

# INSTALLATION MANUAL

## WIRELESS ACM RELAY

### WI-FI CONTROLLER WITH 2 DRY INPUTS










Model: ACM-2R-2Z



## PRODUCT INFORMATION

This product is a Wi-Fi enabled universal dimmer module with remote control capability over the internet via the TIS App. It features dry input(s) particularly designed to be coupled with any push-button wall switch for smart lights control.

### PRODUCT SPECIFICATIONS

 <b>Power supply</b>	Input voltage	110-230 VAC 50/60 Hz
	Output power	3W / 12V
	Protection	Internal protection fuse
	Current consumption	10-20 mA / 12 V DC
 <b>Output</b>	Number of relays	2
	Nominal voltage	110 / 230 V AC 50/60 Hz
	Nominal current per channel	3 A / 230 VAC
 <b>Output switching current</b>	Max Switching current	3A/230 VAC resistive 2A/230 VAC florescent
	Max Continues current	3A/230 VAC
	Max Switching voltage	230VAC / 30VDC
 <b>Output service life</b>	Mechanical endurance	> 10,000,000 OPS
 <b>Output switching times</b>	Operating time	8mS (at nomi. Volt)
	Releasing time	5mS (at nomi. Volt)
	Max. operating frequency	25 cycle/min
 <b>TIS AIR</b>	WIFI signal	2.4 GHz
	Protocol standard	802.11 b/g/n
 <b>Operation</b>	Digital inputs	2 dry inputs for lights control
	TIS AIR	TIS protocol messages & commands
	PRG button with LED	For programming
	Upgrading	Over WIFI connection
 <b>Dimensions</b>	(Width × Length × Height)	20mm × 49mm × 49mm
 <b>Housing</b>	Materials	Fireproof PC
	Internal parts color	White
	IP rating	IP 50



BARCODE (UPC-A)





### Read Instructions

We recommend that you read this Instruction Manual before installation.



### Mounting Location

Install in a dry, indoor area with a suitable temperature and humidity range.



### Safety instructions

Electrical equipment should only be installed and fitted by electrically skilled persons.

Failure to observe the instructions may cause damage to the device and other hazards.

These instructions are an integral part of the product and must remain with the end customer.



### Electrical Wires

The recommended wire size for light channels is 2.5mm, for the Line, Neutral, and Load cables. The installer should consider the total current consumption when selecting the wires.



### Warranty

There is a two-year warranty provided by law. The hologram warranty seal and product serial number are available on each device.



### Programming

This device can be tested and programmed manually. Advanced programming requires knowledge of the TIS Device Search software and instruction in the TIS advanced training courses.



### Simple Installation

it fits on most junction box sizes or can be located anywhere.

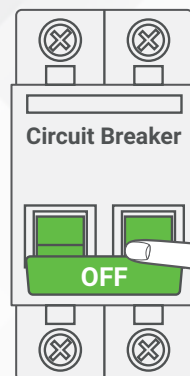




## INSTALLATION STEPS

1»

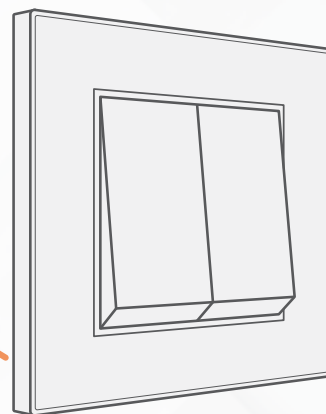
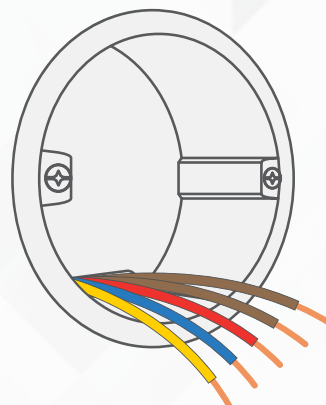
Turn off the power at the main circuit breaker to turn off voltage supply to the switch.



