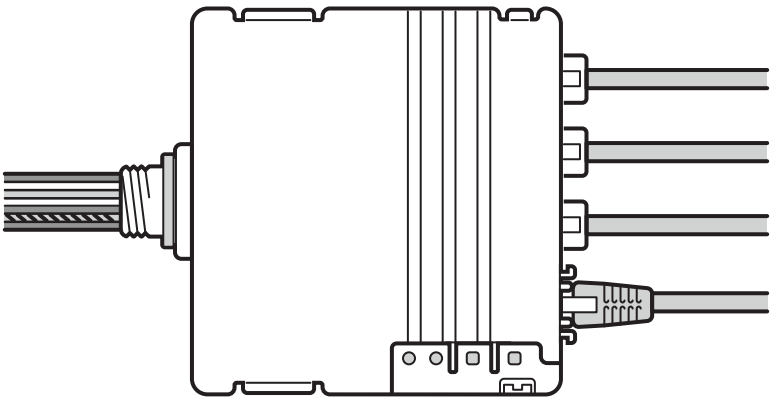
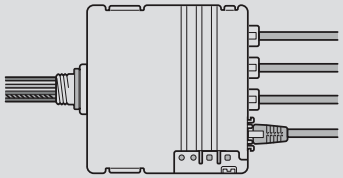
autani
building controls



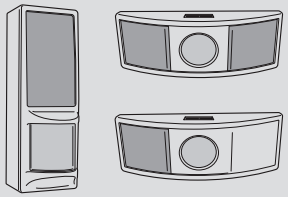
AUTANI WRC WIRELESS PERIPHERALS PROGRAMMING GUIDE

⚠ Before You Start Commissioning Process



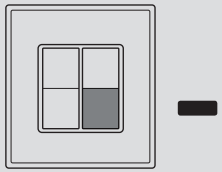
1. Ensure your WRC is installed and wired correctly and that you can reach it to press its control buttons.

2. If the WRC is installed but inaccessible please review our Proximity Commissioning Kickoff instructions in Appendix III.



3. Allow EnOcean motion and photosensor devices to charge for a few minutes under direct light for ideal commissioning results. EnOcean installation guide should be used for mounting instructions.

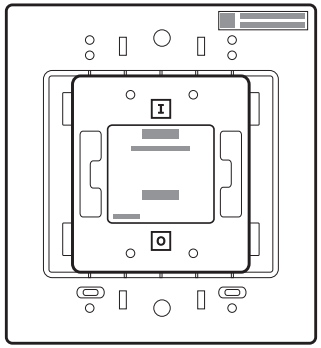
4. Once you have entered Commissioning Mode, it will deactivate after 2 minutes of inactivity – at which point you should follow the appropriate instruction to re-enter Commissioning Mode.



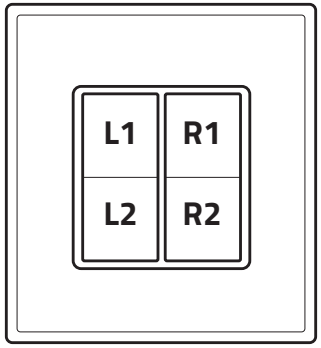
5. You can exit from commissioning at any step by holding on R2 – whether thats simply to exit or if you get lost and don't know where you are and want to restart.

Remember you can always call Autani's support team if you are having any trouble commissioning your devices and we will be happy to assist you. T 443.320.2233 E support@autani.com

The Commissioning Tool



Before you start, take a look at the back of the Commissioning tool to determine the TOP. The **I** symbol should be at the top and the **O** symbol below.



We will refer in the instructions to the four buttons as L1 and L2 (on the left) and R1 and R2 (on the right).

Two Types of Click

Click

Hold

Entering Commissioning Mode

There are different ways to enter Commissioning Mode depending on whether you are starting for the first time, adding a new device or adjusting settings on an existing one. Take a look and see which method is right for your situation A or B. If you do not have access to the WRC you want to program then you might require 'Proximity Commissioning Mode' which is Appendix III.

Before you enter Commissioning Mode find your next intended instructions to avoid being 'timed out'. If there is no activity on the Commissioning Tool for 2 minutes then Commissioning Mode is 'timed out' and you will need to re-enter Commissioning Mode. Note that changes are saved immediately so in case you do get 'timed out', all your changes will remain.

