

INSTALLATION MANUAL

AIR CONDITIONER

Please read this installation manual completely before installing the product.
Installation work must be performed in accordance with the national wiring standards by authorized personnel only.
Please retain this installation manual for future reference after reading it thoroughly.

Independent Power Kit (for Multi V Product)

PRIP0



MFL65920002
Rev.04_101321

IMPORTANT!

Please read this instruction sheet completely before installing the product.

This air conditioning system meets strict safety and operating standards. As the installer or service person, it is an important part of your job to install or service the system so it operates safely and efficiently.

WARNING

- The information contained in the manual is intended for use by a qualified service technician familiar with safety procedures and equipped with the proper tools and test instruments.
- Failure to carefully read and follow all instructions in this manual can result in equipment malfunction, property damage, personal injury and/or death.

Caution: Improper installation, adjustment, alteration, service or maintenance can void the warranty. The weight of the condensing unit requires caution and proper handling procedures when lifting or moving to avoid personal injury. Use care to avoid contact with sharp or pointed edges.

Safety Precautions

- Always wear safety eye wear and work gloves when installing equipment.
- Never assume electrical power is disconnected. Check with meter and equipment.
- Keep hands out of fan areas when power is connected to equipment.
- R-410A causes frostbite burns.
- R-410A is toxic when burned.

Note to installing dealer: The Owners Instructions and Warranty are to be given to the owner or prominently displayed near the indoor Furnace/Air Handler Unit.

WARNING

When wiring:

Electrical shock can cause severe personal injury or death. Only a qualified, experienced electrician should attempt to wire this system.

- Do not supply power to the unit until all wiring and tubing are completed or reconnected and checked.
- Highly dangerous electrical voltages are used in this system. Carefully refer to the wiring diagram and these instructions when wiring. Improper connections and inadequate grounding can cause accidental injury or death.
- Ground the unit following local electrical codes.
- Connect all wiring tightly. Loose wiring may cause overheating at connection points and a possible fire hazard.

When transporting:

Be careful when picking up and moving the indoor and outdoor units. Get a partner to help, and bend your knees when lifting to reduce strain on your back. Sharp edges or thin aluminum fins on the air conditioner can cut your finger.

When installing...

- ... **in a wall:** Make sure the wall is strong enough to hold the unit's weight. It may be necessary to construct a strong wood or metal frame to provide added support.
- ... **in a room:** Properly insulate any tubing run inside a room to prevent "sweating" that can cause dripping and water damage to wall and floors.
- ... **in moist or uneven locations:** Use a raised concrete pad or concrete blocks provide a solid, level foundation for the outdoor unit. This prevents water damage and abnormal vibration.
- ... **in an area with high winds:** Securely anchor the outdoor unit down with bolts and a metal frame. Provide a suitable air baffle.
- ... **in a snowy area(for Heat Pump Model):** Install the outdoor unit on a raised platform that is higher than drifting snow. Provide snow vents.

When connecting refrigerant tubing:

- Keep all tubing runs as short as possible.
- Use the flare method for connecting tubing.
- Check carefully for leaks before starting the test run.

When servicing:

- Turn the power OFF at the main power box(mains) before opening the unit to check or repair electrical parts and wiring.
- Keep your fingers and clothing away from any moving parts.
- Clean up the site after you finish, remembering to check that no metal scraps or bits of wiring have been left inside the unit being serviced.

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1. Safety Precautions



To prevent injury to the user or other people and property damage, the following instructions must be followed.

- Incorrect operation due to ignoring instruction will cause harm or damage. The seriousness is classified by the following indications.

 **WARNING** This symbol indicates the possibility of death or serious injury.

 **CAUTION** This symbol indicates the possibility of injury or damage.

- Meanings of symbols used in this manual are as shown below.

	Be sure not to do.
	Be sure to follow the instruction.

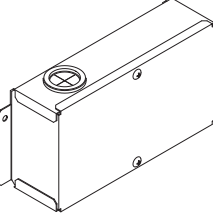


WARNING

- Electric works should be carried out according to ‘The technology requirement on the electric installation’, The wiring standard and this manual by a qualified personnel.
- If the installation is not complete or the capacity of the power circuit is insufficient, electric shock or fire may occur, or death or injury can be caused.
- If the installation was done by a user, there may be incompleteness, which may cause electric shock, fire, injury and death.
- When operating the machine (applying power to the machine), do not carry out any electric work and do not put hand or finger into it. This may cause electric shock, injury and death.

