

INSTALLATION/APPLICATION MANUAL

24 Volt Interface Adapter
208/230V~60Hz, 1Ph
115V~60Hz, 1Ph

Read this manual carefully before installing or operating your new air conditioning unit. Make sure to save this manual for future reference.

⚠ WARNING

- Wires must be properly sized according to the NEC/NFPA 70, CEC and all prevailing codes, ordinances and standards.
- All conductors must be installed with a strain relief eliminating stress on the wire following installation which may result in wire damage and/or overheating with a potential for fire.
- Installation must be performed in accordance with the requirement of NEC and CEC by authorized personnel only.
- All wiring to be rated for the control box amperage rating.
- All wiring installed to meet general industry standards and practices,
- Do not install adapter near flammable liquids or gases.
- Do not operate the unit with wet hands, as this could lead to electrical shock.

⚠ CAUTION

- When connecting with RS 485 communication to the outdoor unit, shielded wire must be used and grounded at one end only.
- When using shielded wire the cable should be grounded at one end to reduce EMI.
- T1 sensor cable shall not exceed 23' (7 m).

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Wall-Mounted 24V INTERFACE KIT Installation

Wear appropriate personal protection equipment (PPE) when installing or servicing.

24V INTERFACE KIT Dimensions

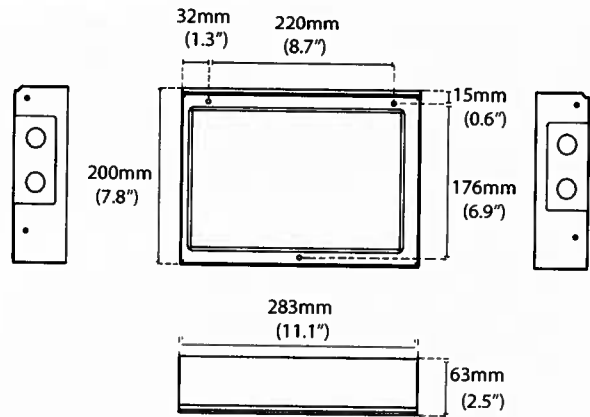
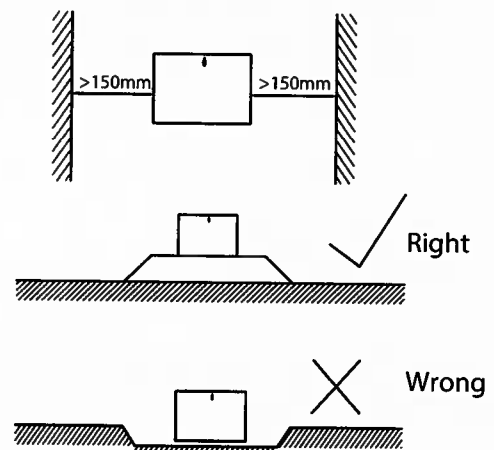


Fig. 1

This interface must be installed indoors in an area free from drips and moisture.



General installation instructions
Location and clearances

Preparation Before Installation

1. Ensure you have the following parts

Table 1

No	Name	Quantity	Remarks
1	Control box	1	
2	Screws	3	M4X20 (For mounting on the wall)
3	Anchors	3	For mounting on the wall
4	The connective wires group	2	For connecting the sensor
5	5m connective wires group	1	

Application:

- * This system is designed for operation with standard 24 vac HVAC thermostats.
- * Wifi standard configuration HVAC thermostats may be used such as NEST, Ecobee, Honeywell, etc.
- * Ductless Light Commercial indoor units (requires new indoor PCB)
- * Single zone mini-split indoor units
- * Not compatible with multizone inverters