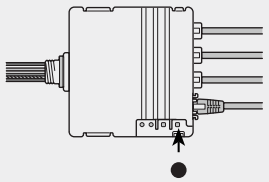
Here are the different instructions you can go to after entering Commissioning Mode:

1. Circuit Configuration
2. Set Light Levels on Dimming Circuit(s)
3. Mapping a Device
4. Removing Mapped Devices from All Circuits
5. Removing Mapped Devices From Specific Circuits
6. Configure Motion Sensor Settings
7. Configure Motion Sensor Timeout
8. Configure Photosensor Settings
9. Configure Power-Up Settings

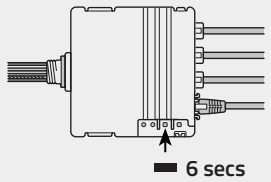
A

Entering Commissioning Mode for the First Time

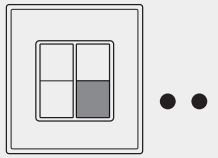
This is for the first time you use the Commissioning Tool. It is also the way to re-enter Commissioning Mode once the Commissioning Tool has been mapped but no other devices have yet been mapped. It can also be used as the method to map a new Commissioning Tool.



1. Turn off the lights by pressing SW2 on the WRC. The lights will come on when entering Commissioning Mode.



2. On the WRC, press and hold SW1 until Green LED ON, Red LED ON, then both LEDs OFF and release SW1 (should take approx 6 secs).



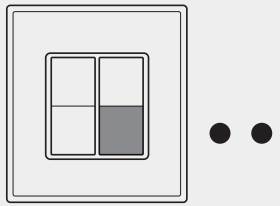
3. Double click R2 on commissioning tool. You are now mapped to the WRC and in Commissioning Mode. All circuits connected to the WRC will blink.

B

Re-enter Commissioning Mode For Existing Devices

This is the method for when the Commissioning Tool has been mapped to the WRC and there are other EnOcean devices that have also been mapped.

1.

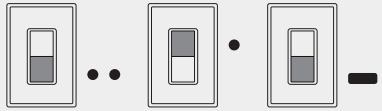


Start with lights on. On completion of entering Commissioning mode lights will blink.

Double click R2 on the Commissioning Tool.

Then press the relevant buttons on another mapped device (as shown in step 2) within 10 seconds.

2.



EnOcean Rocker Switch
Double click down, single click up, press and hold down, all within 2 secs.

Motion & Photosensors
Press Menu Button
(the button with no indent line)

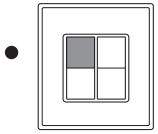
1. Circuit Configuration

This is where you can choose what type of circuit you would like to configure. There are 3 types of circuit choices: dimming circuit(s) with low end cut-off (default), dimming circuit(s) that dim to 0%, and on/off circuit(s). Circuit combinations are shown in Appendix VI.

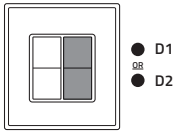
NOTE These instructions will only work in Commissioning Mode.
If you are not in Commissioning Mode then please go back to pages 4 and 5.

For Dimming Circuits with Low End Cutoff

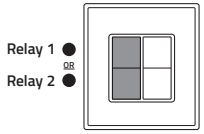
The default setting is a low end light level of 8%. The default operation is that the light will dim to 8% and then cutoff.



1. Click L1 on the Commissioning Tool. [Lights will blink once].



2. Select your desired dimming circuit. On selecting your circuit it will set **D1** or **D2** to be dim to zero.

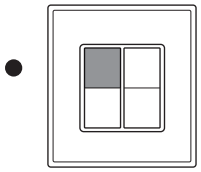


3. Click L1 or L2 to make it a low end cutoff with the desired relay.

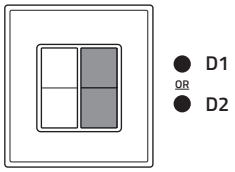
3. Hold R1 to return to Main Menu. [Lights will give a long blink].

For Dimming Circuits That Dim to 0% and/or On/Off Lights

Dimming: The default setting is a low end light level of 0%.



1. Click L1 on the Commissioning Tool. [Lights will blink once].



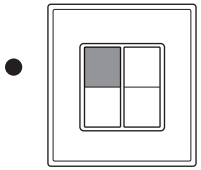
2. Select either **D1** or **D2** to remove the relay as low end cutoff. Relay(s) can now be used for On/Off Light(s) (O1 & O2) and/or D1 & D2 can be used as dim to 0% circuits.

3. **To set light levels on dimming circuits** Hold L2 and jump to step 3 of Page 7. Hold R1 to return to Main Menu [Lights will give a long blink].