⚠ CAUTION

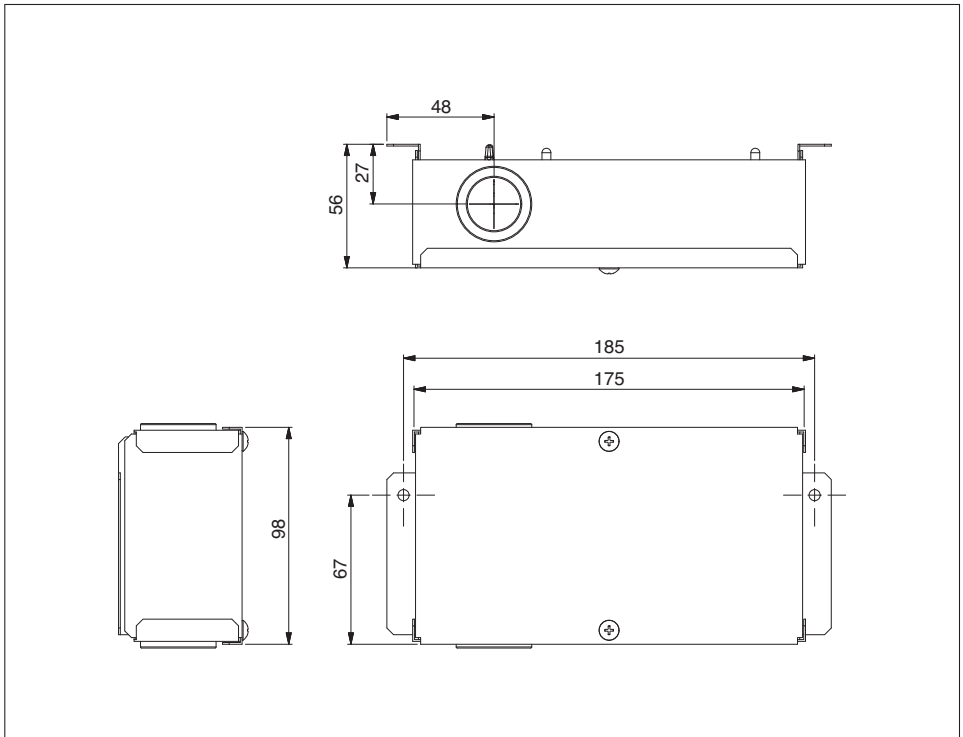
- Before installation, read this manual and carry out the works according to it.
- Before installation, be sure to check all the included items. (However, be sure to use all kinds of certified products when purchasing the items other than those provided by LG at your local store.)
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.
- Do not install the unit in potentially explosive atmospheres.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

2. Included Items

Model	PRIPO			
Item	Independent Power Kit	Screw	Clamp (Tie Wrap)	(Other)
Q'ty	1	2	4	
Figure		 M4 x 10		<ul style="list-style-type: none"> • Harness 1(1 m) • Harness 2(1 m) • Harness 3(1 m) • Harness 4(0.05 m) • Installation manual • Insulator(PE, 2 EA)

- Pipes and wires should be purchased separately for installation of the product.

(Unit : mm)



3. Applied model

■ 2 Serie

- Ceiling Cassette- 1Way
- Ceiling Cassette- 4Way
- Ceiling Concealed Duct - Low Static
- ART COOL Mirror
- Ceiling & Floor
- Ceiling Suspended
- Ceiling Cassette -2Way
- Ceiling Concealed Duct - High Static
- Wall Mounted
- ART COOL Gallery
- Floor Standing - With case
- Without case
- HYDRO KIT
- Console
- Fresh Air Intake Unit

■ 4 Serie

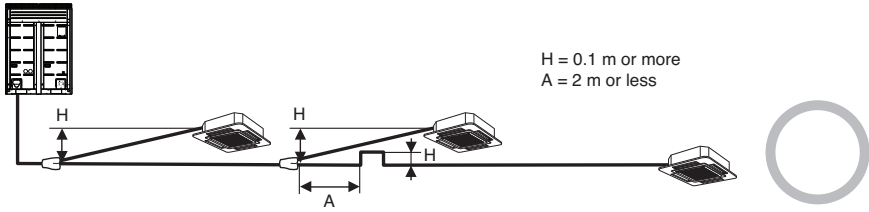
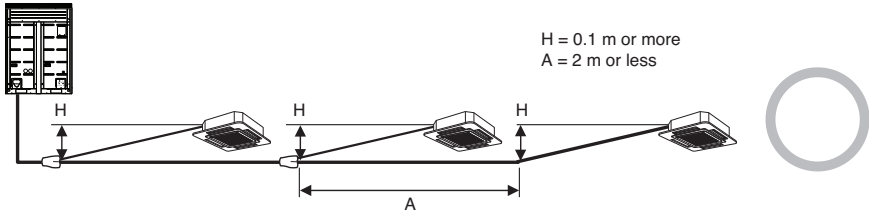
- Ceiling Cassette- 1Way
- Ceiling Cassette- 2Way
- Ceiling Cassette- 4Way
- Ceiling Cassette- 4Way(2)
- Ceiling Concealed Duct - Low Static
- Ceiling Concealed Duct - Built-in (Low Static)
- Ceiling Concealed Duct - Middle Static
- Ceiling Suspended
- Ceiling Concealed Duct - High Static
- Ceiling Concealed Duct – High Sensible
- Floor Standing
With Case
- Without Case
- Wall Mounted
- ART COOL Mirror
- ART COOL Gallery
- Fresh Air In take Unit
- Ceiling & Floor Convertible
- Console

