

How to Set-up and Program Wireless Devices into the SmartLiving Range of panels

Introduction

This technical note will show you how to set-up and program the Two Way wireless devices into the SmartLiving range of systems.

Things to know before you begin

Radio Keyfob's are programmed into the system as 'Digital Keys' and do not take up a zone in the system.

These instructions use both SmartLeague programming software and keypad programming.

Enabling the Wireless Receiver

1. Check the address you wish to set the Wireless receiver at, making sure it does not clash with any other Prox Readers address on the system.



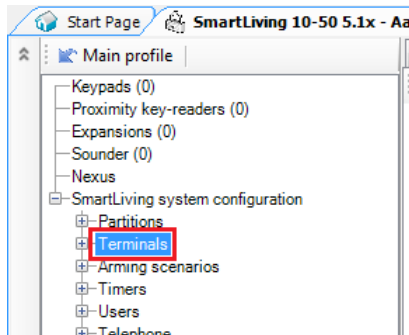
This includes Prox Reader address in any Alien keypads you may be using on the project

2. Set the DIP switches on the Wireless Transceiver to the required Address.

Expansion - Transceiver address		DIP-switch 12345678	Reader address								Keypad address		
SmartLiving 515	1	00000000	1	0	0	0	1	0	0	0	0	1	1
	2	00000001	2	0	0	1	0	0	0	0	0	0	2
	3	00000010	3	0	0	1	1	0	0	0	0	0	3
	4	00000011	4	0	1	0	0	0	0	0	0	0	4
	5	00000100	5	0	1	0	1	0	0	0	0	0	5
	6	00000101	6	0	1	1	0	0	0	0	0	0	6
	7	00000110	7	0	1	1	1	0	0	0	0	0	7
	8	00000111	8	1	0	0	0	0	0	0	0	0	8
	9	00001000	9	1	0	0	0	1	0	0	0	0	9
	10	00001001	10	1	0	1	0	0	0	0	0	0	10
SmartLiving 515 and 515	11	00001010	11	1	0	1	1	0	0	0	0	0	11
	12	00001011	12	1	1	0	0	0	0	0	0	0	12
	13	00001100	13	1	1	0	1	0	0	0	0	0	13

Air2-BS100 PCB

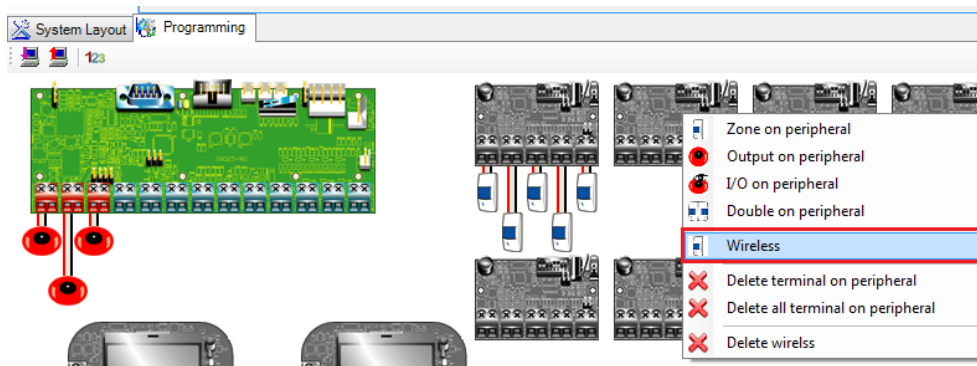
3. Via the Ness SmartLeague programming software, under **SmartLiving System Configuration**, select **terminals**.



4. Right click on an expander and then set it as **Wireless**



This is irrespective of the address you set the expander to as the address setting as per step 2



5. Once the expander is set as a wireless expander the 'wireless' icon will then display on that expander telling you it's a wireless expander.



Programming Wireless Keyfobs (Wireless Digital Keys) into the system.

