Wiring

Safety Precautions

⚠ WARNING

- Be sure to disconnect the power supply before working on the unit.
- All electrical wiring must be done according to local and national regulations.
- Electrical wiring must be done by a qualified technician. Improper connections may cause electrical malfunction, injury, and fire.
- An independent circuit and single outlet must be used for this unit. DO NOT plug another appliance or charger into the same outlet. If the electrical circuit capacity is not enough or there is a defect in the electrical work, it can lead to shock, fire, and unit and property damage.
- Connect the power cable to the terminals and fasten it with a clamp. An insecure connection may cause a fire.
- Make sure that all wiring is done correctly and the control board cover is properly installed. Failure to do so can cause overheating at the connection points, fire, and electrical shock.
- Ensure that the main supply connection is made through a switch that disconnects all poles, with a contact gap of a least 0.118 in (3 mm).
- DO NOT modify the length of the power cord or use an extension cord.

! CAUTION

- Connect the outdoor wires before connecting the indoor wires.
- Make sure to ground the unit. The grounding wire should be away from gas pipes, water pipes, lightning rods, telephone wires, or other grounding wires. Improper grounding may cause electrical shock.
- DO NOT connect the unit with the power source until all wiring and piping is completed.
- Make sure that you do not cross your electrical wiring with your signal wiring, as this can cause distortion and interference.

Follow these instructions to prevent distortion when the compressor starts:

- The unit must be connected to the main outlet. Normally, the power supply must have a low output impedance of 32 ohms.
- No other equipment should be connected to the same power circuit.
- The unit's power information can be found on the rating sticker on the product.

Outdoor Unit Wiring

⚠ WARNING

Before performing any electrical or wiring work, turn off the main power to the system.

1. Prepare the cable for connection
   A. First choose the right cable size. Be sure to use H07RN-F cables.

Table 8.1: Minimum Cross-Sectional Area of Power and Signal Cables North America

Rated Current of Appliance (A)	AWG
≤ 7	18
7 - 13	16
13 - 18	14
18 - 25	12
25 - 30	10

Table 8.2: Other Regions

Rated Current of Appliance (A)	Nominal Cross-Sectional Area (mm^2)
≤ 6	0.75
6 - 10	1
10 - 16	1.5
16 - 25	2.5
25 - 32	4
32 - 45	6

B. Using wire strippers, strip the rubber jacket from both ends of the signal cable to reveal about 5.9 in (15 cm) of the wires inside.

C. Strip the insulation from the ends of the wires.

D. Using a wire crimper, crimp u-lugs on the ends of the wires.

NOTE: While connecting the wires, please strictly follow the wiring diagram (found inside the electrical box cover).

2. Remove the electric cover of the outdoor unit. If there is no cover on the outdoor unit, disassemble the bolts from the maintenance board and remove the protection board (see Fig. 8.1).

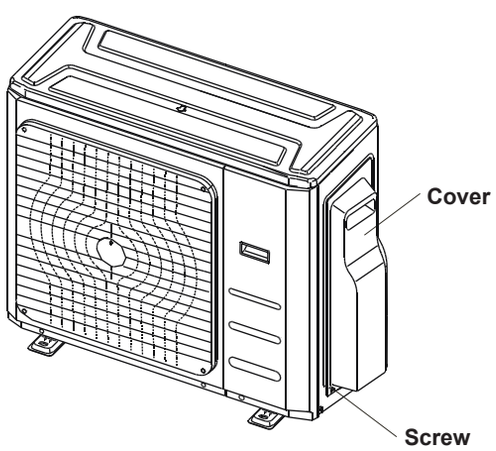


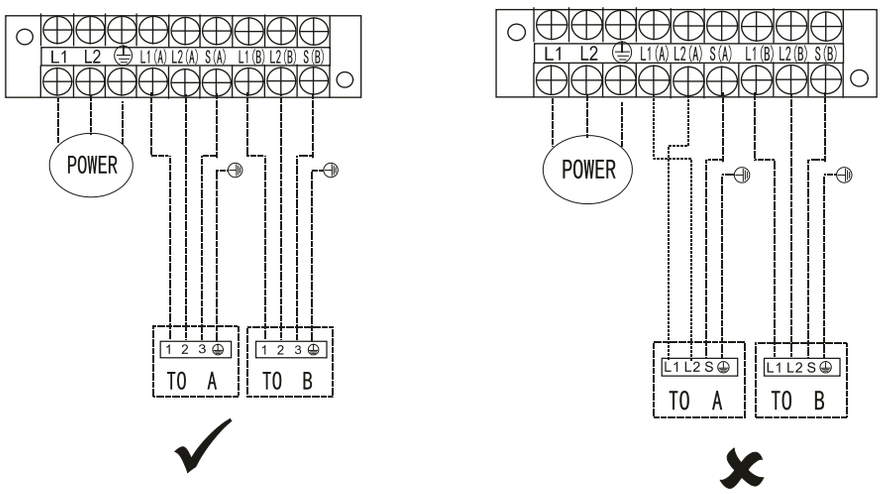
Fig. 8.1

3. Connect the u-lugs to the terminals. Match the wire colors/labels with the labels on the terminal block, then firmly screw the u-lug of each wire to its corresponding terminal.
4. Clamp down the cable with the designated cable clamp.
5. Insulate unused wires with electrical tape. Keep them away from any electrical or metal parts.
6. Reinstall the cover of the electric control box.

Wiring Figure

CAUTION

Connect the connective cables to the terminals as identified with their respective matched numbers on the terminal block of the indoor and outdoor units. For example, see the following US models: Terminal L1(A) on the outdoor unit must connect with terminal L1 on the indoor unit.



NOTE: If the client wants to perform the wiring himself, refer to the following figures.
Run the main power cord through the lower line-outlet of the cord clamp.

One outdoor / Two indoor models: