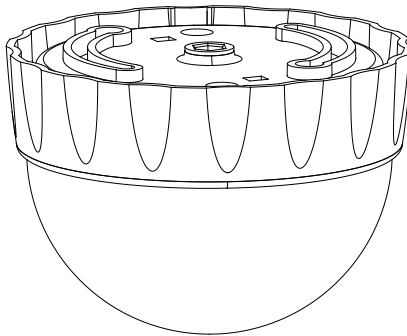


# LA5597- IR Transmitter

## Operation Manual

LA5597 IR Transmitter can intelligent control home electrical IR device using in home automation system which can connect wireless AM433Hz signals with wireless IR signals.

Through 5597 IR Transmitter, users can control all the devices which can use IR remote controllers like TV, air conditioner, electric curtain etc. Its wireless communication is stable, fast and it does not need any wire. Installing it, you just need to bind relevant IR controlled devices. It is very convenient.

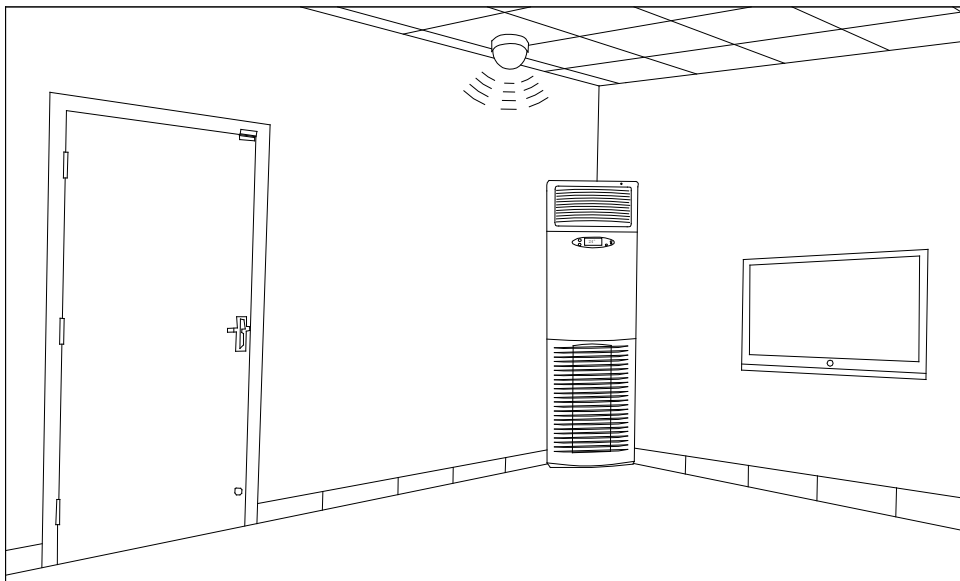


### 1.0- System Feature

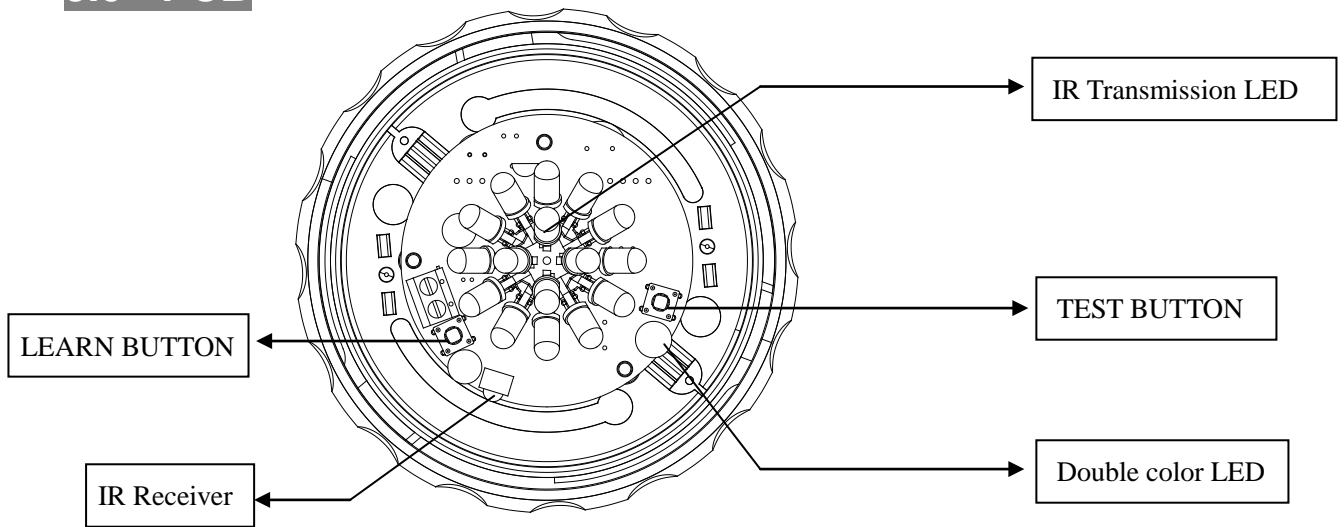
- Learn two IR signal from any IR device (TV, air conditioner etc) and two wireless control panel signal.
- Double color LED indicate learning status
- One learn mode and one test mode