1. On the Keypad, enter the **Installers Code** (default 9999) and then press **OK**

For example:

- Enter in 9999
- Press OK

2. Scroll down the list and select **Keys** then press **OK**.

```
PROGRAMMING
Installer code
Keys
Arming scenarios
```

3. Select **Enrol** and then press **OK**

```
Keys
Enrol
Key parameters
Delete key
```

4. Using the Down arrow, move the options to the reader that you had set the wireless Transceiver to and Press the **OK** button.

```
Readers
READER 002 W
```



In this example Reader 002 has been set as a Wireless Reader which is also identified by displaying a 'W' with the address, where a Hard Wired reader does not display this 'W'.

5. Using the up down arrow buttons on the keypad select the first **Digital Key** that you wish to learn into the system. Then press the **OK** button.

```
Enrol
KEY 002
KEY 003
KEY 004
```

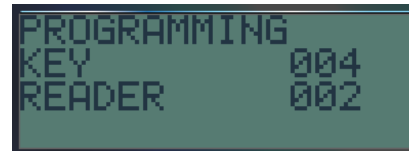
6. The LCD display will now summarize your selections before processing. In this example we have selected Key 003 to be enrolled into Reader 002.

```
PROGRAMMING
KEY 003
READER 002
```

7. On the Wireless Keyfob you are learning in, press the **C** and **D** buttons on the fob together.



8. Once it has been learnt in, the keypad will then display the next key to be learnt in.



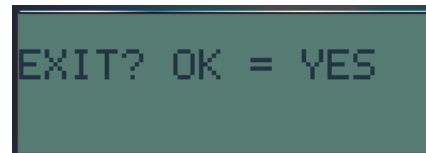
9. Follow the steps from step 7 above to learn more keyfobs in.

10. Once complete and no more Keys are to be learnt in, press the **OK** button on the keypad to save and exit this learn in operation.

11. Press the **ESC** button 2 times to exit the menus.

12. It will then ask if you want to save the settings.

Press **OK** to save the settings.



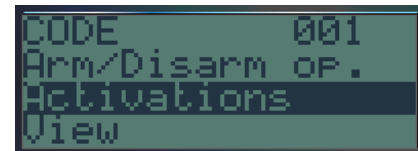
Before a wireless keyfob / Digital key will work on the system it needs to be enabled.

Enabling a Digital Key.

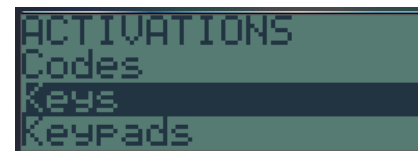
A keyfob (also known as the digital key) needs to be enabled before it will be able to work with the system, even knowing it has been enrolled.

1. On the Keypad, enter the **Master Code** (default 0001) and then press **OK**

2. Scroll down into you get to **Activations** then press **OK**.



3. Scroll down into you get to **Keys** and press **OK**.



4. Scroll down to the Key you want to enable and press the select key (star key) to select the Key. Then press **OK**.



5. The Key will now be enabled.

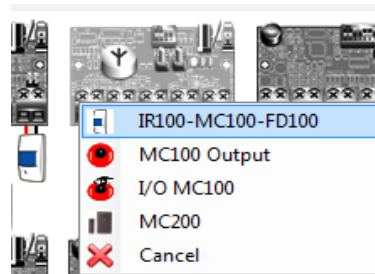
Programming Wireless detection devices into the system using SmartLeague Software.

1. Make sure the expander is set to **Wireless** by seeing the wireless icon on the module.



2. Right mouse click on the expander and choose what type of wireless device you which to program in.

(e.g. IR100 – Wireless PIR
MC100 – Wireless Reed
FD100 – Wireless Smoke Detector etc)



If these options are not displayed when you right mouse click on the terminal then make sure you have the module set as a wireless module (Refer to page 2 of this document).