**WARNING! HIGH VOLTAGE**

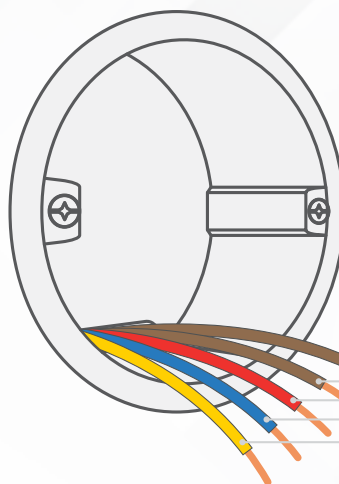
2»

Remove the switch cover. Unscrew and pull the wall switch out. Take the wires out of the load and line.



3»

Find a total of 5 wires.



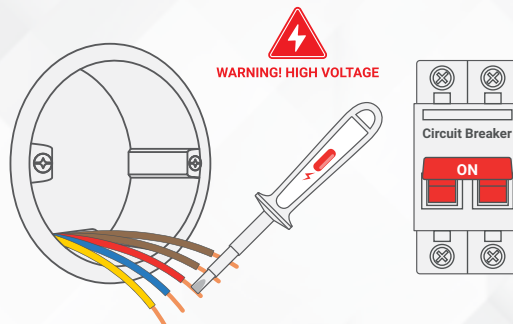
Switch 2  
Switch 1  
Live  
Neutral  
Earth



## INSTALLATION STEPS

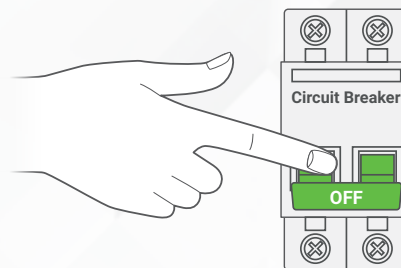
4»

Turn on the power at the main power breaker, and carefully identify the live wire using a voltage tester and find the neutral wire.



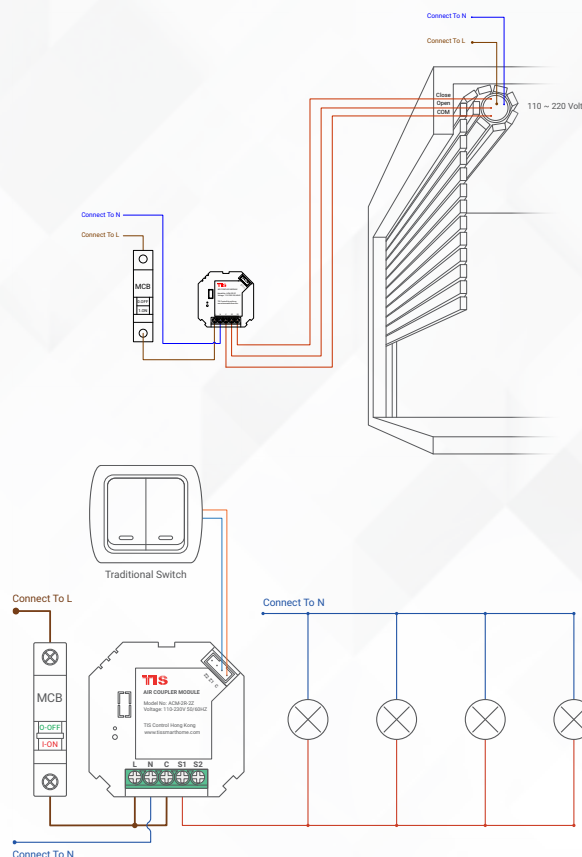
5»

Turn off the power at the main power breaker again to turn off the voltage supply to the switch.



6»

- ▶ Attach the neutral and the live wires to the N & L terminals, respectively.
- ▶ For the 110/220V Loads, you need to connect the L and C terminals.
- ▶ For the dry contact control, keep the C terminal disconnected.
- ▶ Attach the switch1 & 2 wires to the S1 & S2 terminals, respectively.
- ▶ Connect the 2 Dry inputs wires to the wall switch.

