

## Packing List

In addition to this guide, the package includes the following items:



IR-210



CA-0910 \* 1



CA-IR-SH2251 \* 2  
(IR-210)



CA-IR-SH2251-5 \* 2  
(IR-210-5)

## Resources

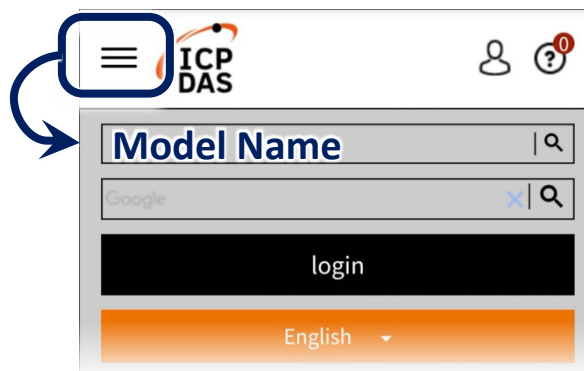
How to search for drivers, manuals and spec information on ICP DAS website.

## Technical Support

[service@icpdas.com](mailto:service@icpdas.com)

[www.icpdas.com](http://www.icpdas.com)

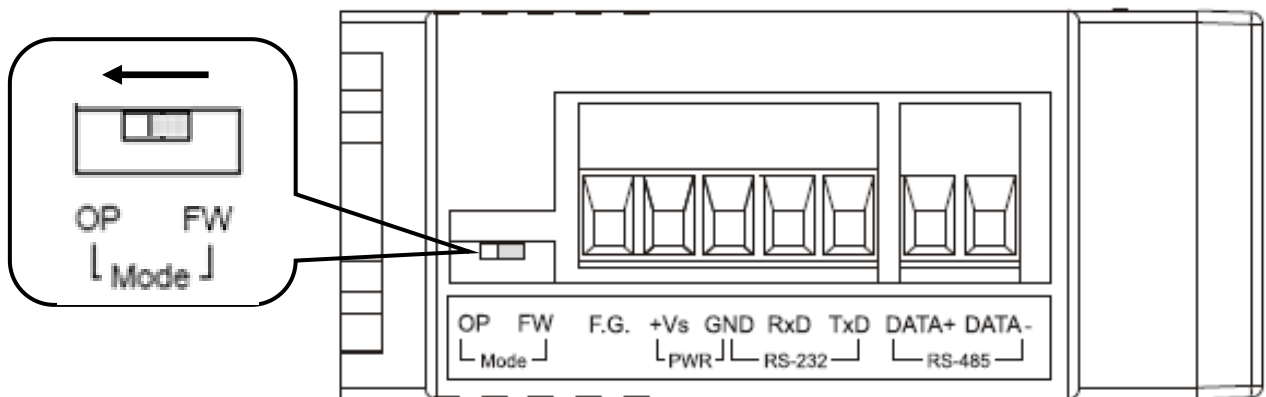
- For Mobile Web



- For Desktop Web

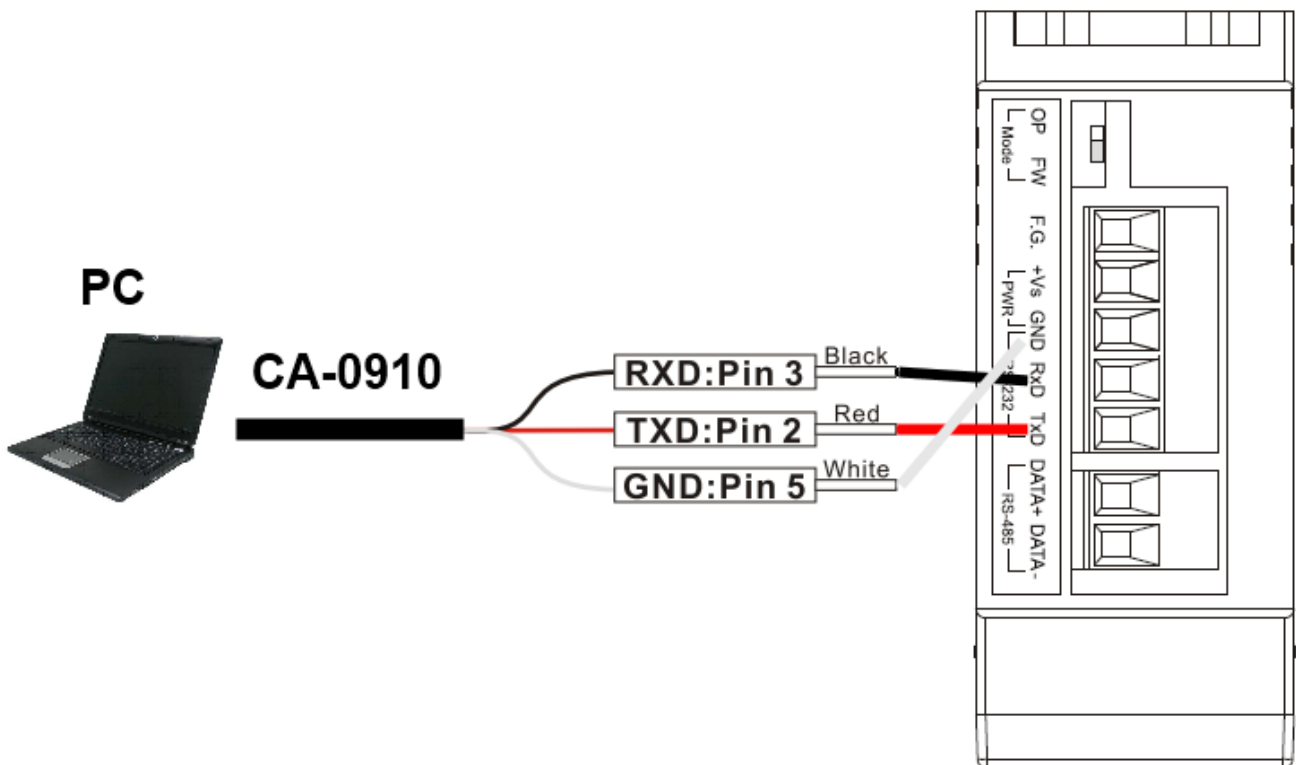
## 1. Check operation mode

Push DIP switch to the position of normal operation mode (OP).



