INSTALLATION MANUAL
TIS AIR ACM 2 RELAYS
RELAY MODULE WITH WI-FI COMPATIBILITY
Model: ACM-2R-2Z

TIS
CONTROL EVERYTHING

ℹ️ PRODUCT INFORMATION

The ACM Relay is a Wi-Fi module with 2 Relays and 2 dry inputs. It can be used to convert a traditional wall switch into a smart switch. It can control lights and shutters and can connect to the Internet to offer remote control via the TIS app.

PRODUCT SPECIFICATIONS		
Power supply	Input Voltage	110-230 VAC 50/60 Hz
	Output Power	3W / 12V
	Protection	Built in Protection fuse
	Current consumption	10-20 mA / 12 V DC
Output	Number of relays	2
	Nominal voltage	110 / 230 V AC 50/60 Hz
	Nominal current per channel	3 A / 230 VAC
Output switching current	Max switching current	3A/230 VAC Resistive 2A/230 VAC florescent
	Max Continues current	3A/230 VAC
	Max. switching Voltage	230VAC / 30VDC
Output service life	Mechanical Endurance	> 10,000,000 OPS
Output switching times	Operating time	8mS (at nomi. Volt)
	Releasing time	5mS (at nomi. Volt)
	Max. operating frequency	25 cycle/min
TIS AIR	WIFI Signal	2.4 GHz
	Protocol Standard	802.11 b/g/n
Operating and display elements	Digital Inputs	2 dry inputs for control …
	TIS AIR	TIS Protocol messages and commands
	PRG Button with LED	Programming button and status LED.
	Upgrading	By WIFI Connection
Dimensions	(Width × Length × Height)	49mm × 20mm × 49mm
Housing	Materials	PC fire proof
	Internal Parts color	White
	IP rating	IP 50

CE · RoHS COMPLIANT · PCT · C · FC

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

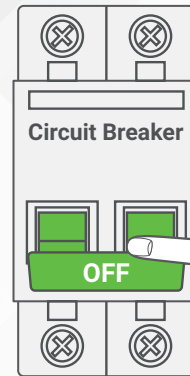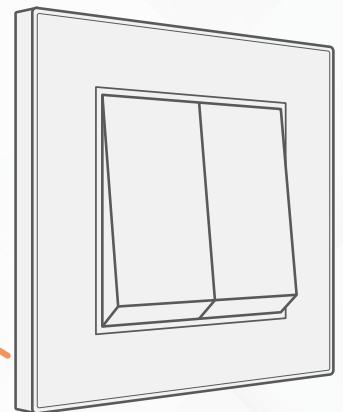it fits on most junction box sizes or can be located anywhere.

2

⚙ INSTALLATION STEPS

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

Circuit Breaker

OFF

WARNING! HIGH VOLTAGE

2 » Remove the switch cover. Unscrew and pull the wall switch out. Take the wires out of the load and line.
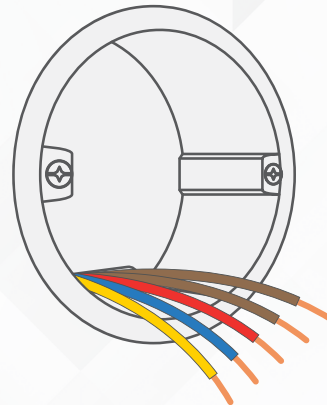
3 » Find a total of 5 wires.

Switch 2
Switch 1
Live
Neutral
Earth

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SUITE# 610. 860 NORTH DOROTHY DR
RICHARDSON
TX 75081.USA

