INSTALLATION MANUAL

GW3-KNX

Thank you very much for purchasing our product.
Before using your unit, please read this manual carefully and keep it for future reference.

- This manual gives detailed description of the precautions that should be brought to your attention during operation.

- In order to ensure correct service of GW3-KNX, please read this manual carefully before using the unit.

- For convenience of future reference, keep this manual after reading it.

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I. Safety precautions

The following contents are stated on the product and the operation manual, including usage, precautions against personal harm and property loss, and the methods of using the product correctly and safely. After fully understanding the following contents (identifiers and icons), read the text body and observe the following rules.

■ Identifier description

Identifier	Meaning
Warning	Means improper handling may lead to personal death or severe injury.
Caution	Means improper handling may lead to personal injury or property loss.

[Note]: 1. “Harm” means injury, burn and electric shock which need long-term treatment but need no hospitalization

2. “Property loss” means loss of properties and materials.

■ Icon description

Icon	Meaning
	It indicates forbidding. The forbidden subject-matter is indicated in the icon or by images or characters aside.
	It indicates compulsory implementation. The compulsory subject-matter is indicated in the icon or by images or characters aside.

WARNING

Please entrust the distributor or professionals to install the unit.
Installation by other persons may lead to imperfect installation, electric shock or fire.

Strictly follow this manual.
Imporper installation may lead to electric shock or fire.

Reinstallation must be performed by professionals.
improper installation may lead to electric shock or fire.

Do not disassemble your air conditioner at will.
A random disassembly may cause abnormal operation or heating, which may result in fire.

CAUTION

Do not install the unit in a place vulnerable to leakage of flammable gases.
Once flammable gases are leaked and left around the wire controller, fire may occure.

The wiring should adapt to the wire controller current.
Otherwise, electric leakage or heating may occur and result in fire.

The specified cables shall be applied in the wiring. No external force may be applied to the terminal.
Otherwise, wire cut and heating may occur and result in fire.



Do not place the wired remote controller near the lamps, to avoid the remote signal of the controller to be disturbed. (refer to the right figure)

II. Other precautions

- **Installation Location**

Do not install the unit in a place with much oil, steam, sulfide gas. Otherwise, the product may be deformed and failed.

- **Preparation before installation**

1. Check whether the following assemblies are complete.

No.	Name	Qty.	Remarks
1	GW3-KNX	1	————————
2	Cross round head wood mounting screw	3	GB950-86 M4X20 (For Mounting on the Wall)
3	Cross round head mounting screw	2	M4X25 GB823-88 (For Mounting on the Electrical Switch Box)
4	Installation Manual	1	————————
5	Plastic expansion pipe	3	For Mounting on the Wall
6	2-core shielded cable	1	For connecting the indoor unit and GW3-KNX

Note to installation of GW3-KNX:

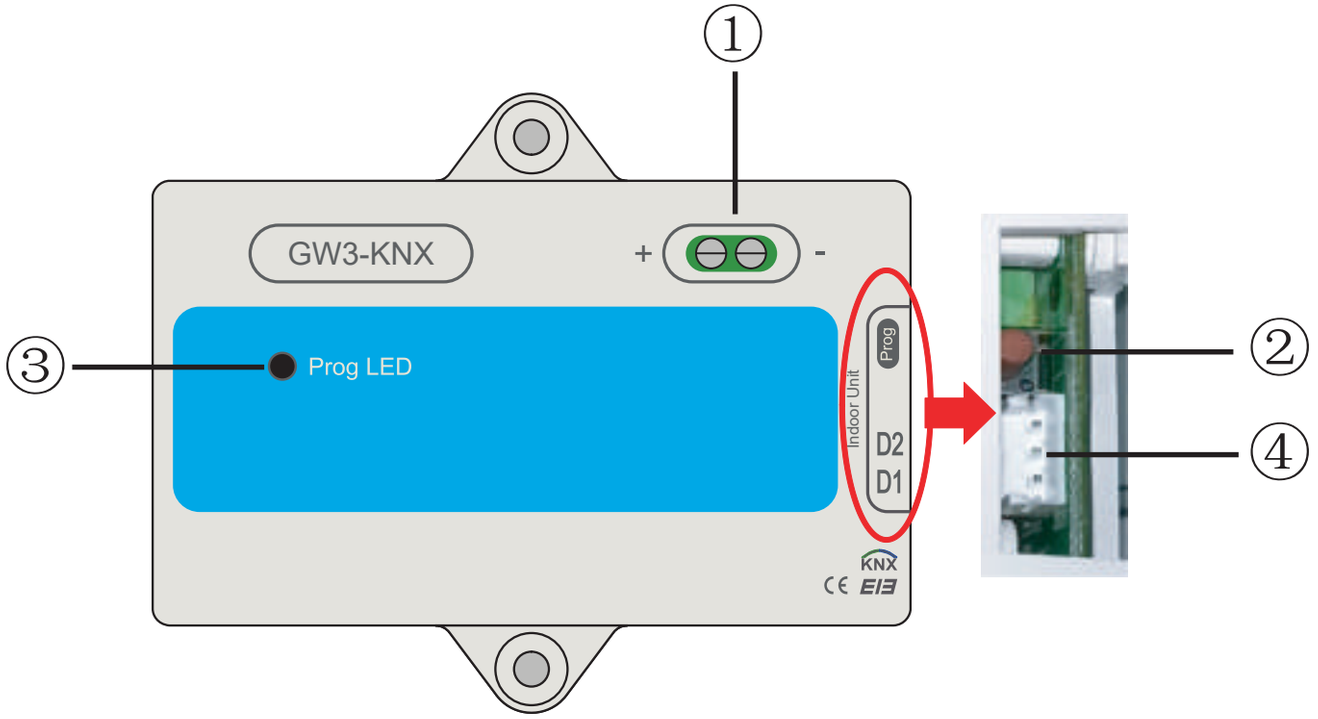
1. One KNX module can only connect with one indoor unit;The KNX module should connect to indoor D1D2E ports.
2. Circuit of GW3-KNX is low voltage circuit. Never connect it with a standard 220V/380V circuit or put it into a same Wiring Tube with the circuit.
3. Do not attempt to extend the shield cable by cutting, if it is necessary, use Terminal Connection Block to connect.
4. After finishing connection, do not use Megger to have the insulation check to the signal wire.
5. The default physical address of the GW3-KNX is 15.15.255,If there are two or more KNX modules, then the physical addresses can not repeat.The physical address can be changed by ETS software.
6. Before installation,need prepare KNX power module .