■ Compact Model

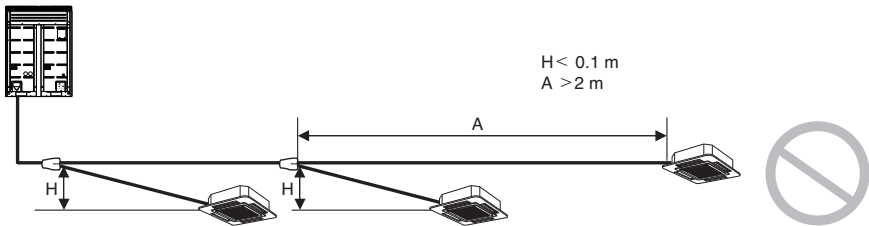
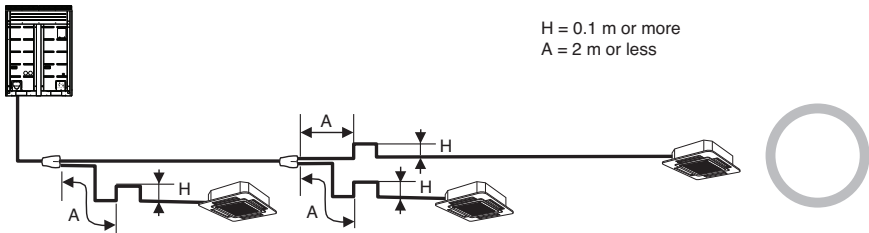
- Ceiling Cassette- 4Way

4. Piping Installation

The pipes between a indoor unit connected PRIP0 and its branch must maintain to incline preventing a back flow toward the indoor unit as shown below. Otherwise, the unit may not operate properly.



If the indoor unit is located lower than its branch, apply Oil Trap as shown below. Otherwise, the unit may not operate properly.

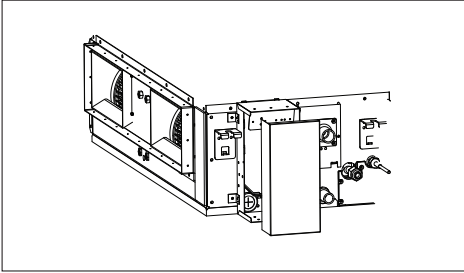


5. Assembly Diagram

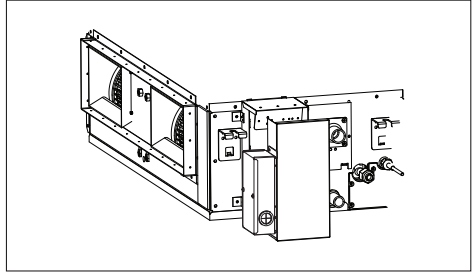
Assembly Diagram - PRIP0

■ High Static Duct/FAU

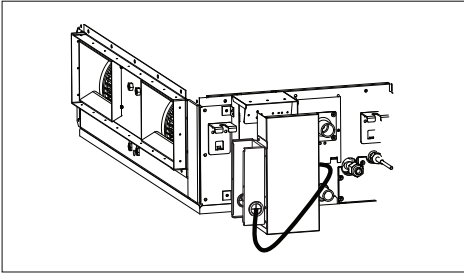
Step1. Open control box cover.



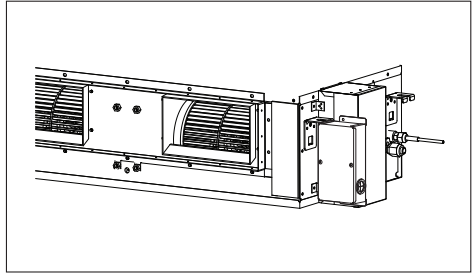
Step2. Assemble PRIP0 with control box cover.



