

# Rocktech Displays Limited



Module P/N:     RK-A4E    

Version:     1.0    

Description: 4.0 inch Smart Control Panel

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**Revision History**

<b>Date</b>	<b>Rev.</b>	<b>Page</b>	<b>Description</b>
<b>2021-08-18</b>	<b>1.0</b>	<b>All</b>	<b>First issue</b>

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## 1. General features

Rocktech A4E Smart Control Panel is integrated with 5G+AI+IoT+Cloud technologies, offering customers control over appliances and the home environment, bringing convenience to life, as well as security and energy saving.

With display, touch, voice, motion and a built-in camera, you can choose the best way to interact with your home in every situation, via touch screen on your wall or via your phone.

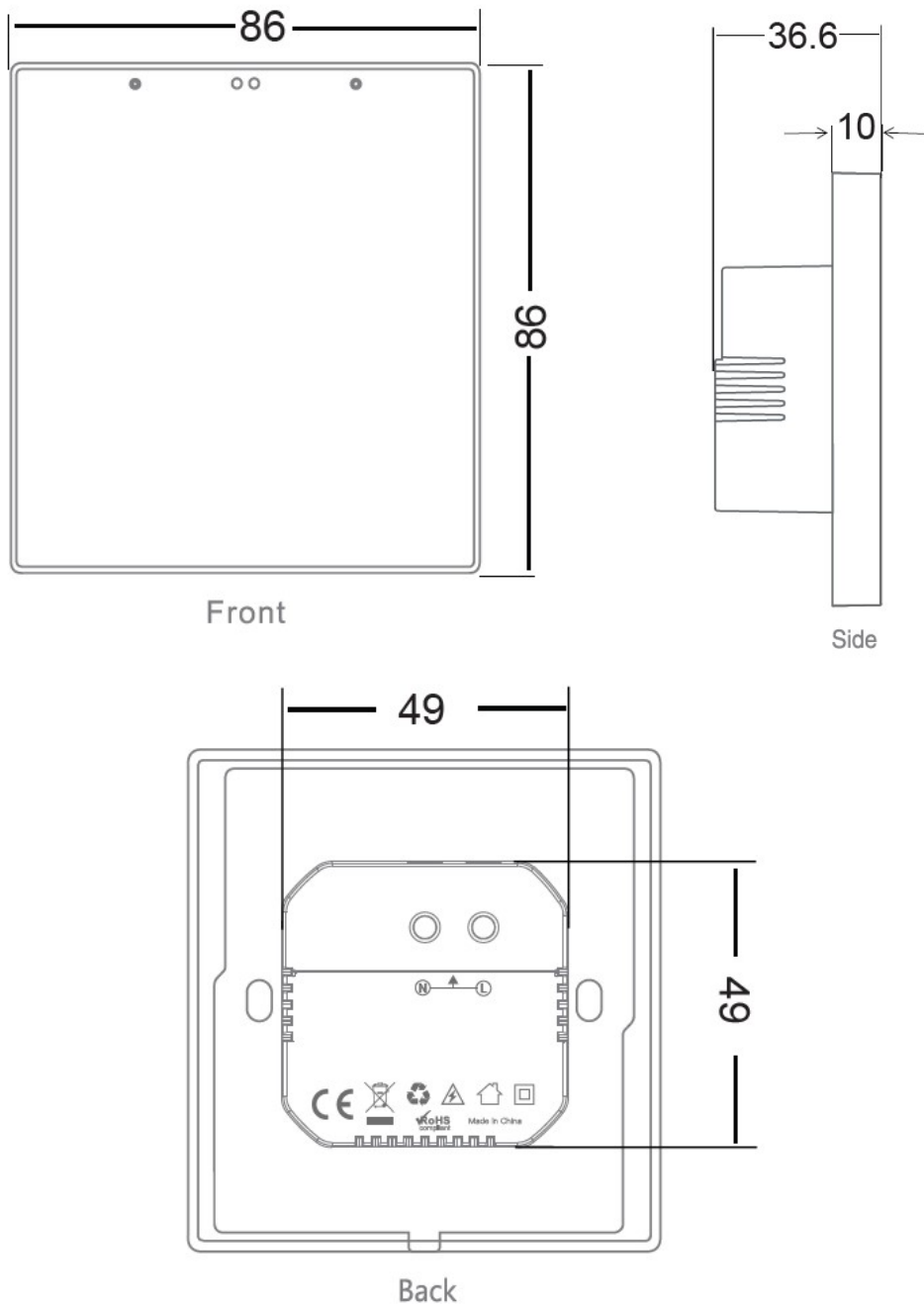


### RK-A4E Main Features:

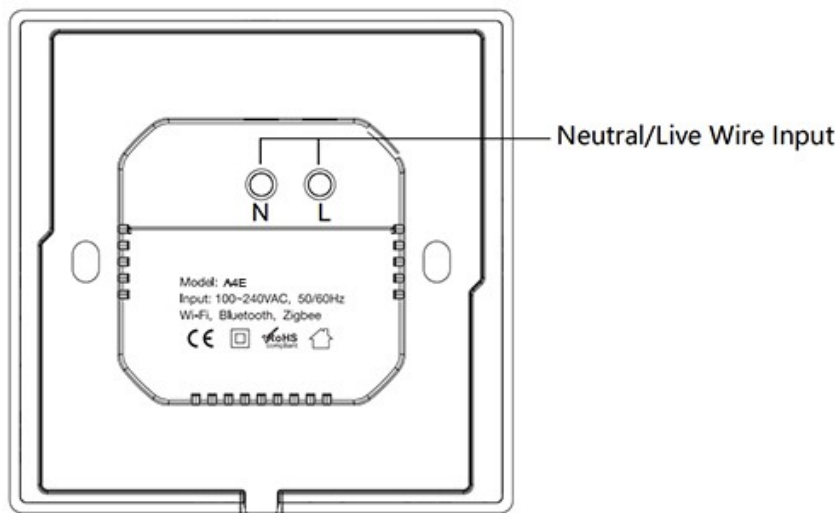
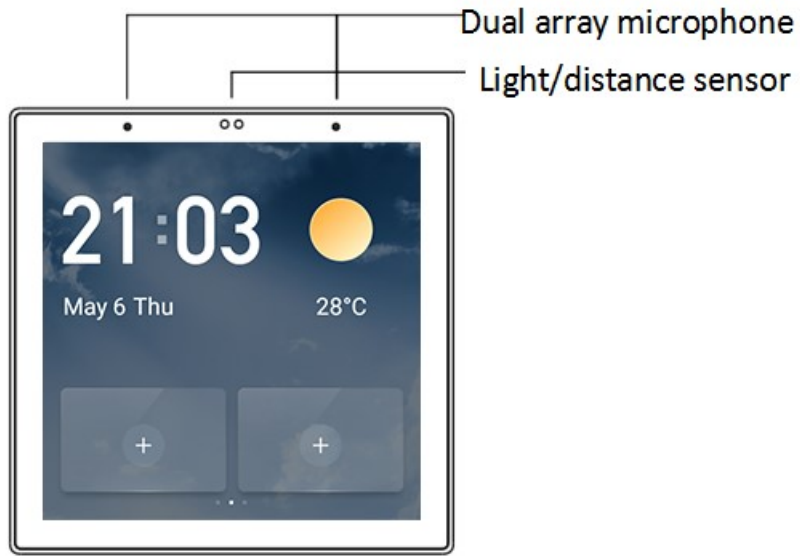
- Standard A4E integrated Tuya Zigbee gateway , Working directly with Tuya PaaS/SaaS to save customer's development cost, supports communication via Zigbee, Wi-Fi, Bluetooth.
- Compatible with European standard wall boxes, simple in wall installation.
- 4-inch HD LCD, IPS, multi touch screen, Dual Array microphone with noise reduction, Auto light sensor, built in 1W speaker.
- Control the lights, curtains, air conditioners, and all other smart home devices. Configure smart home scenes in the APP, turn on/off the scene mode with one touch on the screen.

Specifications	
Product dimensions	86x86x36.6mm (with the base), 86x86x10mm(outside the wall), 49x49x25.2mm (back base)
Screen	4 inch 480*480 Multi-touch
Operating System	Android 8.1
CPU	Rockchip PX30, Quad core Cortex-A35
RAM/ROM	1G+8G
Installation	In-wall concealed with 86 back box
Interface	Live/Neutral wire in
Ethernet	N/A
Wireless Wi-Fi	Wi-Fi (802.11b/g/n150Mbps 2.4GHz)
Zigbee	802.15.4 PHY/MAC Zigbee network protocol stack
Bluetooth	BLE4.2Single point
RS485	N/A
Relays	N/A
Microphone	Dual array microphone with noise reduction
Voice Control	Current standard solution does not support voice control. Can support customization.
Music play	Built in 1W Mono speaker, support local/online music play
Light sensor	Automatically adjust the screen brightness according to surroundings.
Color	White/Black
Net weight	210g
One Smart Control Panel could control all your smart switches, smart plugs, lights, air conditioners, curtains, locks, security cameras, smart sensors, up to 100+ Zigbee sub devices.	

## 2. Dimension and Interface



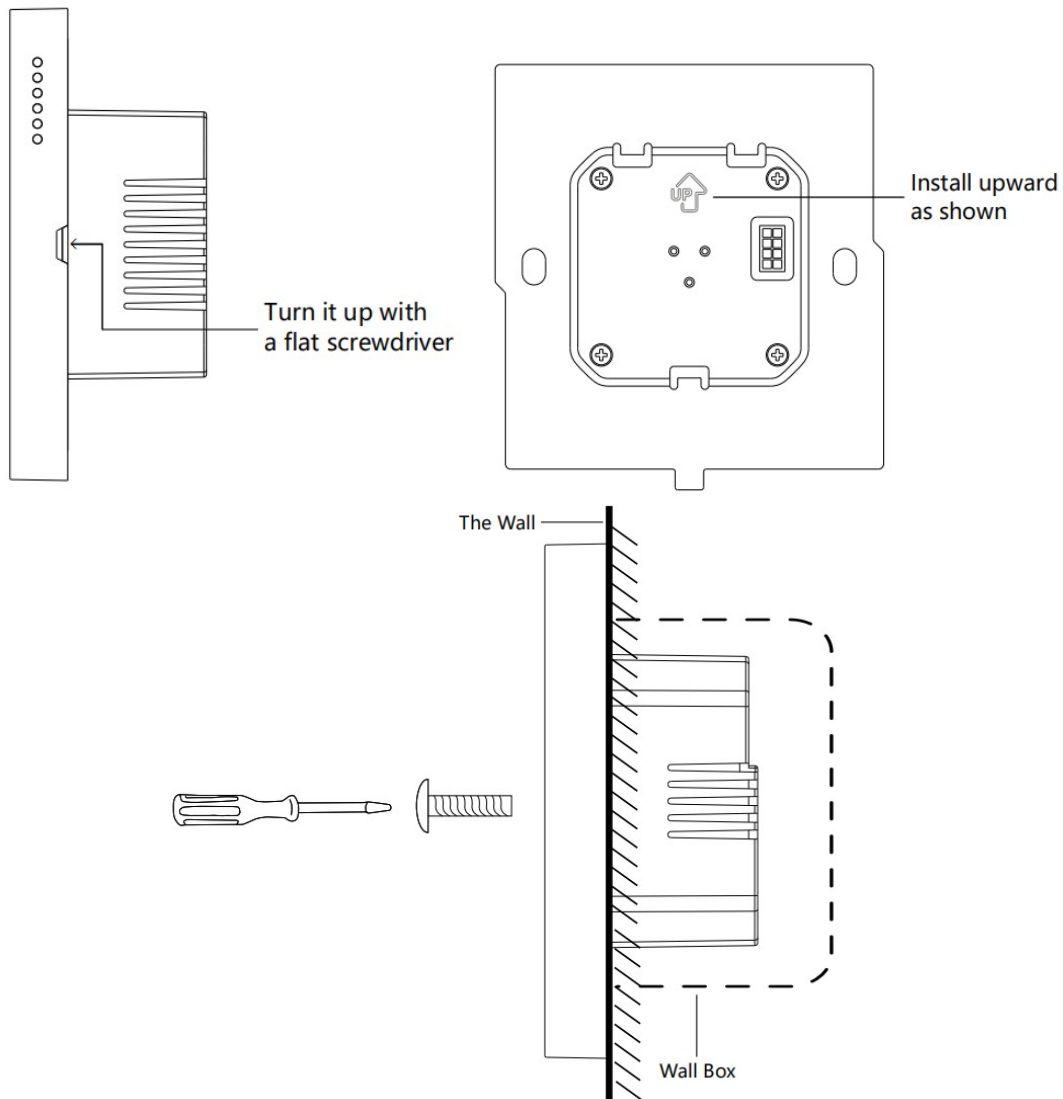
RK-A4E Outline Dimension



RK-A4E Interface and ports

## 3. Installation instructions

- Turn off the main power in the electricity box and confirm the fire wire is not alive with a test pencil.
- Remove the base of the Smart Switch and install it in the wall box (as shown in the pictures following).