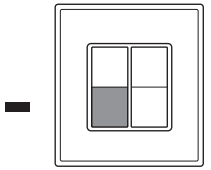
2. Set Light Levels on Dimming Circuit(s)

This is to adjust the Maximum and Minimum dim levels.

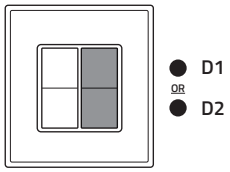
NOTE These instructions will only work in Commissioning Mode.
If you are not in Commissioning Mode then please go back to pages 4 and 5.



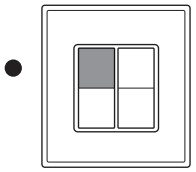
1. Click L1 on the Commissioning Tool. [Lights will blink once].



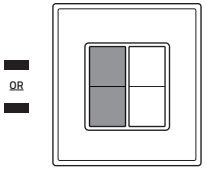
2. Hold L2. [Lights will blink once].



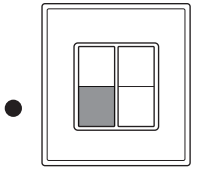
3. Then, click R1 to adjust the light levels for Circuit **D1** **OR** Click R2 to adjust the light levels for Circuit **D2**.



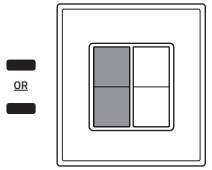
4. Click L1 to adjust the Max light level. The default max light level is 70%.



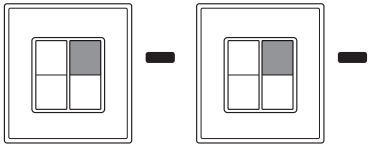
5. Adjust the Max light level by holding L1 to make brighter and holding L2 to make dimmer.



6. Click L2 to adjust the Min light level



7. Adjust the Min light level by holding L1 to make brighter and holding L2 to make dimmer.

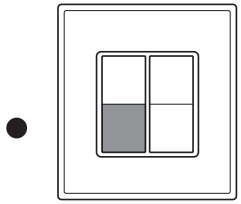


8. Hold R1 twice to return to Main Menu.

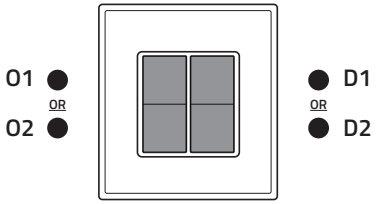
3. Mapping a Device

Depending on what configuration you chose in Instruction 1, you can have up to 4 circuits to map devices to. The ON/OFF circuits are called **O1** and **O2** and the Dimming circuits are called **D1** and **D2**.

NOTE These instructions will only work in Commissioning Mode.
If you are not in Commissioning Mode then please go back to pages 4 and 5.

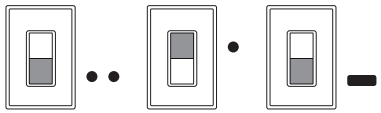


1. Click L2 on the Commissioning Tool. **IF** you want to map a device to ALL Circuits go to Step 3. [Lights will blink twice].

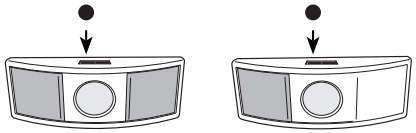


2. **IF** you want to map a device to a specific circuit: click L1 to map to Circuit **O1**, click L2 to map to Circuit **O2**, R1 to map to Circuit **D1** or R2 to map to Circuit **D2**. On selecting a circuit the circuit lights will blink.

3. Add your device:



To Map an EnOcean Rocker Switch
On the device you want to map, double click down, single click up, press and hold down. On successfully adding a device the circuit lights will blink. For EnOcean Rocker behaviors see Appendix I.



To Map a Motion Sensor or Photosensor
Press Menu Button on the device you want to map (button with no indent line). On successfully adding a device the circuit lights will blink.

A failed attempt to add a device will result in 3 light blinks meaning the device was already mapped or max device count has been reached.

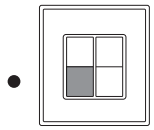
4. Hold R1 on the Commissioning Tool to return to main menu. [Lights will give a long blink].

NOTE In a large space or corridor you may wish to assign more than one device to each circuit. Here are the maximum number of devices you can assign to the same circuit:
5 x Rocker Switches
5 x Motion Sensors
1 x Photosensor

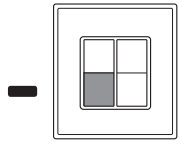
4. Removing Mapped Devices From All Circuits

Here is how to remove mapped devices from all circuits. There is a choice to remove individual devices or all devices from all circuits. To remove devices from specific circuits go to Instruction 5.

