

## Packing List

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



IR-310-RM



CA-0910



CA-IR-001



CA-IR-SH2251-5



Screw  
Driver



Flat Head  
Screws \* 10



L108E



Rack Mount  
Brackets \* 2



Module  
Connecting  
Piece \* 1



Wall Mount  
Brackets \* 2



UP0061D-12PA58G

## Resources

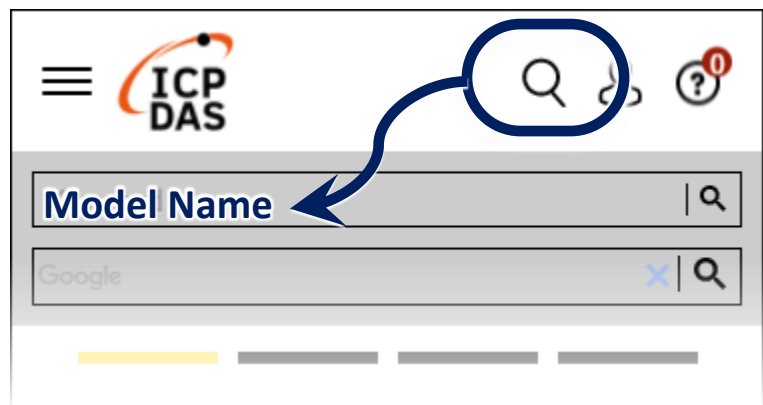
How to search for drivers, manuals and spec information on ICP DAS website.

## Technical Support

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

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

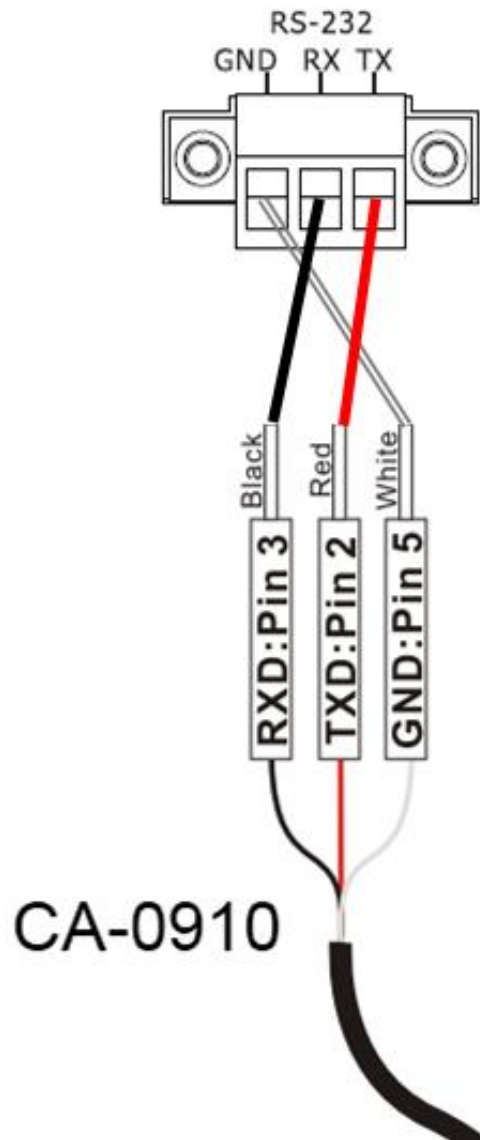
- For Mobile Web



- For Desktop Web



## 1. RS-232 Connection



## 2. Connection to the IR Interface

Please use the IR receiver cable CA-IR-001 for IR input jack and the IR emitter cable CA-IR-SH2251-5 for IR output jack.



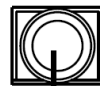
CA-IR-001

IR Input



CA-IR-001

IR Output



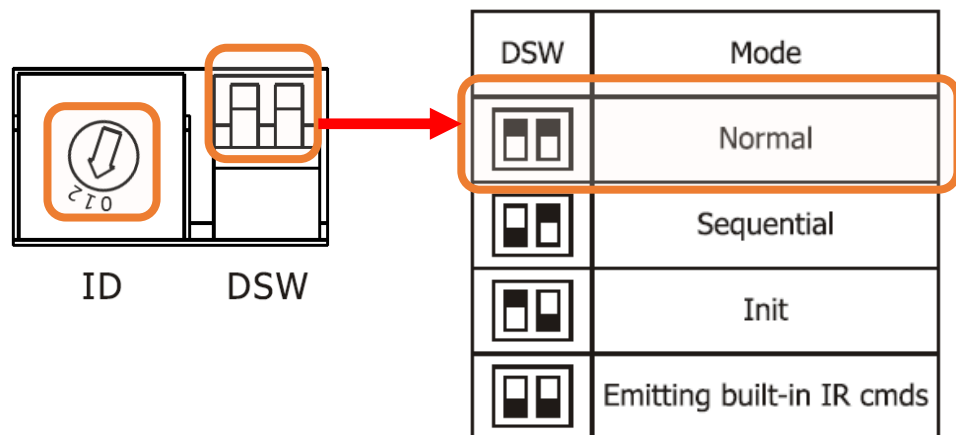
CA-IR-SH2251-5



CA-IR-SH2251-5

### 3. Rotary and DIP Switch

Make sure that the rotary switch is at ID = 1 and DIP switch is in Normal mode for the subsequent manipulation.



### 4. Power Connection

IR-310-RM only supports +12 VDC. The power jack is at the rear of the module. The accompanied UP0061D-12PA58G is the power supply for IR-310-RM.

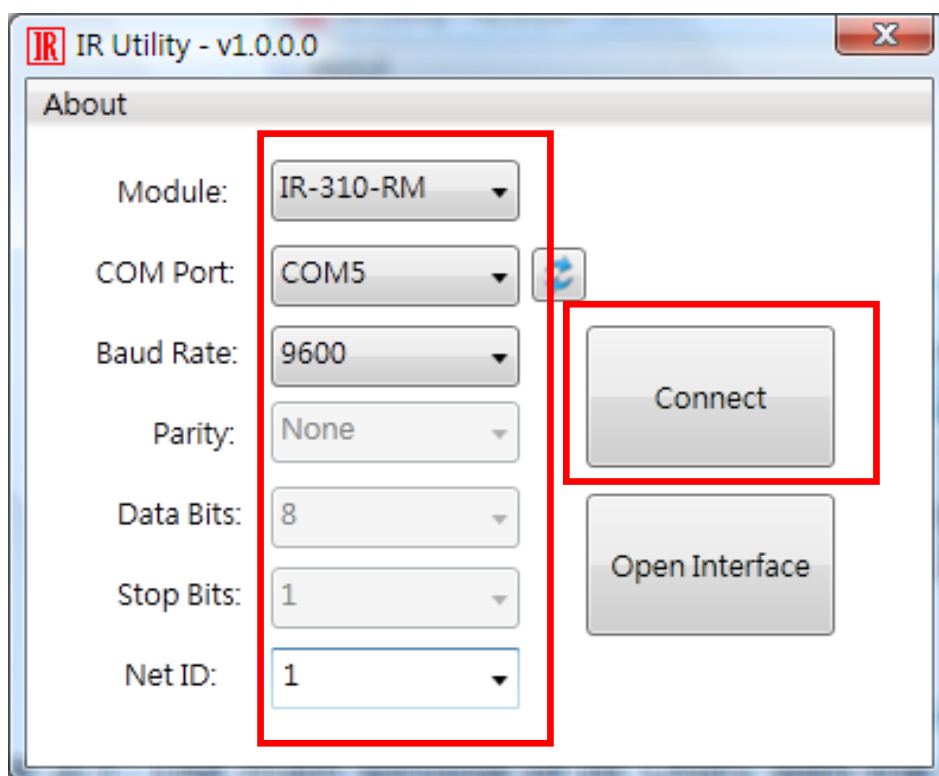


## 5. Install IR Utility

Please get and install IR utility (IR\_Util\_Setup\_Vx\_x\_x\_x.zip) from the Web page of the product.

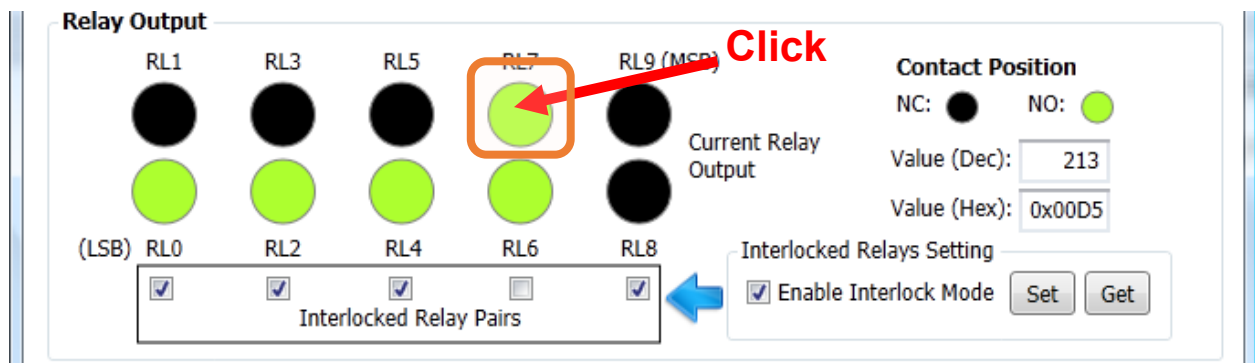
## 6. Connect to the Module

Select “IR-310-RM” in the Module combobox. Select the default communication settings: Baud rate = 9600 bps, Parity = None, Data bits = 8, Stop bits = 1, and Modbus Net ID = 1. Then, click “Connect” button to connect to the IR-310-RM and open the main window of the utility.



## 7. View and test the relay outputs

Current states of 10 relays are indicated in the Relay Output section. Relay states can be changed by clicking the circles.

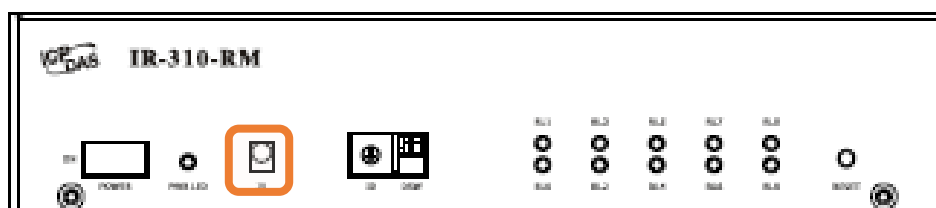


## 8. Relay Control by the IR Remote

Please use an IR learning Remote (such as the accompanied L108E) to learn the IR commands for IR-310-RM.

### 8.1 Test by L108E

By default, the IR learning remote L108E has stored 12 built-in IR commands as shown in the following Table for the IR-310-RM with Net ID = 1. Users can press these buttons to test IR remote function immediately.



**L108E**

Table : Default buttons of the L108E

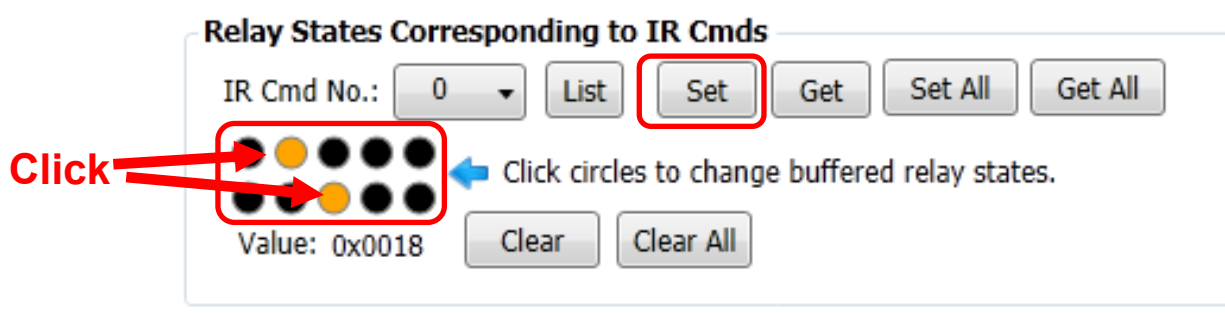
Btn	IR Cmd#	Btn	IR Cmd#
+	#192 (10 relays ON)	4	#198 (RL4 ON, others OFF)
-	#193 (10 relays OFF)	5	#199 (RL5 ON, others OFF)
0	#194 (RL0 ON, others OFF)	6	#200 (RL6 ON, others OFF)
1	#195 (RL1 ON, others OFF)	7	#201 (RL7 ON, others OFF)
2	#196 (RL2 ON, others OFF)	8	#202 (RL8 ON, others OFF)
3	#197 (RL3 ON, others OFF)	9	#203 (RL9 ON, others OFF)

Please refer to the Appendix A of the *IR-310-RM User Manual* for the table of the built-in IR commands numbers.

## 8.2 Steps to learn IR commands

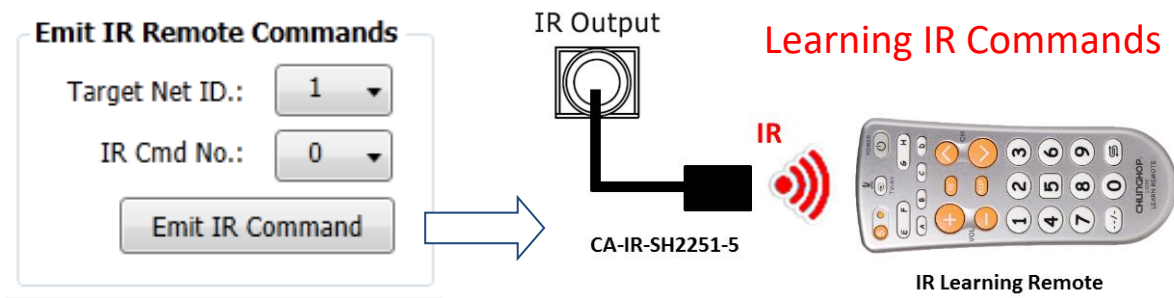
### A. Download IR-relay-states to the IR-310-RM

- (1) Launch IR-310-RM utility and go to the section of the “*Relay States Corresponding to IR Cmds*”. IR-relay-state can be buffered in each item (#=0~63) of the “IR Cmd No.” combobox by clicking the circles representing the 10 relays (RL0 ~ RL9). Click a circle ON/OFF means the relay ON(Normally open)/OFF(Normally closed).
- (2) Set button: Download the current IR-Relay-State to the IR-310-RM.

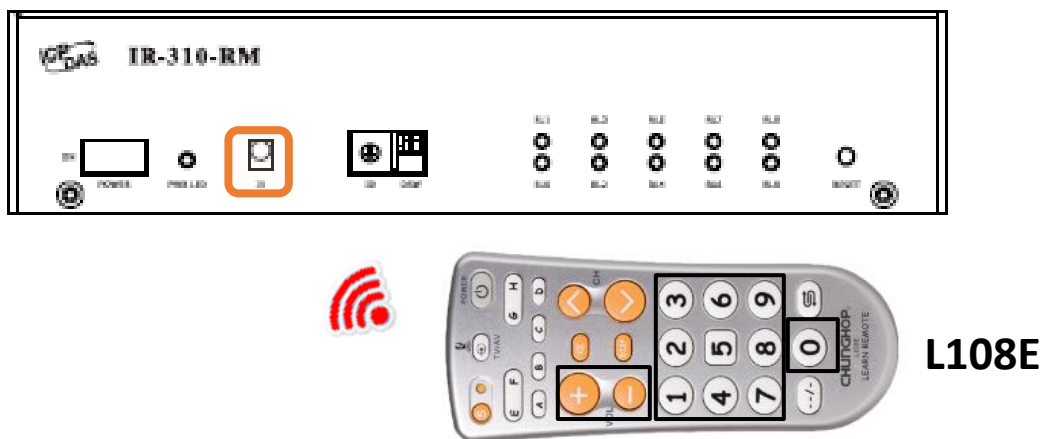


## B. Emit IR commands for IR learning remote

Plug the IR emitter cable (CA-IR-SH-2251-5) in the jack of IR output. Aim the head of the IR emitter cable to the IR emitter of the learning remote (L108E). Go to the “Emit IR Remote Commands” section. Click the “Emit IR Command” to emit the IR command for the specified Net ID. (Please refer to the manual of the L108E to learn the IR learning.)

