

Operating Instructions

Video Intercom System

Model No. **VL-SF70 Series**



VL-VF580



VL-MF70

Table of Contents

Introduction	2
Important information	4
Preparation	5
Operations	11
Specifications	back cover


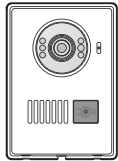
Thank you for purchasing a Panasonic product.

Please read this manual before using the product and save it for future reference.

1. Introduction

1.1 Model composition







The VL-SF70 is composed of the monitor and door station.

Model composition	Monitor	Door station
VL-SF70	VL-MF70	VL-VF580
		

Note:

- In this manual, the suffix of each model number (e.g., the "BX" in "VL-SF70BX") is omitted unless necessary.

Supplied accessories

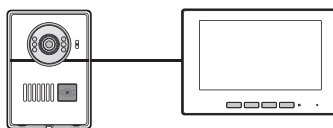
Item	AC adaptor (PNLV245)	Monitor mounting bracket	Wood screws for door station (3.8 mm × 20 mm)	Wood screws for monitor (4 mm × 16 mm)	5-pin connector*1	Hex wrench
						
Quantity	1	1	2	2	1	1

*1 Do not remove the core from the 5-pin connector.

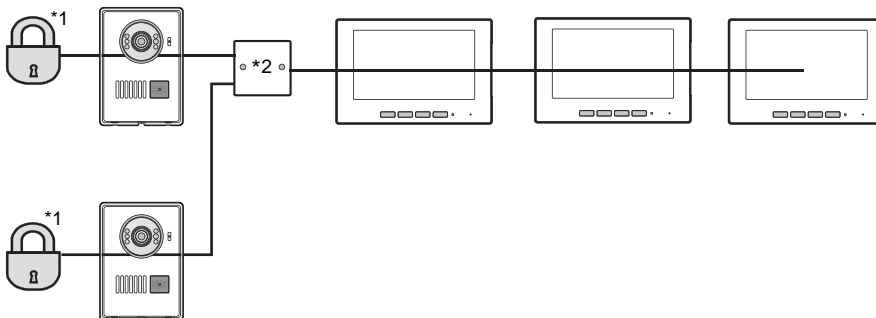
1.1.1 System expansion

The VL-SF70 can be used as a stand-alone system or together with the optional VL-MF70 (consisting of a monitor and an AC adaptor) and VL-VF580 (consisting of a door station, switch box, and AC adaptor). This manual can be used as a reference for all 3 models.

Basic system



Fully expanded system



*1 Electric lock (user supplied)

*2 Switch box included with the optional VL-VF580

1.2 Main features

You can use the following main features with this product.

Answering calls

When you receive a call from a door station, the monitor rings. You can monitor the visitor on the monitor display before answering a call. (See page 11)

Monitoring the outside

You can monitor the situation outside with the door station. (See page 11)

Viewing recorded images

Images are automatically recorded (maximum of 50 images*¹) when a visitor presses the call button of the door station, or when you monitor with the door station. You can view recorded images when the monitor is idle (not used for talking or monitoring, or there are no incoming calls). (See page 11)

*1 When the maximum is reached, existing images, starting with the oldest image, are automatically overwritten.

Unlocking electric locks

If an electric lock (user supplied) is connected to the door station, you can use the monitor to unlock the door. (See page 11)

Calling other monitors

If optional monitors are connected to the system, you can use a monitor to call other monitors. (See page 11)

2. Important information

2.1 Important safety information

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



WARNING

Preventing fire and electric shock

- Use only the power source marked on the product.
- Do not place objects on the power cord. Install the product where no one can step or trip on the cord.
- Do not allow the power cord to be excessively pulled, bent or placed under heavy objects.
- Do not overload power outlets and extension cords.
- Completely insert the AC adaptor into the power outlet.
- Regularly remove any dust, etc. from the AC adaptor by pulling it from the power outlet, then wiping with a dry cloth. Accumulated dust may cause an insulation defect from moisture, etc. resulting in a fire.
- Never touch the AC adaptor with wet hands.
- Do not disassemble this product. Refer servicing to an authorised service centre when service is required. Opening or removing covers may expose you to dangerous voltages or other risks.
- Do not touch the product and the AC adaptor during an electrical storm. There may be a remote risk of electric shock from lightning.
- Never push any objects through slots in this product.
- Unplug this product from power outlets and refer servicing to an authorised service centre when the following conditions occur:
 - If it emits smoke, an abnormal smell or makes unusual noise.
 - If the power cord is damaged or frayed.
 - If metal objects have been dropped inside the monitor.
 - If the monitor has been exposed to rain or water, or liquid has been spilled into the product.
 - If the product has been dropped or physically damaged.



CAUTION

- If the wiring is outdoors, use a protection tube or a surge protector.
- If the wiring is underground, use a protection tube and do not make any connections underground.
- Install the product securely adhering to the instructions in this manual 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 AC adaptor is used as the main disconnect device. Ensure that the power outlet is installed near the product and is easily accessible.
- Do not put your ear(s) near the speaker, as loud sounds emitted from the speaker may cause hearing impairment.
- 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 (excluding the door station) 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 AC adaptor indicated in this manual.

SAVE THESE INSTRUCTIONS

2.2 Privacy and rights of portrait

When installing or using the product, please take into consideration the rights of others with regard to privacy.

- It is generally said that "privacy" means the ability of an individual or group to stop information about themselves from becoming known to people other than those whom they choose to give the information. "Rights of portrait" means the right to be safe from having your own image taken and used indiscriminately without consent.

2.3 Others

- 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.
- The recorded images may be lost when:
 - Mishandled
 - Electric shock or radio wave interference occurs.
 - The power is turned off during use.
- 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 the Operating Instructions.

Note for product disposal, transfer, or return

- This product can store your private/confidential information.

To protect your privacy/confidentiality, we recommend that you erase the information (recorded images) from the memory before you dispose of, transfer or return the product.

See page 11 for information about how to delete recorded images.

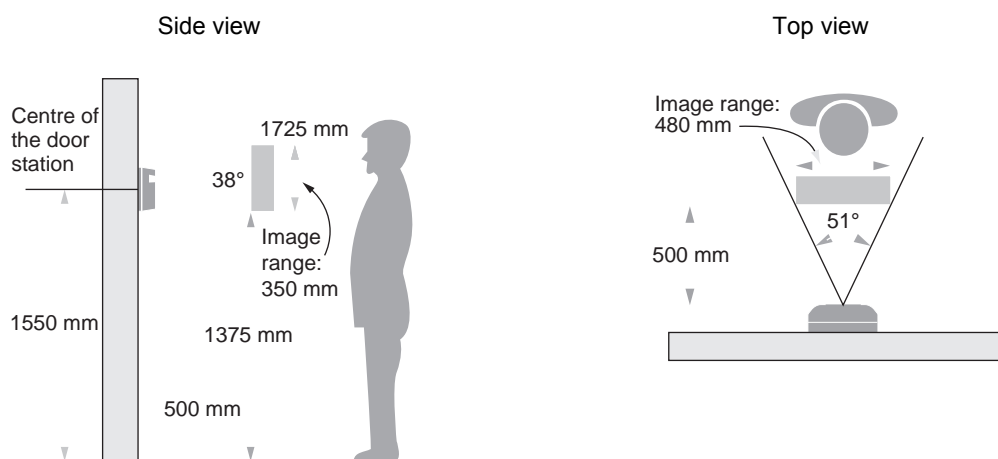
3.1 Installation

3.1.1 Before installation

- Do not install the door station or the monitor in the following locations. There may be a risk of malfunction or communication disturbances.
 - Places where vibration, impact, or echoing occurs.
 - Places near a high concentration of dust, hydrogen sulphide, ammonia, sulphur, or noxious fumes.
 - Places where there is excessive smoke, dust, and high temperature.
 - Places exposed to direct sunlight.
- Make sure to install the monitor more than 5 m away from the door station.

3.1.2 Installation position of the door station and camera range

Views when the camera is facing forwards at 0°. Example: Installation height is 1550 mm.



Note:

- The measurements and angles are for reference purposes and may vary depending on the environment.
- If a strong light is shining on the door station, the visitor's face may not be distinguishable.
- Do not place the door station in the following locations:
 - Where most of the background is the sky.
 - Where direct sunlight will shine on the door station.
 - Where the background is a white wall, and direct sunlight will reflect off it.

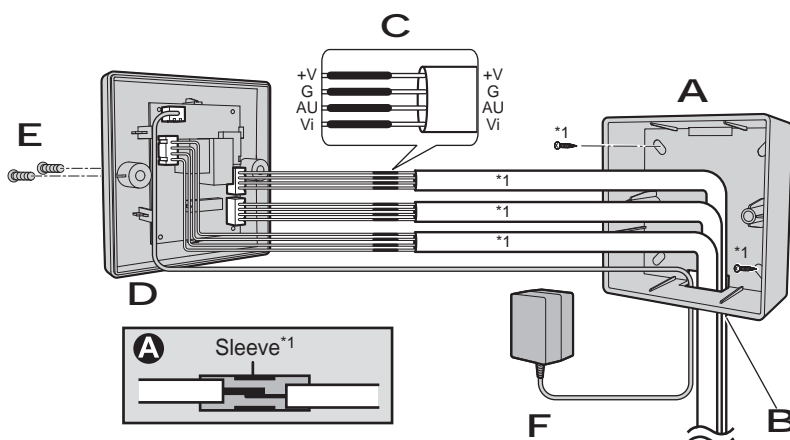
3.1.3 Installing the door station

- 1 Loosen the mounting screw using the hex wrench and then remove the mounting base.
- 2 Securely attach the mounting base to a flat, vertical flat wall using 2 wood screws (3.8 mm × 20 mm).
- 3 Connect the 4 wires^{*1} to the door station.
 - Loosen the 4 screws, insert the ends of the 4 wires into the terminal connectors (refer to the wiring schematic diagrams on page 8 for details), and then tightly fasten the screws.

- Do not install the monitor inside a wall.
- Do not install the monitor near electronic appliances such as TVs, microwaves, personal computers, or air conditioners, or in places where it will be affected by extremely high frequency radio waves (near broadcasting antennas etc.). This may cause the display to flicker or an interrupting noise to occur.
- Do not install the monitor in places surrounded by a high electrical field. This may cause disturbances in the monitor's image or sound.
- Do not install the monitor in places where there is electrical noise generating devices, such as fluorescent lamps and motors.
- The monitor should be kept away from heat sources such as heaters, kitchen stoves, etc. It should not be placed in rooms where the temperature is less than 0 °C or greater than 40 °C. Damp basements should also be avoided.

3.1.5 Installing the switch box (for use with optional door stations)

- 1 Securely attach the switch box base to the wall in a diagonal line using 2 wood screws^{*1} (4 mm × 16 mm).
 - 2 Pass the wires from the door station, monitor, and AC adaptor through the opening in the switch box base.
 - 3 Connect the 4 wires^{*1} from the door station and the monitor using 4-pin connectors. (Refer to the wiring schematic diagrams on page 8 for details.)
 - Connect the wires by soldering them together or joining them with crimping sleeves^{*1} (A).
 - Check the signal names of the wires and make sure to only connect the same signal name wires together.
 - Separate the connected parts of the wires and the unused wire with electrical tape or heat shrink tubing.
- Note:**
- **Connecting the wires incorrectly will cause severe damage and make the system malfunction.**
- 4 Connect the AC adaptor to the switch box.
 - 5 Mount the cover to the switch box base, and then tightly fasten the 2 screws (4 mm × 16 mm).
 - 6 Connect the AC adaptor to the power outlet.