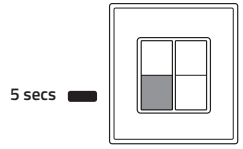
NOTE These instructions will only work in Commissioning Mode.
If you are not in Commissioning Mode then please go back to pages 4 and 5.



1. Click L2 on the Commissioning Tool. [Lights will blink twice].

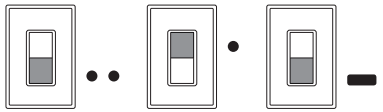


2. Hold L2. [Lights will blink twice].

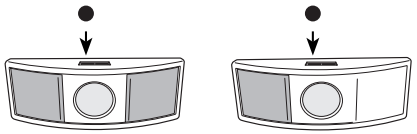


3. **IF** you want to **remove all devices from all the circuits** Hold L2 for 5 seconds.

4. **IF** you want to **remove an individual device from all circuits**



To Remove an EnOcean Rocker Switch
On the device you want to remove, double click down, single click up, press and hold down. On successfully removing all devices the circuit lights will blink twice.



To Remove a Motion Sensor or Photosensor
Press Menu Button (button with no indent line). On successfully removing all devices the circuit lights will blink twice.

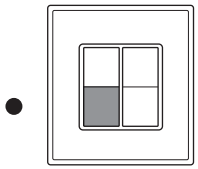
A failed attempt to remove a device will result in 3 light blinks meaning the device not found (possibly already removed or never mapped).

5. Hold R1 on the Commissioning Tool **twice** to return to main menu. [Lights blink twice after first hold followed by a long blink after second].

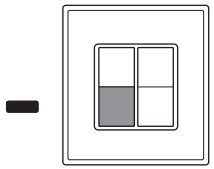
5. Removing Mapped Devices From Specific Circuits

This is how to remove mapped devices from specific circuits. There is a choice to remove individual devices or all devices from a specific circuit.

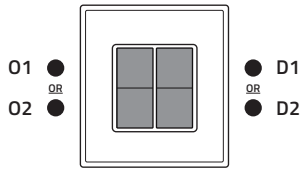
NOTE These instructions will only work in Commissioning Mode.
If you are not in Commissioning Mode then please go back to pages 4 and 5.



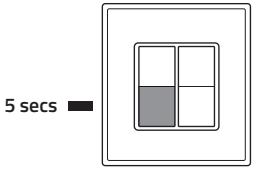
1. Click L2 on the Commissioning Tool. [Lights will blink twice].



2. Hold L2. The lights will toggle off-on once on entering 'Remove Device' Mode.

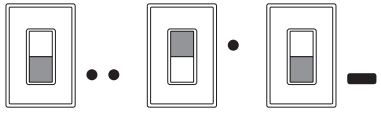


3. Select the circuit you want to remove a device or devices from with a single click. On selecting a circuit the circuit lights will blink.

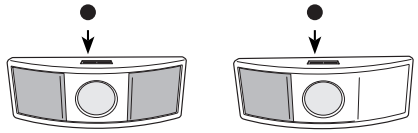


4. <u>IF</u> you want to **remove all devices** from the circuit Hold L2 for 5 seconds.

5. <u>IF</u> you want to **remove an individual device from the specific circuit**



To Remove an EnOcean Rocker Switch
On the device you want to remove, double click down, single click up, press and hold down. On successfully removing a device the circuit lights will blink twice.



To Remove a Motion Sensor or Photosensor
Press Menu Button (button with no indent line). On successfully removing a device the circuit lights will blink twice.

6. Hold R1 on the Commissioning Tool **twice** to return to main menu. [Lights blink twice after first hold followed by a long blink after second].

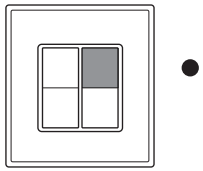
6. Configure Motion Sensor Settings

This is to set how the motion sensors will behave with their respective circuits. If wired sensors (autani and third party) are used, they are automatically tied to all circuits.

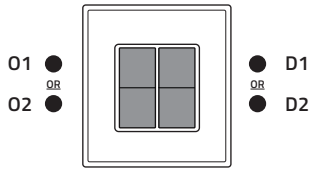
The default mode is Smart On/Off where lights come on with movement and a lack of movement will turn them off. 'Vacancy Mode' is for when you do not wish the lights to turn on with movement. To apply Vacancy Mode follow the instructions below.

NOTE These instructions will only work in Commissioning Mode.
If you are not in Commissioning Mode then please go back to pages 4 and 5.

