

Universal Dimmer Receiver Module

CMR-100



Specification:

Function: On / Off / Dimmer

Frequency: 433.92MHz

Power Rating: 230V~ /50Hz

Output rating:

Incandescent and halogen lamps (230V~): 20W-200W Max.

Electronic transformers (12V~): 20W-200W Max.

Inductive transformers (12V~): 40W-200W Max.

Dimmable energy saving lamp: 3W-24W Max.

Dimmable LEDs: 3W-24W Max.

! Not compatible to fluorescent lamp

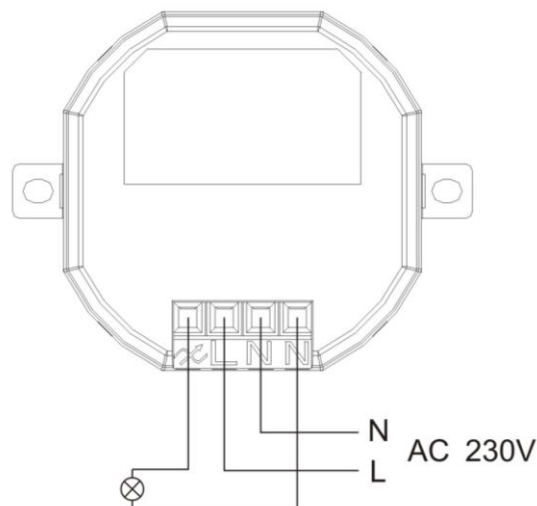
Overview:

Featuring an unique universal dimmer receiver module controlling existing dimmable LED, dimmable energy saving lamp, incandescent lamp, 230V~ halogen lamp and 12V halogen lamp with inductive transformer or electronic transformer.

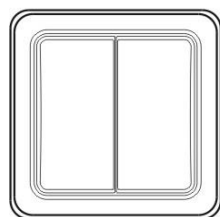
With built-in 4 step rotary switch for adjusting the dim level accordingly to different brands of load(s) used.

Wiring:

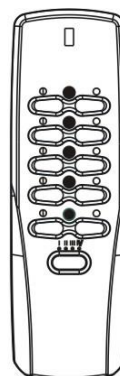
1. Turn Off mains power before installing and wiring.
2. Connect AC 230V Live wire into terminal L-in.
3. Connect AC 230V Neutral wire into terminal N-in.
4. Connect load Live wire into terminal \times -out.
5. Connect load Neutral wire into terminal N-out.
6. Tighten the terminal screws.



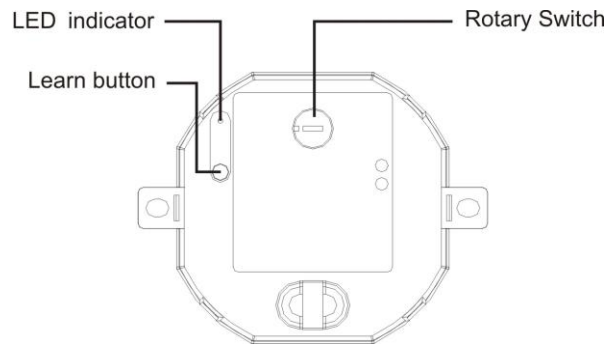
7. To install module into wall / ceiling box, break off the mounting tabs.
8. Turn On mains power and proceed pairing module with wireless wall switch or remote control.



Wall Switch



Remote Control



Pairing:

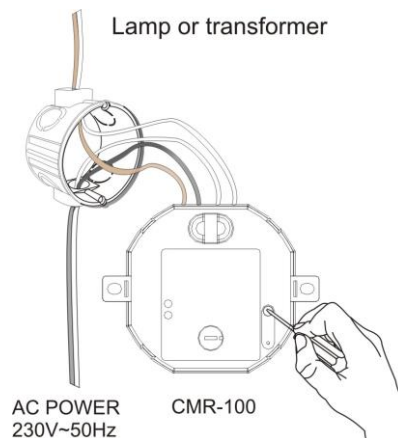
Module can pair with up to 6 different remote controls at any one time as it has **6 memories**.

Module is not compatible to “Code Switch” remote controls.

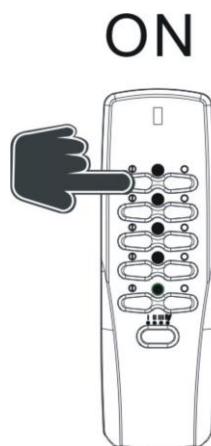
Only compatible to “Self Learning” remote controls.

Pairing using **LEARNING MODE:**

1. On the module press the ‘**Learn**’ button once (LED on module will flash), this will enter learning mode.



2. With a remote control press the ‘**ON**’ button intended to be paired; load(s) will flash twice to confirm that the remote control is now paired.



NOTE: Learning mode lasts for 12 seconds; if no signal is received from a remote control during this time then the module will automatically exit learning mode without pairing the device.

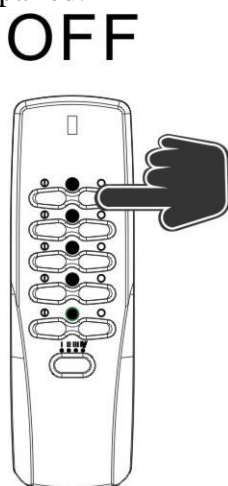
To exit learning mode manually, simply press the **‘Learn’** button again.