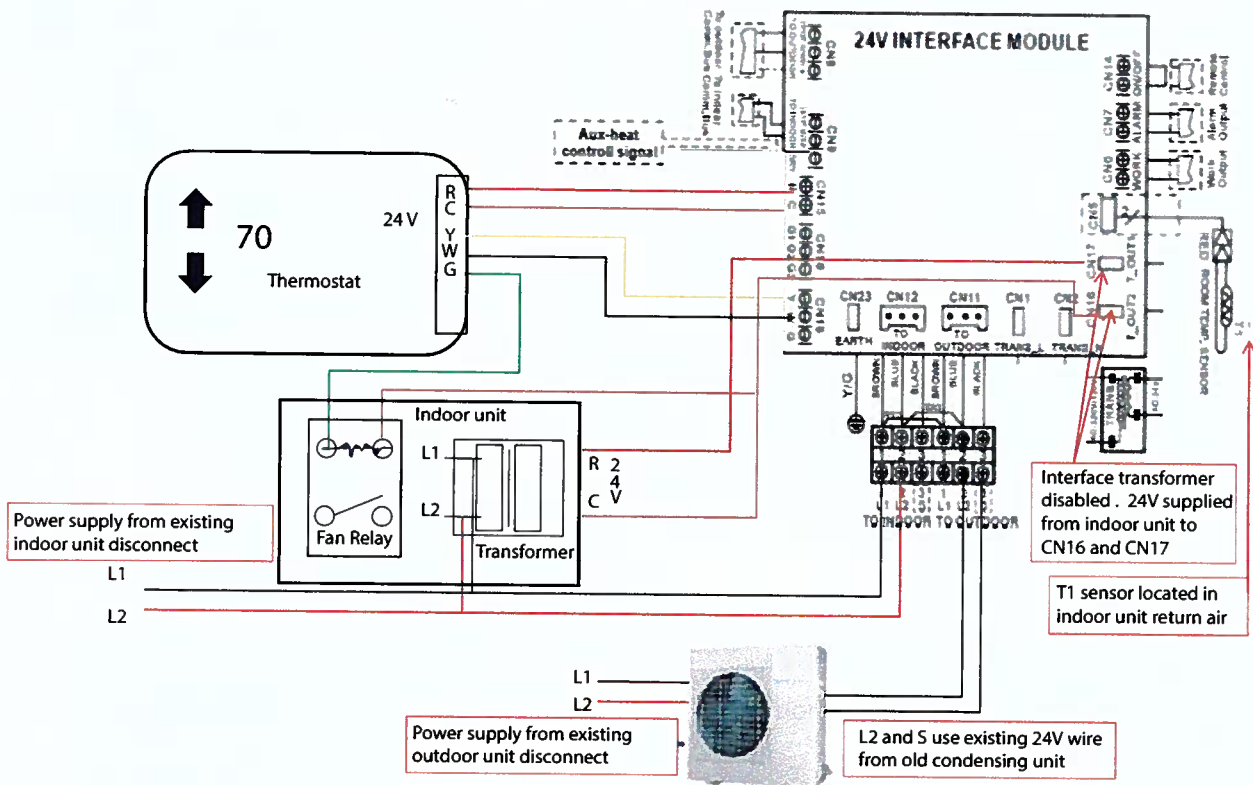
SYSTEM CONFIGURATION SCENARIOS

Four application scenarios:

Scenario No. 1:

Midea current loop (L2 S) communication inverter outdoor unit match with other conventional brand 24V indoor unit;
Match with following outdoor units :

- High Wall (Sizes 9~36)
- Cassette (Sizes 9~24)
- Ducted (Sizes 9~24)
- Floor Console (Sizes 9~12)
- Floor ceiling (18K-24K)



NOTE:

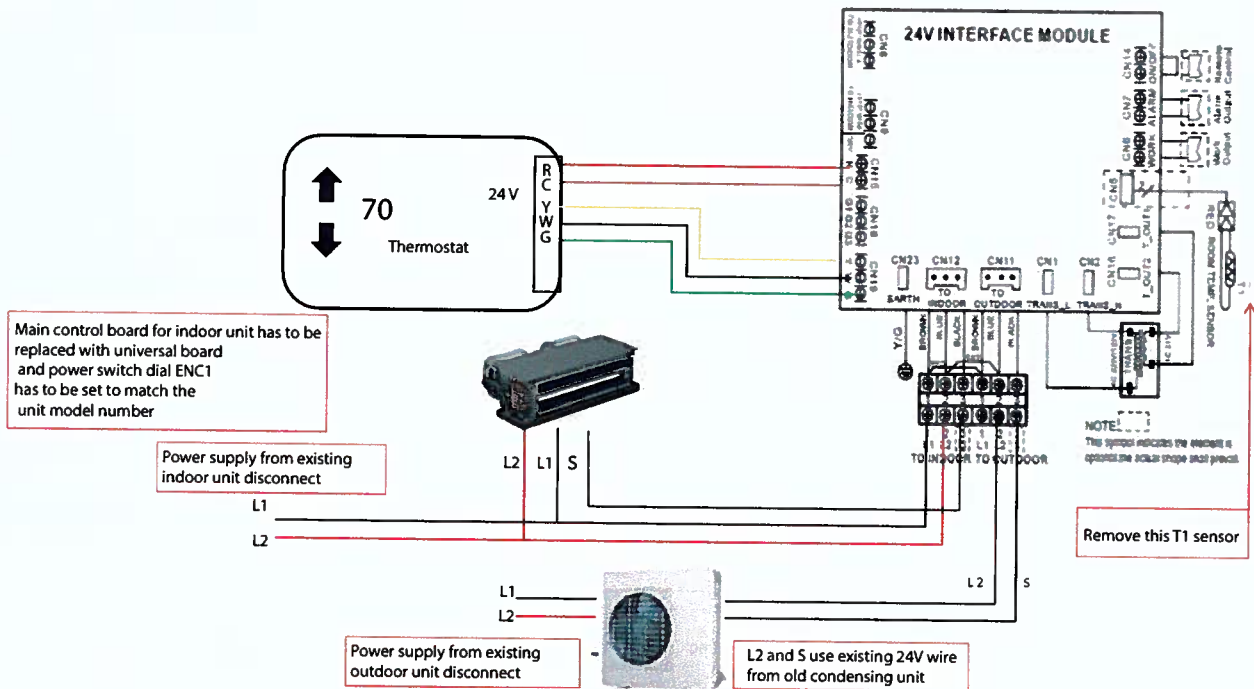
- T1(Room temperature) sensor should be located in the air inlet side.
- If the indoor unit already with a 24V transformer , removing away the transformer from the interface or disconnect the transformer of the interface.
- Must remove the TXV or other metering device from the indoor unit.
- Please connect thermostat G to 24V interface G3 as default.

Scenario No. 3:

Midea current loop (L2 S) inverter outdoor unit match with Midea current loop inverter indoor unit;

Match the following ductless indoor units with the corresponding compatible SINGLE ZONE outdoor units:

- High Wall (Sizes 9~36)
- Cassette (Sizes 9~24)
- Ducted (Sizes 9~24)
- Floor Console (Sizes 9~12)
- Floor ceiling (18K-24K)

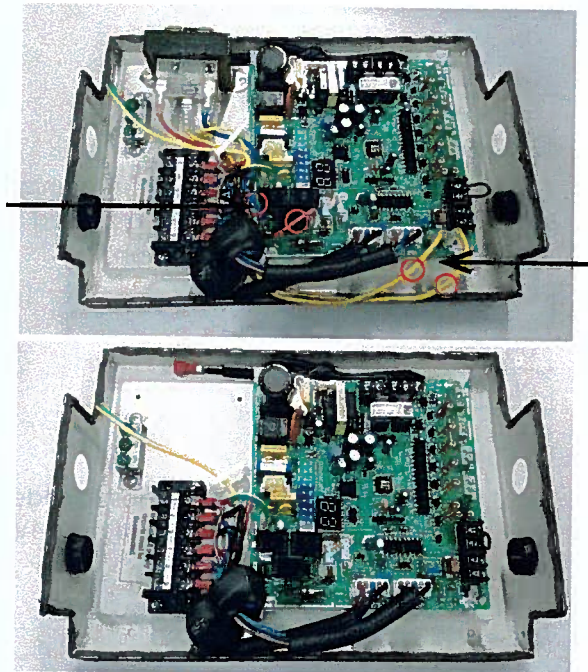


NOTE:

- Indoor PCB board must be updated.
- Please connect thermostat G to 24V interface G as default.
- Make sure the power supply is correct.
- For High wall unit ,the up-down swing louver and the display on/off function is available by the wireless remote controller.
- Remove 24V control box T1 sensor when match with midea indoor unit, which has T1 sensor.

! Key Considerations

- The following steps should be taken when using this device with a conventional central air conditioning unit:
 - * Indoor coil metering device must be removed.
 - * 24V transformer in the interface module must be disconnected.
 - * Refrigerant charge amount may need to be adjusted, depending on the pipe size and length, see outdoor recharge instruction.
 - * The maximum air flow should not exceed 400 CFM/Ton.
- When the indoor air handler or furnace has its own 24 vac transformer, you must disconnect all four wires of the kit transformer.



- Suction and liquid refrigerant lines must be properly insulated to prevent condensation and energy loss.
- You must remove the expansion device from an indoor evaporator coil as the refrigerant is controlled by a metering device in the outdoor unit.
- The following steps should be taken when using this device with a Midea Hi wall (9K-36K Btu/hr) Cassette, Console, Duct, Floor Ceiling (9K - 24K Btu/hr).

- Indoor PCB must be updated (**2016 and earlier products)
- Power switch on new board is changed.
- Indoor unit power switch setting, ENC-1 must be changed to the proper motor wattage: Eg. 36K = 8 48K = 9

Control Logic

Connector

Connector	Purpose
R/C	24VAC Output
Y	Cooling
W	Heating
G	Fan - Auto speed
*G1/G2/G3	Fan Low/Middle/High
AUX/DRY	Aux-Heat/Dry

Mode setting

Y	W	G	G1	G2	G3	Aux/Dry	Setting mode
√	X	*	*	*	*	*	Cooling
X	√	*	*	*	*	X	Heating (without aux-heater)
X	√	*	*	*	*	√	Heating (with aux-heater)
X	X	√	*	*	*	X	Fan only
X	X	X	√	*	*	X	Fan only
X	X	X	X	√	*	X	Fan only
X	X	X	X	X	√	X	Fan only
√	√	*	*	*	*	*	OFF
X	X	X	X	X	X	X	OFF
X	X	*	*	*	*	√	Dry

