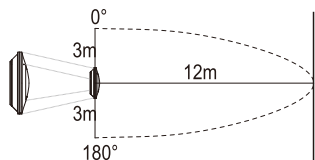


OPERATING MANUAL

IR TRANSCEIVER

HKZW-ACC01-V1.0

1. The figure below shows the relation of Infrared emission angle and Infrared communication distance.



2. How to store infrared code on your IR Transceiver.
We offer two ways to store infrared code on your IR Transceiver.
1) You can learn infrared code from your remote.
2) You can download infrared code from the cloud via APP.

3. How to control an infrared device.
After you store infrared code on your IR Transceiver, you can control an infrared device via APP.

IV . Z-WAVE NETWORK INCLUSION

IR Transceiver can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

To include IR Transceiver into a Z-Wave network as a non-security device:
1) Make sure the power supply is connected and the IR Transceiver is located within a direct Z-Wave network's main controller communication range.
2) Set the Z-Wave network main controller into learning mode (see Z-Wave network controller operating manual).

ACC01 is an IR Transceiver based on ZWAVE technology. It is used for sending IR codes to infrared communication controlling devices such as TV, air condition and TV box.

IR Transceiver can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

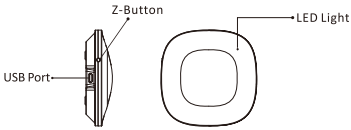
IR Transceiver is also a security Z-Wave device and supports the Over The Air (OTA) feature for the product's firmware upgrade.
If you want your IR Transceiver to be a security device that use secure/ encrypted message to communicate in a Z-Wave network, then a security enabled Z-Wave controller is needed.

The features list:

- 1) Z-Wave Plus certified for wide compatibility (500 serials product).
- 2) Infrared max communication distance is about 12meters.
- 3) Infrared emission angle is about 180°.
- 4) Support firmware OTA.

I . GENERAL INFORMATION ABOUT DOOR/WINDOW SENSOR

1. Product layout



- 3) Triple-clicking the Z-Button within 1.5 seconds.
- 4) If the add for inclusion is successful, the LED will blink fast for less than 5 seconds and then keep on. Otherwise, the LED will blink 5 seconds and then keep blinking slowly, in which case you need to repeat the process from step 2.

To include IR Transceiver into a Z-Wave network as a security device:
1) Make sure the power supply is connected and the IR Transceiver is located within a direct Z-Wave network's main controller communication range.

- 2) Set the Z-Wave network main controller into learning mode (see Z-Wave network controller operating manual).
- 3) Pressing and holding the Z-Button for 3 seconds.
- 4) If the add for inclusion is successful, the LED will blink fast for less than 5 seconds and then keep on. Otherwise, the LED will blink 5 seconds and then keep blinking slowly, in which case you need to repeat the process from step 2.



TIP:
If you want your IR TRANSCEIVER to be a security device that use secure/encrypted message to communicate in a Z-Wave network, then a security enabled Z-Wave controller is needed.

V . REMOVING FROM Z-WAVE NETWORK

To remove the IR TRANSCEIVER from the Z-Wave network:

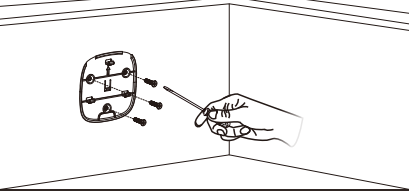
- 1) Make sure the power supply is connected and the IR Transceiver is located within a direct Z-Wave network's main controller communication range.
- 2) Set the Z-Wave network main controller into exclusion mode.
- 3) Triple-clicking the Z-Button within 1.5 seconds.
- 4) If the remove for exclusion is successful, Led will blink fast for less than 5 seconds and keep blinking slowly. Otherwise, led will blink for 5 seconds and then keep on, in which case you need to repeat the process from step 2.

2. Specifications

Power supply:	DC 5V 1A
Storage environment:	-10°C -50°C 0%-90%
Operational temperature:	0~40°C
Radio protocol:	Z-Wave
Radio frequency:	<input type="checkbox"/> 908.42MHz(US) <input type="checkbox"/> 868.42MHz(EU) <input type="checkbox"/> 921.42MHz(AU)
Range:	More than 150m outdoors About 40m indoors (depending on building materials)
Dimensions:	85x85x26cm
Working current:	About 60mA
Standby current:	About 35uA

II . INSTALLATION

IR Transceiver is simple to install and it should be installed near the infrared devices as possible as you can.
1) Utilize the screws provided to affix the plastic mount to the surface you desired.



NOTE:
Remove procedure will clear the IR TRANSCEIVER's memory which means it will erase all information about Z-Wave network and advanced configuration.

VII . RESET IR TRANSCEIVER

Reset procedure will clear the IR Transceiver's memory, including Z-Wave network information, but not including IR information.

To reset IR Transceiver:
Pressing and holding the Z-button for 20 seconds. Release the button after 20 seconds, Led will be on for 3 seconds, and then led will keep blinking. IR Transceiver will send "Device_Reset_Locally" to the main controller and exclude from the Z-Wave network, this procedure will reset IR Transceiver to factory default.



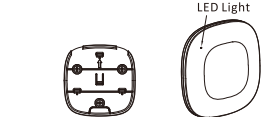
NOTE:
Use this procedure only in the event that the network primary controller is missing or otherwise inoperable.

VIII. ASSOCIATION

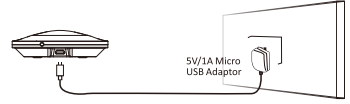
IR Transceiver supports only one association group.

Grouping Identifier	Max Nodes	Send Commands
Group 1	0x05	NULL

2) After step 1, you can now lock your IR Transceiver to the plastic mount by pressing it as the direction shows below.



3) Firmly connect the 5V/1A Micro USB adaptor to your IR Transceiver and then put the adaptor plug into an AC outlet. IR Transceiver will power on as soon as you plug in the adaptor.



III .INFRARED INFORMATION

Infrared emission angle has great effect on the communication distance. The communication distance is up to 12 meters when the angle between infrared device and IR Transceiver is 90°(this is the optimal performance). The communication distance is 3 meters when the angle between infrared device and IR Transceiver is 0° or 180°.

IX. ADVANCED CONFIGURATION

IR TRANSCEIVER offers a wide variety of advanced configuration settings. Below parameters can be accessed from main controllers configuration interface.

Parameter No.93 Clear IR information

Clear all IR information.
Value: **1431655765**
Default: **1**
Parameter size: **4[byte]**

Parameter No.254 Enable/disable the configuration command

Lock/Unlock all configuration parameters.
0 – Unlock.
1 – Lock.
Default setting: **0**
Parameter size: **1[byte]**

Parameter No.255 Reset Scene Controller

Reset the sensor or remove from the Z-Wave network
Value: **1431655765**
Default: **1**
Parameter size: **4[byte]**
Reset to factory default settings and removed from the Z-Wave network.
Value: **85**
Default: **1**
Parameter size: **1[byte]**
Reset the values of the configuration command to default setting.

X.FCC NOTICE (for USA)

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.

NOTE: THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

Note: 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.