IR/2.4G RF Convertor

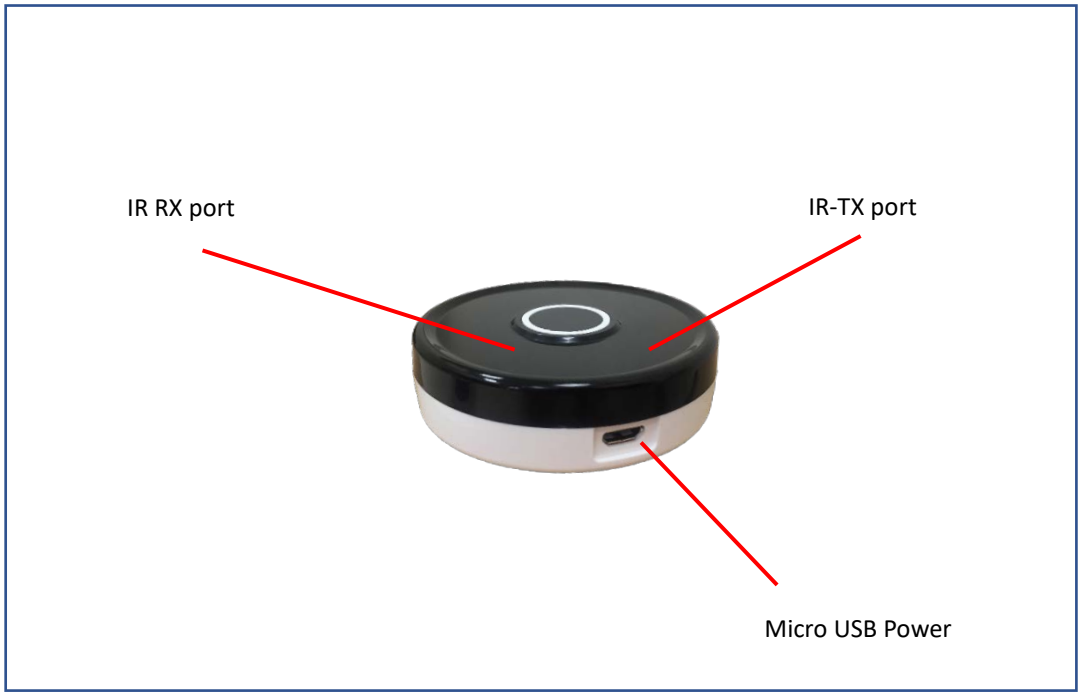
eLIFE WTR-100C

User Manual V1.0

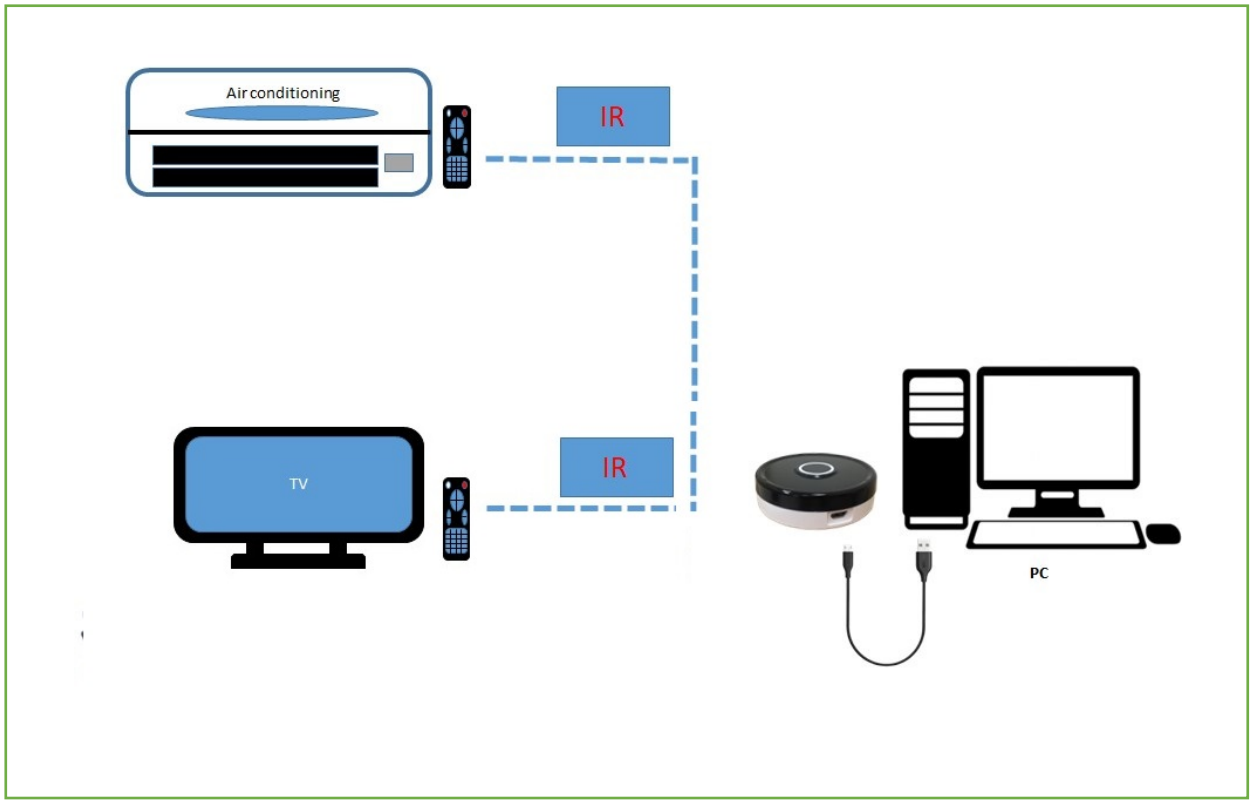
Product Introduction

WTR-100C is a plug-and-play smart converter , with the technology of wireless IR/WIfI 2.4G RF signal to control the IR and WiFi enable device

Product function description

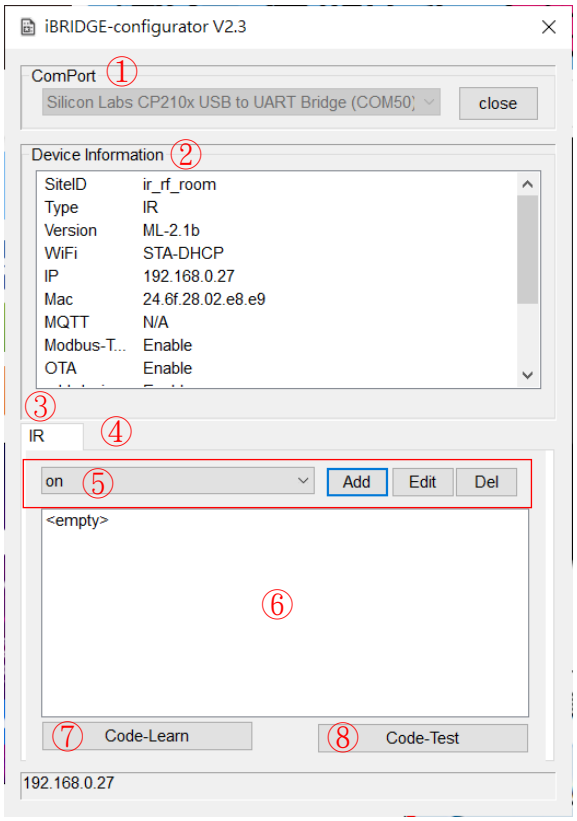


Application Diagram



iBRIDGE-configurator:

Main Configuration Menu



① **ComPort**: RS232 port to the device

② **Device Information**: display the device information and also the various parameter setting