- Check the wires and make sure the wires are in good contact with the terminals and no exposed cooper wires.
- Fasten the base to the wall box with mounting screws and fix the Smart Switch back to the base.
- Note that the screws should not be fixed too tight during installation in case any deformation or damage to the screen and hardware.
- If the Smart Switch is not flat after installation, do not press the screen violently, please check the wall box and the base installation at first.





**4. Operation specifications**

Items		Min	Typical	Max
Power Supply	100~240V AC,50/60Hz	--	220V	
Power Consumption	Operating current	--	20mA	300mA
Environment	Operating Temp	-10°C	--	60°C
	Storage Temp	-30°C	--	80°C

**5. Reliability testing standard**

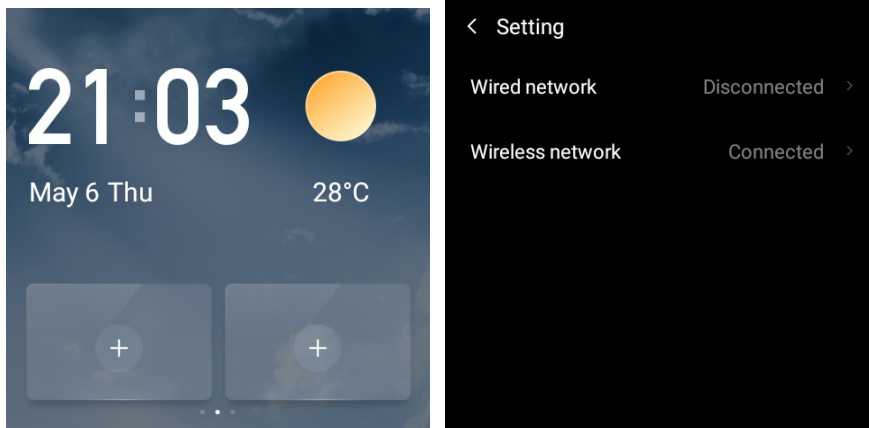
No.	Test Item	Test Conditions	Remark
1	High Temperature	Storage	80°C, 48Hr
		Operation	60°C, 48Hr
2	Low Temperature	Storage	-30°C, 48Hr
		Operation	-10°C, 48Hr
3	High Temperature and High Humidity	40°C, 90%RH, 48Hr	
4	ESD Test	Air +/-8KV 5 times; Contact: +/-4 KV 5 times;	
5	Vibration Test(Storage)	50HZ, 30min, Amplitude: 2 cm, X/Y/Z directions	

## 6. Operation guideline

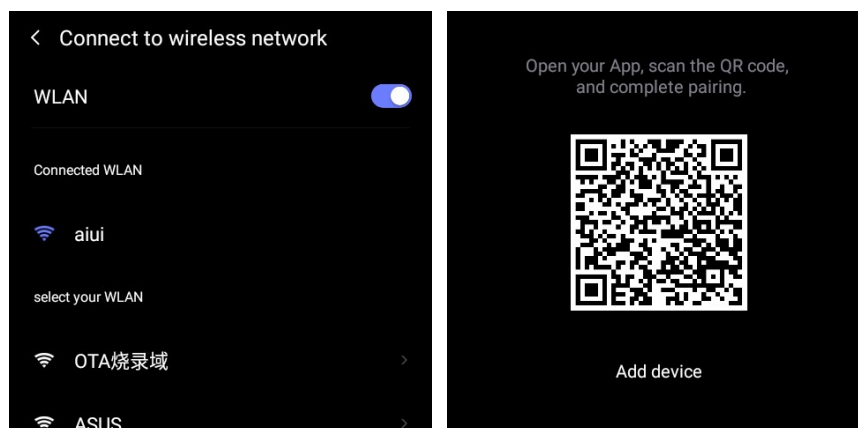
This operation guideline is based on Tuya Zigbee, Tuya App, Tuya PaaS/SaaS and Rocktech A4E firmware. If any other PaaS/platforms or firmware, please follow their operation guidelines.

