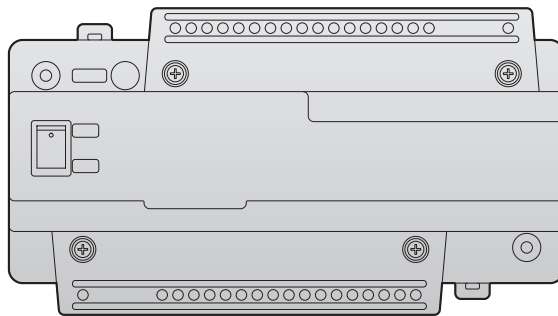


Installation Guide

Video Intercom System — Power Supply Unit

Model No. **VL-PS2410**



Thank you for purchasing a Panasonic product.

Please follow all instructions in this document and save it for future reference.

Carefully read the information found in the section titled "1.1 Important safety information" in particular.

This product is a separately sold power supply unit for use with Panasonic Video Intercom Systems.

Note to the installer

- Please read this document carefully, and install the product safely and correctly by following the instructions.
- Only use attachments/accessories specified by the manufacturer.
- The installation shall be carried out in accordance with all applicable installation rules.

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1.1 Important safety information

To prevent severe injury or loss of life or property, and to ensure proper and safe operation of your product, read this section carefully before using the product.



Preventing fire, electric shock and short circuits

- **Leave installation work to the dealer. Installation work requires technical knowledge and experience. Electrical connection work should be performed by certified personnel only. Failure to observe this may cause fire, electric shock, injury, or damage to the product. Consult the dealer.**
- **For Australia/New Zealand only: Installation must only be by a registered electrician. Wiring must be performed according to AS/NZS 3000 wiring rules.**
- Use only the power supply unit VL-PS2410.
- Do not place objects on the power cables. Install the product where no one can step or trip on the power cables.
- Do not allow the power cables to be excessively pulled, bent or placed under heavy objects.
- Make sure all connections from the power outlet to the power supply unit are secure.
- Never touch the power supply unit and power cables with wet hands.
- Do not use the power supply unit for outdoor installations (it is for indoor use only).
- Do not disassemble or modify the product. Refer servicing to an authorised service centre when service is required. Disassembling the product or manipulating the product in a way not described in the documentation may expose you to dangerous voltages and other risks.
- Do not touch the product or the power supply unit during an electrical storm. There may be a remote risk of electric shock from lightning.
- Never install wiring during a lightning storm.
- Do not connect non-specified devices.
- Do not connect a power cable to a terminal that is not specified in this document.
- When opening holes in walls for installation or wiring, or when securing the power cable, make sure you do not damage existing wiring and ductwork.
- Do not make any wiring connections when the power outlet is turned on.
- Do not install the product and power supply unit in the following places:
 - Places where the product and power supply unit may be splashed with water or chemicals
 - Places where there is a high concentration of dust or high humidity

- Do not push any objects through the openings of the product.
- If any of the following conditions occur, disconnect the power supply unit from the power outlet, and then refer servicing to an authorised service centre.
 - The product emits smoke, an abnormal smell or makes unusual noise
 - The power cables are damaged or frayed
 - Metal objects have been dropped inside the product
- When existing wires are used, it is possible that they contain AC voltage. Contact an authorised service centre.



Preventing accidents, injuries, and property damage

- Do not use the product in unstable areas or areas prone to strong vibrations. This may cause the product to fall, resulting in damage to the product or injury.
- Make sure you turn off the power at the breaker before performing any wiring work.
- Always connect power cables to the appropriate connection terminals. Incorrectly connecting the power cables may damage the power supply unit.
- To prevent the power cables from disconnecting and to prevent electric shock, secure the power cables using the included cable binders and attach the cable covers.
- Insert the power cables firmly all the way into the terminals. If the cables are not inserted all the way, heat may be generated.
- If the wiring passes outdoors, use a conduit and a surge protector.
- If the wiring passes underground, use a conduit, and do not make any connections underground.
- Install the product securely adhering to the instructions in this document to prevent it from falling off the wall. Avoid installing onto low-strength walls, such as gypsum board, ALC (autoclaved lightweight concrete), concrete block, or veneer (less than 18 mm thick) walls.
- The power supply unit is used as the main disconnect device. Ensure that the power outlet is installed near the product and is easily accessible.

1. Important Information

1.2 Important safety instructions

When using this product, basic safety precautions should always be followed to reduce the risk of fire, electric shock, or personal injury.

1. Do not use this product near water. For example, near a bathtub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
2. Use only the power supply unit indicated in this document.

SAVE THESE INSTRUCTIONS

1.3 Disclaimer

- To the maximum extent permitted by law, Panasonic assumes no responsibility for injuries or property damage resulting from failures arising out of improper installation or operation inconsistent with this document.