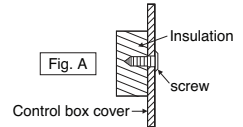
Step3. Open the cover of PRIP0 and connect wires.



Step4. Assemble control box cover.

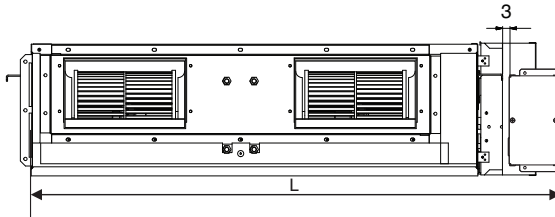


Note: While connecting the PRIP0, attach insulation at the rear of the control box cover where it receives screws as shown in Fig. A.



CAUTION

Check the distance between PRIP0 and a control box when connecting anchor bolts.

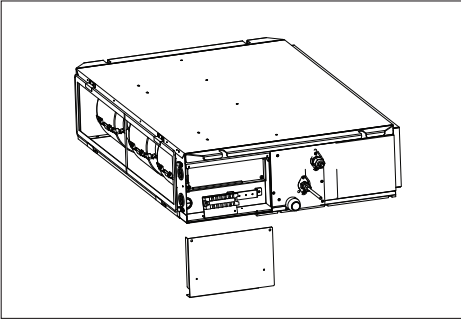


(Unit : mm)

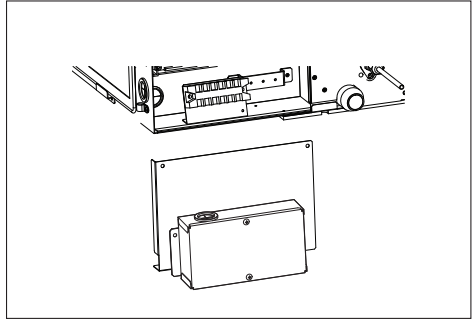
Chassis	L
BH	1 090
BG	1 350
BR	1 400
B8	1 720

■ Low Static Duct/Built-in Duct

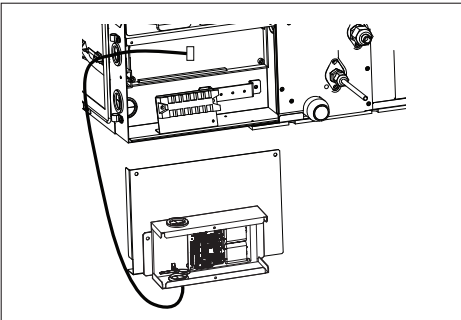
Step1. Open control box cover.



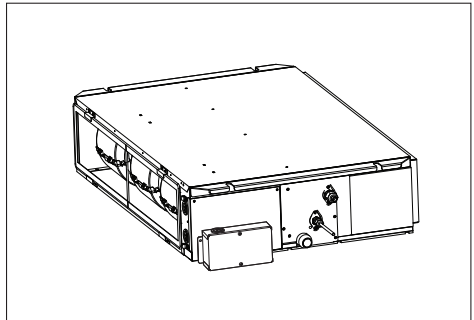
Step2. Assemble PRIPO with control box cover.



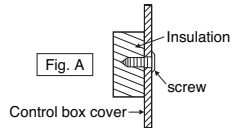
Step3. Open the cover of PRIPO and connect wires.



Step4. Assemble control box cover.

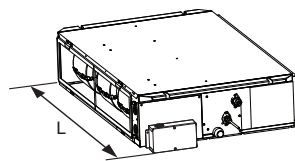
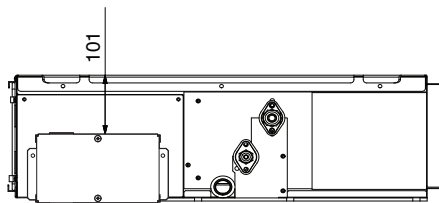


Note: While connecting the PRIPO, attach insulation at the rear of the control box cover where it receives screws as shown in Fig. A.



⚠ CAUTION

Check the distance between PRIPO and the top of model when connecting anchor bolts.