### 2.0 – Location of components

- Do not site an IR Transmitter where its field of view may be obstructed (e.g. by curtains.)
- Ensure the IR signal of IR transmitter cover with IR electrical device(TV, air condition etc)



### 3.0 - PCB

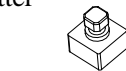


## Section 1 - Using IR Transmitter

### 4.0 - How to register IR Electrical Device

- i. To learn IR signal from IR remote control to LA5597 IR Transmitter

**1. Signal A :** Press the LEARN button 1 time, the LED becomes Red indicating learn mode for IR signal A.



Press **LEARN** button 1 time



**Red LED light**

**2. Signal B.** Press the LEARN button 2 times, the LED becomes Green indicating learn mode for IR signal B.



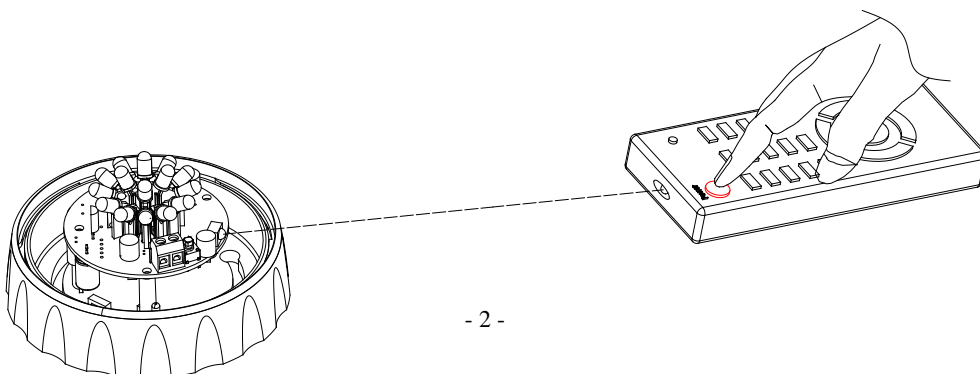
Press **LEARN** button 2 times



**Green LED light**

**Note:**

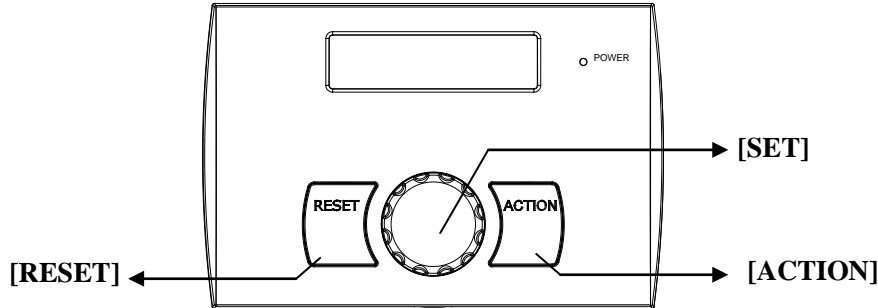
1. To complete the whole learning process of a signal once a time..
  2. If no operation on the button system within 15 seconds will exit learn mode automatically.
- ii. To register by pressing either key to be learnt on remote control of electrical device.
- iii. The LED light off indicates IR signal had been learnt into the IR Transmitter and exiting to normal mode.



## 4.1 - How to register Control Panel

Set home automation controller entering to learning status as follow:

- i. Set home automation controller entering to learning status as follow:



Home Automation Control Panel

- System is in Day mode.

08:00 01- Jan  
DAY

- Press [SET] to go into Program Mode

08:00 01- Jan  
**SETUP** ACT INFO

- When cursor is on **SETUP** character, press [SET] to go into SETUP program mode

SETUP MENU  
Setup System?

- Rotate [SET] to select **Output Device**.  
Then press [SET] to go into **Output Device** function.

SETUP MENU  
Output Device?

- Rotate [SET] to select **Output 1**

**Note:** Learning B IR Signal must to be selected other output device number.

Then press [SET] to go into setup output device 1 function.

OUTPUT DEVICE  
Output 1?

- Rotate [SET] to select **Device Type**.  
Then press [SET] to go into **Output Device Type** function.

OUTPUT DEVICE  
Device Type?

- LCD display current output device type  
Rotate [SET] to select **IR Signal** type.

Device Type  
IR Signal?

- Rotate [SET] to select **A** signal.

**Note:** Learning B IR Signal must to be selected B signal.

IR Signal  
A

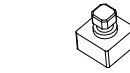
- Press [SET] to go to “Tx Learn Data”.

Note: Controller transmits learn data, ID save to Output device

Output Device  
Tx Learn Data?

- i) To learn wireless signals from LA5597 IR transmitter to LA5592 Home Automation Controller

**1.Signal A** : Press the LEARN button 3 times, the LED becomes Red and flashing indicating learn mode for signal A.



Press **LEARN** button  
3 times



**Red** LED flash

**2. Signal B.** Press the LEARN button 4 times, the LED becomes Green and flashing indicating learn mode for signal B.



Press **LEARN** button  
4 times



**Green** LED flash

**Note:**

1. To complete the whole learning process of a signal once a time..
  2. If no operation on the button within 15 seconds system will exit learn mode automatically.
- ii. Trigger control panel of home automation system, flashing LED light off indicate control panel A signal had been learnt and exit to normal mode.

**Operating Home Automation Controller as follow:**

- Pressing **[SET]** key Controller will transmit learn data to output device
- To enable the output device of controller after learn data successfully. Then press **[SET]** go into **Enable Work** function.
- Display current Enable status
- Rotate **[SET]** to select ON and press **[SET]** key to accept, it will enable Output Device 1 work  
Note: Set Enable Work to be OFF, Controller will not action the output device.
- System generate an have OK tone, it will exit and go into next Output Device setting.

**Tx Learn Data  
to output device**

**Output Device  
Enable?**

**Enable Work  
OFF?**

**Enable Work  
ON?**

**OUTPUT DEVICE  
Output 2?**

**Test IR Transmitter via controller**

- System is in Day mode.
 

08:00 01- Jan  
 DAY
  
- Press [SET] to go into Program Mode
 

08:00 01- Jan  
**SETUP** ACT INFO
  
- Rotate [SET] to select **INFO** ?
 

08:00 01- Jan  
 SETUP ACT **INFO**
  
- When cursor indicate INFO, press [SET] key will go into view information mode
 

INFO MENU  
 View Log?
  
- Rotate [SET] to select **Test System?**

INFO MENU  
 Test System?
  
- Press [SET] to go into **Test System** function
 

TEST SYSTEM  
 Speaker Test?
  
- Press [SET] to go into Test System function.  
and Rotate [SET] key to select **Out\_Device Test?**

TEST SYSTEM  
 Out\_Device Test?
  
- Press [SET] go into test output device function.  
and rotate [SET] to select will test device
 

Out\_Device Test  
 O01: Output 1?
  
- Press [SET] to accept and the toggle test outputs ON  
The corresponding IR electrical Device will work on.
 

O01: Output 1  
 ON, Press any key
  
- Press any key to go into next output device.
 

Out\_Device Test  
 O02: Output 2?

## 5.0- How to enter to Test mode

You can test the two IR signals which you had learnt into the transmitter. Test mode last out 15 seconds.



Press **TEST button** for 3 seconds



**Orange LED flash**

- i. Pressing TEST button for 3 seconds, the led flashing orange indicates enter to test mode.
- ii. Pressing the TEST button once the IR transmitter transmits the A IR signal.
- iii. Going on to press once the test button, IR transmitter transmits the B IR signal. IR A signal and IR B signal transmit alternately through pressing test button.

## 6.0- How to clear the all record signal

- i. Power off the IR transmitter.
- ii. Press the LEARN button and power up the transmitter.
- iii. After 5 seconds, the green LED flashing two times indicates all the record signal had been cleared.



Press **LEARN** button for 5 seconds



**Green LED flash** two times

# Section 2 – Troubleshooting Guide

Wireless IR Transmitter

Symptoms	Possible causes and cures
IR Transmitter can't learn IR signal from remote control.	Ensure the IR led of remote control front to front the IR receiver of the IR transmitter.
IR Transmitter can not control the IR device after learning IR signal.	Ensure the position of IR device (TV, Air condition etc) would not beyond control distance of IR transmitter (10 meters).
IR Transmitter can not control the IR device after learning IR signal.	Ensure there is no covering in front of the IR receiver of IR device(TV, Air condition etc)

## Section 3 - Specifications

### Wireless IR transmitter

Double color LED	: Learn mode, Test Mode and Transmission indication
IR LED	: 38K Hz IR transmitter, range 10 meters
Transmission Frequency	: AM 433MHz
Wireless Transmission Range	: 100 meters (line of sight)
Power Supply	: 12V AC 50Hz max load 0.5A