! If during learning mode the module does not react and LED on module continues to flash, this means that the module’s memory is **FULL** and no further remote control may be paired unless one of the existing remote control is first unpaired (see below).

Unpairing:

Removing single device:

1. On the module press the **‘Learn’** button once (LED on module will flash), this will enter learning mode.
2. With a remote control press the **‘OFF’** button intended to be un-paired; load(s) will flash twice to confirm that the remote control is un-paired.



Clearing Memory (will remove all paired remote controls):

On the module press the **‘Learn’** button for 6 seconds (LED on module will flash), release then press once again. Load(s) will flash twice to confirm that all remote control is unpaired.

※ **Important** ※

Load (s) must be under ‘OFF’ state when performing ‘pairing’ and ‘un-pairing’ mode.

Dim Level Setup:

! Recommend using the same brand of load at the same time.

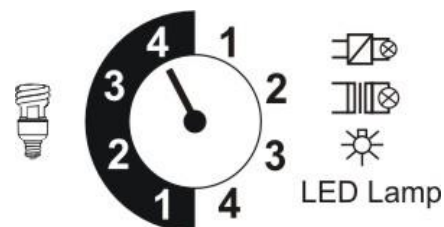
1. From factory pre-set the rotary switch will be set at ESL position 4.
2. Total 4 dim level starting from ‘4’ (Brightest) through to ‘1’ (Dimmest).
3. Choose the type of load (A) or (B) you are connecting with because the setup will be different.
4. Type of setup:

(A) Dimmable ESL

(B) Dimmable LED / Incandescent and halogen lamps / Electronic or Inductive transformers

(A) Dimmable ESL

- Connect all load(s) and with the paired remote control and turn ON the receiver module, load



will need 100% power to activate therefore **load will rise to 100% brightness** then dim down to the relevant brightness level, you can clearly see the full range of dimming effect each time you alter the rotary switch.

Fig. 1 Adjust the rotary switch anticlockwise from 4 to 3, **load will rise to 100% brightness** then dim down to the relevant brightness level.

Fig. 2 If you think the dim level is still too bright then alter further from 3 to 2, again **load will rise to 100% brightness** then dim down to the relevant brightness level.

Fig.3 If during this step the load flickers or turns OFF, then alter one step back from 2 to 3 to the most appropriate dim level setting.

You may also choose your own desired brightness level.



(B) Dimmable LED/ Incandescent and halogen lamps / Electronic or Inductive transformers

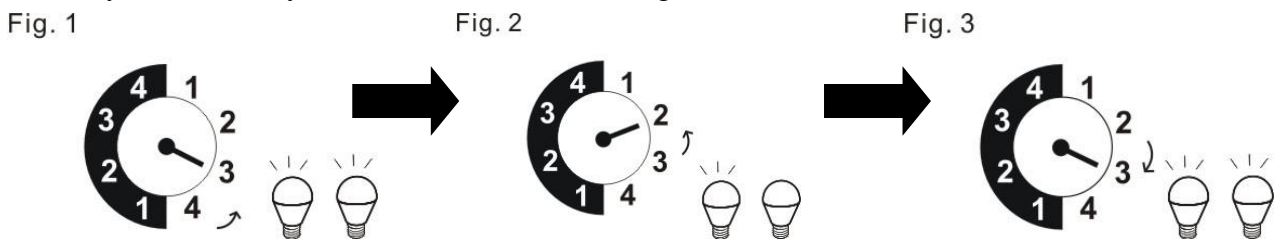
- Connect all load(s) and with the paired remote control turn ON the receiver module, **load will dim in steps** to the relevant brightness level, you can clearly see the dimming effect each time you alter the rotary switch.

Fig.1 Adjust the rotary switch anticlockwise from 4 to 3, **load will dim down in steps** to the relevant brightness level.

Fig.2 If you think the dim level is still too bright then alter further from 3 to 2, again **load will dim down in steps** to the relevant brightness.

Fig.3 If during this step the load flickers or turns OFF, then alter one step back from 2 to 3 for the most appropriate dim level setting.

You may also choose your own desired level of brightness level.



! During dim level setup, some load(s) can be dimmed to a very low level however may not have enough power to properly turn ‘ON’ especially with cold load(s).

Characteristic of each load may be different therefore if this case is found after the setup please perform the dim level setup again and increase one or two brightness level.

! If you replace a new load or cleared all memories on receiver module, please perform the dim level setup again.

※ Caution※

If dimmable ESL is set in the wrong setting (B), the load may be in an abnormal state. i.e unable to turn 'ON' the load.

Operation:

ON/OFF Function:

Press the 'ON' button on wall switch, the load(s) will gradually illuminate.

Press the 'OFF' button on wall switch, the load(s) will gradually turn OFF.

Dimming Function:

1. Make sure the load(s) is switched ON.
 2. With the remote control press the ON button again, the load(s) will start to dim.
 3. To stop at the desired dim level, press the ON button again.
- ※ Dim level dims in cycle, during the cycle if no signal is given within 4 cycles the load(s) will stop at 100% brightness.

! After setting a dim level with the remote control the load(s) is then switched OFF, the next time that the light is switched back ON again, dimmable ESL will rise to 100% brightness then to the stipulated brightness or dimmable LED will directly return to the previous stipulated brightness.

Note:

This module is capable and safe for dimmable ESL and dimmable LEDs to operate up to 50 Watts maximum, but in order to fulfil the regulation the product specification rating must indicate 24Watts Maximum.

Caution:

Please leave minimum of 1.5 meters in-between 2 or more receivers.