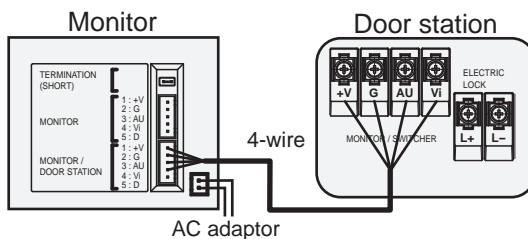


*1 User supplied

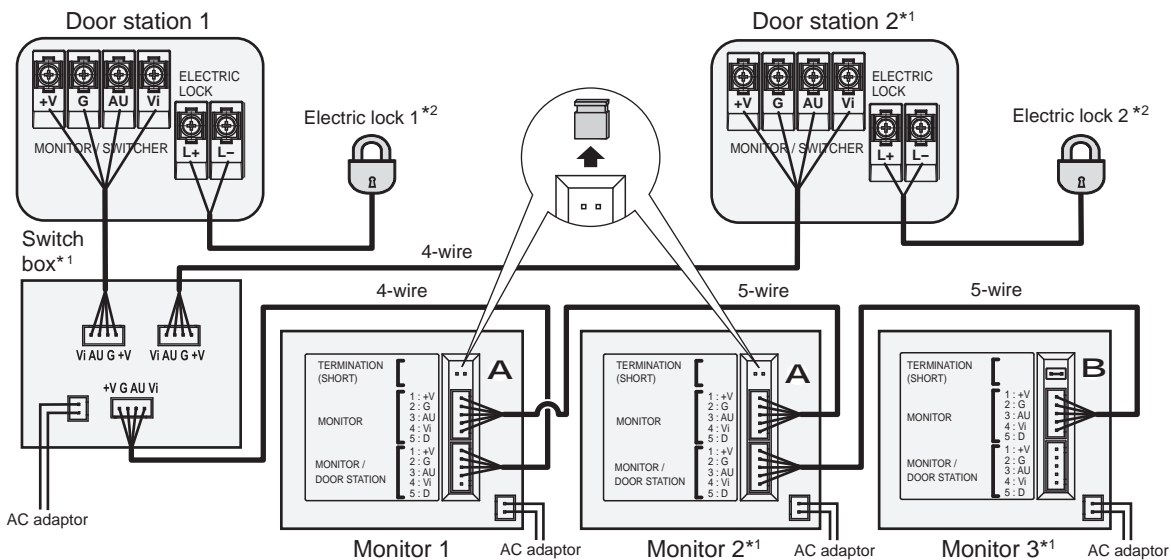
3. Preparation

3.1.6 Wiring schematic diagram

Basic system



Fully expanded system



*1 Optional products

*2 User supplied. The wiring schematic shown here for the electric locks is only an example. Refer to the wiring instructions provided with your electric lock. When using an electric lock, select a device that meets the following guidelines.

- Electric lock connection terminal (L+/L-): 12 V DC, less than 1.5 A

Wire type and distance (between the monitor and the door station)

When the multiple monitors are connected in a series, the maximum distance between the door station and the last monitor in the series ("Door station 2" and "Monitor 3" in the illustration above) is 100 m.

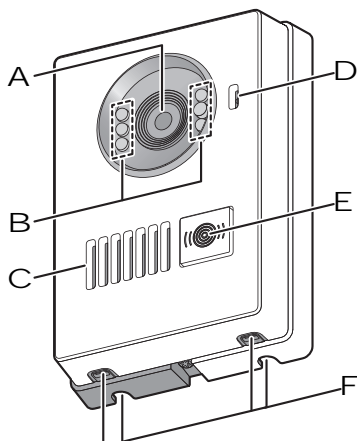
From - To	Max. distance	Cable standard	Cable type reference
Door station - Monitor	50 m	0.5 mm ²	RVV4 (4-wire)
	100 m	0.75 mm ²	
Electric lock - Door station	5 m	1.0 mm ²	RVV2 (2-wire)
	10 m	1.5 mm ²	
Monitor - Monitor	50 m	0.5 mm ²	RVV6 (6-wire)
	100 m	0.75 mm ²	

Installing multiple monitors

When installing multiple monitors, remove the jumpers (A) attached to the "TERMINATION (SHORT)" terminals of the monitors ("Monitor 1 and 2" in the illustration above). Leave the jumper (B) of the last monitor in the series ("Monitor 3") attached.

3.2 Controls

3.2.1 Door station



- ① Camera lens
- ② LED lights and illumination sensor
 - The illumination sensor determines the brightness of the surrounding area and automatically lights the white LEDs when it is dark.
- ③ Speaker
- ④ Microphone
- ⑤ Call button and indicator
 - Press to call the monitor.
 - The indicator lights in red when the power is on.
- ⑥ Water drain holes

3.2.2 Monitor

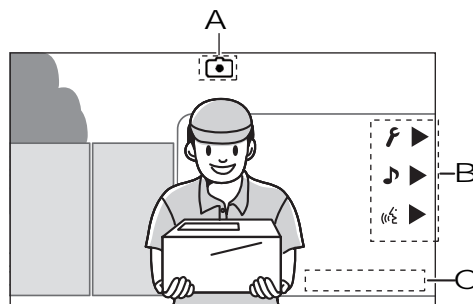


- ① Play button
- ② Monitor button
- ③ Door key button
- ④ Talk button

- ⑤ Intercom indicator
 - The intercom indicator lights when:
 - there is an incoming call
 - monitoring
 - talking with the door station or another monitor
 - paging another monitor
- ⑥ Microphone
- ⑦ Menu controller (⏮)
 - Push to enter the menu display or select items.
 - Rotate up or down to select actions, change settings, or scroll through recorded images.
- ⑧ Ringtone volume controller (🎵)
 - Rotate up or down to adjust the ringtone volume.
- ⑨ Talk volume controller (🔊)
 - Rotate up or down to adjust the speaker volume.

3.3 Displays

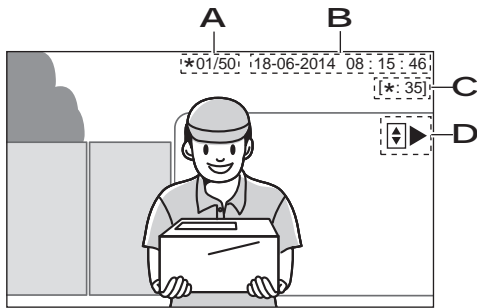
Talking/monitoring/incoming call image example



- ① Indicates that a photo of the displayed image is being taken.
- ② Displays the position of the menu, ringtone volume, and talk volume controllers for about 5 seconds after the image is displayed.
- ③ Displays the date (day/month/year) and time.