3. Program settings as required, as you would for any zone, such as Zone Description, Area is belongs to, etc.

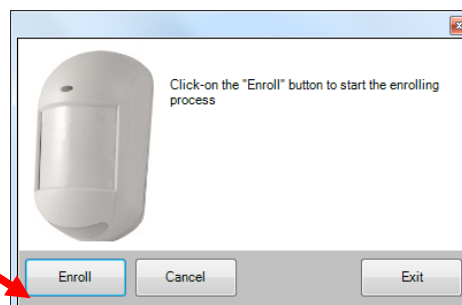
4. Select the Wireless type (e.g. Infrared Detector, Magnetic contract (Reed Switch) etc)

5. Press the **Enroll** button to enroll / learn in the wireless detection device.

6. Once you click on **Enroll**, it will then open up the device confirmation window confirming the device type to be learnt in.

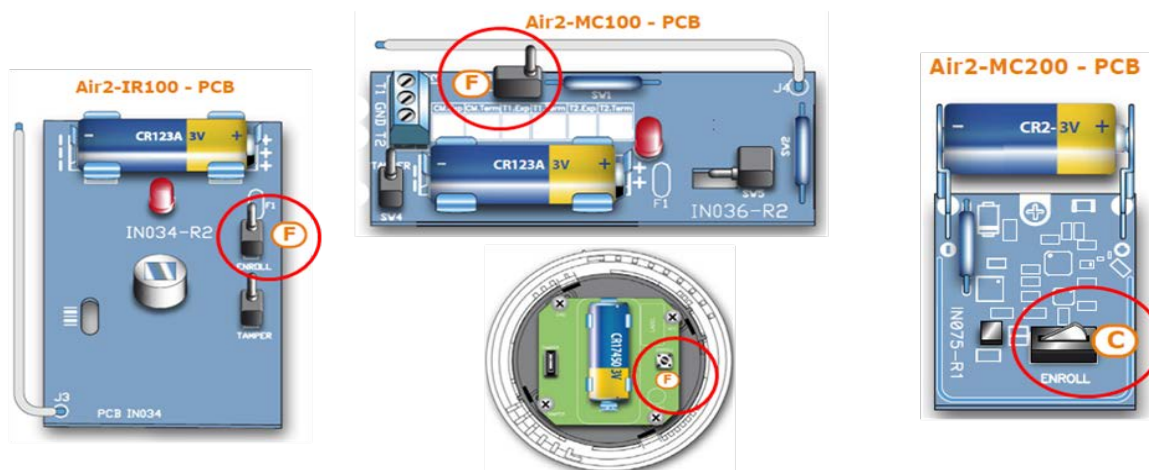
Make sure the device you have selected is the right type of device to learn in (e.g. Wireless PIR, Magnetic contact etc)

7. When ready to learn the device in, click on the **Enroll** button to start the Enrolling process.

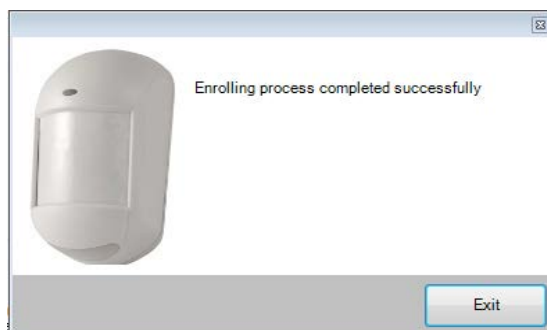


8. When prompted press the **Enroll** button on the Wireless Device being enrolled into the system to complete the enrolling process.

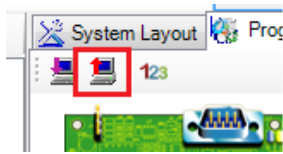
9. The following shows the location of the Wireless devices 'Enroll' button that needs to be pressed to complete the enrollment process.



10. Once the device is learnt in it will then display 'Enrolling process complete successfully' on the screen. Click on **Exit** to finish.



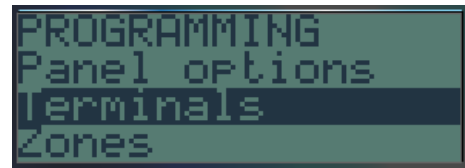
11. Once completed ensure you download the details to the control panel to enable it.