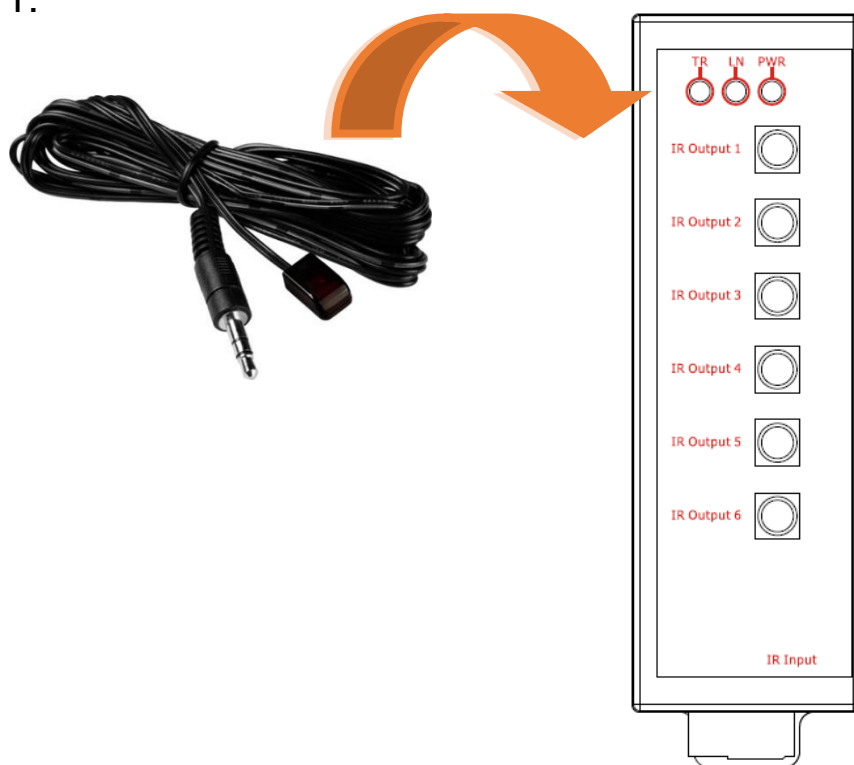
## 2. Serial Wire Connection to PC

Use the RS-232 cable (CA-0910) to establish the wire connection between IR-210 and PC as shown in the following figure. The DB9 (9-pin) connector of CA-0910 is for PC COM port.



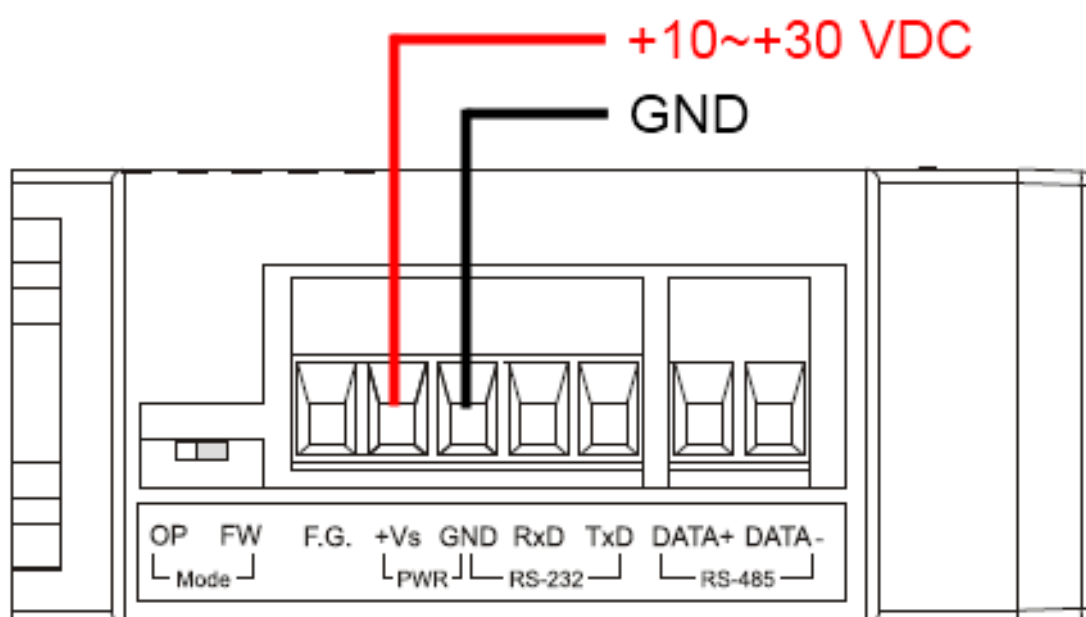
### 3. Plug in an IR Emitter Cable

Plug the IR emitter cable CA-IR-SH2251(-5) into the 3.5 mm jack of the IR Output 1.



### 4. Power Wire Connection

Connect the power supply cable (+10 ~ +30 VDC) to the power connector.