Fan speed setting

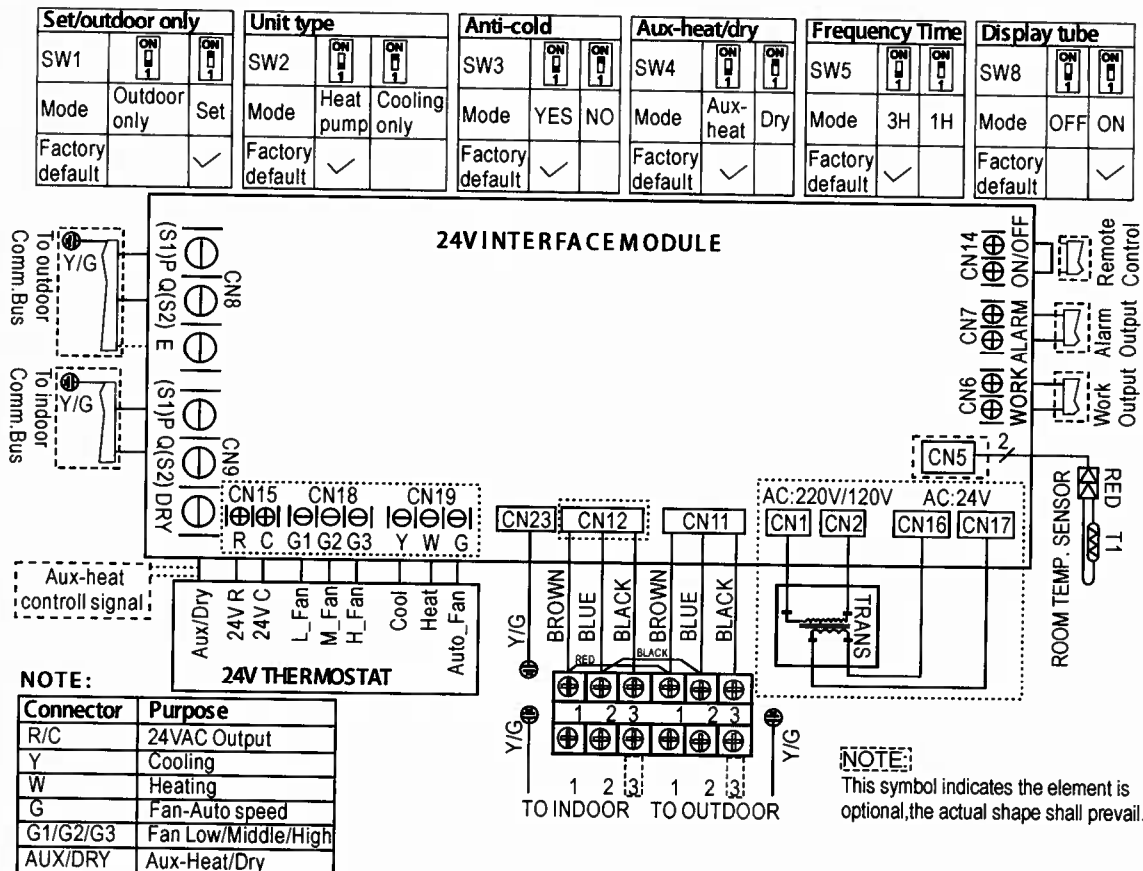
Unit ON/OFF	G	G1	G2	G3	Setting fan speed
√	X	X	X	X	Auto fan speed
√	√	*	*	*	Auto fan speed
√	X	√	*	*	Low speed
√	X	X	√	*	Middle speed
√	X	X	X	√	High speed
X	X	X	X	X	Fan OFF

Error Codes

Display	Malfunction & protection indication
E0	Indoor EEPROM error
E2	Cross-zero detection error
E3	Indoor fan speed malfunction
E4	Indoor room temperature sensor error
E5	Evaporator coil temperature sensor error
EC	Refrigerant leak detection system malfunction
F0	Current overload protection
F1	Outdoor ambient temperature sensor (T4) malfunction
F2	Condenser coil temperature sensor (T3) malfunction
F3	Condenser coil temperature sensor (T5) malfunction

F4	Outdoor unit EEPROM parameter error
F5	Outdoor fan speed has been out of control
F6	T2b sensor error
P0	Inverter module (IPM) malfunction
P1	Over-voltage or under-voltage protection
P2	Compressor top high temperature protection (OLP)
P3	Low ambient temperature cut off in heating
P4	Compressor drive malfunction
-	Mode conflict
P6	Compressor low-pressure protection
00	Module boot mode and indoor running mode for power off
IN	Module and indoor unit communication malfunction
OU	Module and outdoor unit communication malfunction

Wiring Diagram



此面无需印刷

技术要求:

1. 双胶纸(说明书)80g非E项目大度
2. 尺寸: 210*297mm
3. 颜色: 黑白
4. 注意: 排版时注意页码数字都是靠外面的, 以便翻阅
5. 装订。