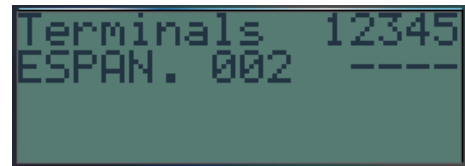
Programming Wireless detection devices into the system using the Systems Keypad.

1. On the Keypad, enter the **Installers Code** (default 9999) and then press **OK**

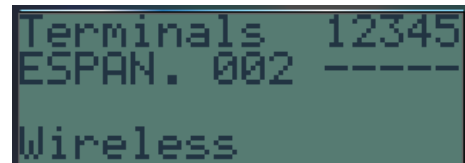
2. Scroll down into you get to **Terminals** then press **OK**.



3. The first page will show the panels first 5 terminals. Press the **Down Arrow** to bring up the next set of 5 terminals and continue until you select the expander you wish to program as a **Wireless** expander.



4. With the expander you wish to make a **Wireless** expander, press the **6** key on the keypad to make it a wireless expander.



(Notice it now says **Wireless** at the bottom of the screen)

5. Use the **Left** and **Right** arrow keys on the keypad to move the cursor under the terminal to be programmed.

6. Once selected, use digits **1~5** to configure the terminal.

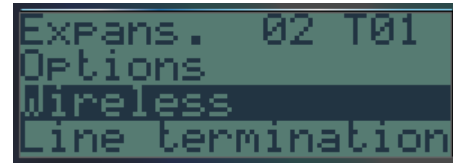
(e.g. 1 = Input, 2 = Output etc)

- **1** to configure the terminal as an INPUT ("I")
- **2** to configure the terminal as an OUTPUT ("O")
- **3** to configure the terminal as a TWO WAY - SUPERVISED OUTPUT ("T")
- **4** to configure the terminal as a DOUBLE ZONE ("D")
- **5** to configure the terminal as UNUSED ("-")
- **6** to enable/disable the terminal as "Wireless"

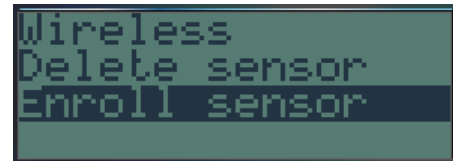
7. Once selected the type of the terminal press **OK**.

8. Once saved the **options** for the Terminal is displayed and you can program these options as you would a hard wired zone.

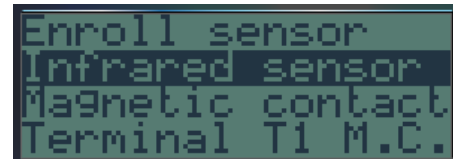
9. Set the options as required (i.e. Descriptions, partitions the zone will belong, etc) and then move onto the **Wireless** option.



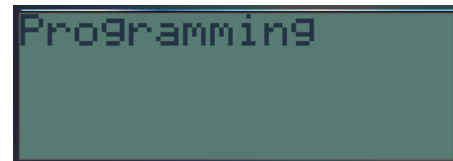
10. Scroll down to **Enroll sensor** and then press **OK**.