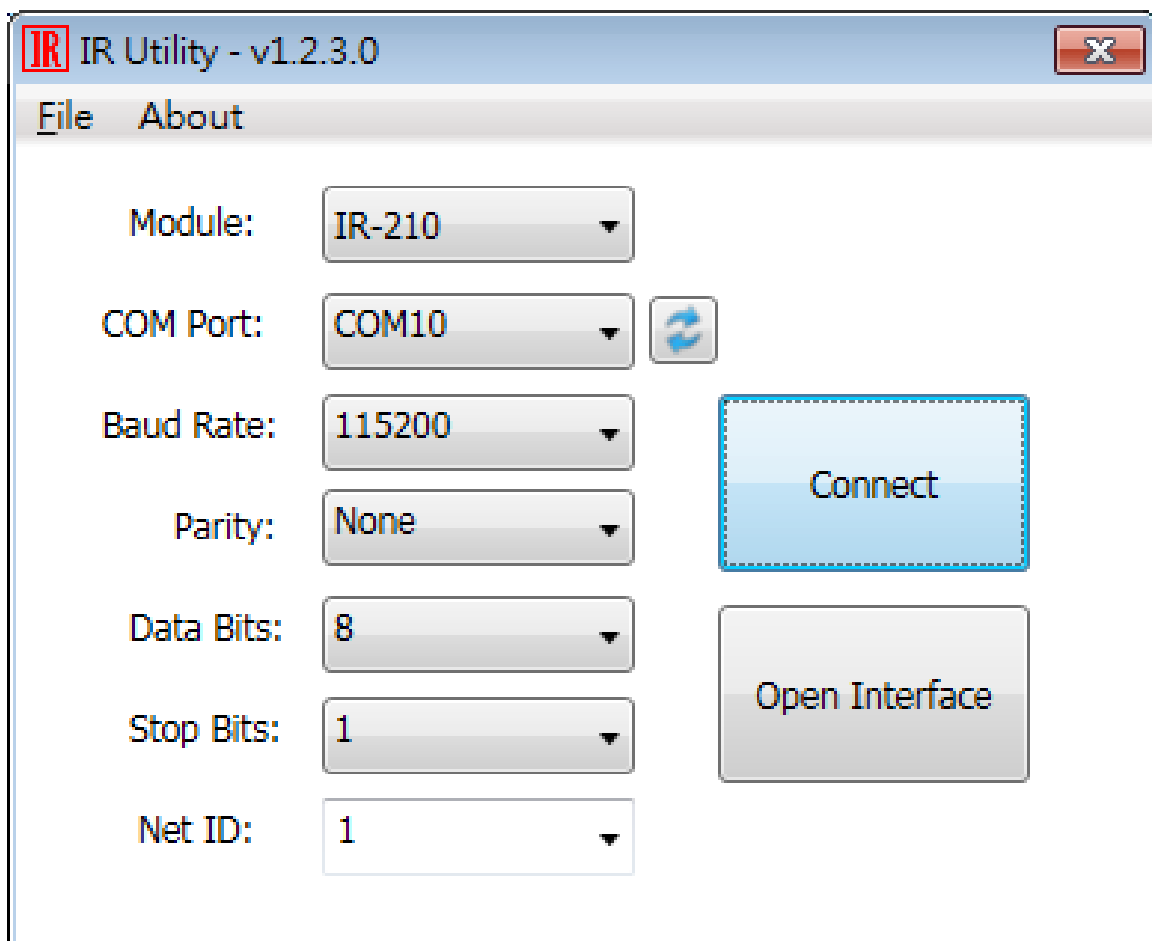


## 5. Install IR Utility

Please get the IR Utility installation file (IR\_Util\_Setup\_v#\_#\_#\_#.zip) from the web page of the product.

