- Combo
- Cmbo/Bcon

Device Properties

Type

Ident

Loop

Address

Quick Info

- None
- Loop Address
- Ident
- Device Type

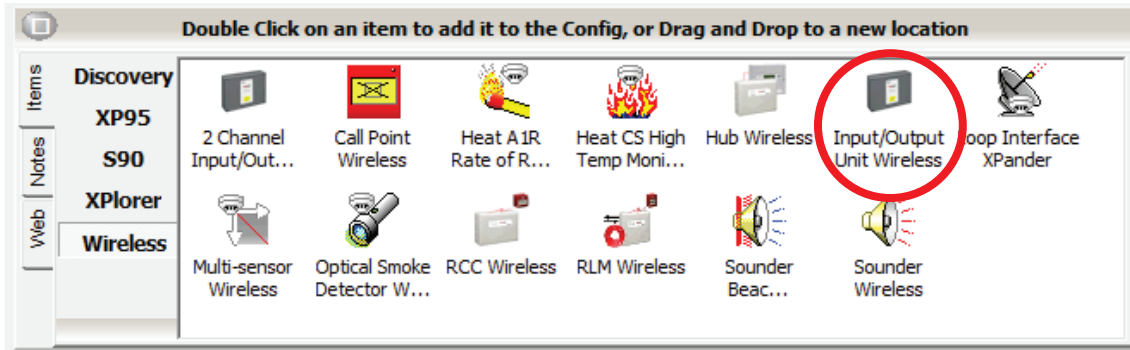
FREE SLOT

Clear All Delete Cancel Apply OK

# Adding a Wireless RIM to the Control Panel

The Wireless RIMs are added to the Loop Explorer configuration file as 'Input/Output Wireless' devices.

The selection of available wireless devices is shown below with the 'Input/Output Wireless' device selected for the RIM highlighted.



Double click on the 'Input/Output Wireless' icon, shown above, to add the RIM to the setup. An example is shown below:

Address	Device Type
001	Optical Smoke Detector Wireless
002	Heat CS High Temp Monitor Wire...
003	Input/Output Unit Wireless

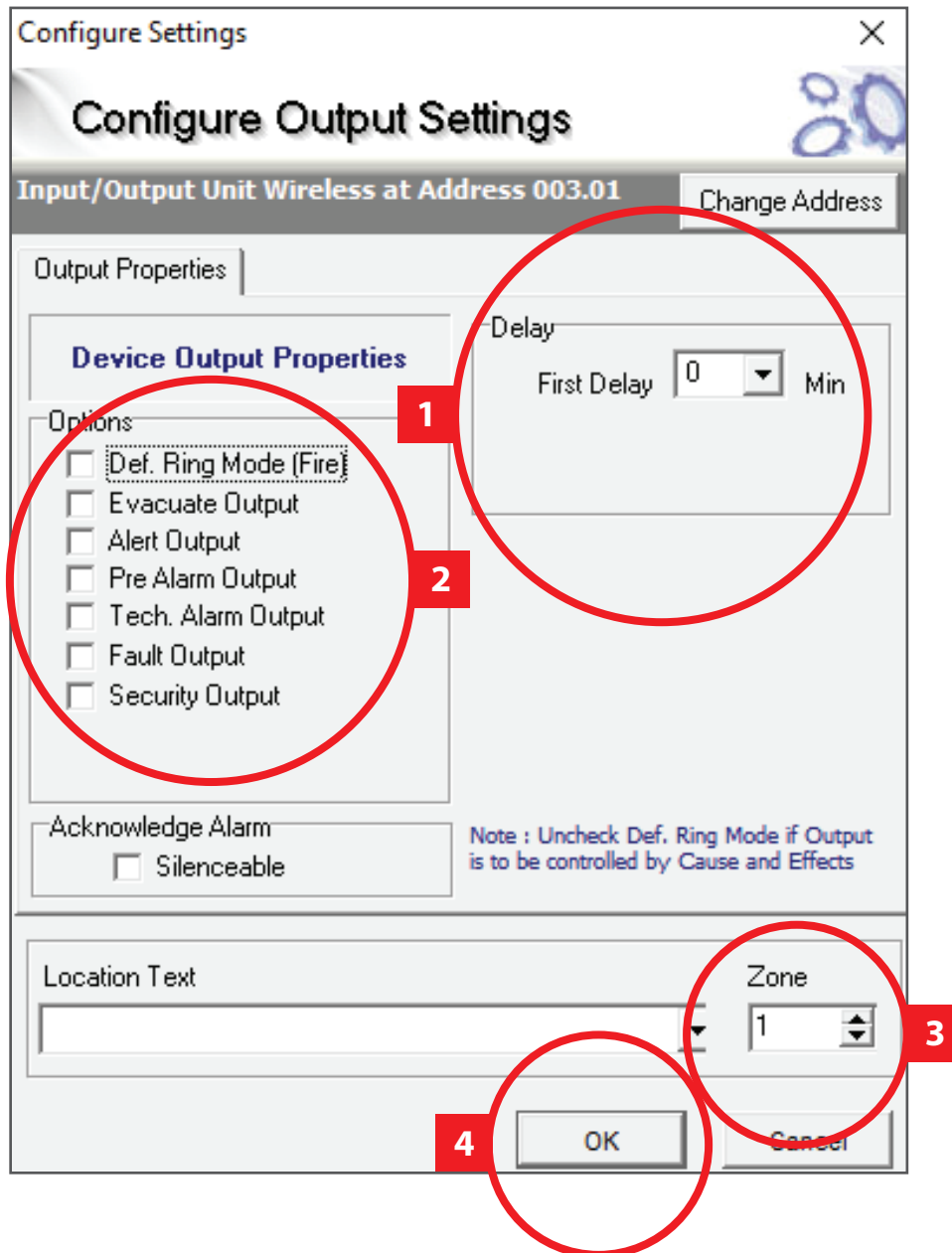
Double click on the 'Input/Output Unit Wireless' icon shown above to expand the device to show the input and output, as shown below:

Item	Type
—● 00 - Sub Addr	Input/Output Unit Wireless
→● 01 - Sub Addr	Output
←● 02 - Sub Addr	Input

Double click on the output field. The display will change to show the device's output properties.

Ensure all fields are un-selected and that a delay is not present.

Also ensure the zone setting for the output (Wireless RIM) corresponds with the zone that is to cause the device to operate. An example with the correct settings to follow zone 1 operation is shown below:



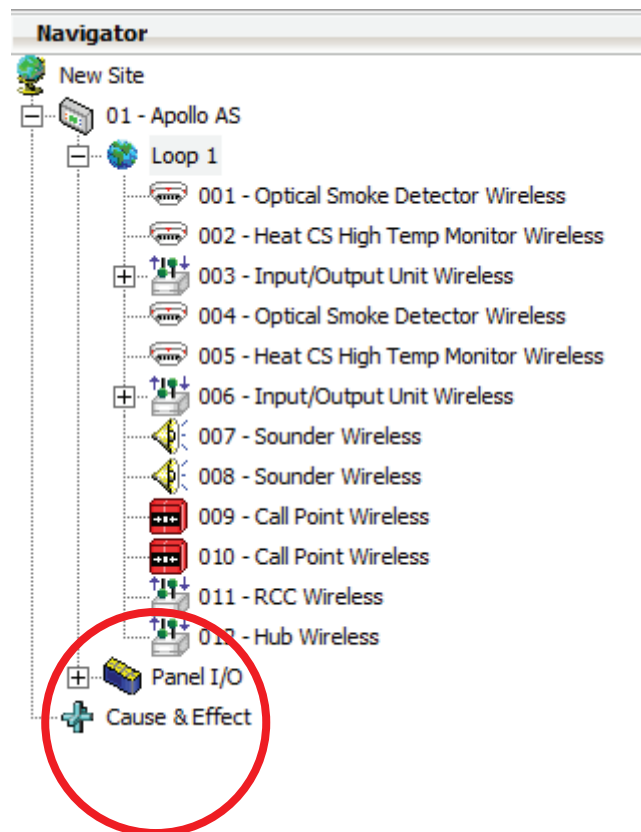
**Note: the zone setting for the device (Wireless RIM) is only relevant for the cause and effect when programming the unit to follow the activation of a zone of devices.**

# Linking a zone to a RIM

An example is shown below for linking a zone of devices to an individual RIM. In this example, zone 1 is used.