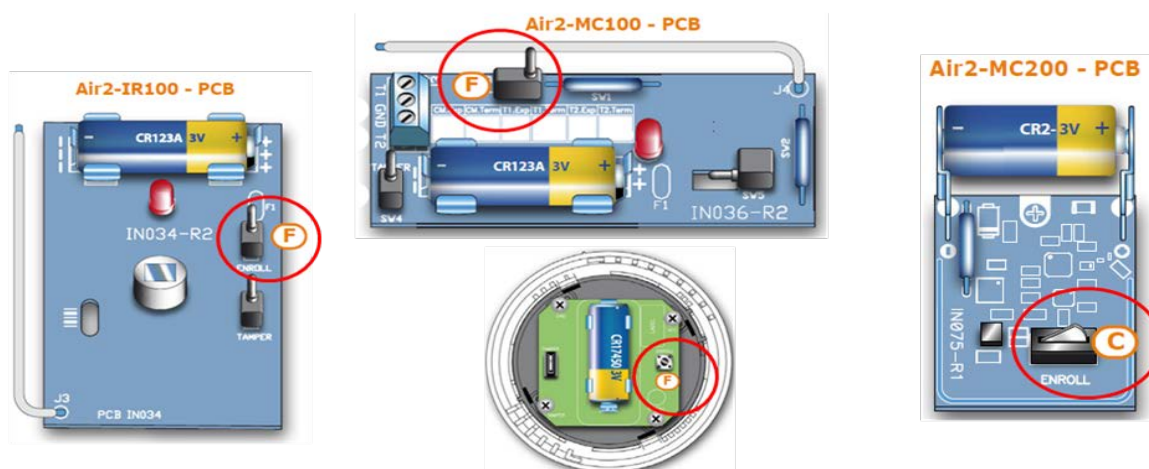
11. Select the Wireless Device Type to be enrolled, and then press **OK**.



12. **Programming** will be displayed as it waits for an incoming enrollment signal to be received from the Wireless device.



13. Once the **Programming** message is displayed, press the Wireless devices **Enroll** button (as shown below for each Wireless Detection Device) you are learning into the system to complete the enrollment process.

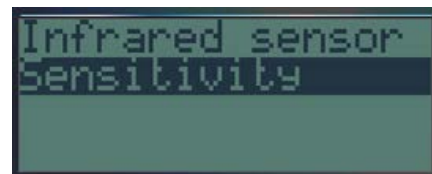


14. Once the enrollment signal is received and the device is learnt into the system, the device type will be displayed on the keypad screen.

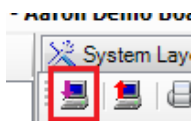


15. Press **OK** to save this and to move onto the next option.

16. You can also if you wish adjust the Wireless PIR's sensitivity via software / panel programming. Press **OK** to select it and begin changing the sensitivity by the software, or press the **ESC** key to exit and save the new enrolled Wireless programming.



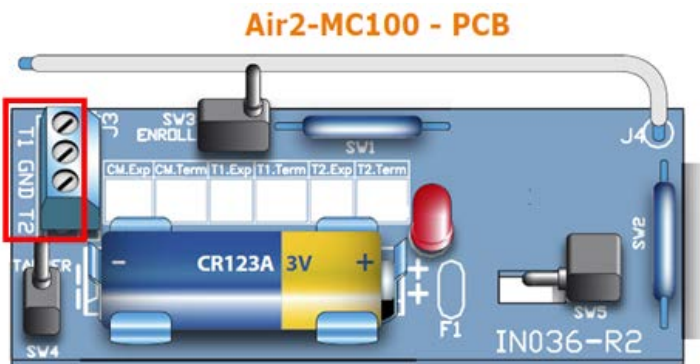
17. If you are using SmartLeague software to later change settings, do not forget to upload the settings from the control panel into the SmartLeague Software.



Programming Wireless Output on a MC100 Magnetic Reed Switch.

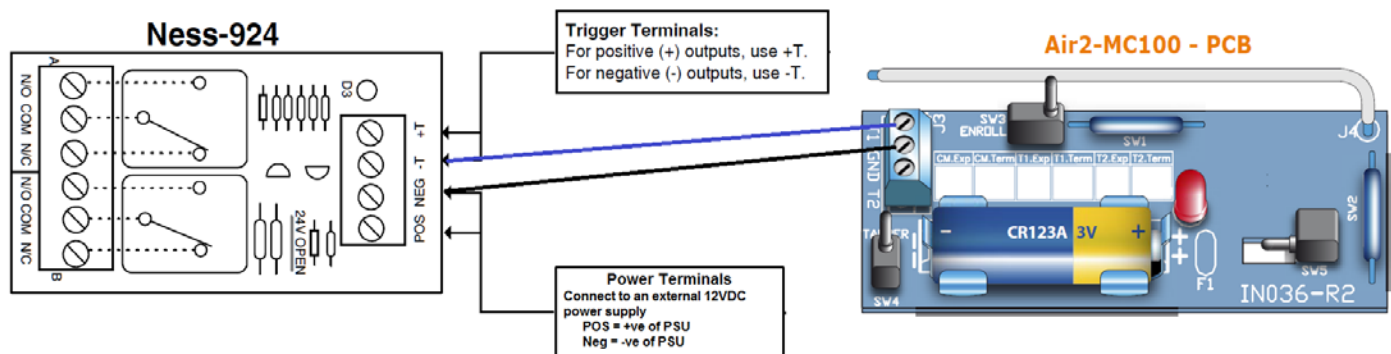
In addition to the two reed switches on the main MC100 (Long side and Short Side), the MC100 Wireless Reed Switch has two terminals (T1 and T2) that can be configured as Inputs or Outputs.