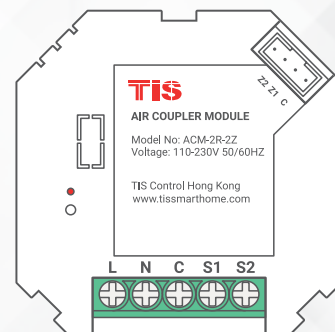
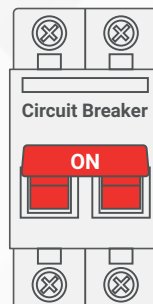




## INSTALLATION STEPS

7»

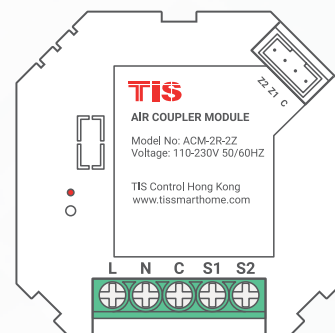
Turn on the breaker. The module should turn on accordingly.



8»

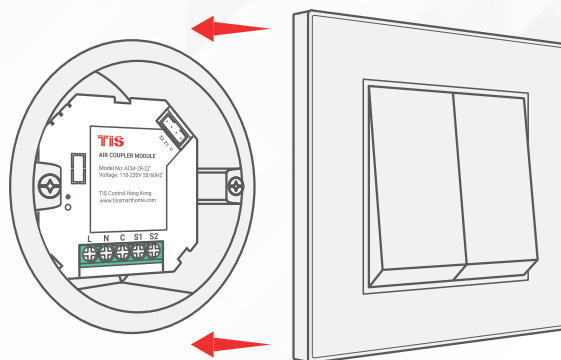
Start the programming and test the device performance using the app.

(See p. 6 for server linking and p. 8 for configuration steps).



9»

If the module works accurately, then insert the ACM Module into the junction box, and fix it to the wall.



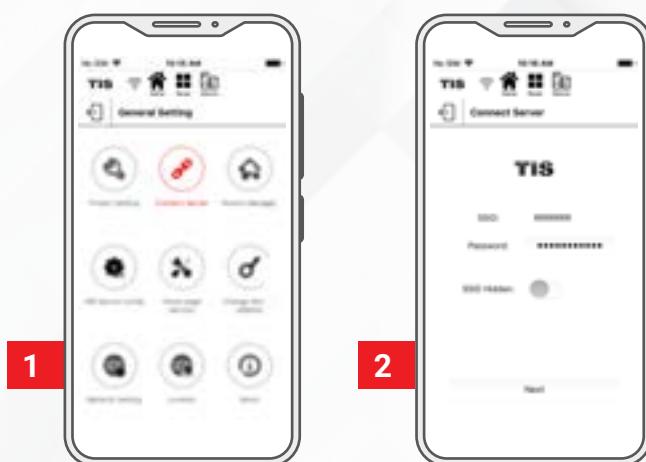
### SERVER LINKING

In order for a project to be fully linked to the TIS server, server configuration must be enabled in just 1 product within that project.

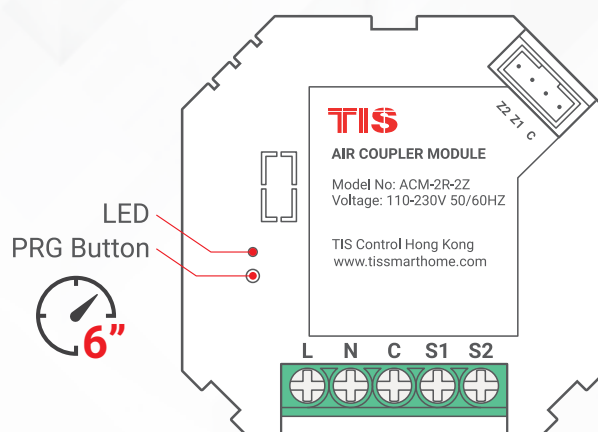
If you have already done that with any other panel, just ignore these steps and proceed to configuration steps.

To do the server linking, complete the following steps:

- 1» In the TIS App, go to Settings ► Connect Server, and follow the steps by entering your SSID password.



- 2» On the module, press and hold the PRG button for 6 seconds. The PRG LED will start blinking.