3. Preparation

Recorded image example



- ① Displays the number of the currently displayed image and the total number of recorded images. For example, "1/50" indicates that the first image of 50 total images is displayed. An "*" indicates that an image has not been viewed.
- ② Displays the date and time of when the image was recorded.
- ③ Displays the total number of images that have not been viewed.
- ④ Displays the position of the menu controller used to scroll through recorded images.

Menu display example

- A—
- B—
- C—
- D—
- E—
- F—
- G—
- H—

- ① Brightness setting
- ② Contrast setting
- ③ Chroma setting
- ④ Date setting
- ⑤ Time setting
- ⑥ Ringtone setting
- ⑦ Delete all images
- ⑧ Menu exit



Note:

- The display will turn off if no operations are performed for about 90 seconds.

3.4 Setting the date and time

- 1 Press .
- 2 Press .
- 3 Press repeatedly to select .
- 4 Rotate up or down to adjust the day setting, and then press . Repeat to adjust the settings for the month and year.
- 5 Press repeatedly to select .
- 6 Rotate up or down to adjust the hour setting, and then press . Repeat to adjust the settings for the minute and second.
- 7 Press repeatedly to select and then rotate .

4.1 Answering calls

- 1 When the monitor rings, press .
- 2 Speak alternately with the other party (staying within about 50 cm of the microphone).
- 3 To end the conversation, press .

Note:

- Unanswered calls stop ringing after about 30 seconds.
- Maximum talking time is about 120 seconds.












4.2 Monitoring the outside

- 1 Press .
- 2 To end monitoring, press .










Note:

- When multiple door stations are used, the door station that was last used is automatically monitored.
- Maximum monitoring time is about 180 seconds.



4.3 Adjusting the display settings


- 1 Press .
- 2 Press .
- 3 Press  repeatedly to select , , or .
- 4 Rotate  to adjust the settings.
- 5 Press  repeatedly to select  , and then rotate .

4.4 Changing the ringtone








- 1 Press .
- 2 Press .
- 3 Press  repeatedly to select .
- 4 Rotate  to change the ringtone to ringtone "1", "2", or "3".
- 5 Press  repeatedly to select  , and then rotate .

4.5 Viewing recorded images


- 1 Press  when the monitor is idle, and then wait for about 3 seconds.
- 2 Rotate  up or down to display the next or previous image.

- 3 To stop viewing images, press .

4.6 Deleting all recorded images


- 1 Press .
- 2 Press .
- 3 Press  repeatedly to select .
- 4 Rotate  to select .
- 5 Press .

4.7 Unlocking electric locks (if used)

Press  when there is an incoming call or when monitoring or talking.

4.8 Calling other monitors (if used)

Press  when the monitor is idle.

- To answer a call from another monitor, press .

5. Specifications

5.1 Specifications

Monitor

Power source	AC adaptor (PNLV245), 24 V DC, 0.5 A
Power consumption	Standby: approx. 1.3 W During operation: approx. 10 W
Dimensions (mm) (height × width × depth)	Approx. 135 × 201 × 25.5 (excluding protruding sections)
Mass (weight)	Approx. 465 g
Operating environment	Ambient temperature: approx. 0 °C to +40 °C Relative humidity (non-condensing): from 45 % up to 90 %
Display	Approx. 17.64 cm (approx. 7 inches) wide colour display
Talking method	Hands-free
Installation method	Wall mount (mounting bracket supplied)

Door station

Power source	Supplied by the monitor
Dimensions (mm) (height × width × depth)	Approx. 143 × 101 × 35 (excluding protruding sections)
Mass (weight)	Approx. 265 g
Operating environment	Ambient temperature: approx. -10 °C to +50 °C Relative humidity (non-condensing): up to 90 %
Installation method	Wall mount (mounting base attached)
Minimum illuminance required	1 lx (within approx. 50 cm from the camera lens)
Lighting method	White coloured LED lights

Switch box

Power source	AC adaptor (PNLV245), 24 V DC, 0.5 A
Dimensions (mm) (height × width × depth)	Approx. 87 × 87 × 45 (excluding protruding sections)
Operating environment	Ambient temperature: approx. 0 °C to +40 °C Relative humidity (non-condensing): from 45 % up to 90 %
Installation method	Flush mount or wall mount

Information on Disposal in other Countries outside the European Union

(For VL-SF70BX, VL-SF70CX, VL-MF70BX, VL-MF70CX, VL-VF580BX, and VL-VF580CX users only)



This symbol 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.

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