This section of the Technical note will step through the configuration and programming of a terminal to use it as an 'Output'.



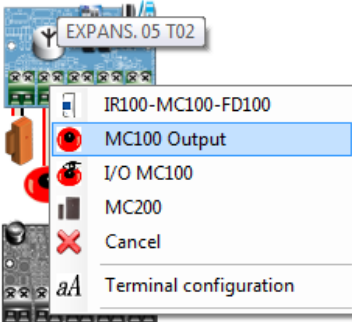
Configuring the MC100 Output.

1. Because of the low power in the Wireless Reed Switch, if you require more current to be switched than the 50mA available, then you need to introduce the Ness 924 Sensitive Relay (Ness Part No. 101-284) which can then switch 7 Amps @ 30VDC and power this via a separate 12VDC power source (Connected to Pos and Neg of the Ness 924 Relay module). This is then triggered by the Terminal Output of the MC100 into the T- terminal of the Ness-924 Relay as shown below.

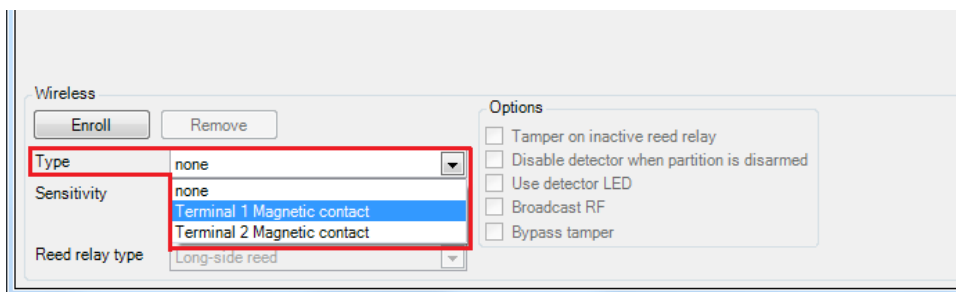


Programming the MC100 Output.

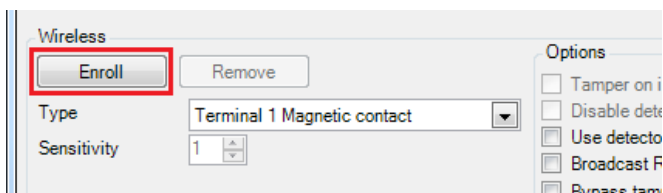
1. Using the SmartLeague software, right mouse click on the terminal you wish to set as the wireless Output and select MC100 Output.



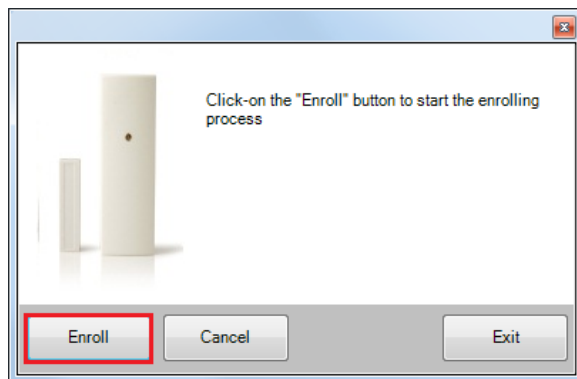
2. Double click on the terminal you set as an Output to open the programming window for this output.
3. Select the wireless **Type** to be Terminal 1 or Terminal 2 of the MC1000.