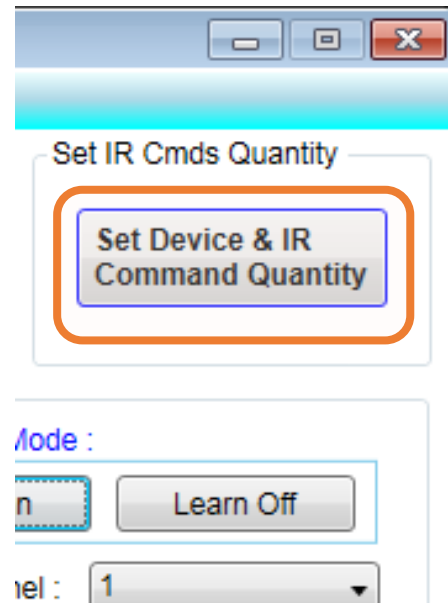
## 6. Serial Communication to the Module

Select “IR-210” in the Module combobox. Select the default communication settings: Baud rate = 115200 bps, Parity = None, Data bits = 8, Stop bits = 1, and Modbus Net ID = 1. Then, click “Connect” button to connect to the IR-210 and open the main window of the utility.



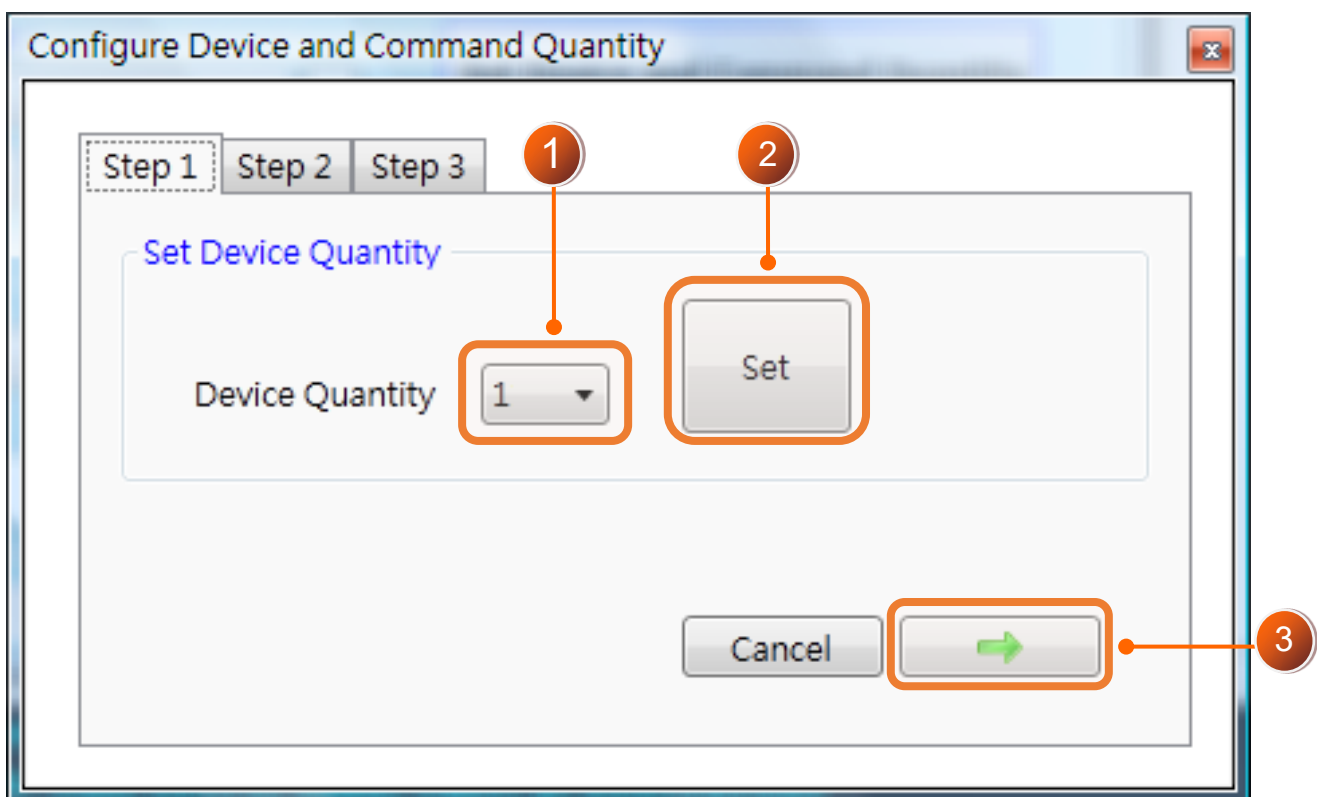
## 7. Set Device and IR Command Quantity