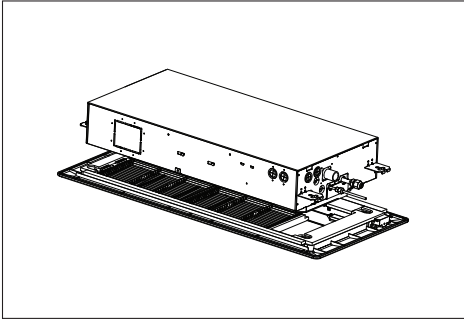


(Unit : mm)

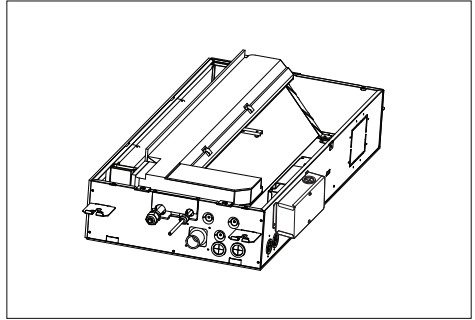
Chassis	L
M1	1 090
M2	1 350
M3	1 400
L1	1 090
L2	1 350
B1/B3	1 090
B2/B4	1 350

■ 1 Way CST

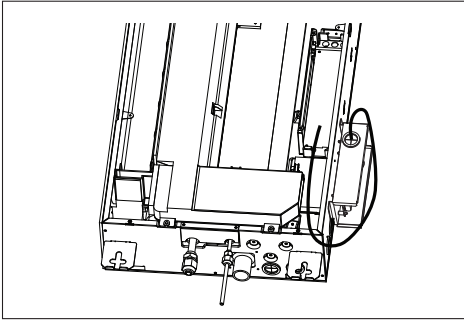
Step1. Open control front panel.



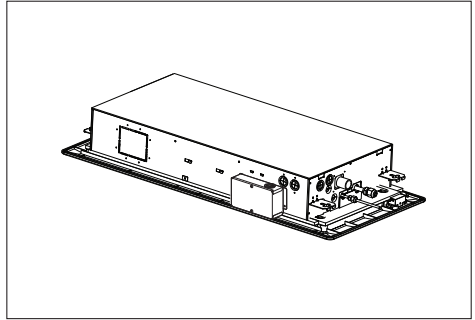
Step2. Assemble PRIPO with cabinet.



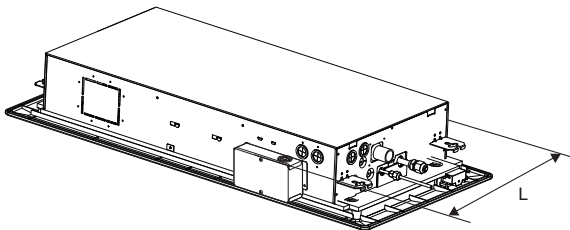
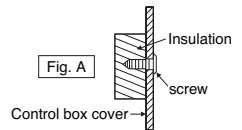
Step3. Open the cover of PRIPO and connect wires.



Step4. Assemble control box cover and front panel.



Note: While connecting the PRIPO, attach insulation at the rear of the control box cover where it receives screws as shown in Fig. A.

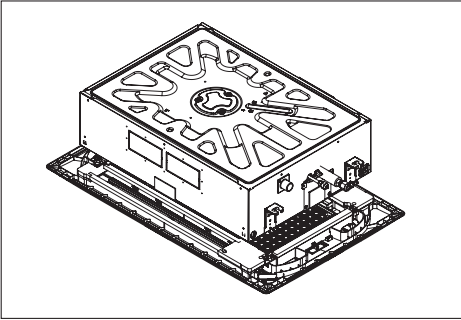


(Unit : mm)

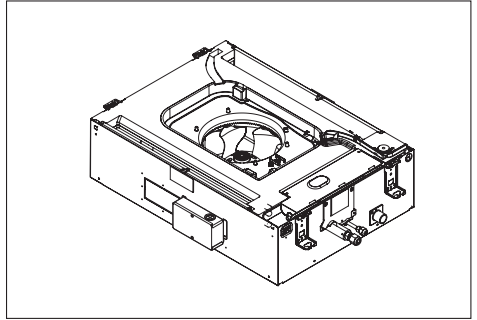
Chassis	L
TU/TT	510

■ 2 Way CST

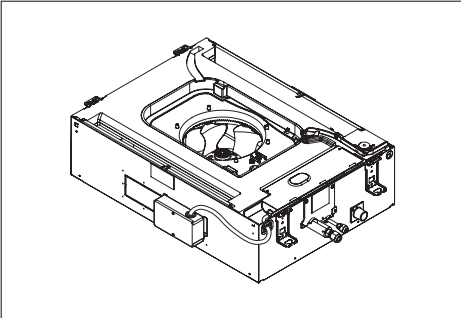
Step1. Open control front panel.