1.4 Other important information

- When you leave the product unused for a long period of time, unplug it from the power outlet.
- If you stop using the product, remove it from the walls to prevent it from falling off.
- When power fails, this product cannot be used.
- Panasonic may not be liable for damages due to external factors such as power failures.

1.5 General information

- In the event of problems, you should contact your equipment supplier in the first instance.
- After removing the product and any included items from the packaging, store, dispose, or recycle the packaging as necessary. Note that certain types of packaging may be a suffocation or choking hazard.

Graphical symbols for use on equipment and their descriptions

Symbol	Explanation
	Alternating current (A.C.)
	Direct current (D.C.)
	Protective earth
	Protective bonding earth
	Functional earth
	For indoor use only
	Class II equipment (equipment in which protection against electric shock relies on Double Insulation or Reinforced Insulation)
	"ON" (power)
	"OFF" (power)
	Stand-by (power)
	"ON"/"OFF" (power; push-push)
	Caution, risk of electric shock

Disposal of Old Equipment (Only for European Union and countries with recycling systems)



This symbol (①) on the products, packaging, and/or accompanying documents means that used electrical and electronic products must not be mixed with general household waste.

For proper treatment, recovery and recycling of old products, please take them to applicable collection points in accordance with your national legislation.

By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment.

For more information about collection and recycling, please contact your local municipality.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union

This above symbol (①) is only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

1.6 For India only

Declaration of Conformity with the requirements of the E-Waste (Management) Rules

The Product is in conformity with the requirements of the reduction of hazardous substances of the E-Waste Rules.

The content of hazardous substance with the exemption of the applications listed in SCHEDULE II of the E-Waste Rules:

1. Lead (Pb) – not over 0.1% by weight;
2. Cadmium (Cd) – not over 0.01% by weight;
3. Mercury (Hg) – not over 0.1% by weight;
4. Hexavalent chromium (Cr6+) – not over 0.1% by weight;
5. Polybrominated biphenyls (PBBs) – not over 0.1% by weight;
6. Polybrominated diphenyl ethers (PBDEs) – not over 0.1% by weight.

Disposal information



For the purpose of recycling to facilitate effective utilization of resources, please return this product to a nearby authorized collection centre, registered dismantler or recycler, or Panasonic service centre when disposing of this product.

Please see the Panasonic website for further information on collection centres, etc., or call the toll-free number below.

Website:

<http://www.panasonic.com/in/corporate/sustainability/panasonic-india-i-recycle-program.html>

Service helpline: 1800 103 1333 or 1800 108 1333

1.7 For Europe

For information of Compliance with EU relevant Regulatory Directives,

Contact to Authorised Representative:

Panasonic Testing Centre

Panasonic Marketing Europe GmbH



Winsbergring 15, 22525 Hamburg, Germany

<http://www.ptc.panasonic.eu/doc>

2. Preparation

2.1 Included items

The following items are included in addition to the power supply unit.

Item	Quantity
Screw (3.8 mm × 20 mm) Used to secure the power supply unit to the wall. 	2
Cable binder Used to secure the AC and DC wires. 	2

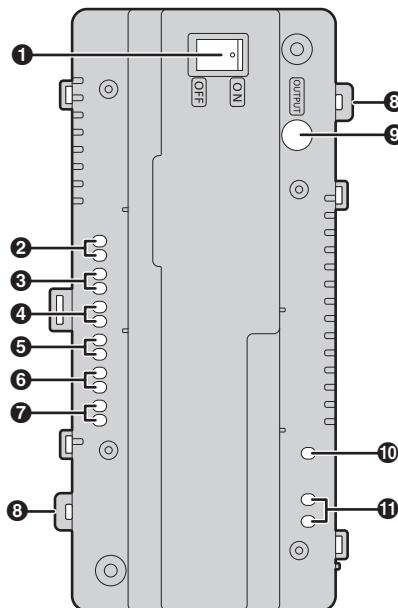
2.2 Specifications

The power supply unit is for indoor use only.

Power source	Input: 220–240 V AC, 1 A, 50/60 Hz Output: 24 V DC, 2.5 A
Dimensions (mm) (height × width × depth) (excluding protruding sections)	Approx. 116 × 210 × 58
Mass (weight)	Approx. 530 g
Operating environment	Ambient temperature: approx. 0 °C to +50 °C Relative humidity (non-condensing): up to 90%
Installation method	Attach to DIN rail Wall mount (using included screws)
External material	Flame retardant PC+ABS resin

2.3 Device diagrams

Example: power supply unit with the cable cover removed



- 1 Output switch
- 2 DC OUT connection terminals 1
- 3 DC OUT connection terminals 2
- 4 DC OUT connection terminals 3
- 5 DC OUT connection terminals 4
- 6 DC OUT connection terminals 5
- 7 DC OUT connection terminals 6
- 8 Hook for tying cables to with a cable binder
- 9 OUTPUT indicator
- 10 Connector used for connecting earth wires
- 11 AC IN connection terminals

3.1 Installation cautions

Refer to the information found in 1 Important Information (Page 3) before installing the product.