Please click the “Set Device & IR Command Quantity” button to open the setup window. Three steps to be set:



### Step 1: Set device quantity.

- (1) Set the Device Quantity to be 1.
- (2) Press the “Set” button.
- (3) Press the Next (right arrow) button.



## Step 2: Configure the IR device names and its IR command quantity.

- (1) Enter Device Name and IR Command Quantity.
- (2) Press the "Set" button.
- (3) Press the Next (right arrow) button.

Configure Device and Command Quantity

Step 1 Step 2 Step 3

Set Command Device Name & Command Quantity

Device Name 1\_DVD

Enter Device Name DVD

IR Command Quantity 18

Set

Cancel ← →

1 2 3

## Step 3: Set each IR command name

The prefix number (e.g. 1\_Play) is the number of an IR command stored in the IR-210. Click OK button to go back to main window.

Configure Device and Command Quantity

Step 1 Step 2 Step 3

Set Command Name

Device Name 1\_DVD

1 IR Command Name 1\_Play

2 Enter IR Cmd Name Play

Set

Cancel ← OK

3 4

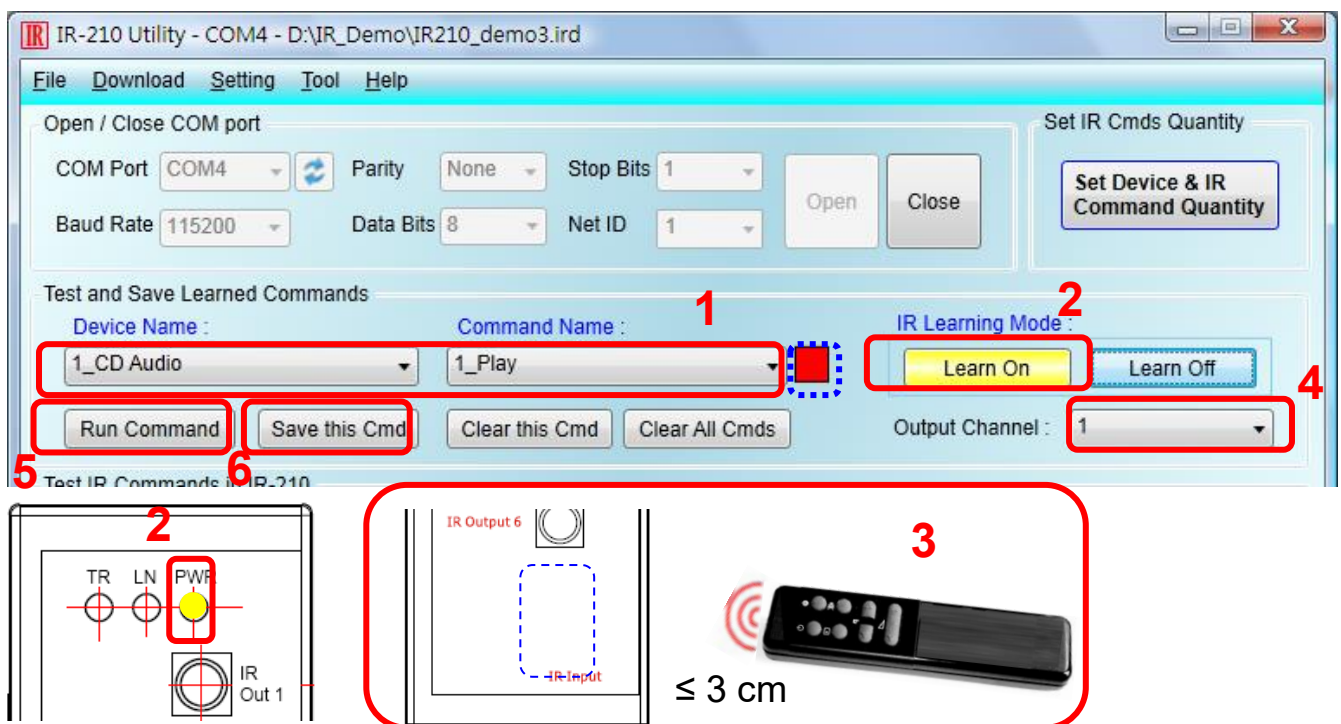
## 8. Learn IR Commands

In the section “**Test and Save Learned IR Commands**” of the utility:

- (1) Select the item in “Device Name” and “Command Name” combobox.
- (2) Click “Learn On” button to enable IR learning mode (LN LED is ON).