③ **TAB**: function tab

④ **IR**: IR function tab

⑤ **Scene field:** new/edit/delete the scene

⑥ **Code**: IR/RF code display

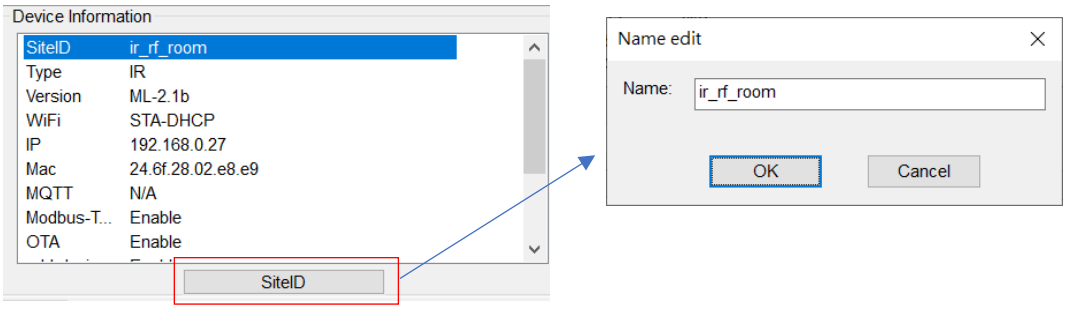
⑦ **Code-Learn**: start/stop the code learn

⑧ **Actions Test**: test the learned code on line

Device Information introduction:

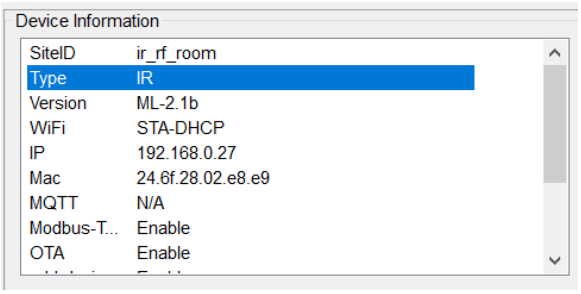
1.) SiteID:

devie name，user click【SiteID】button to pop up the name edit dialog



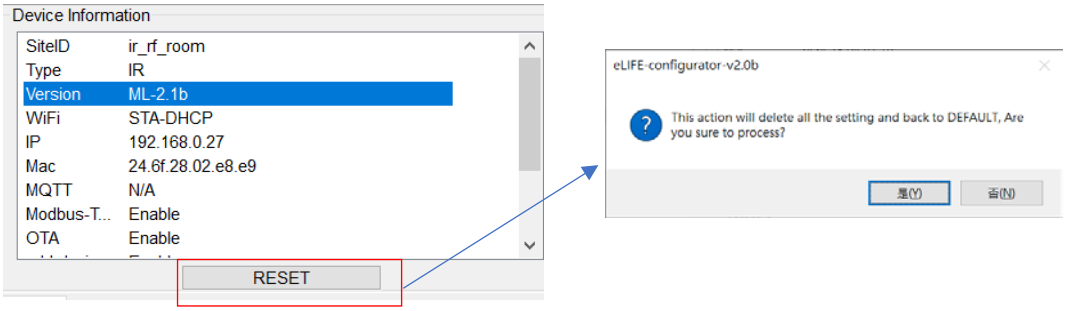
2.) Type:

device type



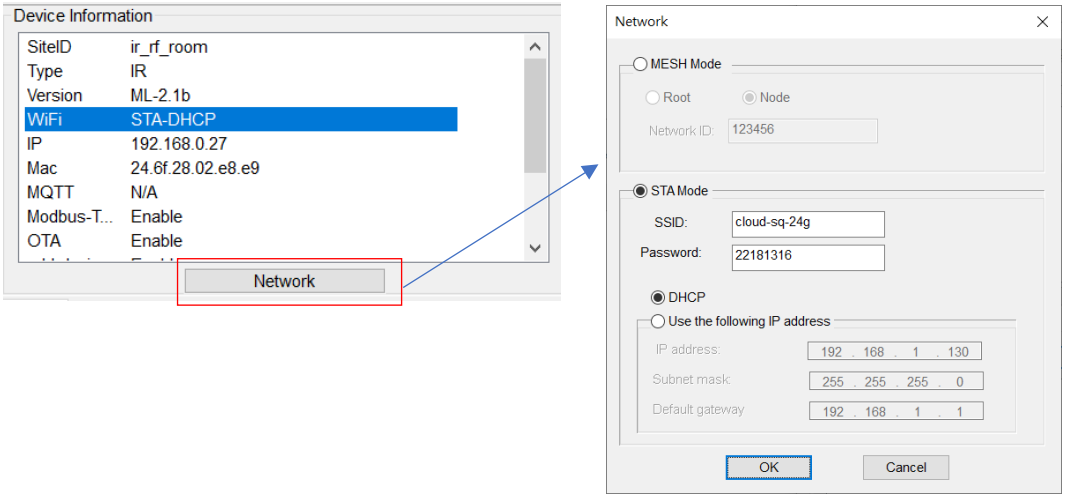
3.) Version:

display current FW version，click【RESET】button will pop up the RESETdiaplog



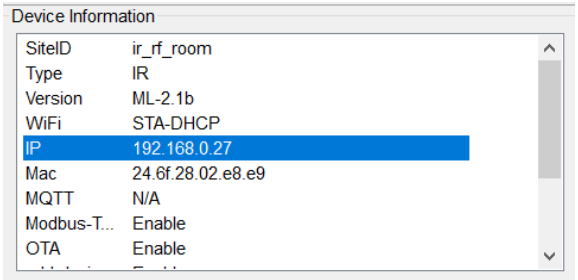
4.) Wi-Fi:

Current operation mode，click【Network】button will opo up the mode setting dialog



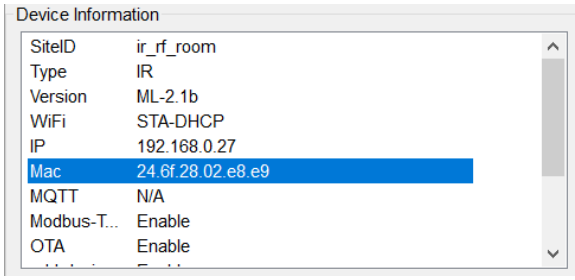
5.) IP:

Current IP address (this item only display on the STA Mode)



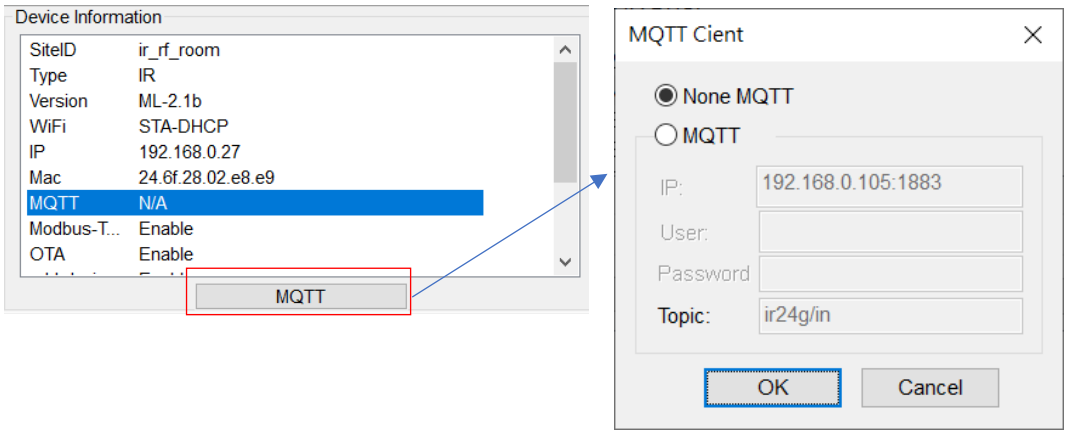
6.) Mac:

Current device MAC address (Physical Address)