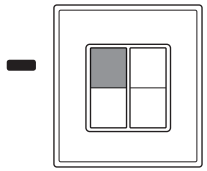
Applying Vacancy Mode to a Circuit



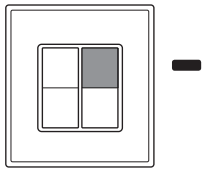
1. Click R1 on the Commissioning Tool. [Lights will blink three times].



2. Select the circuit you want to apply Vacancy Mode to with a single click. On selecting a circuit the circuit lights will blink.



3. Hold L1 to apply Vacancy Mode to the selected circuit. **To configure the timout settings jump to Instruction 7**.



4. Hold R1 to return to the Main Menu. [Lights will give a long blink].

To Remove Vacancy Mode from a Circuit

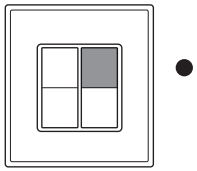
1. Follow steps 1, 2 and 4 above skipping step 3.

7. Configure Motion Sensor Timeout

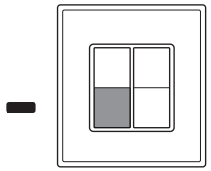
This is to set the amount of time between a lack of motion and the lights going off. The default timeout setting is 18 minutes.

All timeouts mentioned here are in addition to any built in timeouts 3rd party motion sensors may come with. For EnOcean sensors, that is 2 minutes and 15 seconds.

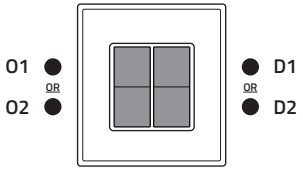
NOTE These instructions will only work in Commissioning Mode.
If you are not in Commissioning Mode then please go back to pages 4 and 5.



1. Click R1 on the Commissioning Tool. [Lights will blink three times].

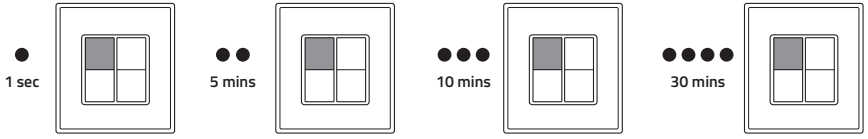


2. Hold L2. [Lights will blink three times].



3. Select the circuit connected to your motion sensor(s) that you want to adjust with a single click. On selecting a circuit the circuit lights will blink.

4. When you select your circuit, it defaults to a timeout of 18 mins.



5. To adjust the timeout click the same button that you used to select your circuit. 1 click to make timeout 1 second, 2 clicks for 5 mins, 3 clicks for 10 mins and 4 clicks for 30 mins, a further click will cycle back to the default and the lights will toggle on/off. **Shown here for Circuit O1, so we are using the L1 button (if you had selected O2 you would use L2, D1 would be R1, and D2 is R2).**

6. Hold R1 **twice** to return to Main Menu. [Lights blink twice after first hold followed by a long blink after second].

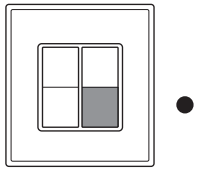
8. Configure Photosensor Settings

This is to define the threshold at which your photosensor will activate. The default light threshold is 600 Lux.

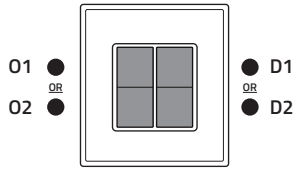
NOTE These instructions will only work in Commissioning Mode.
If you are not in Commissioning Mode then please go back to pages 4 and 5.

Only On/Off circuits have a photosensor setting to configure.

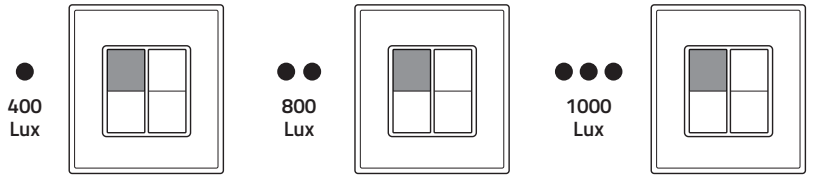
If a photosensor is mapped to a dimming circuit, the dim level will automatically adjust to maintain light level set by dimmer.



1. Click R2 on the Commissioning Tool. [Lights will blink four times].



2. Select the circuit connected to the photosensor that you want to adjust. Click L1 for Circuit O1 or L2 for Circuit O2. On selecting a circuit the circuit lights will blink.