- (3) Aim the emitter head of the remote control (RC) to the “IR Input” of the IR-210 (distance less than 3 cm) and press the remote control button which is to be learned in a short time. After IR learning is finished, the TR/LN LED is OFF.
- (4) Select IR Output 1 in the output channel combobox.
- (5) Aim the IR emitter, which is plugged in IR Output 1 jack, to the IR receiver of the controlled device. Click “Run Command” button to check the effectiveness of the IR learning command. Repeat (2) and (3) if no action on the device.
- (6) Click “Save this Cmd” button.
- (7) Repeat the above (1)~(6) to finish IR learning.

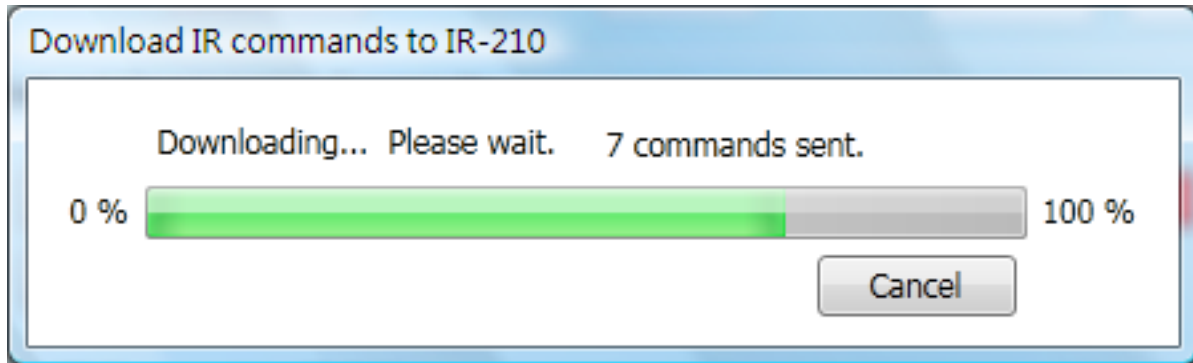
Besides, the color rectangle (marked a blue dotted frame) means:

- **Red**: Learning data is saved in the item of “Command Name”.
- **Yellow**: Get learning data form IR-210. The data is buffered and lost when selecting other item of “Command Name”.
- **White**: No learning data saved in the current item of “Command Name”.



## 9. Download IR Commands to the Module

After IR learning finishes, click Menu [Download]-> [Download IR Commands to IR-210] to download the IR commands to the IR-210.



## 10. Test IR Commands

Go to the "Test IR Commands in IR-210" section:

- (1) Select IR Command No.
- (2) Select Output Channel to 1. Aim the IR emitter head to the appliance.
- (3) Press "Transmit (MBRTU Msg)" button. The appliance reacting means success.