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Hong Kong

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.
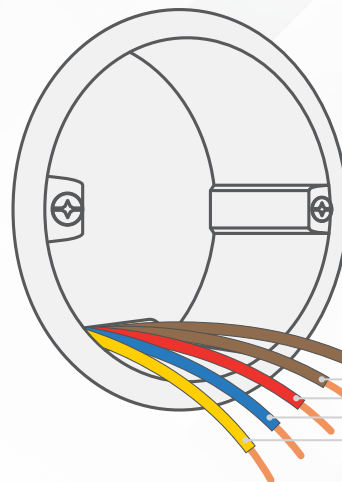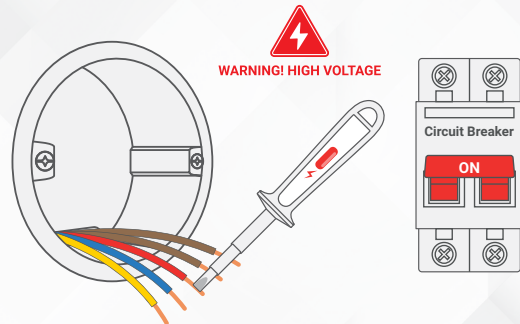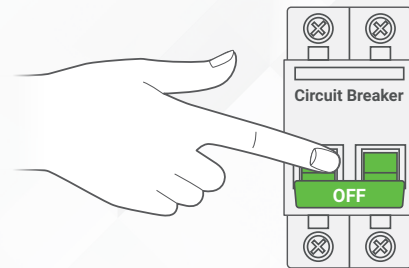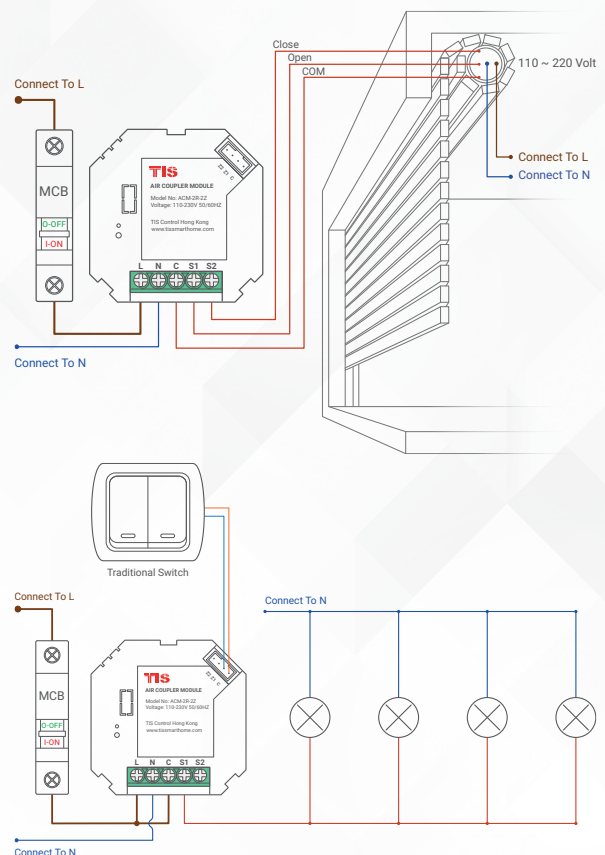
⚡ **WARNING! HIGH VOLTAGE**

Circuit Breaker
ON

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

Circuit Breaker
OFF

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.

Close
Open
COM
110 ~ 220 Volt
Connect To L
Connect To L
Connect To N
Connect To N

MCB
O-OFF
I-ON
AIR COUPLER MODULE
Model No: ACM-2R-2Z
Voltage: 110-230V 50/60HZ
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L N C S1 S2

▶ Attach the switch1 & 2 wires to the S1 & S2 terminals, respectively.
▶ Connect the 2 Dry inputs wires to the wall switch.

Traditional Switch
Connect To L
Connect To N
Connect To N

MCB
O-OFF
I-ON
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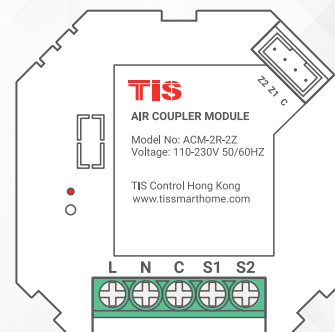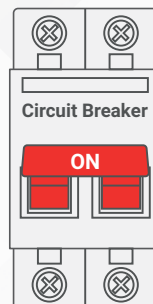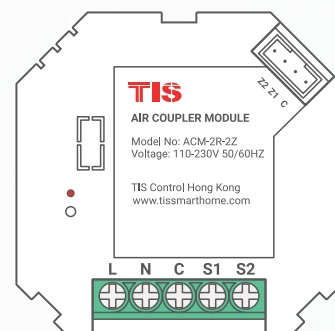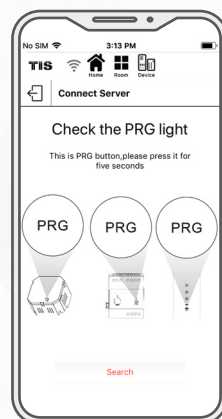L N C S1 S2