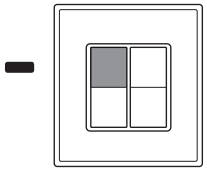
3. When you select your circuit, it defaults to a threshold of 800 Lux. To adjust the threshold click the same button that you used to select your circuit. 1 click to change the threshold to 400 Lux, 2 clicks for 800 Lux, and 3 clicks for 1000 Lux, a further click will cycle back to the default and the lights will toggle on/off. **Shown here for Circuit O1, so we are using the L1 button (if you had selected O2 you would use L2).**

4. Hold R1 to return to Main Menu. [Lights will give a long blink].

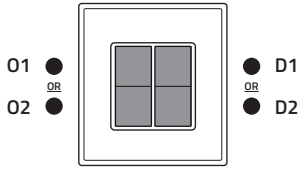
9. Configure Power-Up Settings

This is to define what the circuit should do after a tripped breaker or power outage. The default setting is to restore the previous state.

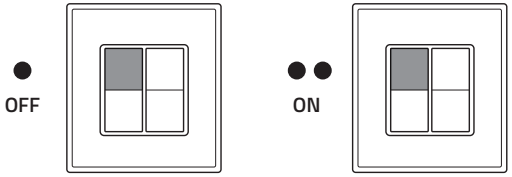
NOTE These instructions will only work in Commissioning Mode.
If you are not in Commissioning Mode then please go back to pages 4 and 5.



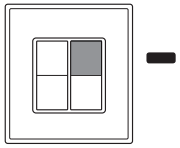
1. Hold L1 on the Commissioning Tool. [Lights will have a long blink followed by a blink].



2. Select the circuit that you wish to adjust. Click L1 for Circuit O1, L2 for Circuit O2, R1 for Circuit D1, or R2 for Circuit D2. On selecting a circuit the circuit lights will blink.

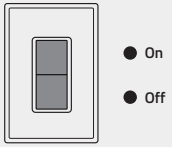


3. When you select your circuit it defaults to restore previous state. To change this setting click the same button that you used to select your circuit. 1 click for OFF, 2 clicks for ON, a further click will cycle back to the default and the lights will toggle on/off. **Shown here for Circuit O1, so we are using the L1 button (if you had selected O2 you would use L2, D1 would be R1, and D2 would be R2).**

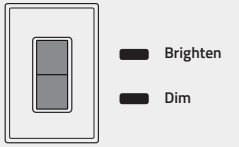


4. Hold R1 to return to Main Menu. [Lights will give a long blink].

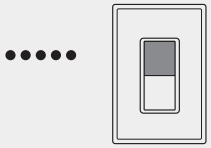
Appendix I: EnOcean Rocker Behaviors



a. Click Up to turn on; click down to turn off.



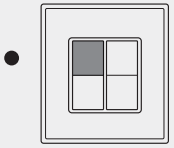
b. Press and hold Up to brighten
Press and hold Down to dim.



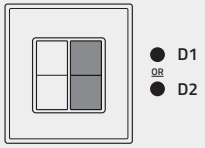
c. Click up for step dimming (5 steps max to min). One second after max value is reached a single click will restart the cycle from min. Cycle timer expires after 10 seconds. Single press followed by a 1 second wait needed to re-initiate step dimming cycle.

Appendix II: Inverting a Dimming Circuit

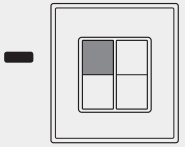
To invert the settings on a dimming circuit follow these instructions:



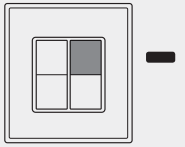
1. Click L1 on the Commissioning Tool. [Lights will blink once]



2. Select the circuit you wish to invert D1 or D2.



4. Hold L1 to invert the dimming circuit.

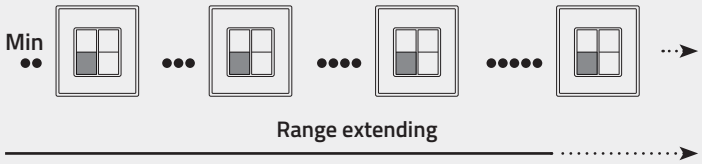


4. Hold R1 to return to Main Menu. [Lights will give a long blink].

Appendix III: Proximity Commissioning Kickoff

This is the method for if your WRC is inaccessible or to re-assign the Commissioning Tool.

The number of clicks on L2 will determine how 'relaxed' the proximity kickoff is. The more L2 clicks you do before the rest of the sequence means you can be farther from the WRC.