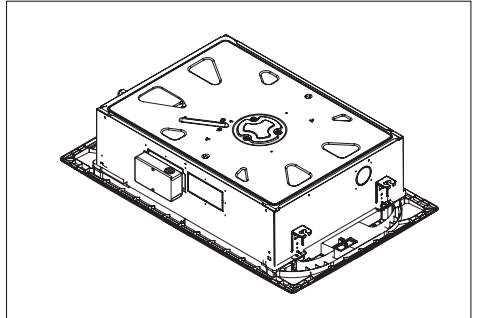
Step2. Assemble PRIPO with cabinet.



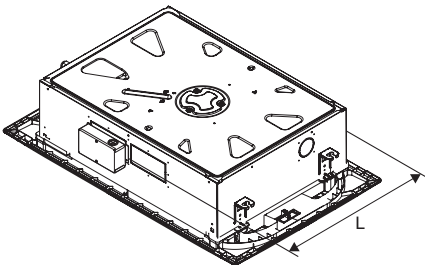
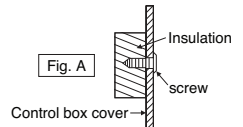
Step3. Open the cover of PRIPO and connect wires.



Step4. Assemble control box cover and front panel.



Note: While connecting the PRIPO, attach insulation at the rear of the control box cover where it receives screws as shown in Fig. A.

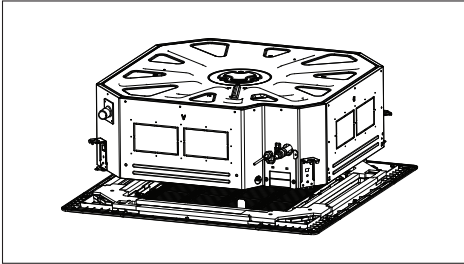


(Unit : mm)

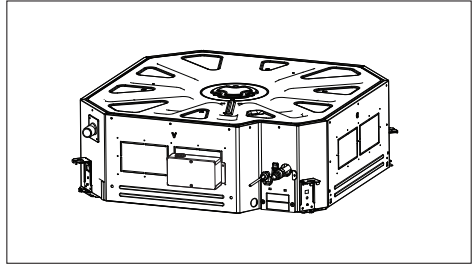
Chassis	L
TS	670
TL	890

■ 4 Way CST

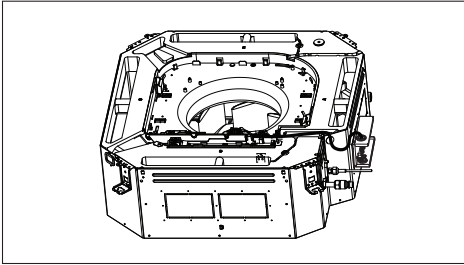
Step1. Open control front panel.



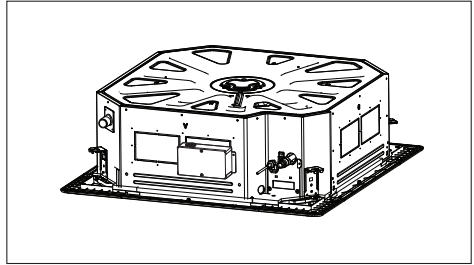
Step2. Assemble PRIP0 with cabinet.



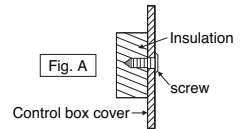
Step3. Open the cover of PRIP0 and connect wires.



Step4. Assemble control box cover and front panel.

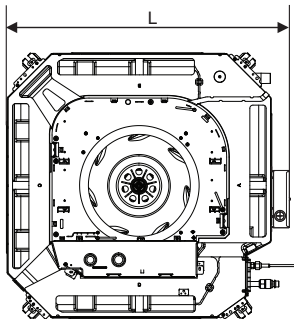


Note: While connecting the PRIP0, attach insulation at the rear of the control box cover where it receives screws as shown in Fig. A.



CAUTION

Check the attached direction to the indoor unit.