Fire alarm in		RIM allocated to	
Zone 1	✓	Zone 1	✓
Zone 2		Zone 2	
Zone 3, etc.		Zone 3, etc.	

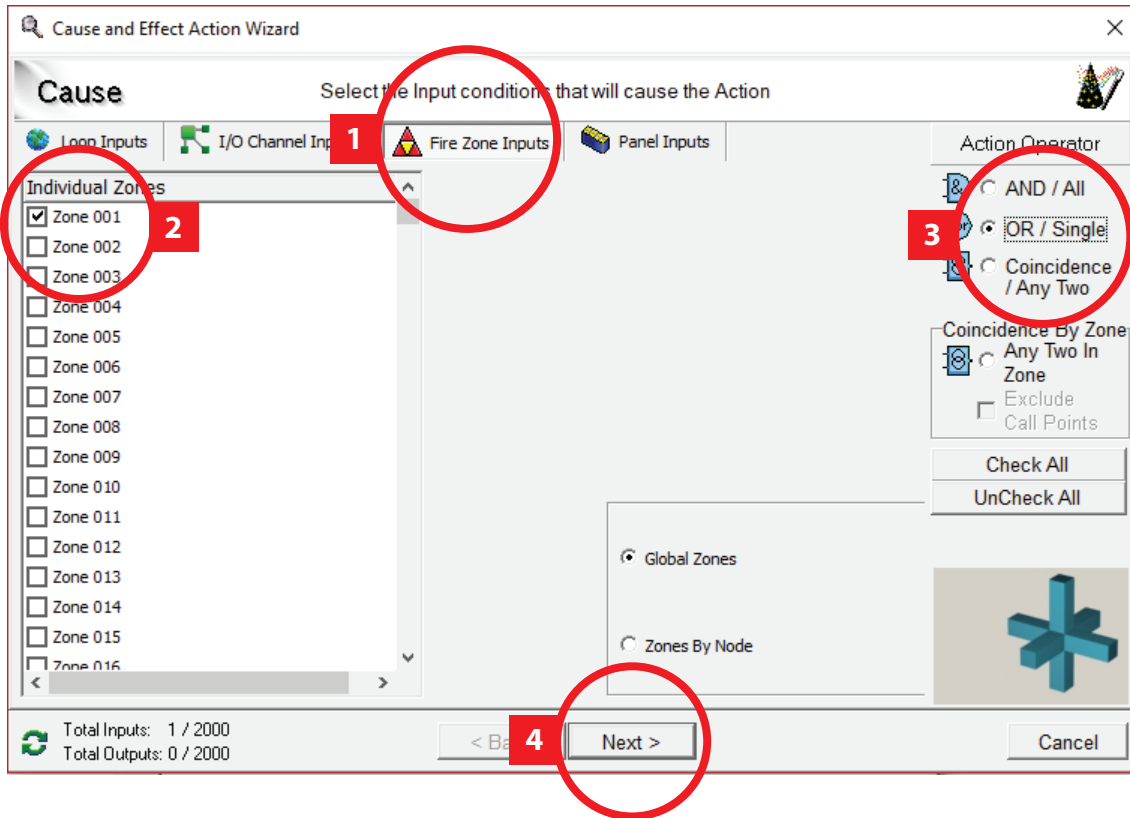
Click on the 'Cause & Effect' icon, shown below:



Double-click on the 'Action' icon, shown below:



The display will change to show available options for the input programming. Click on the 'Fire Zone Inputs' icon and the display will now show individual zones. Click on the individual zone required and the 'OR/Single' icon. An example below shows the settings required for zone 1.

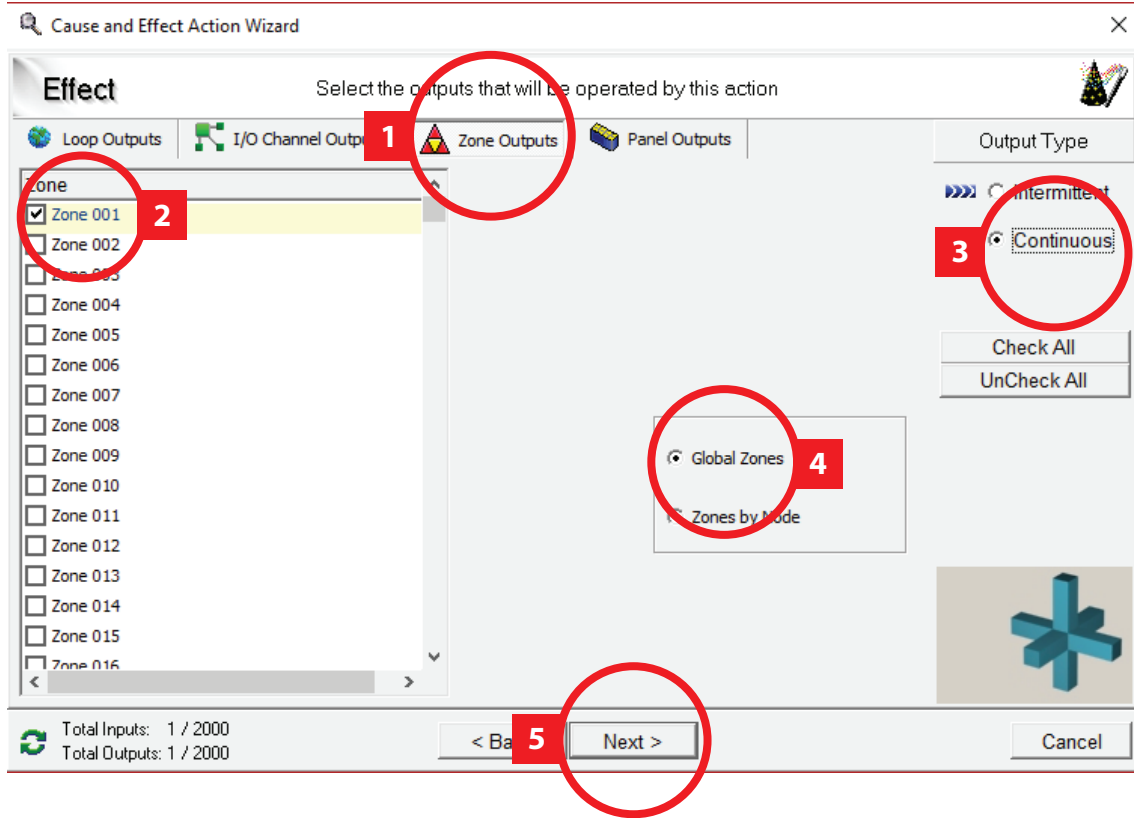


Click the 'Next >' button once complete.

The display will change to show available options for the output programming.

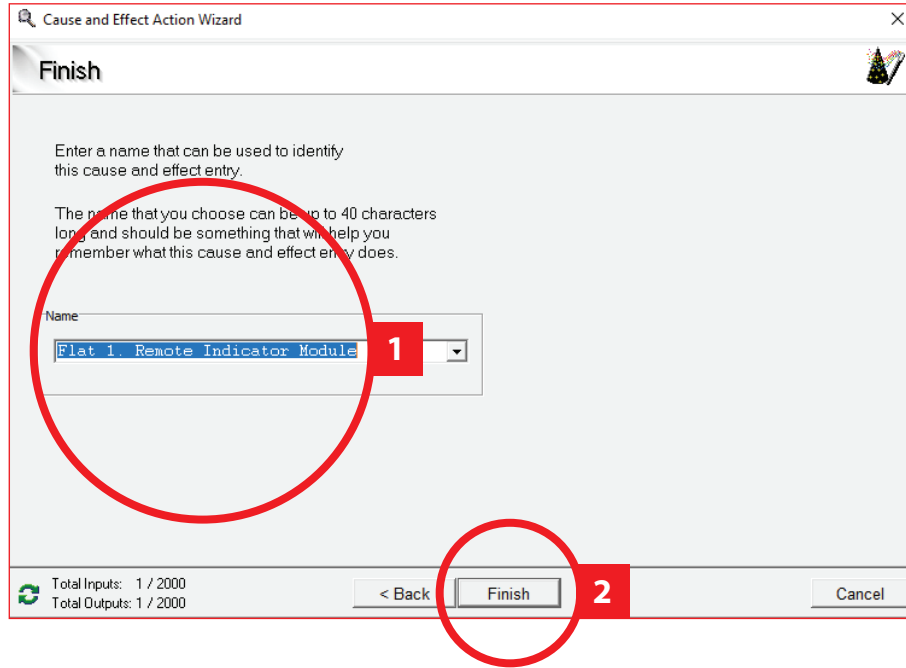
Click on the 'Fire Zone Outputs' icon and the display will change to show individual zones.

Click on the required individual zone and select the 'Continuous' output type. An example below shows the settings required for zone 1.





Click the 'Next >' button once complete.

The display will change and allow a text description to be allocated for the cause and effect rule written. An example is shown below.



Enter the required text to identify the rule and click the 'Finish' button once complete.

The rules for the system will be displayed under the cause and effect icon on the Loop Explorer front display. They will be individually identifiable via the text description allocated. An example is shown below.

Type	Name
 Action	Flat 1. Remote Indicator Module
 Action	Flat 2. Remote Indicator Module

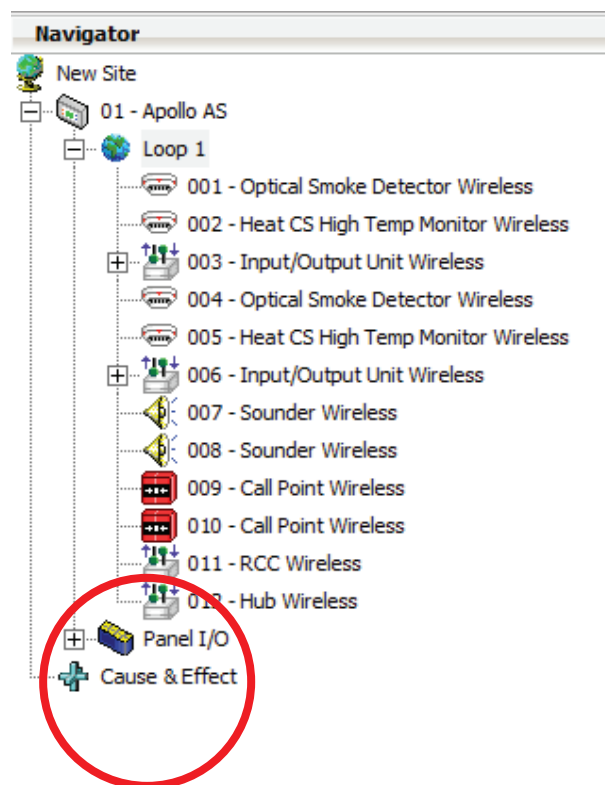
Repeat the above programming for each of the Wireless RIMs on the system which are required to follow individual zone activations.

# Linking an individual device to a RIM

An example is shown below for linking an individual device to an individual RIM. In this example, detection device 4 is associated with Wireless RIM device 6.

Fire detector address		Associated RIM address	
Device 1		Device 1	
Device 2		Device 2	
Device 3		Device 3	
Device 4	✓	Device 4	
Device 5		Device 5	
Device 6		Device 6	✓

Click on the 'Cause & Effect' icon, as shown below:



Double-click on the 'Action' icon, shown below:

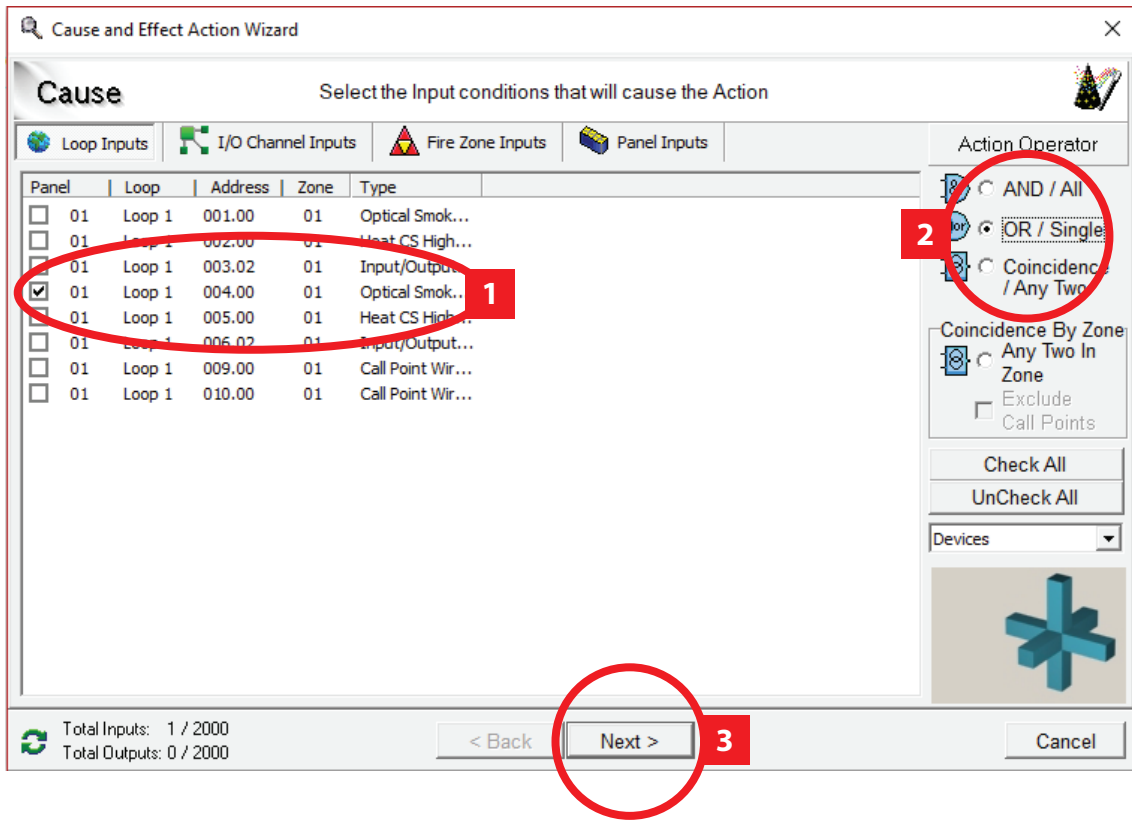




The display will change to show available options for the input programming.

Click on the individual device required (detector), followed by the 'OR/Single' action operator.

An example below shows the settings required for device 4.