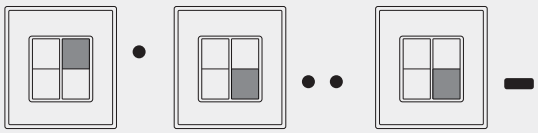


1. Start with lights on. When you enter Commissioning Mode the lights will blink. The L2-click-count requires a minimum of 2 clicks. Each subsequent click increases the range. So, if 2 L2-clicks did not initiate Commissioning Mode try 3 L2-clicks followed by the rest of the sequence. Add L2-clicks to the start of the sequence as necessary until the device(s) you want to commission have entered commissioning mode.

   This method should be used with caution because any WRC nearby will hear this sequence and could enter commissioning mode if they are within the range selected by L2.

   This method can be used to commission multiple WRCs at the same time if the same configuration is desired on all of them. For example, by clicking L2 14 times, followed by the rest of the sequence, the range will be roughly 80 ft line of sight.

   Signal strength is used to determine the range. Signal strength degrades when passing through walls, desks, people, etc.



2. Single click R1, double click R2 , press and Hold R2 and move as close to the WRC as possible and release. Lights will toggle and you are now in Commissioning Mode.

Appendix IV: FAQs

1. I've followed the 'Enter Commissioning Mode' steps but I do not see any lights blinking.

A. Confirm the blue, orange, and yellow wires are capped off together. If you are using these wires for hardwired switches, make sure they are in the ON position.

2. I have multiple circuits, why are only some of them blinking?

A. Confirm circuits are wired properly.

B. Only the circuits that can be adjusted in the respective instruction will blink. So for example, if you go to configure the photosensor settings only the on/off lights will blink as the photosensor settings for the dimming lights are set my the dimmer and cannot be set through this instruction.

3. Everytime I try to map an EnOcean device, the lights blink 3 times.

A. 3 blinks under the mapping instructions means that the device is already mapped or the device per circuit count limit has been exceeded. If you have a device you want to remove, do that first and try again. If you don't recall mapping any devices and want to start fresh, follow instructions 4 or 5.

4. I press the Menu button on the EnOcean sensors under the mapping device instruction and nothing happens.

A. Place sensors under direct light to allow them to charge.

B. If after charging you still don't get anything, press the menu button and look to the left of it to see if a green LED lights up. For motion: try adding a CR2032 battery and if not replace device. For photosensor: replace device.

5.I try to select O1 and O2 under the mapping devices instructions and I don't see either circuit blink.

A. Go back to circuit configuration and confirm you have cleared the low end cutoffs and are setup to use the relays as on/off lights.

6. I am lost and do not know where I am in the commissioning process.

A. Press and hold L2 to exit commissioning and reenter.

7. I've set my photosensor threshold, what does this mean?

A. The photosensor threshold is the lux value that the photosensor has to read before it turns the associated circuits off. The circuit will come back on when the light level has dropped below half the threshold value.

8. I've mastered the commissioning tool, is there a way to disable the light indicators?

A. Yes, from menu press and hold L2 for 2 seconds. To reenable, exit and reenter commissioning.

Remember you can always call Autani's support team if you are having any trouble commissioning your devices and we will be happy to assist you. T 443.320.2233 E support@autani.com

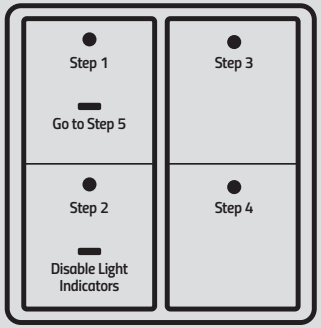
Appendix V: Commissioning Mode Function Map