CAUTION

- Always connect power cables to the appropriate connection terminals. Incorrectly connecting the power cables may damage the power supply unit.
- To prevent the power cables from disconnecting and to prevent electric shock, secure the power cables using the included cable binders and attach the cable covers.
- If the wiring passes outdoors, use a conduit and a surge protector.
- If the wiring passes underground, use a conduit, and do not make any connections underground.
- Install the product securely adhering to the instructions in this document to prevent it from falling off the wall. Avoid installing onto low-strength walls, such as gypsum board, ALC (autoclaved lightweight concrete), concrete block, or veneer (less than 18 mm thick) walls.

3.2 Installing the power supply unit

Required items

- Power supply unit
- Cable binders (included with power supply unit)
- Screws (included with power supply unit)
- Wires for AC and DC connection (user supplied)
See 3.2.5 Wire type and maximum wire length (Page 9).

Installation location

- The device must be installed inside an electrical panel or cabinet.
- A readily accessible disconnect device shall be incorporated external to the equipment.
The external disconnect device must be certified, and have a creepage and clearance distance of 3 mm or more.

Installation methods

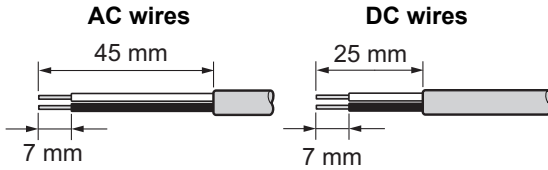
The following 2 methods can be used for installing the power supply unit.

- mounting on a DIN rail (user supplied)
- attaching directly to a wall

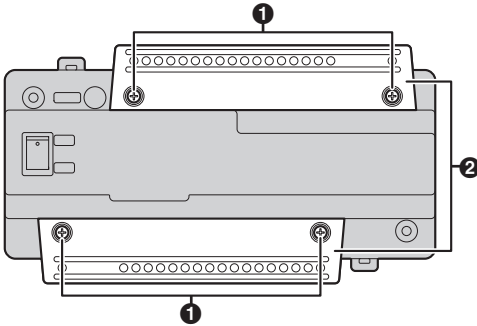
3. Installation

3.2.1 Connecting the AC wires and DC wires

- 1 Strip the ends of the wires that connect to the power supply unit as shown below.

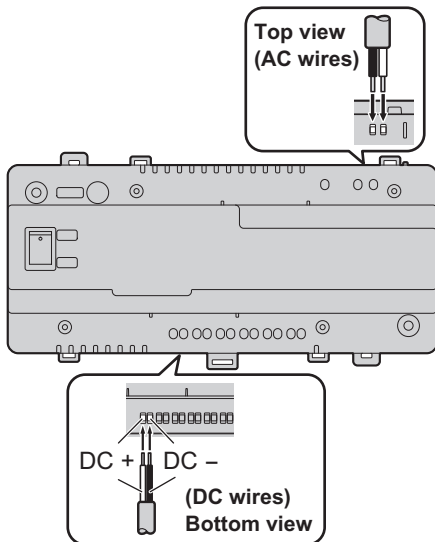


- 2 Remove the cable cover screws and then remove the cable covers.



- 1 Screws
- 2 Cable covers

- 3 Connect the AC wires to the AC IN terminals on the top of the power supply unit, and then connect the DC wires to the DC OUT terminals on the bottom of the power supply unit.

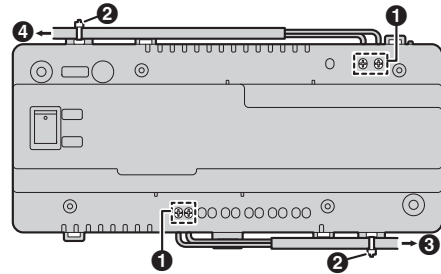


- For DC wires, the black wire is negative (-) and the other colour wire is positive (+). Note the colour of each DC wire and which terminal each

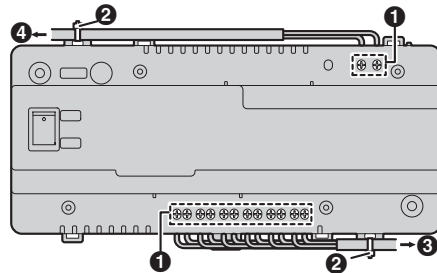
wire should be connected to, and insert the DC wires as shown.