III. Installation procedure

1.The product parameters

No.	Name	Remarks
1	Dimensions	85*51*16mm
2	Power supply	29VDC 10mA,Supplied through KNX bus
3	LED indicator	KNX programming
4	Push button	KNX programming button
5	Configuration	Configuration with ETS software.

2.The product parameters



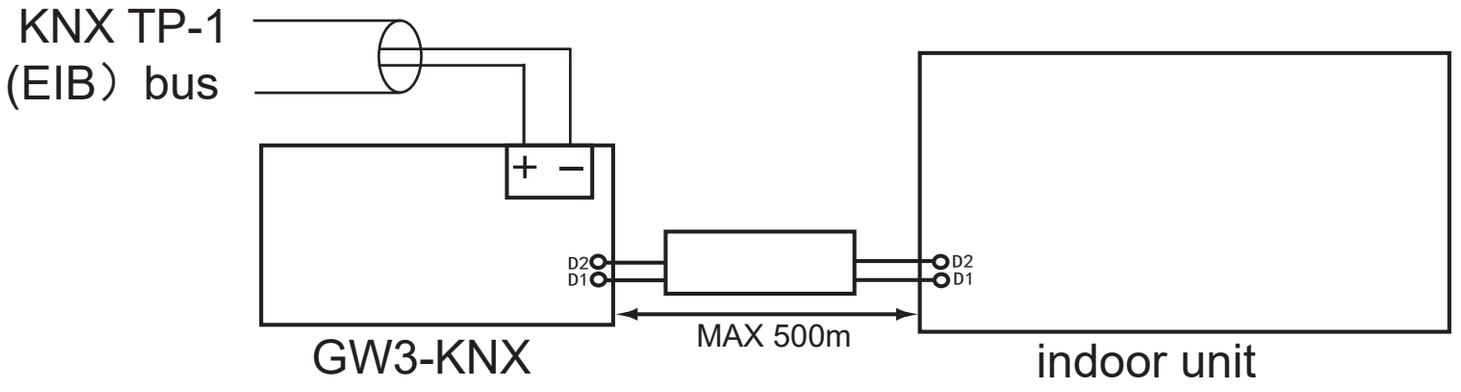
- ① **Bus interface**：Power supply DC 29V, 10mA and connect to KNX bus；
  ② **KNX programming button**：press once to enter the programming mode, press it again will exit.
  ③ **KNX programming statues lamp**：when it is light up means programming status and can write data to the module by KNX bus
  ④ **RS485 communication ports**：Communication port between KNX module and indoor unit.(Support V8 indoor unit)

- GW3-KNX is completely in conformity with EIB/KNX standard. ETS software must be used by integrator to carry out configuration and project design. For detailed information of ETS software, please contact knx association: www.knx.org.

- ETS database （*.vd*）of GW3-KNX can be consult our company.

3. Wiring installation instruction

The Wiring diagram follows,the GW3-KNX connect to the indoor Unit and KNX Power.