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INSTALLATION STEPS

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

Circuit Breaker

ON

AIR COUPLER MODULE
Model No: ACM-2R-2Z
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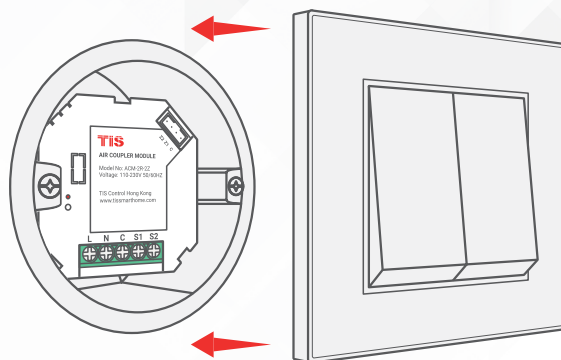TIS Control Hong Kong
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L N C S1 S2

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

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

No SIM   3:13 PM

Home Room Device

Connect Server

Check the PRG light

This is PRG button,please press it for five seconds

PRG   PRG   PRG

Search

AIR COUPLER MODULE
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L N C S1 S2

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

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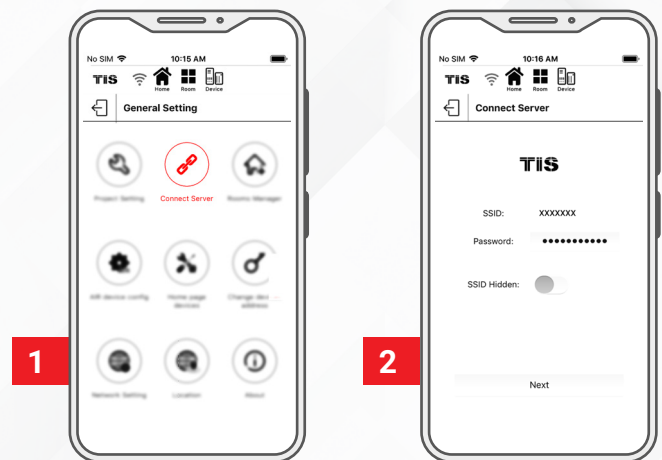
L N C S1 S2

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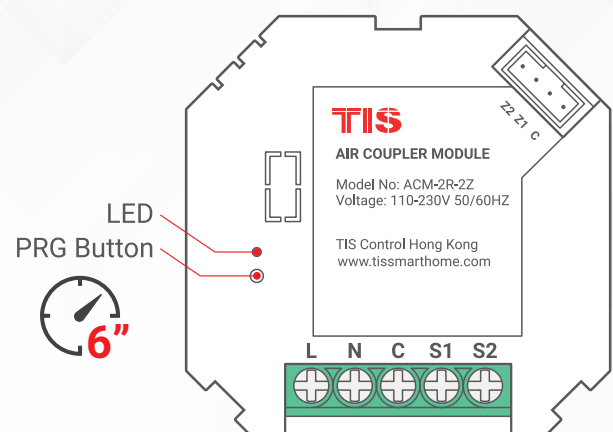
If you have already done that with any other panel, just ignore these steps and proceed to configuration steps.

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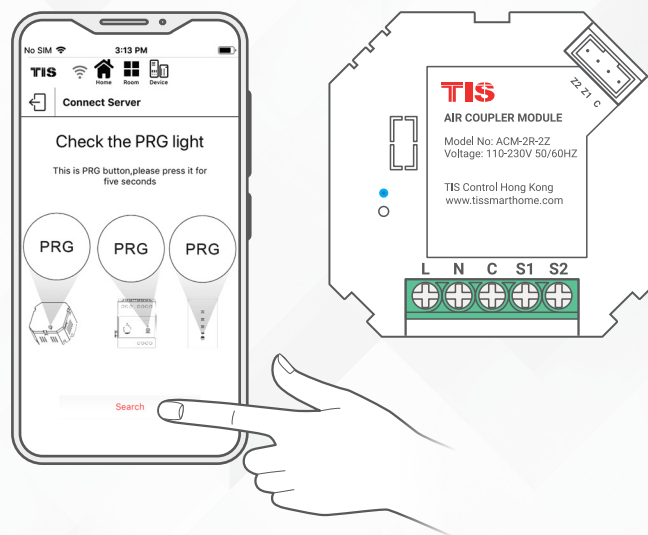
2 On the module, press and hold the PRG button for 6 seconds. The PRG LED will start blinking.