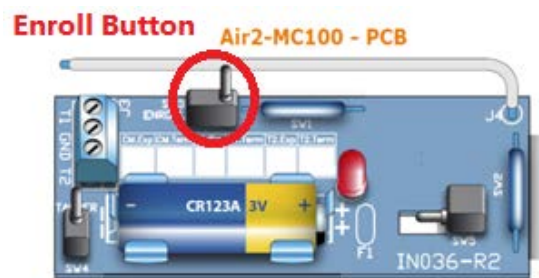
4. Once the type is set, press the **Enroll** button.



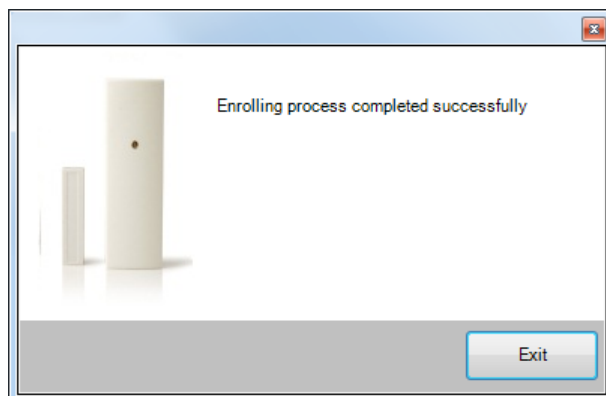
5. The enroll dialog will then appear. Press the **Enroll** button to begin the enrollment.



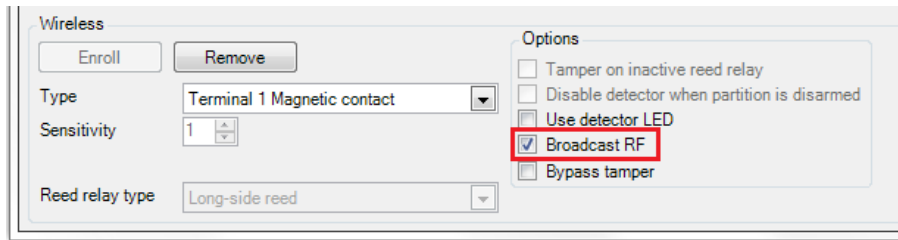
6. Once you press the **Enroll** button from step 5, follow the steps in the dialog and when prompted to do so, press the **Enroll** button on the device to learn it in.



7. Once the system enrolls the Terminal it will reply with confirmation the process is complete



8. Once the terminal is enrolled tick on the **Broadcast RF**.



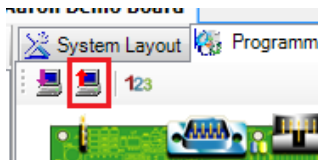
The screenshot shows a 'Wireless' configuration window. On the left, there are buttons for 'Enroll' and 'Remove'. Below them, 'Type' is set to 'Terminal 1 Magnetic contact', 'Sensitivity' is set to '1', and 'Reed relay type' is set to 'Long-side reed'. On the right, under the 'Options' section, several checkboxes are listed: 'Tamper on inactive reed relay', 'Disable detector when partition is disarmed', 'Use detector LED', 'Broadcast RF' (which is checked and highlighted with a red box), and 'Bypass tamper'.



You must enable the Broadcast RF option. This option must be enabled when the zone and one of the terminals of the Air2-MC100 device (T1 or T2) is configured as an Output. Assures the activation / deactivation of the output within 2 seconds of the control panel command.

With this option disabled, the activation / deactivation of the wireless output occurs within 2 minutes of the command from the control panel.

9. Once the enrollment is done and you have ticked the Broadcast RF from step 8, you then need to send the settings to the control.



Additional Information:

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Email: customerservice@ness.com.au

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