The Introduction GW3-KNX

- GW3-KNX allows monitoring and control, fully bi-directionally, of all the functioning parameters of Air Conditioners from KNX installations.

- Simple installation.
  Can be installed inside the own indoor unit, it connects directly in one side to the electronic circuit of the indoor unit (cable supplied) and in the other side to the KNX TP-1 (EIB) bus.

- Great flexibility of integration into your KNX projects.
  Configuration is made directly from ETS, the database of the device comes with a complete set of communication objects allowing, from a simple and quick integration using the basic objects, to the most advanced integration with monitoring and control all the indoor unit's parameters. Also available specific device's communication objects, as for example save and execute scenes.

- Allows the use of a KNX temperature sensor for the air conditioning control.

IV.ETS database group objects introduction

Index	Internal Name	Function Text	Object Size	Flags	Datapoint Type
1	Control_Mode	0-OF;1-Fan;2-Co;3-He;4-Au;5-Dr	1 Byte	RWC---	[20.102] DPT_HVACMode
2	Control_Setpoint Temperature of Non-Auto Mode	°C	2 Bytes	RWC---	[9.1] DPT_Value_Temp
3	Control_Setpoint Temperature of Auto Mode(Heat)	°C	2 Bytes	RWC---	[9.1] DPT_Value_Temp
4	Control_Setpoint Temperature of Auto Mode(Cool)	°C	2 Bytes	RWC---	[9.1] DPT_Value_Temp
5	Control_Fan Speed	1-Speed1,...7-Speed7;8-Auto	1 Byte	RWC---	[5.4] DPT_Percent_U8
6	Control_Mode Switch Cool/Heat	0-Cool;1-Heat	1 Bit	RWC---	[1.100] DPT_Heat_Cool
7	Control_Swing_Up_Down	1/2/3/4/5-Angle,0-OFF,6-Auto	1 Byte	RWC---	[5.4] DPT_Percent_U8
8	Control_Swing_Left_Right	1/2/3/4/5-Angle,0-OFF,6-Auto	1 Byte	RWC---	[5.4] DPT_Percent_U8
9	Status_Mode	0-OF;1-Fan;2-Co;3-He;4-Au;5-Dr	1 Byte	R-CT--	[20.102] DPT_HVACMode
10	Status_Ambient Temperature	°C	2 Bytes	R-CT--	[9.1] DPT_Value_Temp
11	Status_Setpoint Temperature of Non-Auto Mode	°C	2 Bytes	R-CT--	[9.1] DPT_Value_Temp
12	Status_Setpoint Temperature of Auto Mode(Heat)	°C	2 Bytes	R-CT--	[9.1] DPT_Value_Temp
13	Status_Setpoint Temperature of Auto Mode(Cool)	°C	2 Bytes	R-CT--	[9.1] DPT_Value_Temp
14	Status_Fan Speed	1-Speed1,...7-Speed7;8-Auto	1 Byte	R-CT--	[5.4] DPT_Percent_U8
15	Status_Swing_Up_Down	1/2/3/4/5-Angle,0-OFF,6-Auto	1 Byte	R-CT--	[5.4] DPT_Percent_U8
16	Status_Swing_Left_Right	1/2/3/4/5-Angle,0-OFF,6-Auto	1 Byte	R-CT--	[5.4] DPT_Percent_U8
17	Status_Auxiliary Heater	0-OFF;1-ON	1 Bit	R-CT--	[1.1] DPT_Switch
18	Status_Alarm	0-No Alarm;1-Alarm	1 Bit	R-CT--	[1.5] DPT_Alarm
19	Status_On/Off	0-Off;1-On	1 Bit	R-CT--	[1.1] DPT_Switch
20	Control_On/Off	0-Off;1-On	1 Bit	RWC---	[1.1] DPT_Switch
21	Control_Mode Auto	1-Set Auto Mode	1 Bit	RWC---	[1.1] DPT_Switch
22	Control_Mode Cool	1-Set Cool Mode	1 Bit	RWC---	[1.1] DPT_Switch
23	Control_Mode Heat	1-Set Heat Mode	1 Bit	RWC---	[1.1] DPT_Switch
24	Control_Mode Dry	1-Set Dry Mode	1 Bit	RWC---	[1.1] DPT_Switch
25	Control_Mode Fan	1-Set Fan Mode	1 Bit	RWC---	[1.1] DPT_Switch
26	Control_Mode +/-	1-Down;0-Up	1 Bit	RWC---	[1.8] DPT_UpDown
27	Control_Set Temp +/- of Non-Auto Mode	1-Down;0-Up	1 Bit	RWC---	[1.8] DPT_UpDown
28	Control_Fan Speed +/-	1-Down;0-Up	1 Bit	RWC---	[1.8] DPT_UpDown
29	Control_Set Temp +/- of Auto Mode(Cool)	1-Down;0-Up	1 Bit	RWC---	[1.8] DPT_UpDown
30	Control_Set Temp +/- of Auto Mode(Heat)	1-Down;0-Up	1 Bit	RWC---	[1.8] DPT_UpDown

The instruction as follow:

1: Set Mode; database type: DPT_20.102 HVAC Mode;
Set value:0-OFF; 1-Fan only; 2-Cool; 3-Heat ; 4-Auto; 5-Dry
2: Set Temperature of Non Auto Mode; database type: DPT_9.001 temperature(°C).