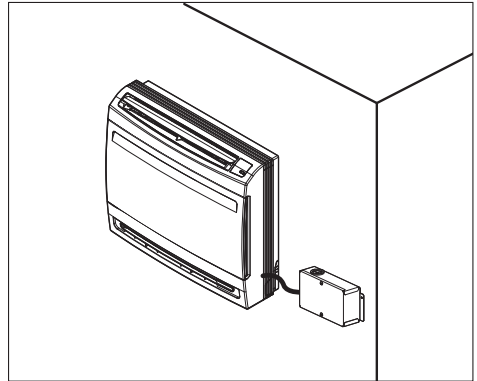
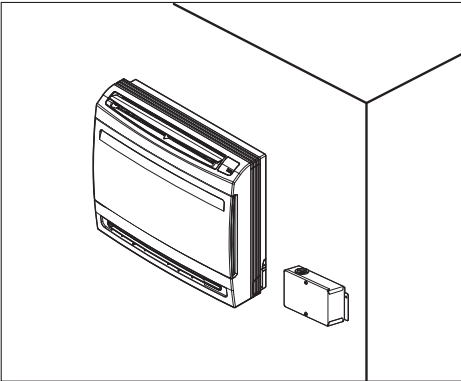
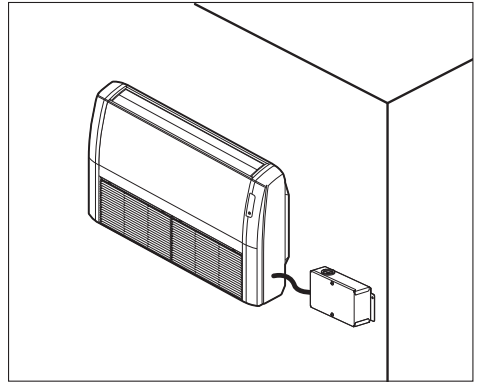
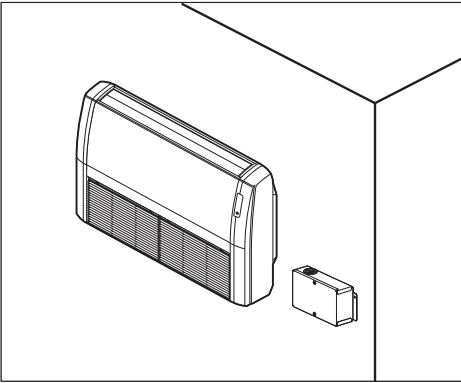
(Unit : mm)

chassis	L
TQ/TR	630
TP/TN/TM/TP-B/TM-A	900

■ Ceiling Suspended/Console

Step1. Mount independent power kit on the wall.

Step2. Connect wires (use a piping or wiring hole) and assemble cover.

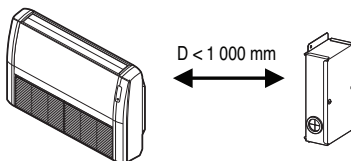


⚠ CAUTION

Do not install PRIP0 at places exposed to rain or any water. Otherwise it may leads to electric shock, fire, injury or sometimes even fatality.

⚠ CAUTION

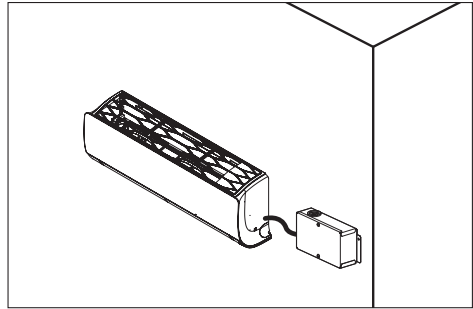
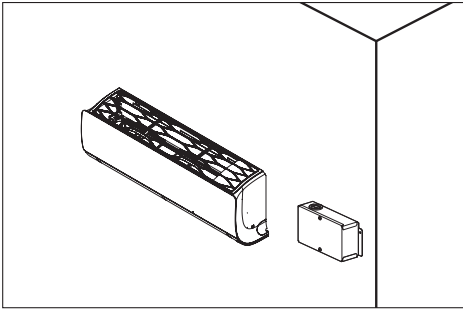
Independent power kit should be installed within 1 000 mm which is length of the given wires. Otherwise Indoor EEV may cause malfunction.



■ Wall mounted & Art cool

Step1. Mount independent power kit on the wall.

Step2. Connect wires (use a piping or wiring hole) and assemble cover.

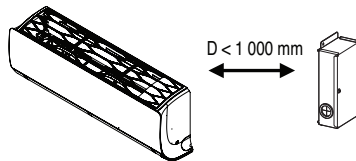


⚠ CAUTION

Do not install PRIP0 at places exposed to rain or any water. Otherwise it may leads to electric shock, fire, injury or sometimes even fatality.

⚠ CAUTION

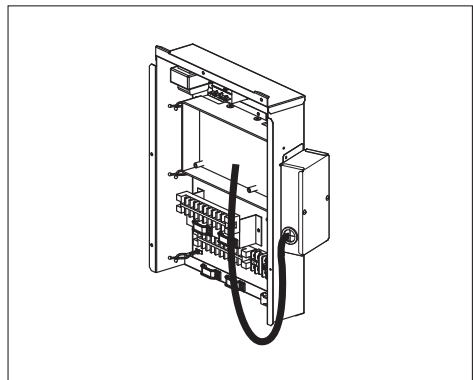
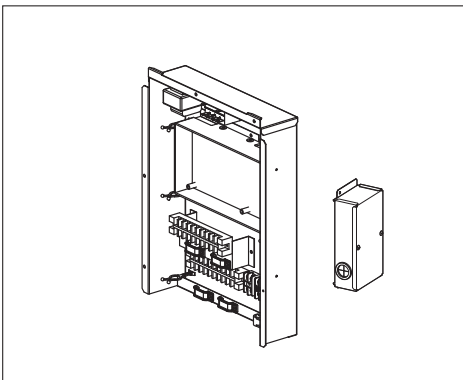
Independent power kit should be installed within 1 000 mm which is length of the given wires. Otherwise Indoor EEV may cause malfunction.