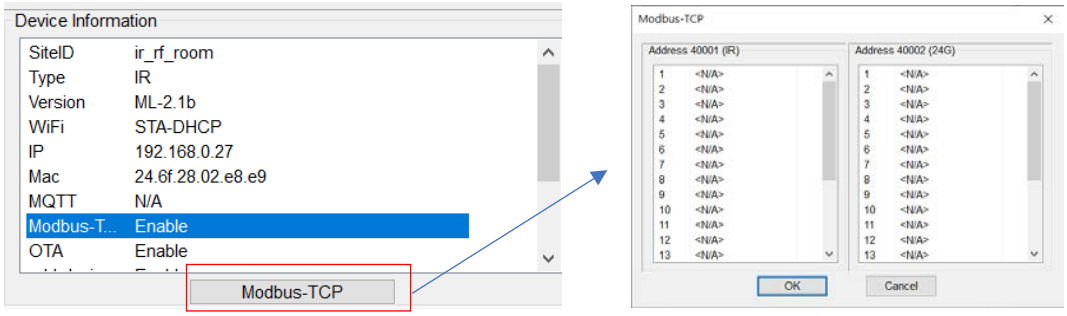
7.) MQTT:

Current MQTT Server IP setting information，click【MQTT】will pop up the parameters edit dialog for edit (only display on the STA Mode)



8.) Modbus-TCP:

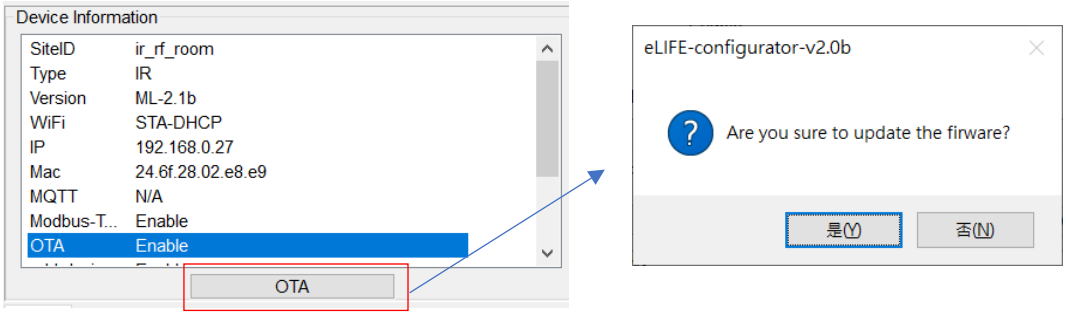
click【Modbus-TCP】button will pop up the setting dialog (only display on the STA Mode)



9.) OTA:

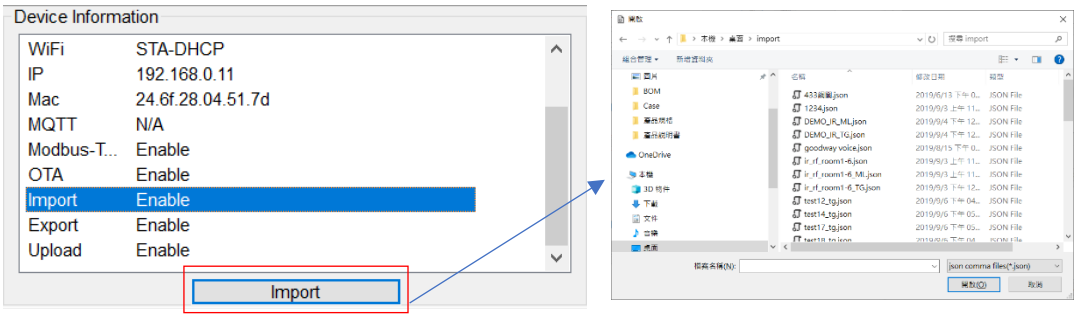
OTA update item, click【OTA】button will pop up the update confirm dialog (only display

on the STA Mode)



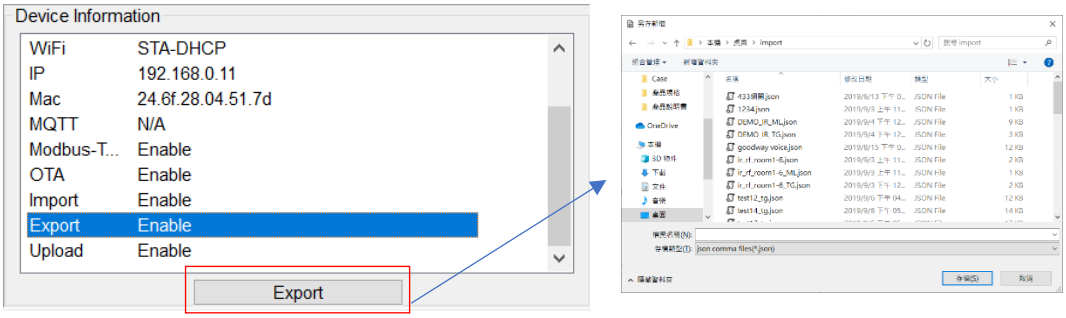
10.) Import:

Import configuration file from file，click【Import】button will display the import file selection dialog , user can select the desired file to import into the device



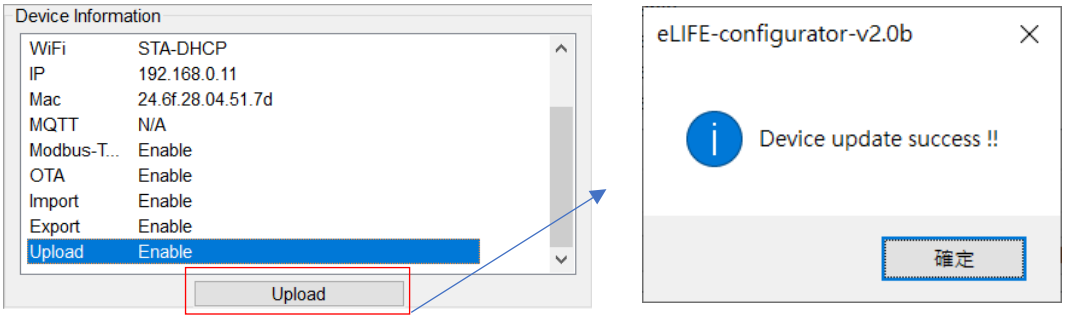
11.) Export:

Export configuration to file, click【Export】button will display the export file directory dialog, user can select a file and save to file



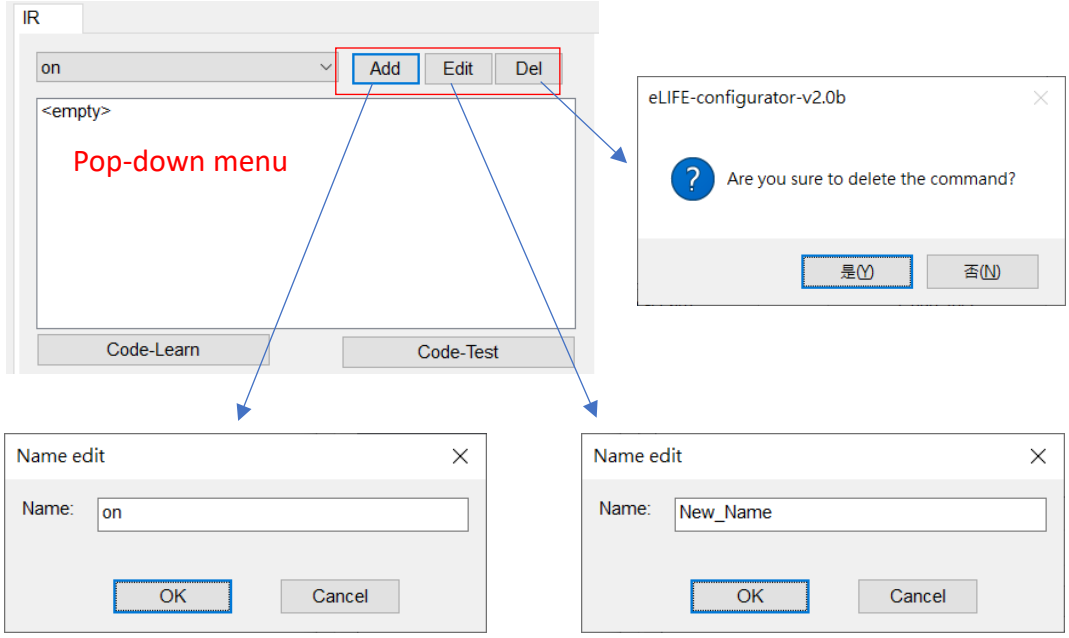
12.) Upload:

Upload current setting parameters to the connected device


Device Information
WiFi STA-DHCP
IP 192.168.0.11
Mac 24.6f.28.04.51.7d
MQTT N/A
Modbus-T... Enable
OTA Enable
Import Enable
Export Enable
Upload Enable
Upload
eLIFE-configurator-v2.0b
Device update success !!
確定

IR code edit and learning

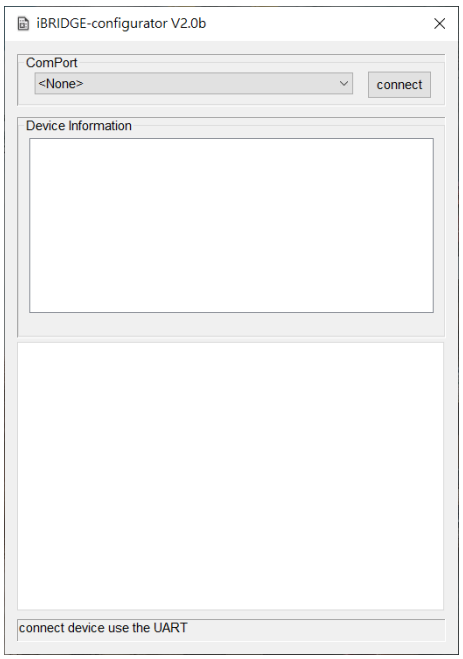
User can use the New【Add】/edit【Edit】/delete【Del】button to edit the IR device control scene



Operation Instruction

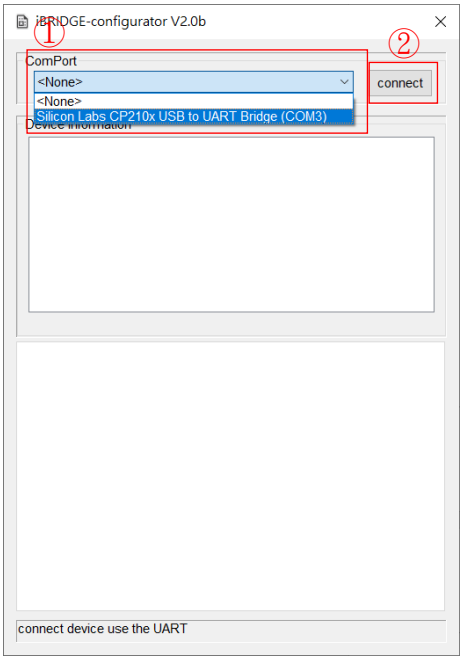
1. Mesh mode operation step by step

STEP 1: connect『WTR-100C』to the PC or NB through the USB data transfer cable	***STEP 2:*** check the virtual serial driver COM port Number on the windows device manager
STEP 3: run iBRIDGE-configurator.exe，after start will display the dialog	S **STEP 4:** Connect device to configuration ① select the device COM port Number ① click【connect】



STEP 5:

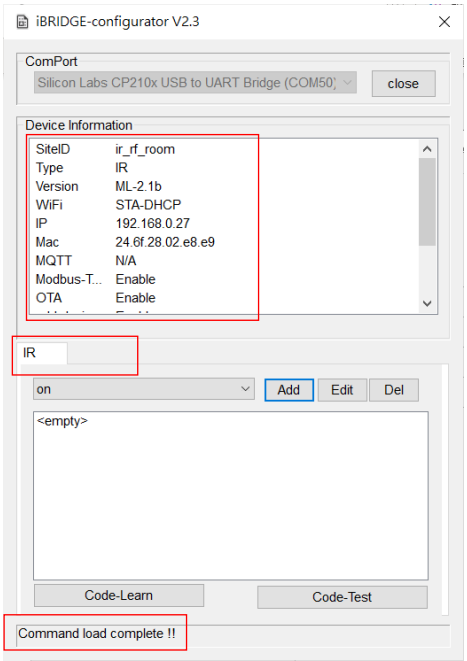
If connect success, status field will display the【Command load complete!!】message



STEP 6:

Wi-Fi mode set

① click【WIFI mode】button

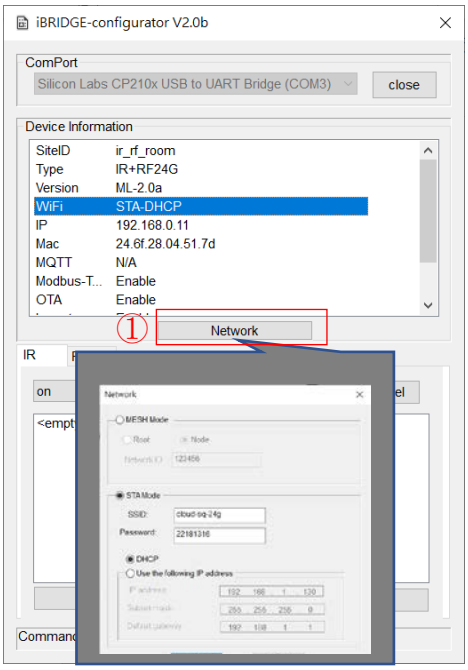


STEP 7:

Wi-Fi setting change

① Click MESH Mode, choice【Root】

② Network-ID can be any 6 digit number, ex:654321

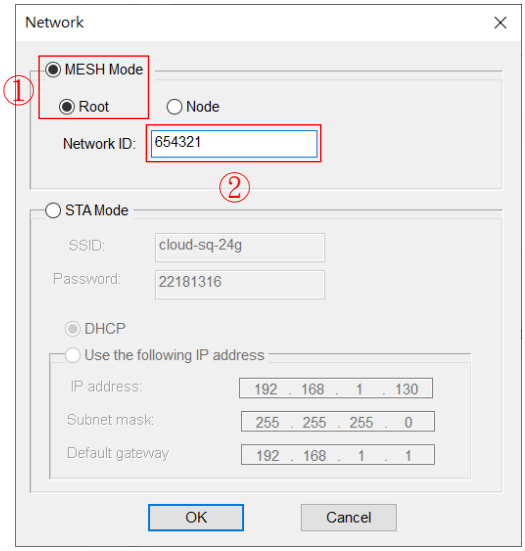


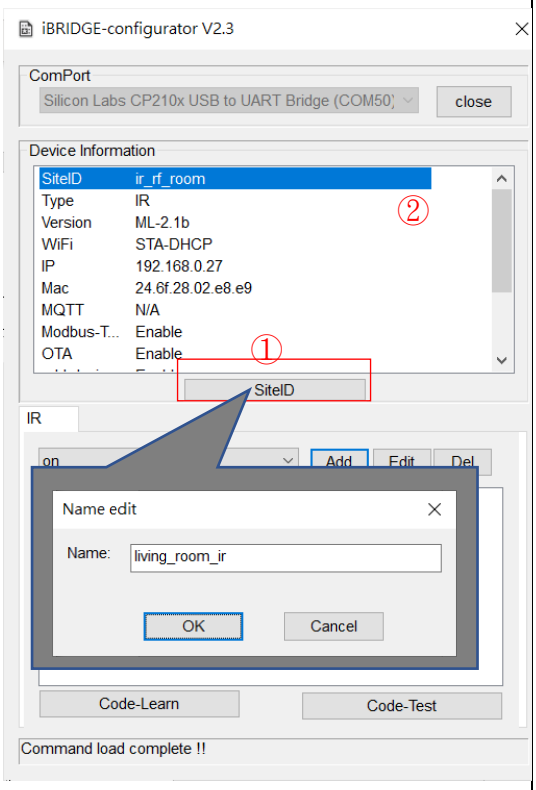
STEP 8:

Name your SiteId

① Select the SiteID item and Click the【SiteID】button

② Pop up the name edit dialog, input your desired name,

<table>
<tr><td></td><td><ex>:living_room_ir</td></tr>
<tr><td>


NOTE: every mesh network which the same Network-ID can only one Root , others will ne Node
</td><td>


</td></tr>
<tr><td>

STEP 9:

On Device Information area , the item SiteID will show the name which you input

</td><td>

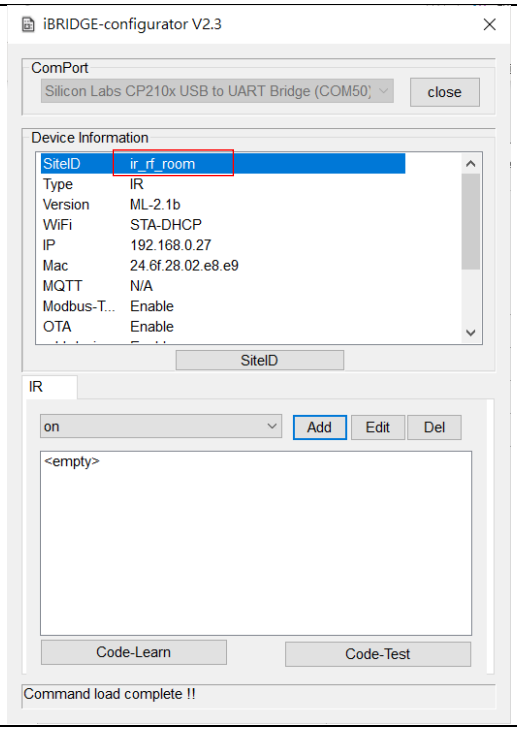
STEP 10:

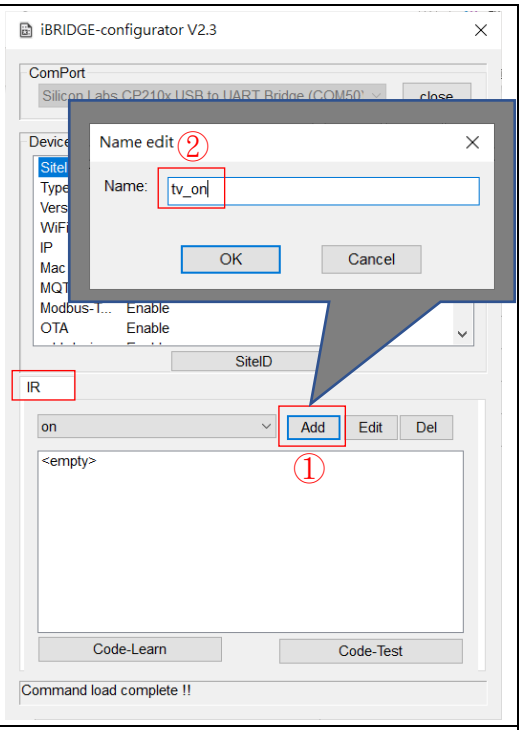
How to add a IR control action

① Under the IR tab, click the【Add】button

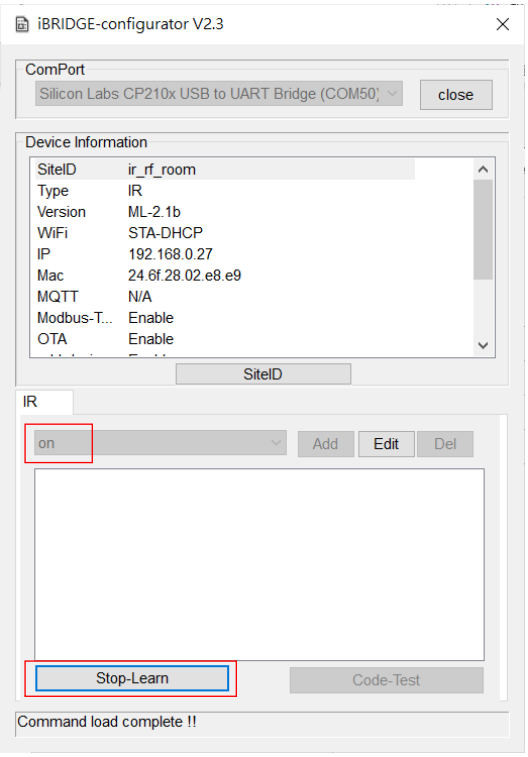
On the name field, input the name, ex: tv_on

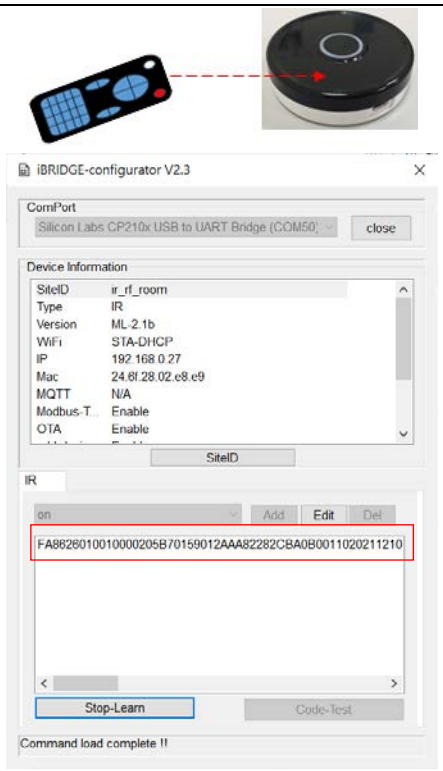
</td></tr>
</table>





STEP 11: IR code learning click【Code-Learn】button, the label will change to【Stop-Learn】, you are on the IR leaning mode now	***STEP 12:*** Pick your TV remote controller and press the “ON” button on the controller, when the code show on the filed , mean your learning code success. (your IR controller should direction to the 『IR/24G』,under 10-20 cm will be better signal collection.



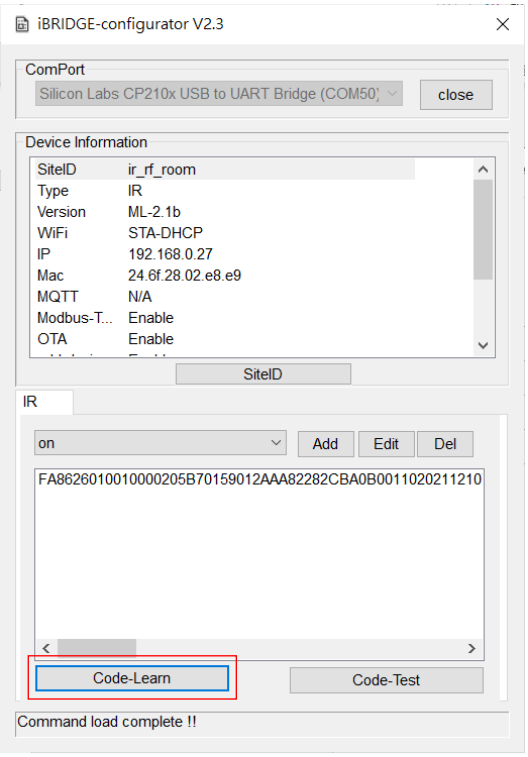


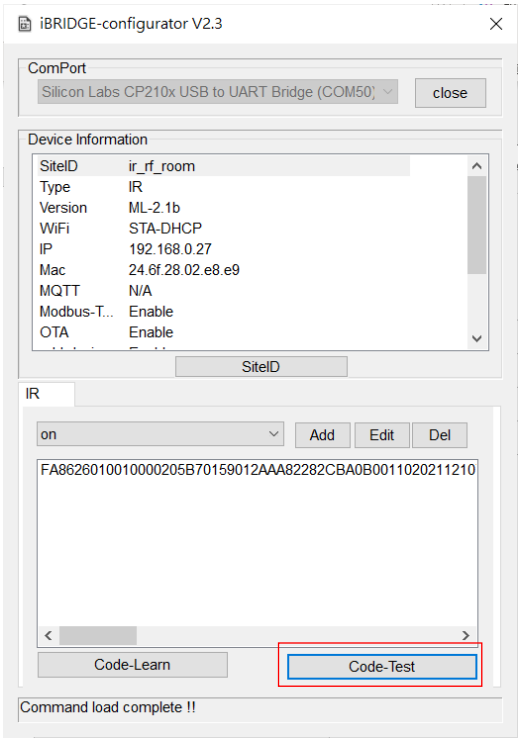
STEP 13:

After collect every action you want, click the 【Stop-Learn】button , the button label will change to【Code-Learn】, new exit the learn mode

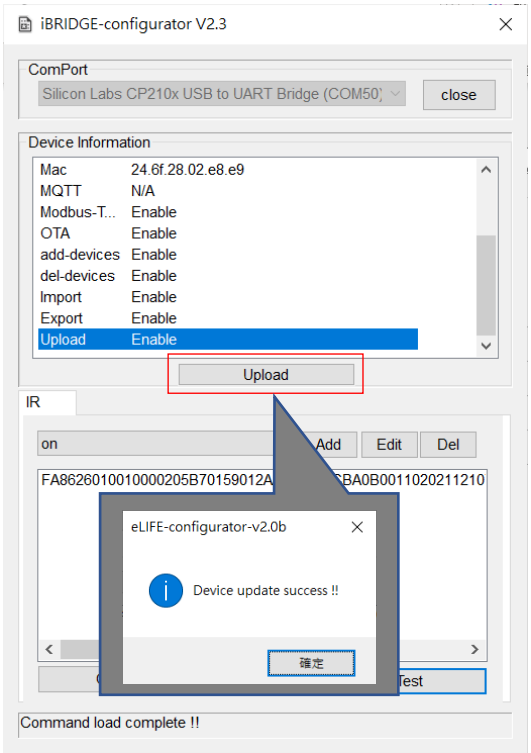
STEP 14:

You can click the【Code-Test】button, this will send out all the learned code, make sure the TV is turn on as your expect





STEP 15:

After every test action is set complete, you should click the 【Upload】button to upload the command scene to the device. You can repeat step11-14	
	

STA Mode operation step by step

STEP 1: connect『IR/24G』to the PC or NB through the USB data transfer cable	***STEP 2:*** check the virtual serial driver COM port Number on the windows device manager
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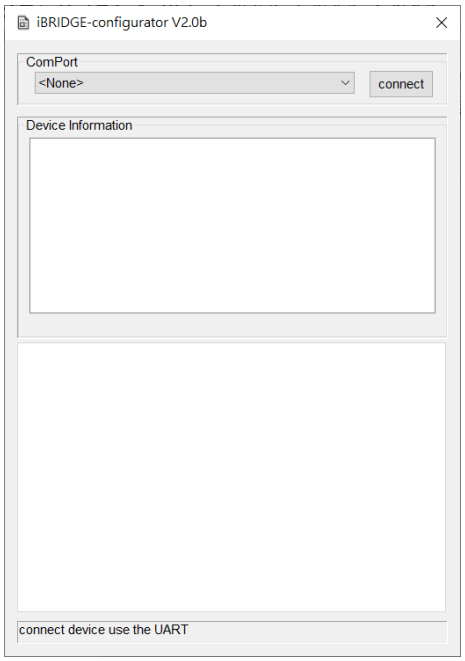	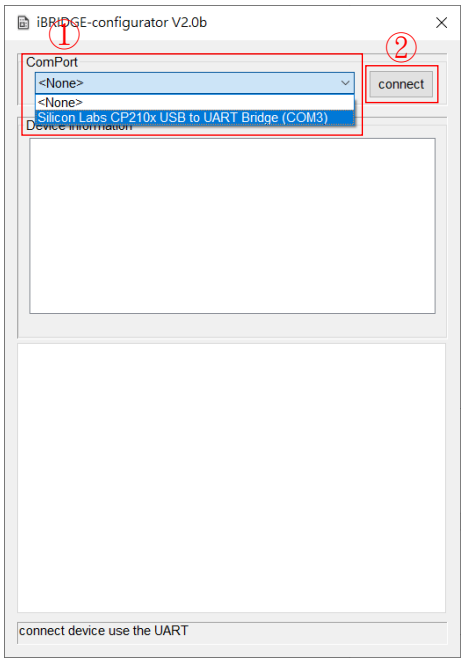

STEP 5:

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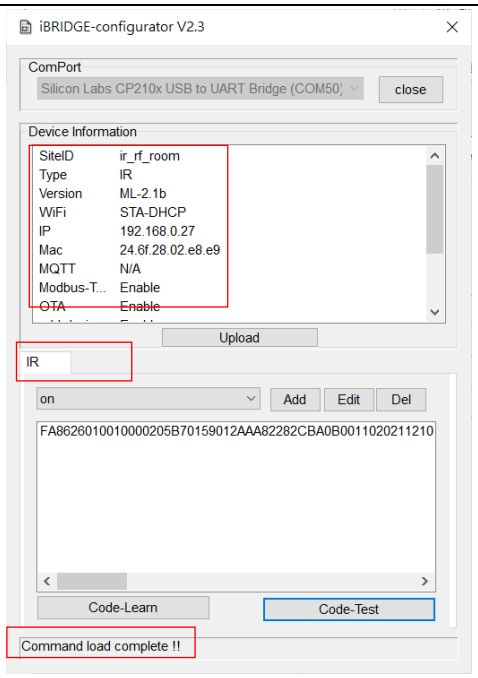
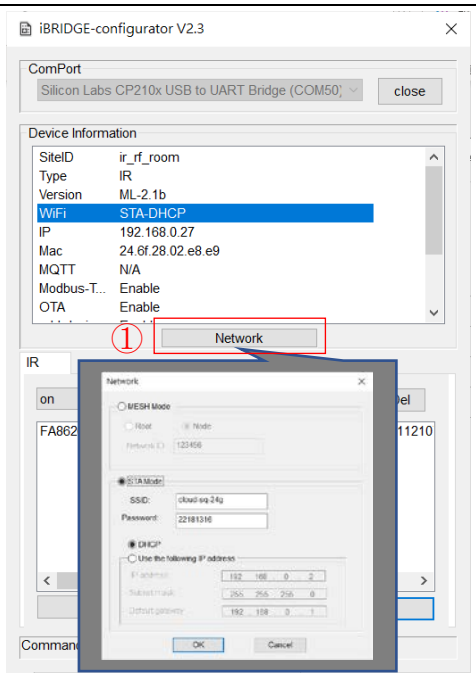


STEP 6:

Wi-Fi mode set

① click【WIFI mode】button

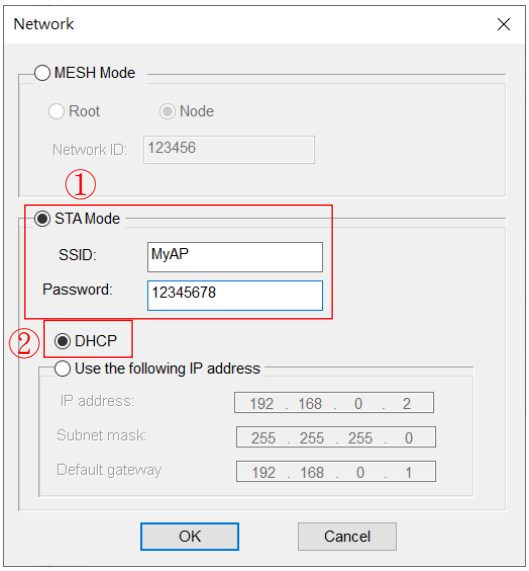


STEP 7:

Parameter modify

① click【STA Mode】button to pop up the dialog and fill in your AP SSID and Password

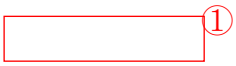
② choose【DHCP】

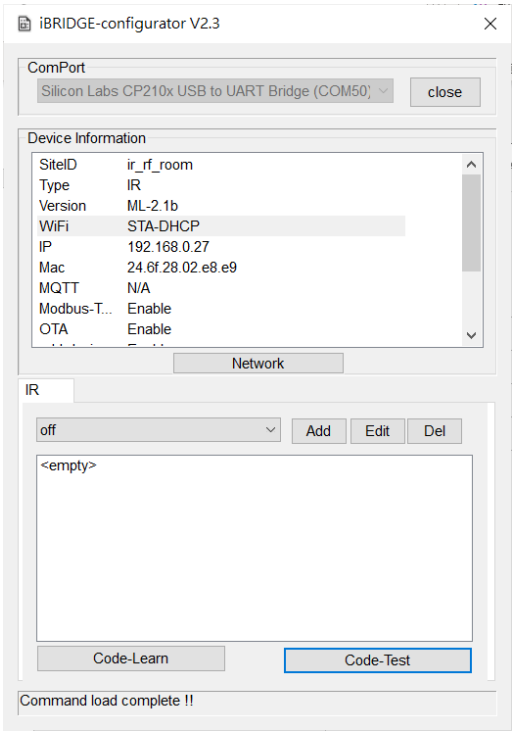


STEP 8:

After you change and confirm the network setting, the inform will refresh and update to the last message

① the new IP will display





STEP 9:

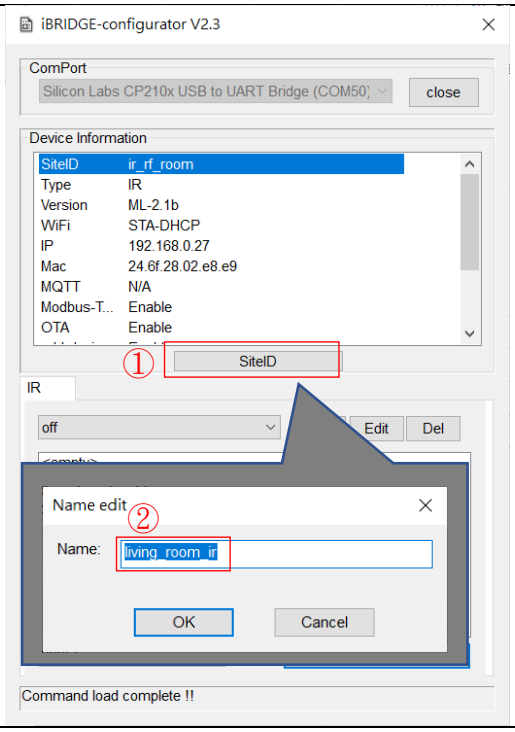
Edit your SiteID name

① Select the SiteID item and click the 【SiteID】button

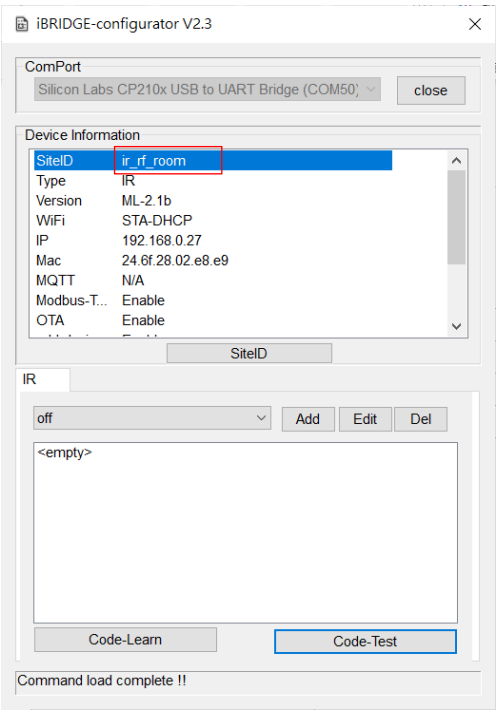
② Popup the name edit dialog and input name. ex: living_room_ir

STEP 10:

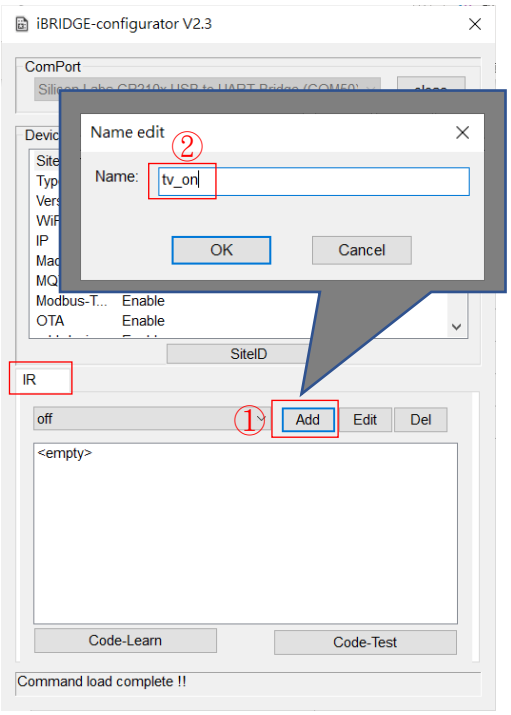
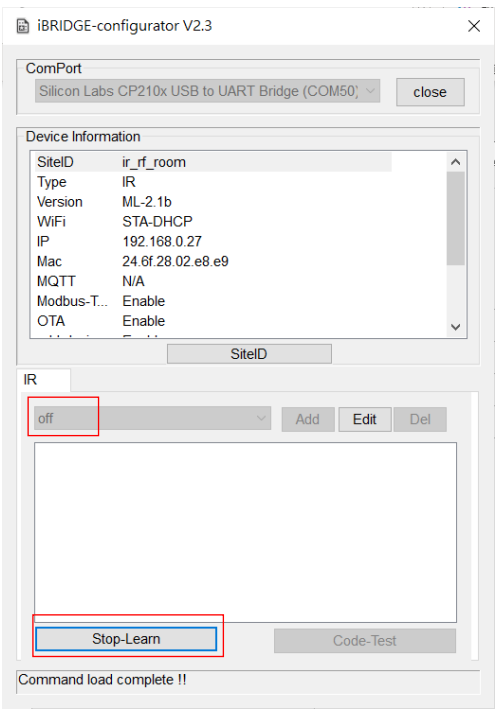
On Device Information area , the item SiteID will show the name which you input



STEP 11:



STEP 12:

How to add a IR control action	IR code learning
② Under the IR tab,click the 【Add】 button ③ On the name field, input the name, ex: tv_on	click 【Code-Learn】 button, the label will change to 【Stop-Learn】 , you are on the IR leaning mode now
	
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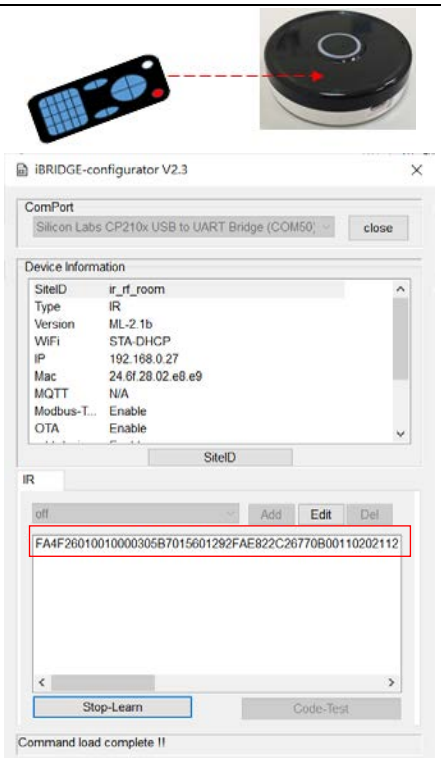
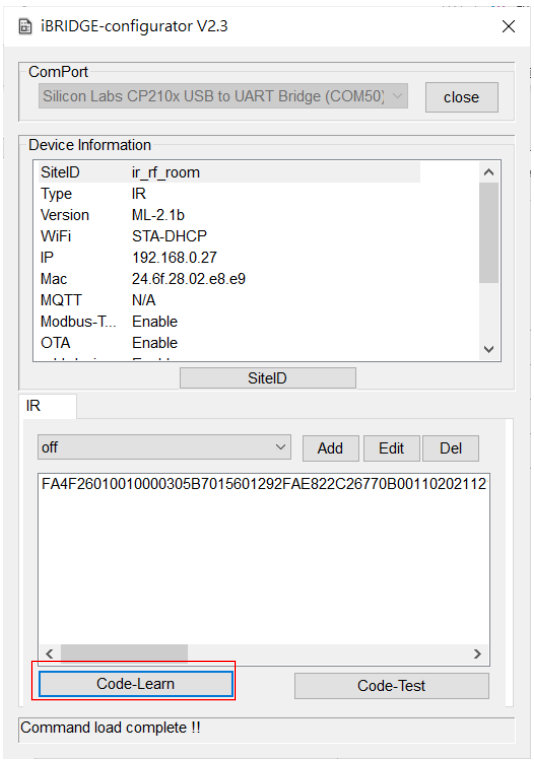