### Safety Notes

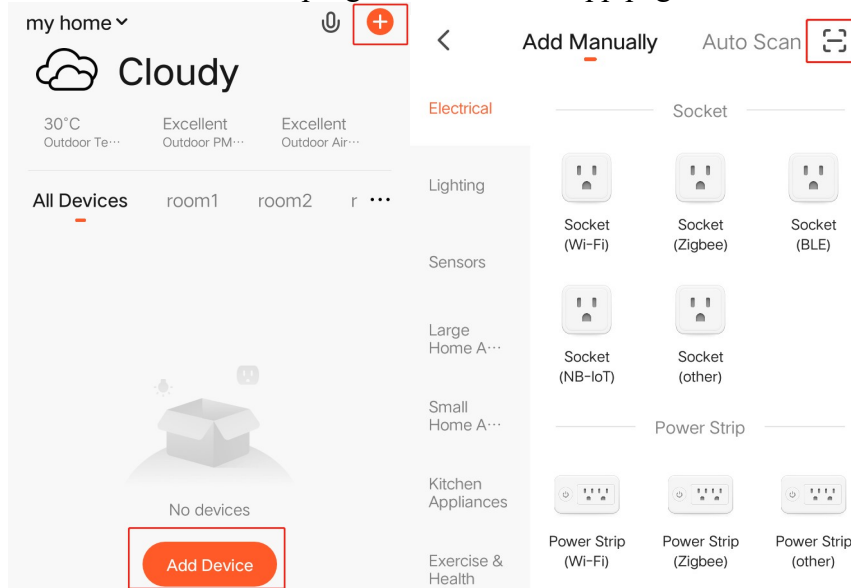
- The product must be installed by professional electricians.
  - Turn off the main power in the electricity box and confirm the fire wire is not alive with a test pencil.
  - The product should be kept away from fire and water during installation and use.
  - The product can't be used in moisture circumstances such as bathroom.
  - Please note the product does not support POE power supply. Do not connect POE switch to this product which would cause damage to the product.
- 1) The product will be turned on once you connect it to the power supply. The product will get to the network settings when you start it in the first time. You can also get into the network settings from the select menu by dropping down from the top of the LCD screen.



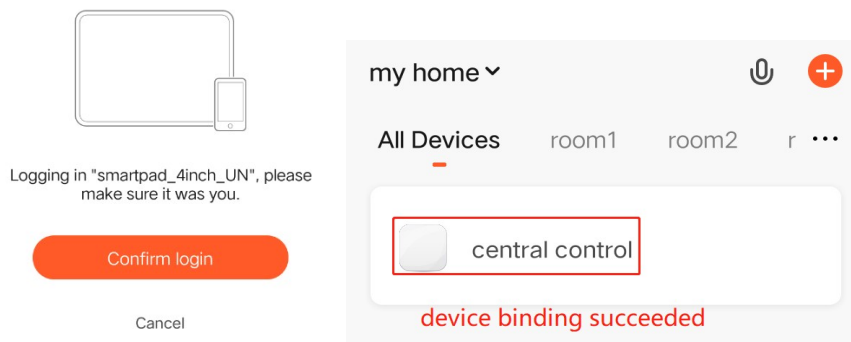
- 2) There are two options in the network settings. You can select wireless connection or wire connection. There will be a QR code showing on the screen after the network connection is done.





- 3) Start the Tuya App in your smart phone, select the “+” at top right corner in the App home page, and then select the “QR” at top right corner in the App page.



- 4) Scan the QR code on the screen of the product to add it into the Tuya App.



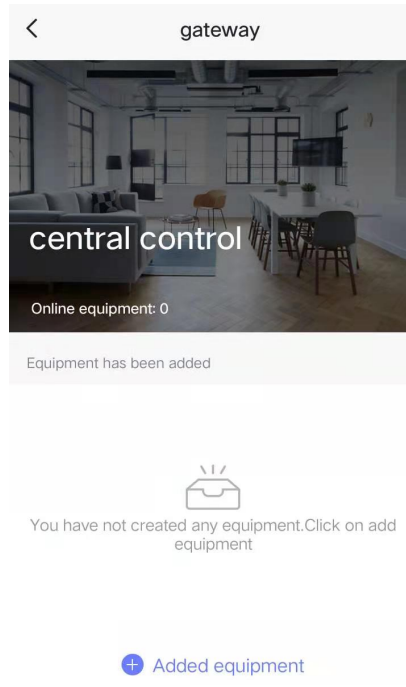
- 5) Get into the product interface in the Tuya App, you will see the gateway and switch icons like  and . Click the switch icon to control 2 local switches (load of each switch should be no more than 200W.). It means the switch is off when the icon is in grey, and the switch is on when it is in orange.



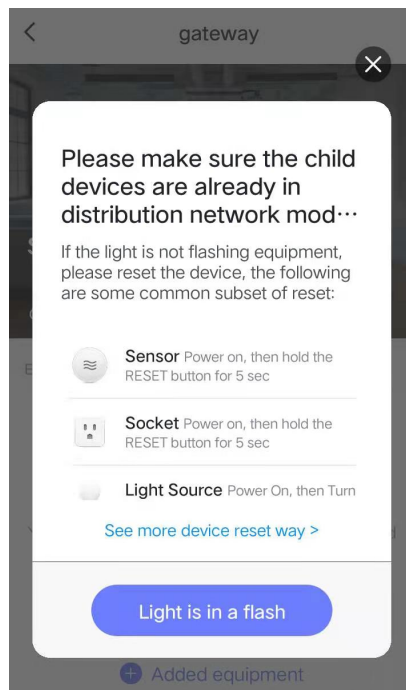
Long press switch 1 or switch 2 to change the name of the switch.

6) Click the gateway icon to add Zigbee sub devices.

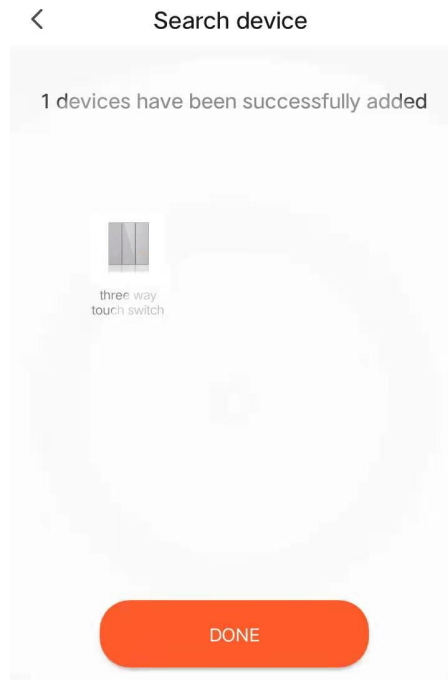
Make sure the Zigbee sub devices are in the set-up mode. The gateway will search and add the sub devices automatically. You can follow the user manual of the sub devices to make sure it is in set-up mode. (Usually it is long press the power button or the reset button in 5s, then the LED indication light will flickering which means it is in the set-up mode.)



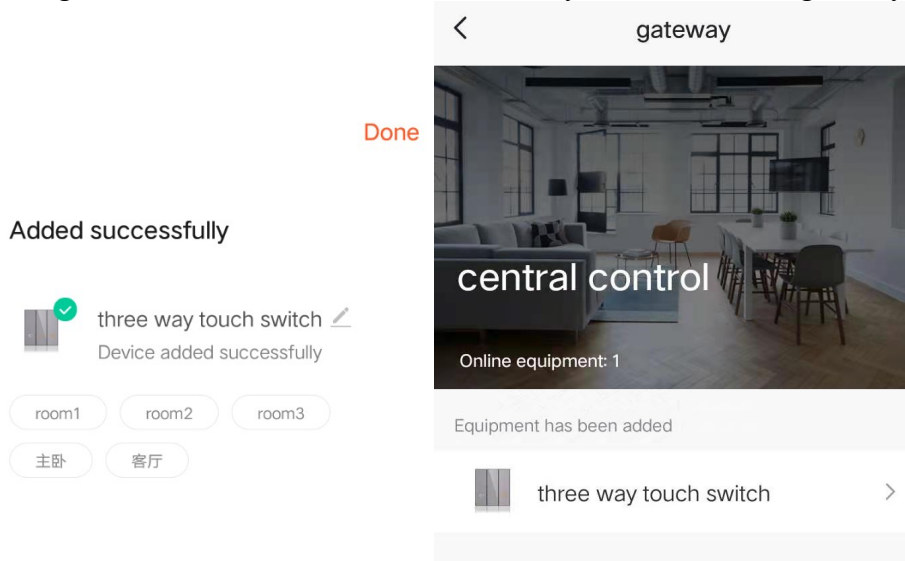
You will see the following pictures in the Tuya App when you are adding sub devices to the gateway. Make sure the sub devices are in the set-up mode and the LED indication light is flickering.