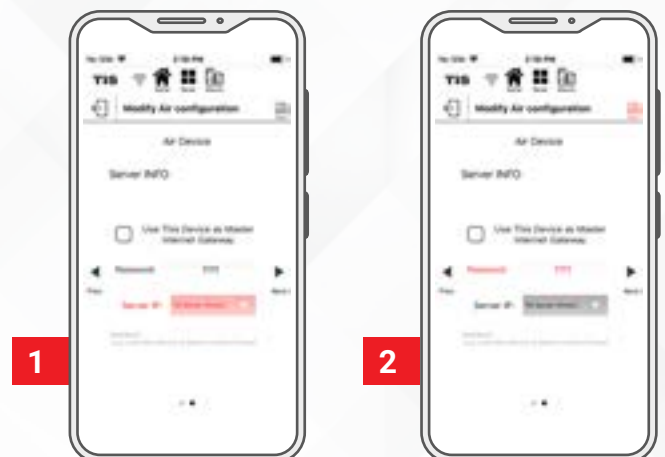


### SERVER LINKING

- 3» On the TIS app, press Search and wait for a few seconds. The panel will link to your Wi-Fi, and the PRG LED will turn blue.

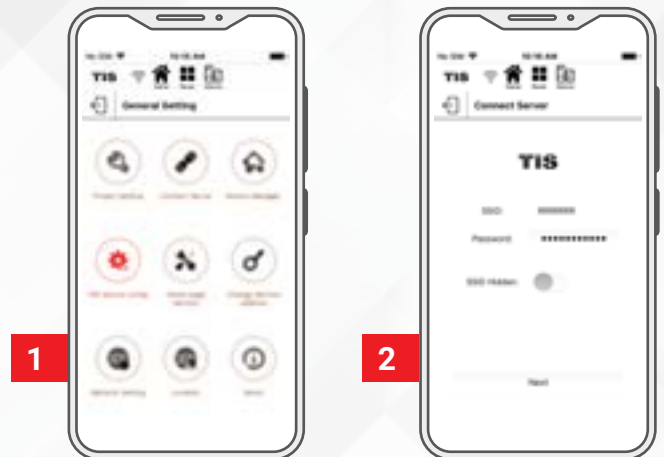


- 4» Select your server option and 4-digit password. Then, press Save.

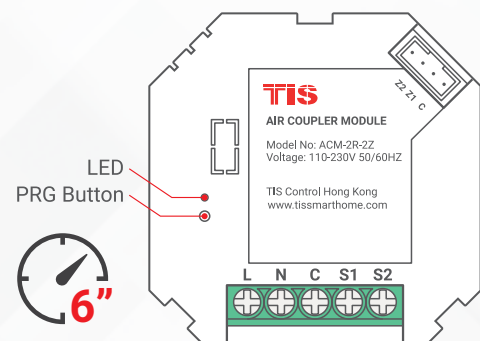


### CONFIGURATION STEPS

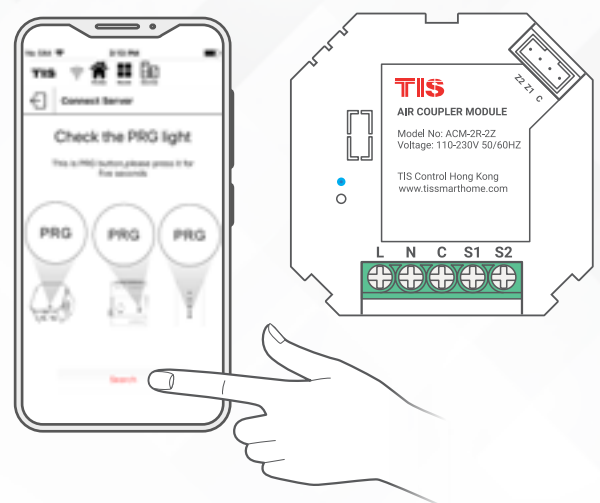
**1** In the TIS App, go to the Settings ► AIR Device Configuration, and follow the steps by entering your SSID password.



**2** On the module, press and hold the PRG button for 6 seconds. The PRG LED will start blinking.



**3** On the TIS app, press Search and wait for a few seconds. The panel will link to your Wi-Fi, and the PRG LED will turn blue.