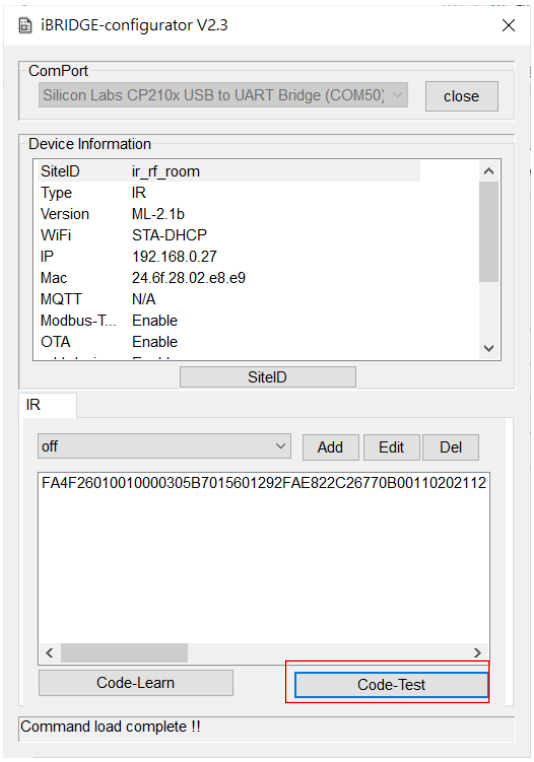


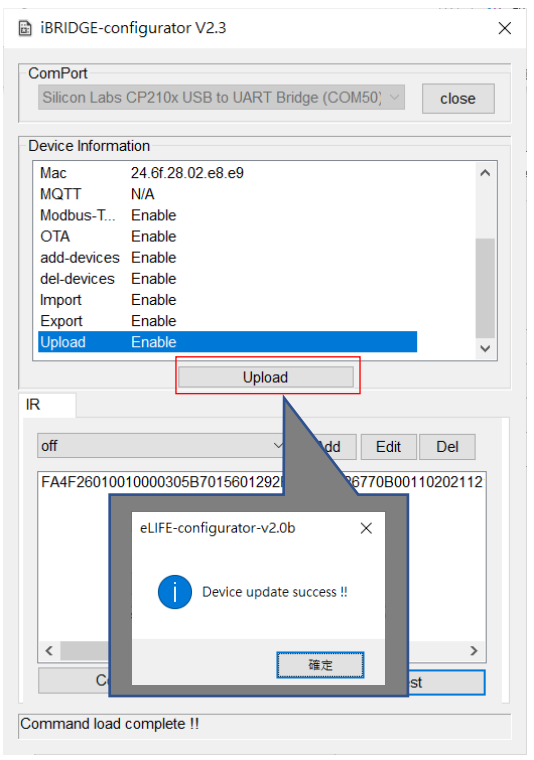
STEP 15:

You can click the【Code-Test】button, this will send out all the learned code, make sure the TV is turn on as your expect

STEP 16:

After every test action is set complete, you should click the 【Upload】button to upload the command scene to the device. You can repeat step12-15





***STEP 17*:**

You can use the ” SocketTest.exe” TCP win application (not support the Chinese and blank string) for test

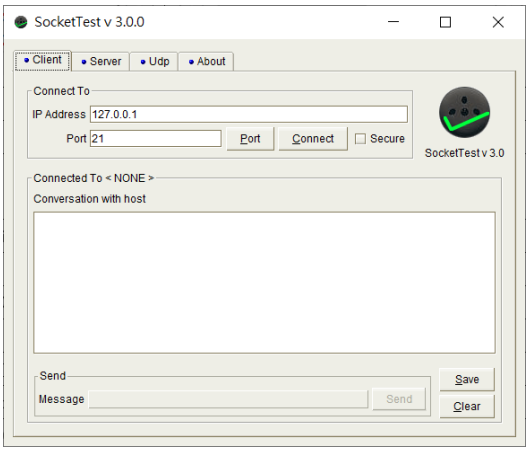
※kindly download from webby yourself

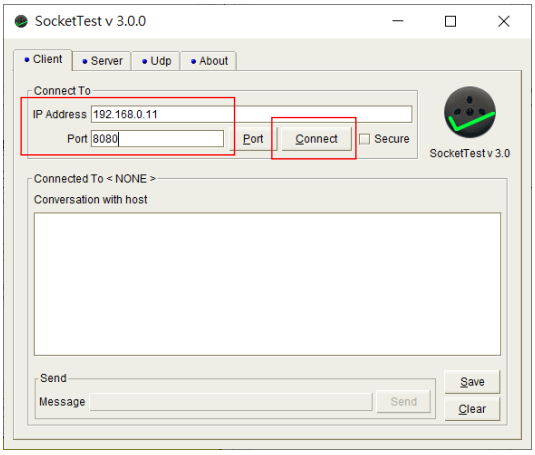
STEP 18:

Parameters set

① Input the IP and Port

② Click the【Connect】button

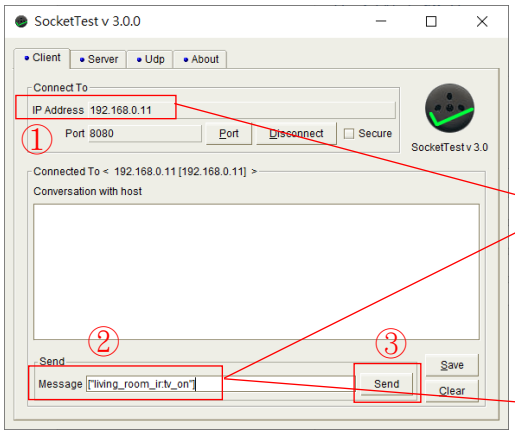




STEP 19:

① Confirm parameter is correct

② Input the json command format and click【Send】then confirm A/C is open

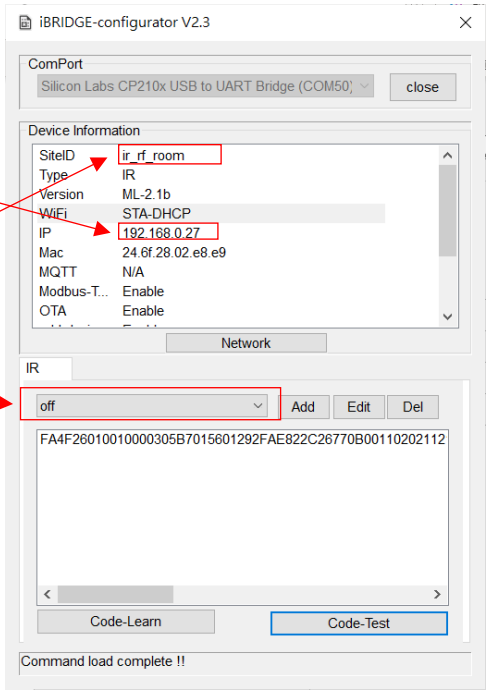


Command format: [“siteID:Cmd”]

EX: [“living_room_ir:tv_on”]

Command format: [“siteID:Cmd”,”siteID:cmd”]

EX: [“living_room_ir:tv_on”, “living_room_ir:yv_off”]



Product Specification:

Wireless	*Wi-Fi 802.11 b/g/n* *(802.11n, up to 150Mbps)*
IR transmit distance	*10M*
IR input	*Carrier Frequency 38KHz*
Power supply	*micro USB Adapter 5VDC, 1A*
Operation temperature	*0~40°C*
Certification	*CE & FCC*

Warning:

15.19

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. 15.105 This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: —Reorient or relocate the receiving antenna. —Increase the separation between the equipment and receiver. —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. —Consult the dealer or an experienced radio/TV technician for help.

15.21

Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment.

This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible

RF Radiation Exposure Statement This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

15.105

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.