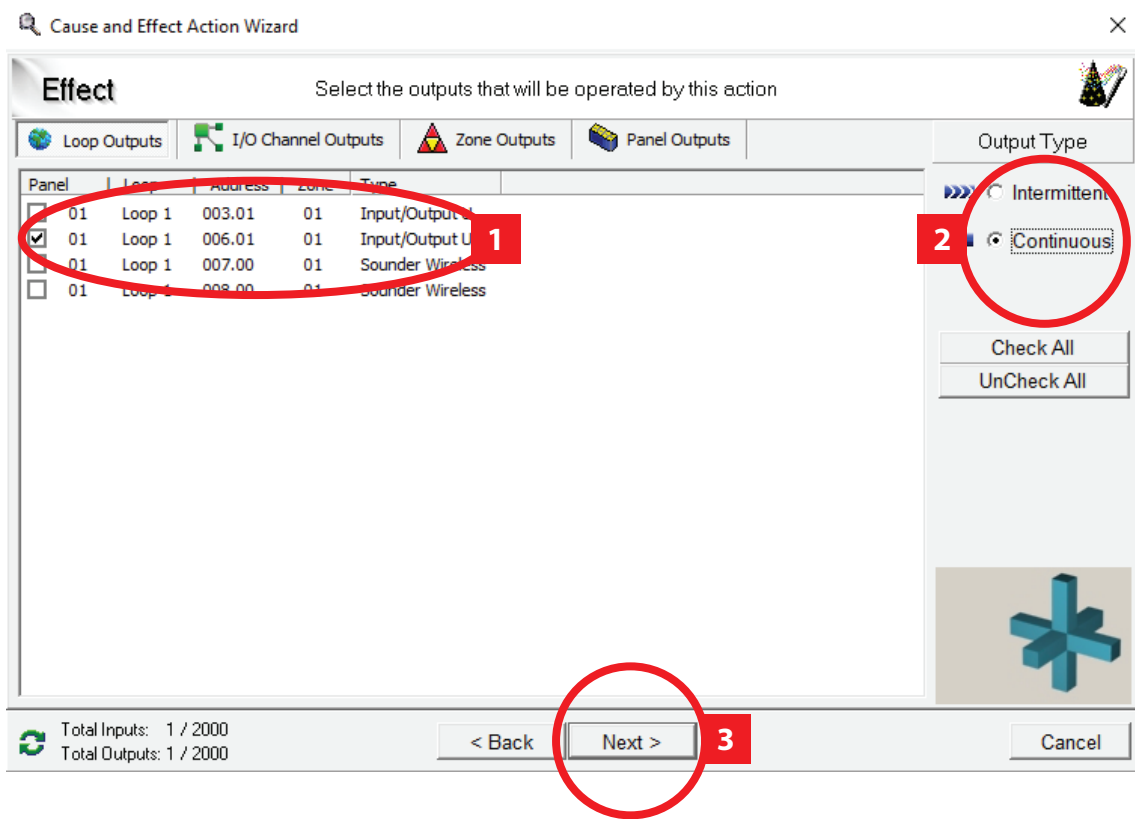


Click the 'Next >' button once complete.

The display will change to show available options for the output programming.

Click on the individual device required (RIM), followed by the 'Continuous' output type.

An example below shows the settings required for remote indicator module device 6.



Click the 'Next >' button once complete.

The display will change and allow a text description to be allocated for the cause and effect rule written. An example is shown below.

Cause and Effect Action Wizard

### Finish

Enter a name that can be used to identify this cause and effect entry.

The name that you choose can be up to 40 characters long and should be something that will help you remember what this cause and effect entry does.


Name  
Device 4. RIM

< Back Finish Cancel

Total Inputs: 1 / 2000  
Total Outputs: 1 / 2000

Enter the required text to identify the rule and click the 'Finish' button once completed.

The rules for the system will be displayed under the cause and effect icon on the Loop Explorer front display. They will be individually identifiable via the text description allocated. An example is shown below.

Type	Name
 Action	Device 4. Remote Indicator Module

Repeat the above programming for each of the Wireless RIMs on the system which are required to follow individual device activations.

# Testing RIM functionality

Once the programming of the Wireless RIMs is complete, it is recommended that their functionality is fully tested to ensure correct operation.

Below are some testing recommendations to ensure correct functionality.

## **Cause & effect programmed for linking a zone of devices to a RIM.**

- Activate a device into a fire alarm condition, in a zone which also has a RIM allocated to that zone.
- Ensure that the device operated into an alarm condition's LED illuminates, together with the LED of the RIM associated with the zone.
- Silence the control panel. The LEDs will still be illuminated.
- Reset the fire alarm condition on the control panel. The activated device and the associated RIM's LEDs will extinguish.
- Repeat the above test for each device in the zone. On each occasion the RIM's LED will operate and follow the operation as described above.

***Note: The RIM LED will only illuminate for fire alarm activations in the associated Zone. The LED should not illuminate for any other activations.***

## **Cause & effect programmed for linking an INDIVIDUAL DEVICE to a Remote Indicator Module.**

- Activate a device into a fire alarm condition which also has an associated Wireless RIM .
- Ensure that the device operated into an alarm condition's LED illuminates, together with the LED of the device's associated RIM.
- Silence the Control panel. The LED's will still be illuminated.
- Reset the fire alarm condition on the control panel. The activated device and the associated RIM's LEDs will extinguish.

**Note: The RIM LED will only illuminate for Fire Alarm activations from the allocated device. The LED should not illuminate for any other activations.**





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