### CONFIGURATION STEPS

**4»** Select the Relay type (Lights, Curtain).



**5»** Select the room; then, select channel names and icons.



1

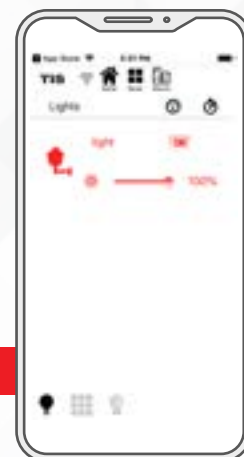


2

**6»** Go to the configured room's page and start controlling.



1

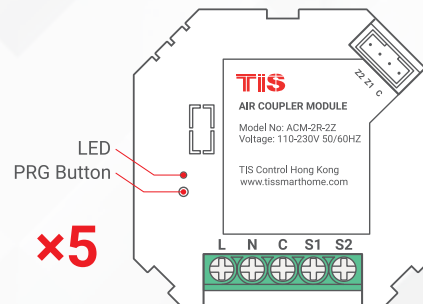


2

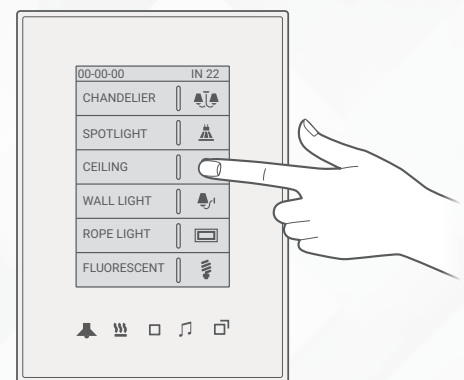
### PAIRING (MANUAL PROGRAMMING)

To pair the TIS ACM module with any TIS wall panel buttons, do the following:

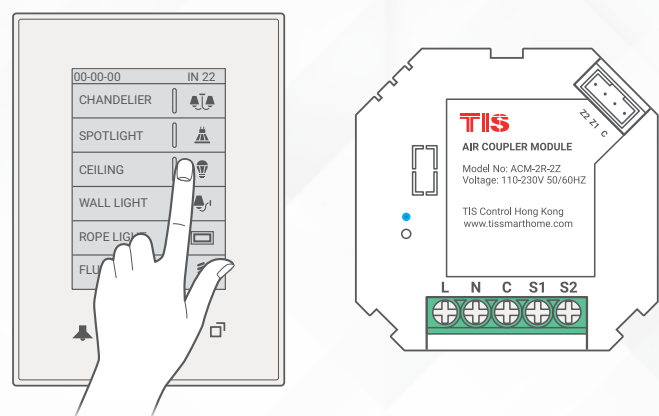
- 1» Short press on the PRG button five times in a row until the PRG LED starts to blink every 2 seconds.



- 2» Go to any other wall panel and short press on any lighting button.



- 3» Test by pressing on the wall panel's ON/OFF button. The module relay should respond by turning ON and OFF accordingly.



- 4» The same procedure must be followed to program other relay channels. The only exception is that you must press the PRG button six times for channels 2. The following table displays method info in detail.



## USER OPERATION



Use your mobile app or smart wall switches to control lights ON/OFF.

**Notice:** Wall switches need to be configured with this module's dry inputs beforehand.



## TROUBLESHOOTING



**PRG button blinks purple color rapidly**

**Reason:** The panel address conflicts with another device in the TIS network. You need to press and hold the PRG button for 6 seconds so that the module can get a new address.



**Device can't link to Wi-Fi router**

**Reason:** The device is not connected to Wi-Fi.



**Other wall panels can't pair with the device**

**Reason 1:** The device is too far from the Wi-Fi router.

**Reason 2:** The SSID or password is not correct.

**Reason 3:** Some setting in the WIFI router is preventing new devices from being added.



**Other wall panels can't control the device channels**

**Reason 1:** Other panel connections are not linked to the same Wi-Fi network.

**Reason 2:** The manual programming function is disabled in the device (default is enabled).