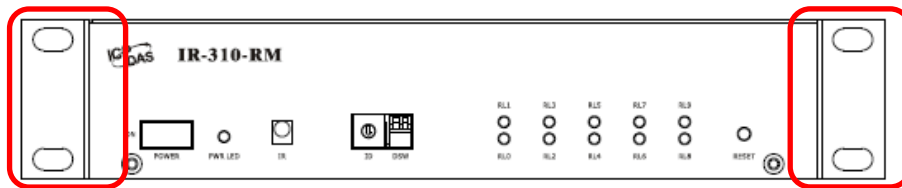


## C. Test by the IR Remote

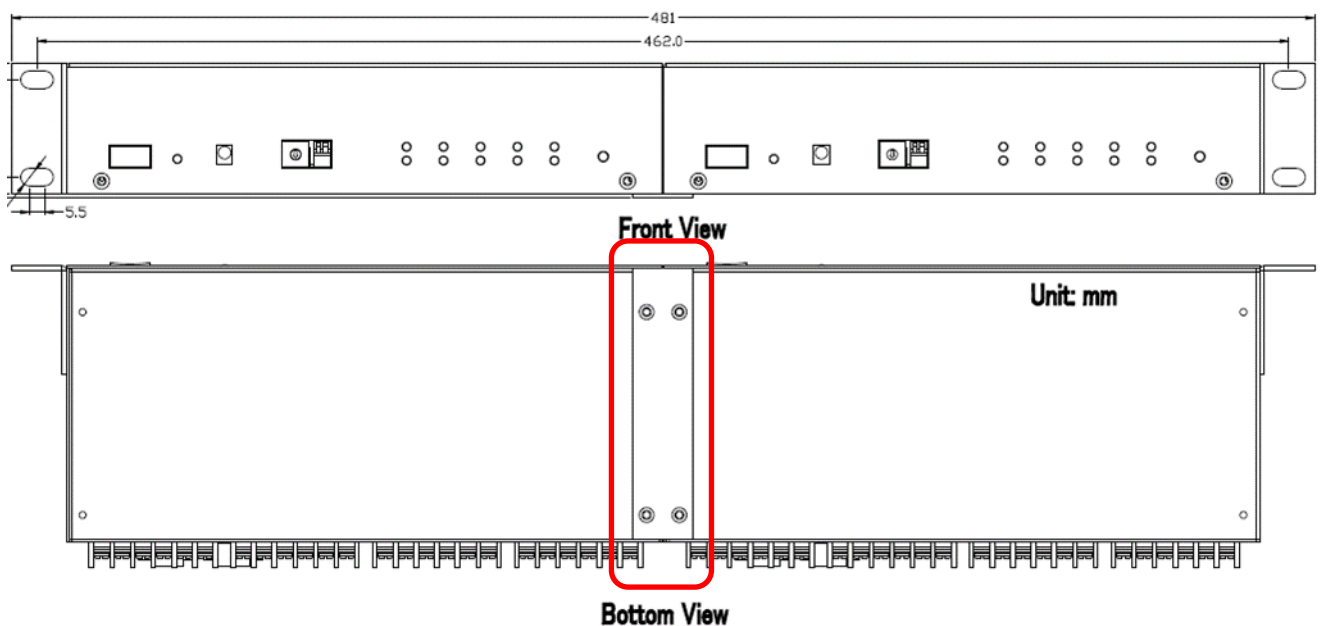


## 9. Rack Mounting

The two rack mount brackets in the package are for rack mounting environment.



The steel joint plate can join two IR-310-RMs to be of 19" width for an equipment rack.



## 10. Wall Mounting

The two wall mount brackets in the package are installed on the case as follows

