2013 Wireless Video Intercom
# INSTALLATION GUIDE

Panasonic

VL-WD613

INDEX

System configuration and wiring

VL-SWD501 System Component

■**Basic System Component**

VL-SWD501

Up to **2**

Door Station
(Doorphone)

5-inch wide screen touch panel

Main Monitor Station
(Main monitor)

2.2-inch TFT colour LCD

Up to **6**

Wireless Monitor Station
(Sub monitor)

■**Optional Expandability**

Door Station
(Doorphone)
VL-V554

Up to **2**

DECT Repeater
VL-FKD2

Up to **4**

Wireless Sensor Camera
VL-WD812

Wireless Monitor Station
(Sub monitor)
VL-WD613

VL-SWD501EX wiring schematic diagram

Main Monitor Station

Door Station 1

A

NP

NP

D1
D2
D3
D4
OUT1
OUT2

1
2
3
4
5
6

D1 D2   S1 S2 S3 S4

D

NP

Electric lock
(Electric vehicle gate lock)*1

12 VAC/DC

Power
supply

Electric lock
(Electric door lock)*2

NP

12 VAC/DC

Power
supply

Door Station 2

NP

C

220-240 VAC

NP

E

NP

D1 D2   S1 S2 S3 S4

B

D

NP

Electric lock
(Electric vehicle gate lock)*1

12 VAC/DC

Power
supply

Electric lock
(Electric door lock)*2

NP

12 VAC/DC

Power
supply

Connection device for option
output (A contact)

NP: Non-polarised

24 V DC

Power Supply Unit

*1 Make sure to only connect electric vehicle gate locks to the S3/S4
   terminals of the door stations.
*2 Make sure to only connect electric door locks to the S1/S2 terminals
   of the door stations.

VL-SWD501EX wiring type and length

| Wiring run		Wire type*1		
		Diameter		Length (Max.)
Main Monitor Station – Door station	A	φ 0.65 mm	22 AWG	100 m
		φ 1.0 mm	18 AWG	130 m
		φ 0.5 mm	CAT 5	50 m
Main Monitor Station – Power Supply Unit	B	φ 0.65 mm	22 AWG	10 m
		φ 1.0 mm	18 AWG	20 m
Power Supply Unit – AC power source	C	φ 1.2 mm - φ 2.0 mm (17 AWG - 12 AWG)		No requirement
Door Station – Electric Lock*2	D	φ 0.5 mm - φ 1.2 mm (24 AWG - 17 AWG)		According to specification of connected device.
Main Monitor Station - Connection device for option output (A contact)*2	E	φ 0.5 mm - φ 1.2 mm (24 AWG - 17 AWG)		According to specification of connected device.

*1 Type: Single-pair cable with outer sheath (jacket)
   Conductor: Copper solid
   ●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.
*2 When using an electric lock or a connection device for option output (A contact), select a device
   that meets the following guidelines:
   ●Electric lock connection terminal (S1/S2, S3/S4):
    --N/O dry closure contact
    -- 12 V AC/DC, less than 1 A
   ●Connection device for option output (A contact) terminal (OUT1/OUT2):
   -- 24 V AC/DC, less than 0.3 A (minimum contact: 5 V DC 1 mA)

Door Station Installation

Door Station Installation

Installing the door station (VL-V554EX)

Step 1 Attach the mounting base to the wall securely.

Mounting base

Screws x 2 * (locally procured)

83.5 mm
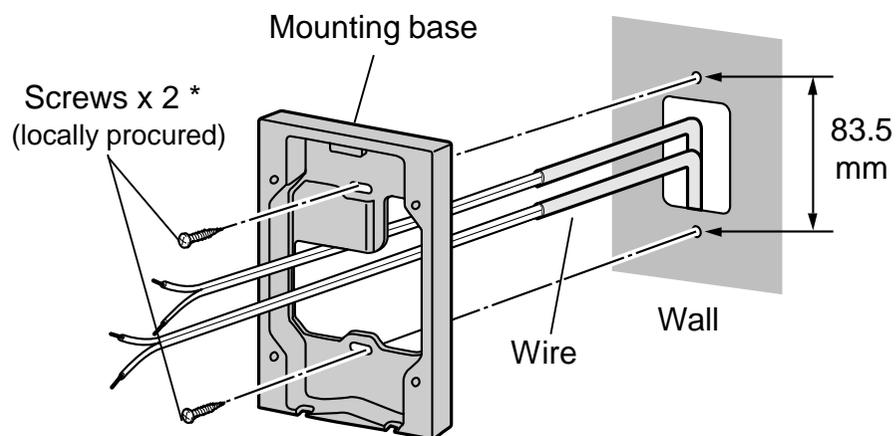
Wall

Wire

• Install the mounting base on a vertical flat wall.