- Insert the power cables firmly all the way into the terminals. If the cables are not inserted all the way, heat may be generated.
- 4 Tighten the terminal screws to secure the AC and DC wires (bare wire area) to the terminals, and then use the cable binders to secure the AC and DC wires (jacketed area) to the cable binder holes on the top and bottom on the power supply unit.
Example: DC terminal 1 is used.



Example: DC terminal 1-6 are used.



- 1 Terminal screws
- 2 Cable binders connected to cable binder holes
- 3 Connected device (example: lobby station, distributor, main monitor, etc.)
- 4 To AC power outlet

- Recommended torque:
 - AC IN terminals: 0.5 N·m {5.1 kgf·cm}
 - DC IN terminals: 0.45 N·m {4.6 kgf·cm}

- 5 Make sure to reattach the cable covers and then securely fasten the cable cover screws.
 - After reattaching the cable covers, attach the cable to the cable hook.
- 6 After connecting wires to each device, turn the output switch on.
 - The OUTPUT indicator lights when the output switch is turned on.

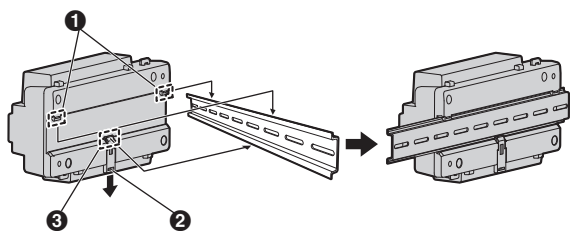
3.2.2 Information about the power supply unit

The VL-PS2410 power supply unit has 6 DC OUT connections terminals. (Use the VL-PS2410 so that the combined output does not exceed 2.5 A. Check the power consumption of each device for more information.)

3.2.3 Mounting on a DIN rail

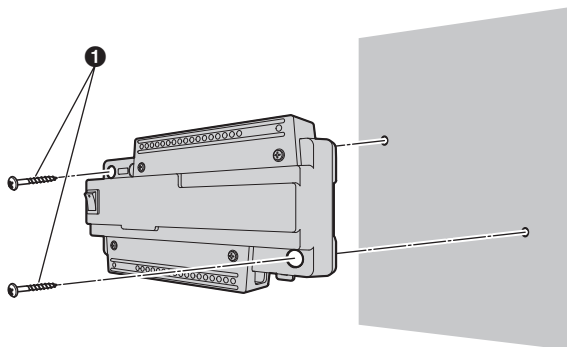
Attach the power supply unit to the DIN rail so that the bottom hook is positioned at the bottom of the power supply unit.

- 1 Hang the top hooks (❶) of the power supply unit on the top of the DIN rail.
 - At this point the power supply unit will be hanging from the DIN rail but will not be secure.
- 2 Pull the lever (❷) down, make sure the bottom of the power supply unit is flat against the DIN rail, and then release to lever.
 - The bottom hook (❸) will slide up, securing the bottom of the power supply unit to the DIN rail.



3.2.4 Attaching directly to a wall

Attach the power supply unit to the wall securely using the 2 mounting screws (❶).



3.2.5 Wire type and maximum wire length

Wiring run	Wire diameter	Max. length
Power supply unit ↔ Connected device (example: lobby station, distributor, main monitor, etc.)	0.65 mm (22 AWG)	approx. 50 m ^{*1}
	2 mm (12 AWG)	approx. 100 m ^{*1}
Power supply unit ↔ AC power source	1.2 mm (17 AWG)	No requirement
	2 mm (12 AWG)	

*1 The maximum wiring length differs depending on the connected device. For details, refer to the documentation included with the device.

Note the following when selecting wiring

- Use 2-conductor (solid copper) wiring with a PE (polyethylene)-insulated PVC jacket. Mid-capacitance, non-shielded cable is recommended.

3. Installation

- A certified power supply wiring has to be used with this equipment. The relevant national installation and/or equipment regulations shall be considered. A certified power supply wiring not lighter than ordinary polyvinyl chloride flexible wiring according to IEC 60227 shall be used.

3.3 Cleaning

Wipe the product with a soft, dry cloth.

For excessive dirt, wipe the product with a slightly damp cloth.

Important:

- **Do not use any cleaning products that contain alcohol, polish powder, powder soap, benzine, thinner, wax, petroleum, or boiling water. Also do not spray the product with insecticide, glass cleaner, or hair spray. This may cause a change in colour or quality of the product.**

3.4 Terms and illustrations in this document

- Model number suffixes (e.g., the "EX" in "VL-PS2410EX") are omitted unless necessary.
- Design and specifications are subject to change without notice.
- Illustrations may vary slightly from the actual product.

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