- 7) Click the finish button on the App after you add the sub device successfully. For example (2 switches panel) as the following.



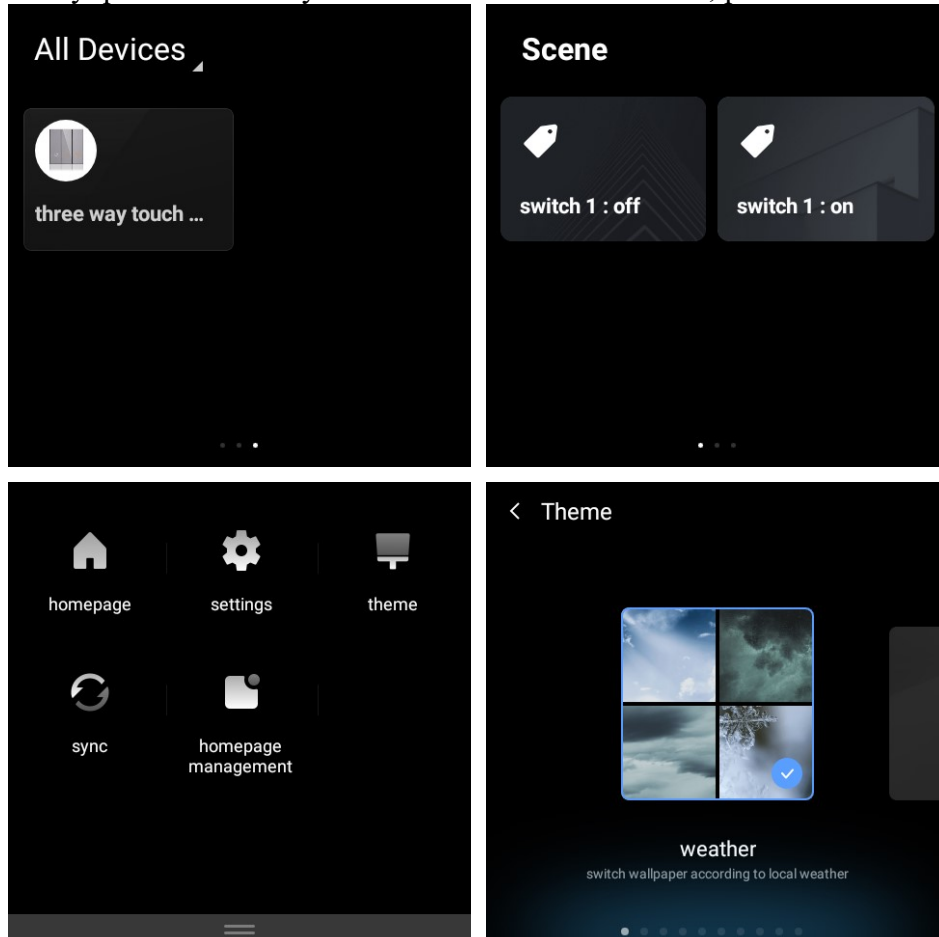
- 8) You could change the name of the sub devices after they are added to the gateway successfully.



9) You could change the device type by getting into the device interface in the App. It means the switch is off when it is in grey, and the switch is on when it is in green. You could also set up timers(Schedule) for the switches to realize the automation control.



If there are any questions when you add some other sub devices, please contact us for support.



## 7. Technical support

Tuya PaaS/SaaS, standard Smart Panel for customer's choice to save development cost, OEM/ODM supported

Customer's own PaaS, debug customer's APP running smoothly in Rocktech Smart Panel; Support Rocktech Smart Panel communicating with customer's IOT devices via Zigbee, Wifi or Bluetooth. OEM/ODM supported.

Future technical support, pls contact: [sales@rocktech.com.hk](mailto:sales@rocktech.com.hk)