The indoor unit temperature value corresponding to ETS temperature value:

NO.	Temp.value(℃)	ETS value	NO.	Temp.value(℃)	ETS value
1	16	06 40	9	24	0C B0
2	17	0B 52	10	25	0C E2
3	18	0B 84	11	26	0D 14
4	19	0B B6	12	27	0D 46
5	20	0B E8	13	28	0D 78
6	21	0C 1A	14	29	0D AA
7	22	0C 4C	15	30	0D DC
8	23	0C 7E			

3: Set Heat temperature of Auto Mode; database type: DPT_9.001 temperature(°C).
4: Set Cool temperature of Auto Mode; database type: DPT_9.001 temperature(°C).
5: Set Fan speed; data type: [5.4] DPT_Percent_U8;
Set value:1-speed1; 2-speed2; 3-speed3; 4-speed4; 5-speed5; 6-speed6;
7-speed7; 8-Auto
6: Set Heat/Cool mode switch; data type: [5.4] DPT_Percent_U8.
Set value: 0-Cool mode； 1-Heat mode.

8: Set Right-Left swing; database type: [5.4] DPT_Percent_U8. set value:0- OFF; 1- Angle1; 2- Angle2; 3- Angle3 ; 4- Angle4; 5- Angle5;6- Auto

9: Mode status read; data type: DPT_20.102 HVAC mode.
Read value: 0-OFF.1-Fan ; 2-Cool ; 3-Heat ; 4-Auto;5-Dry.

10: Indoor unit ambient temperature read; data type: DPT_9.001 temperature(°C).

11: Set temperature Non Auto Mode read; data type: DPT_9.001 temperature(°C) .

12: Set Heat temperature of Auto Mode read; data type: DPT_9.001 temperature(°C) .

13: Set Cool temperature of Auto Mode read; data type: DPT_9.001 temperature(°C) .

14: Fan speed read; data type: [5.4] DPT_Percent_U8
Read value: 1-speed1; 2-speed2; 3-speed3; 4-speed4; 5-speed5; 6-speed6; 7-speed7; 8-Auto

15: Fan Right-Left swing status read; database type: [5.4] DPT_Percent_U8.
Read value:0- OFF; 1- Angle1; 2- Angle2; 3- Angle3 ; 4- Angle4; 5- Angle5;6- Auto

16: Fan Right-Left swing status read; database type: [5.4] DPT_Percent_U8.
Read value:0- OFF; 1- Angle1; 2- Angle2; 3- Angle3 ; 4- Angle4; 5- Angle5;6- Auto

17: Auxiliary Heater status read; data type: DPT_1.001 Switch.
Read value: 0-Auxiliary Heater OFF,1-Auxiliary Heater ON

18: Alarm state read; data type: DPT_1.005 alarm
Read value: 0-no alarm; 1-alarm

19: ON/OFF status; data type: DPT_1.001 switch
Read value: 0-OFF, 1-ON

20: ON/OFF; data type: DPT_1.001 switch
Set value: 0-OFF; 1-ON

21: Set auto mode; data type: DPT_1.001 switch
Set value: 1-set as auto mode

22: set Cool mode; data type: DPT_1.001 switch

Set value: 1-set as Cool mode

23: Set Heat mode; data type: DPT_1.001 switch

Set value: 1-set as Heat mode

24: Set Dry mode; data type: DPT_1.001 switch

Set value: 1-set as Dry mode

25: Set Fan mode; data type: DPT_1.001 switch

Set value: 1-set as Fan mode

26: Set mode +/-; data type: DPT_1.008 UpDown

Set value: 1-Down 0-UP

27: Set temperature +/- of Non Auto Mode; data type: DPT_1.008 UpDown

Set value: 1-Down 0-UP

28: The fan speed +/-;data type: DPT_1.008 UpDown

Set value: 1-Down 0-UP

29: Set cool temperature +/- of Auto Mode; data type: DPT_1.008 UpDown

Set value: 1-Down 0-UP

30: Set heat temperature +/- of Auto Mode; data type: DPT_1.008 UpDown

Set value: 1-Down 0-UP

WP-MD22IU-061A-EN

16111200000736 V.B

此页不做菲林，只做说明
材料；双胶纸80g
大小；130*130
黑白印刷，内容清晰