Step 2 Use a hex wrench to loosen screw A and remove the front panel of the door station.

Front panel

2 mm hex wrench

Screw A

Step 3 Connect the wires

<Rear view>

Terminal for the main monitor station
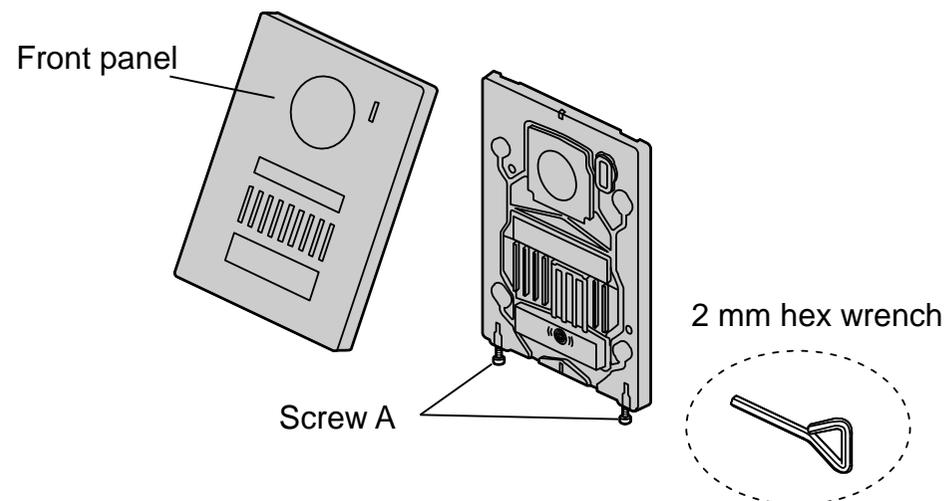
Terminals for the electric locks
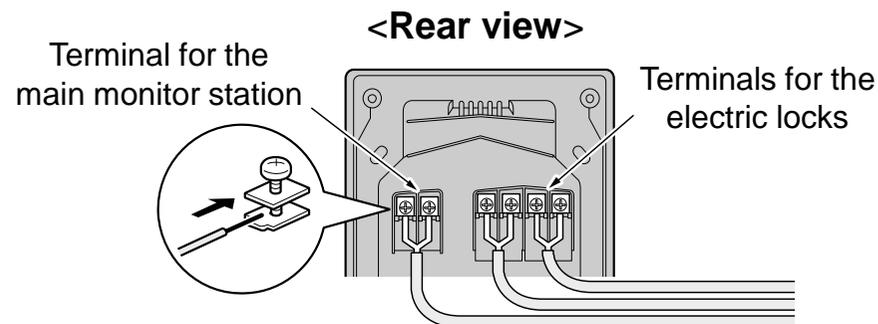
1 Loosen the screws.

2 Push in the wires to the terminal connectors (non-polar), then tighten the screws.

Door Station Installation

Installing the door station (VL-V554EX)

Step 4 Attach the door station to the mounting base.
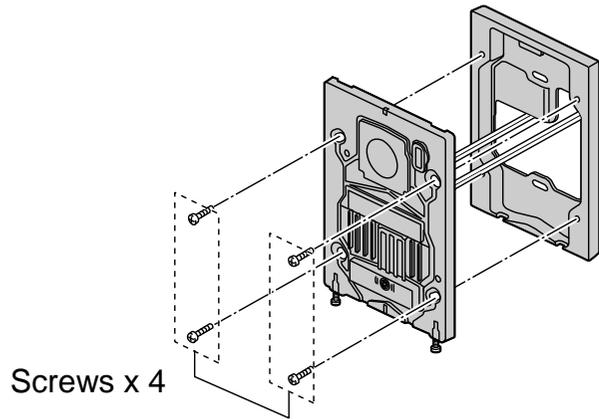
Screws x 4

Step 5 Attach the name plate to the door station and use screw A to secure the front panel.

Name plate

Screw A

• Write the name on the name plate as needed.

● **Important**
• On the bottom surface of the door station and the mounting base, there are holes to allow water to drain. Do not cover them up when installing.
• When existing wiring (such as chime wires) is used:
- It may contain AC voltage that may cause electric shock and/or damage the product.
- Never use the following types of wiring. Consult a qualified technician/dealer.

Door Station Installation

Installing the door station (VL-V554UEX)

Step 1 Install the flush mounting box in the wall.