MASTER LEVEL

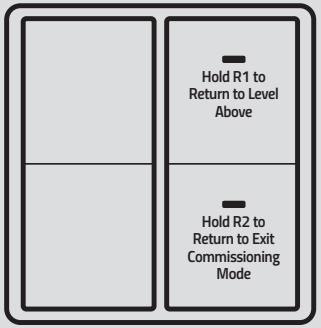
TOP LEVEL

SUB LEVEL

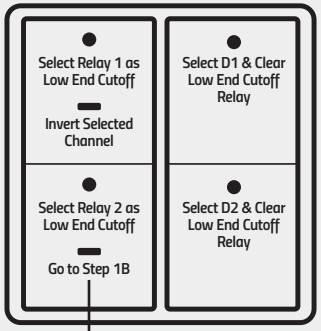
Main Menu



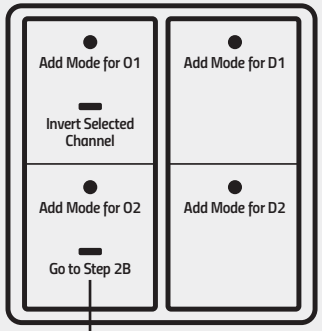
Global Functions



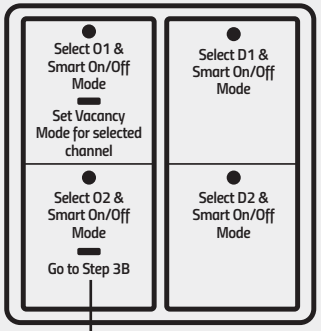
Step 1A – Dim Configuration



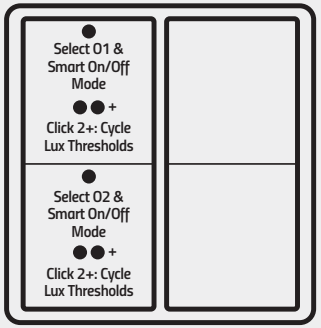
Step 2A – Map Devices



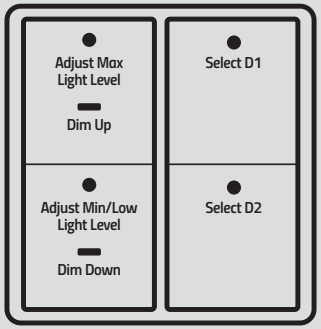
Step 3A – Motion Sensor Settings



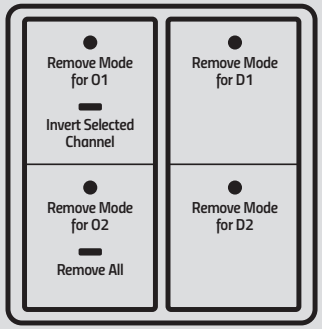
Step 4A – Photosensor Settings



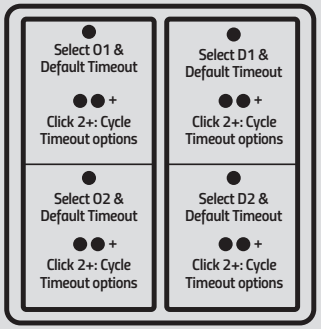
Step 1B – Light Levels



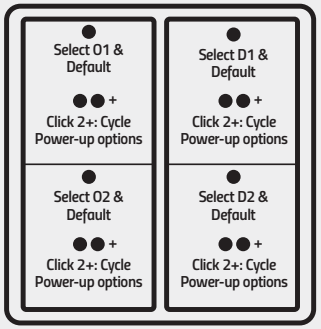
Step 2B – Un-Map Devices



Step 3B – Motion Timeout Settings



Step 5 – Power-Up Settings



Appendix VI: Circuit Options

The WRC is capable of controlling up to 4 individual circuits (some require a power pack). Below is a breakdown of the possible combinations:

1 Circuit:
A: On/Off
B: Dimming with Low End Cutoff
C: Dimming w/o Low End Cutoff (Driver dims to 0)

2 Circuits:
A: Two On/Off (with power pack)
B: Two Dimming with Low End Cutoff (power pack required)
C: Two Dimming w/o Low End Cutoff (Driver dims to 0)
D: On/Off & Dimming with Low End Cutoff (power pack required)
E: On/Off & Dimming w/o Low End Cutoff (Driver dims to 0)
F: Dimming with Low End Cutoff & Dimming w/o Low End Cutoff (Driver dims to 0)

3 Circuits:
A: Two On/Off & Dimming w/o Low End Cutoff (Driver dims to 0) (power pack required)
B: On/Off & Dimming with Low End Cutoff & Dimming w/o Low End Cutoff (Driver dims to 0) (power pack required)

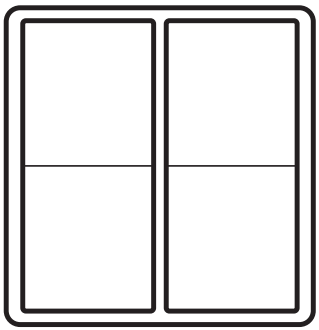
4 Circuits:
A: Two On/Off & Two Dimming w/o Low End Cutoff (Drivers dims to 0) (power pack required)

User-Defined Settings

Use this area to note down the settings you have defined for each circuit, or useful information for the next person to adjust the settings.

Circuit O1

Circuit O2



Circuit D1

Circuit D2