■ Hydro Kit

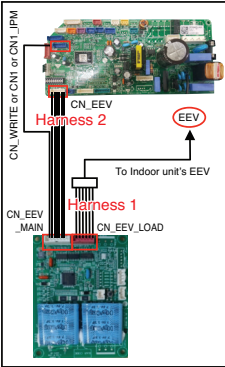
Step 1. Open the front panel of the control box.

Step 2. Assemble the cover of PRIP0, fix it tightly with bolts and connect wires.

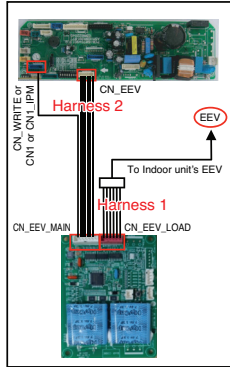


6. Electrical Wiring

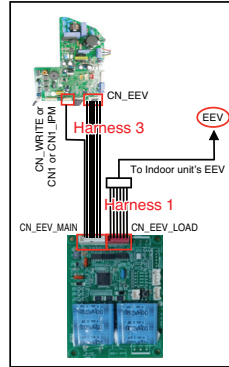
DUCT/FS/CVT/FAU



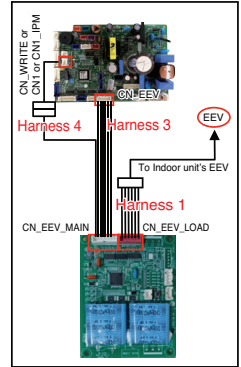
CST/Console/Hydro Kit



Gen2 Wall mounted & Art cool



Gen4 Wall mounted



*FS: Floor Standing

*CST : Cassette

*CVT : Convertible

*FAU : Fresh Air Intake Unit

1. Turn the power off using circuit breaker.
2. Disconnect the EEV cable of the indoor unit's PCB(CN-EEV)
3. Connect the independent power kit(CN-EEV/LOAD) to the indoor unit's EEV, using harness 1.
4. Connect the independent power kit(CN-EEV/MAIN) to the indoor unit's PCB(CN-EEV/CN_WRITE or CN1 or CN1_IPM), using harness 2 or 3, 4.
5. Supply the power.

⚠ WARNING

- The wire should not be exposed to the outside otherwise it may leads to the malfunction of the independent power kit due to wire damage.
- Wrong wiring also causes the malfunction of the independent power kit or damage to it.
- Power should be supplied more than 20 minutes continuously in order to operate the independent power kit correctly. Otherwise, the independent power kit can not fully close the EEV due to the lack of the charging power.

Minimum cross-sectional area of conductors

Rated current of appliance A	Nominal cross-sectional area mm ²
≤ 0.2	Tinsel cord ^a
> 0.2 and ≤ 3	0.5 ^a
> 3 and ≤ 6	0.75
> 6 and ≤ 10	1.0 (0.75) ^b
> 10 and ≤ 16	1.5 (1.0) ^b
> 16 and ≤ 25	2.5
> 25 and ≤ 32	4
> 32 and ≤ 40	6
> 40 and ≤ 63	10

* ^a These cords may only be used if their length does not exceed 2 m between the point where the cord or cord guard enters the appliance and the entry to the plug.

^b Cords having the cross-sectional areas indicated in the parentheses may be used for portable appliances if their length does not exceed 2 m.

NOTE: For supply cords supplied with multi-phase appliances, the nominal cross-sectional area of the conductors is based on the maximum cross-sectional area of the conductors per phase at the supply cord connection to the appliance terminals.



LG Electronics Inc. Single Point of Contact (EU/UK) & EU Importer :
LG Electronics European Shared Service Center B.V.
Krijgsman 1, 1186 DM Amstelveen, The Netherlands

Manufacturer :
LG Electronics Inc.
84, Wanam-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do, KOREA

UK Importer : LG Electronics U.K. Ltd, Velocity 2, Brooklands Drive, Weybridge, KT13 OSL