HVAC Gateway User Manual

1. Product Brief	3 3
SPEC	3
Installation	4
1.Outlooking Size & Installation Environment	4
2.Components	4
3.Installation	
4.Wiring Installation Tips	6
2. Hardware Configuration1.Preparation	7
2. Terminal Choose and Communication pairing	7
3. Display and button user manual and LED Indicator Instruction	9
3. APP Instructions	

1. Product Brief

Introduction

Thanks for purchasing LifeSmart HVAC gateway, which can easily turned your central AC to become Smart and controller remotely.

Now the gateway has already supported Daikin, Toshiba, Hitachi, Mitsubishi, Hisense, Haier, Panasonic, York, Midea, LG, BOSCH, GREE and etc.

The supported references are refreshed continually, details please find sales person for suppot.

Please review this document before installed.

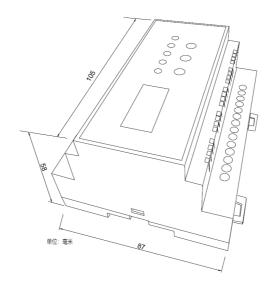
SPEC

Item	SPEC
Input Power	DC 12V
Consumption	Below 1.2W
Working	Temp :0∼40°C
Environment	Humidity: 20~85%
Gateway port	RJ45

Installation

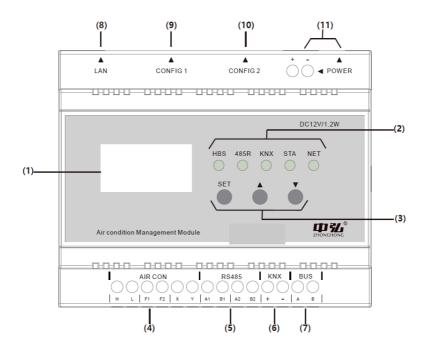
1.Outlooking Size & Installation Environment

Installed indoor only and installed hidden



1-1 Out looking and Dimension

2.Components



(1) Display: Show the contents of communication, display the related parameter like connected HVAC brandings and Qty of indoor machines.

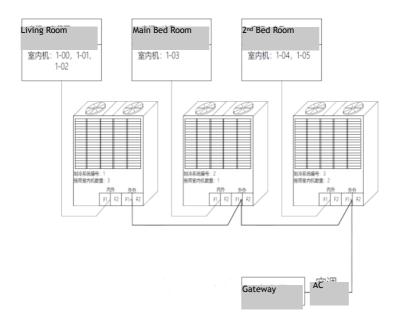
- (2) LED indicator: Show status of the Gateway
- (3) Buttons: Functional buttons to set up parameters and page up/down functions.
- (4) AIR CON Terminals: For different protocol terminals.
- (5, 6, 7, 8) are terminals for other bus protocol.
- (9) CONFIG 1: Dialing terminals (RED) is interface for choosing AIR Con brandings.
- (10) CONFIG 2: Dialing terminals (BLUE) is interface for better communication for AIR Con.
- (11) POWER Interface: For Power Supply .PS: Power supply is DC12V. Unfit power supply will cause damage for the device.

PS 1: LED indicator:

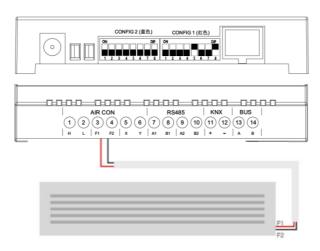
HBS: When AC communication detected, the indicator will light up. It will flicker though the AC communication rhythm.

STA: It will keep dark, while device running normally to search AC

3.Installation



Pic 2 System Diagram ((Example is Daikin)



Pic 3 System Diagram (terminal) (Example is Daikin)

Installation of Daikin outdoor / indoor machine should be done by professional HVAC installers.

The communication wire between gateway and HVAC should be:2-core STP (Shielded twisted pair), more than 0.75mm²-under 100,

4. Wiring Installation Tips

- Different brandings and references, wiring interface is different (Please check the dialing and interface program) 。
 - ◆Please use DC 12V to power the gateway.。
 - •Improper power connection will cause damage to device.
 - •Please power off the HVAC and gateway when install or repair
 - •Better NOT put communication wire together with the power line to avoid the unexpected disturb. If there is not enough space, please grantee the communication wire distance between gateway and other wire more than 30cm.
 - •If wrongly connect the power line with signal terminal, it will cause fuse burn, please contract LifeSmart.

_

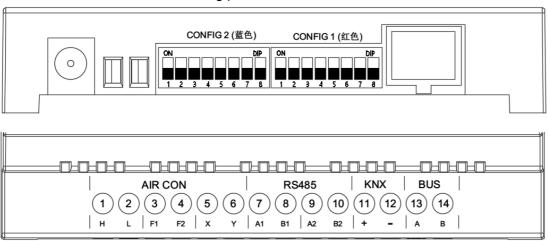
Hardware Configuration

1.Preparation

- 1.1 Make sure HVAC is on power, including all outdoor / indoor machines.
- 1.2 Make sure all functions working well without alarm or report.
- 1.3 Distribute network address to each indoor machine. (For all series of Daikin and Toshiba, we need to distribute address manually. For other brandings with only 1 outdoor machine, the indoor machines are distributed automatically)
 - 1.4 Connect the gateway and HVAC interface as below chart guidance

2. Terminal Choose and Communication pairing

2.1 Hardware Interface and dialing plate



Function: CONFIG 1: Dialing terminals (RED) is interface for choosing AIR Con brandings.

Notice: Improper dialing may cause devices not working. Please consult LifeSmart Service Engineer before making any change to dialing terminals.

CONFIG 2: Dialing terminals (BLUE) is interface for better communication for AIR Con.

2.2 Dialing Terminals and communication terminals for different brandings.

Brands	Communication	Terminal Dialing	Gateway	HVAC	Terminal
	Dialing Code	Code	Terminal	Terminal	Polarity
	(BLUE)	(RED)			
Daikin- _{Multi}	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	F1, F2	F1,F2 (Out door- Outdoor)	N
Daikin-Single External Machine	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	F1, F2	F1,F2 (Indoor - Outdoor)	N
Hitachi	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	F1, F2	1, 2	N
Toshiba	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	F1, F2	U1,U2	N
Mitsubishi	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	F1, F2	M1,M2 (TB3/7)	N
Electric					
York-New	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	F1, F2	1, 2	N
Panasonic	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	F1, F2	U1, U2	N
	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	F1, F2	U1, U2	N
Hisense	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	F1, F2	1, 2	N
Hair	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	F1, F2	P, Q Outdoor	N
GREE	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	H, L	G1, G2 Outdoor	Y
	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	H, L	D1, D2 Outdoor	Y
Mitsubishi Hea vy Industries	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	X, Y	A1, B1	N
York-Old	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	X, Y	X, Y	Y

Midea	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	X, Y	X, Y Outdoor	Y
Aux	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	X, Y	X, Y	Y
Bosch	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	X, Y	X, Y	Y
LG	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	X, Y	A. B (CEN.)	Y

3. Display and button user manual and LED Indicator Instruction

3.1 Once the gateway powered with DC 12V, it starts initialization.

初始化中。。。

3.2 The initialization will continue like 20secons, and change to "Able to reset " status. Right now the LCD display shows "Right now, you can press set button 5seconds to reset "Normally if you don't need reset, wait 20seconds than jump automatically.

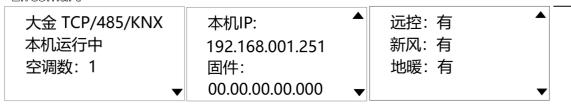
此处可长按 SET 5秒复位

3.3 Start seraching HVAC, right now LCD display show "Searching HVAC

It takes 2-5 minutes

搜索空调中。。

3.4 After searching ends, on the display page, there will be information about the HVAC. You can use rolling up/down button to see full information.



3.5 When there is error occurred , the LCD display will show the repairing code . pleaes offer this to aftersale service .

大金 TCP/485/KNX 空调故障码:0001 空调数:1 ▼

PS 1: LED indicator:

HBS: When AC communication detected, the indicator will light up. It will flicker though the AC communication rhythm.

STA: It will keep dark, while device running normally to search AC



3. APP

Instructions

1.APP Instruction

- 1.1 Make sure you have a LifeSmart Account and with a Smart Station under the account
- 1.2 Please click the "add devices in APP, and choose the HVAC Gateway
- 1.3 Back to home page, click left corner LifeSmart General All devise Smart Station HVAC Gateway Settings, then slide from right to left at No.1 Address, sync, and choose all groups to retrieve all indoor machines group
 - 1.4 It will takes about 1-10 minutes at 1st time to sync devices on home page (The devices will show as

grey), then rename each AC device.