LED
PRG Button

6"

AIR COUPLER MODULE
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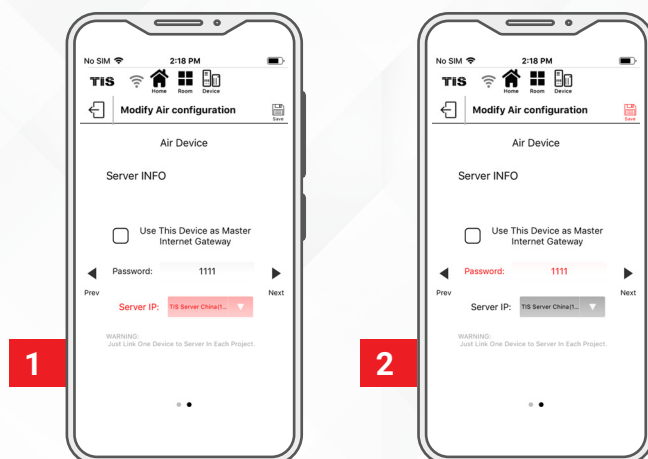Hong Kong

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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.
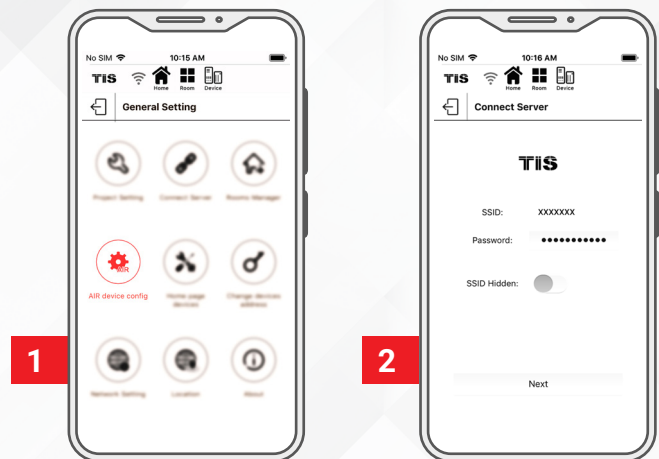

4 ➤ Select your server option and 4-digit password. Then, press Save.
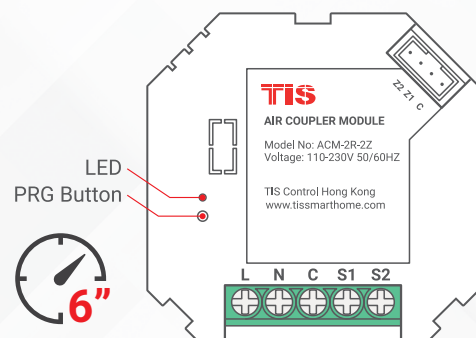

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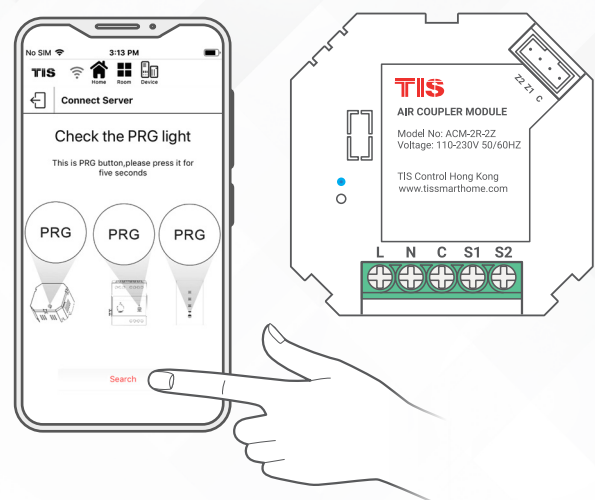Hong Kong

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.
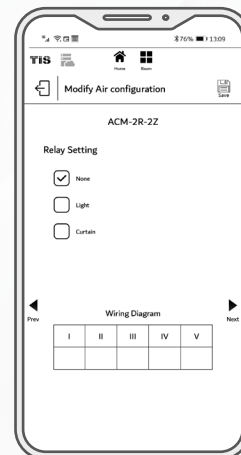
LED
PRG Button

6"

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.

8

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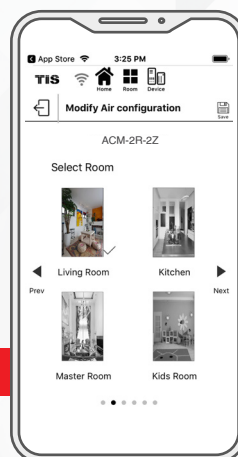253-261 Hennessy Rd Wanchai
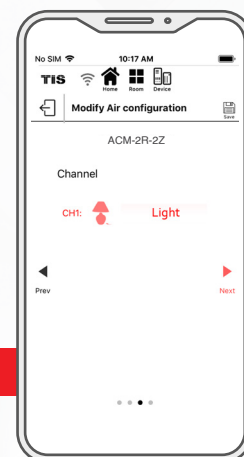Hong Kong

⚙ CONFIGURATION STEPS

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

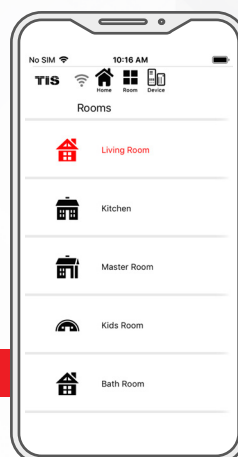**5 »** Select the room; then, select channel names and icons.

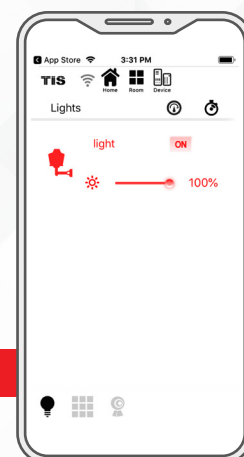**6 »** Go to the configured room's page and start controlling.
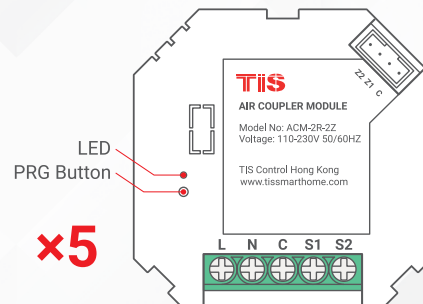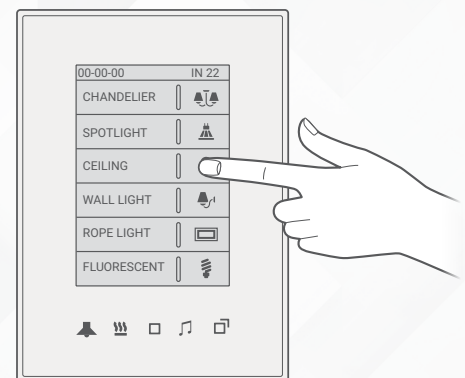
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PAIRING (MANUAL PROGRAMMING)

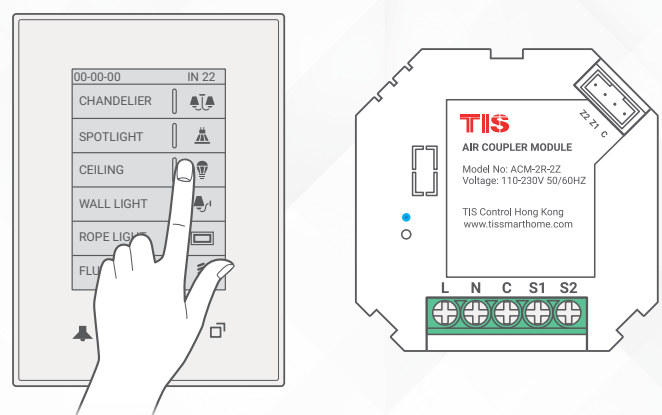To pair the TIS ACM module with any TIS wall panel buttons, do the following:

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

LED
PRG Button

AIR COUPLER MODULE
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×5

L   N   C   S1   S2

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

00-00-00   IN 22
CHANDELIER
SPOTLIGHT
CEILING
WALL LIGHT
ROPE LIGHT
FLUORESCENT

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

00-00-00   IN 22
CHANDELIER
SPOTLIGHT
CEILING
WALL LIGHT
ROPE LIGHT
FLU

AIR COUPLER MODULE
Model No: ACM-2R-2Z
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L   N   C   S1   S2

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.

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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).

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