Flush mounting box

100mm

Knockout hole[*1]

151mm

37mm
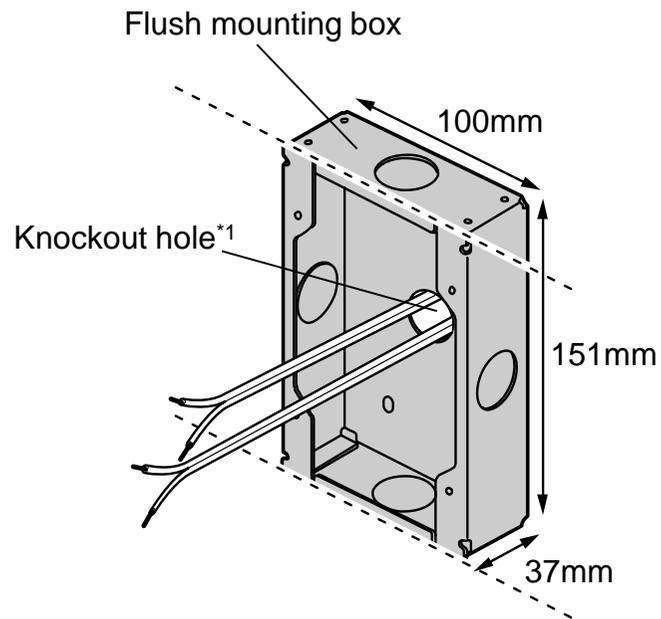
*1 Only open the knockout holes as required for the wiring.

Step 2 Use a hex wrench to loosen screw A and remove the front panel of the door station.
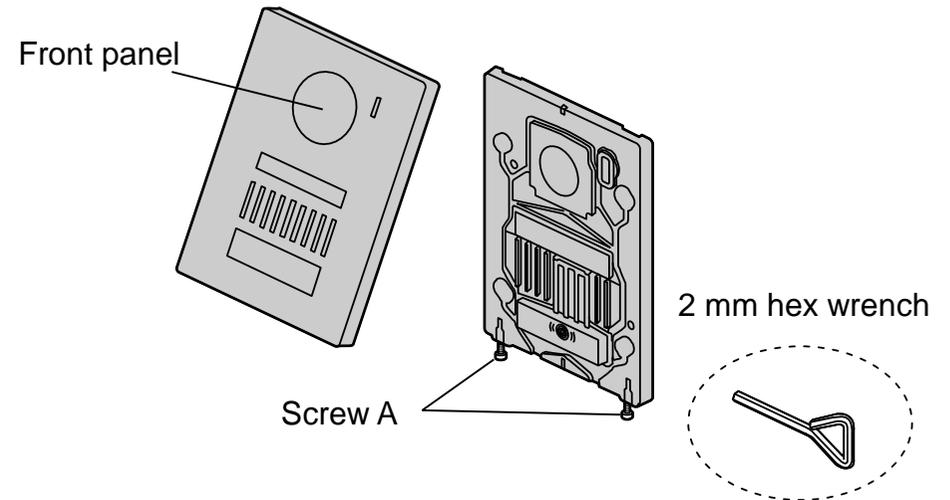
Front panel

2 mm hex wrench

Screw A

Step 3 Connect the wires

<Rear view>

Terminal for the main monitor station

Terminal for the electric lock
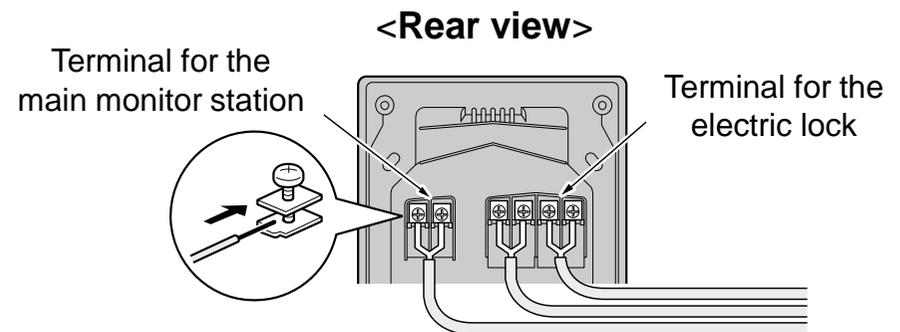
1 Loosen the screws.

2 Push in the wires to the terminal connectors (non-polar), then tighten the screws.

Door Station Installation

Installing the door station (VL-V554UEX)

Step 4 Attach the door station to the flush mounting box.
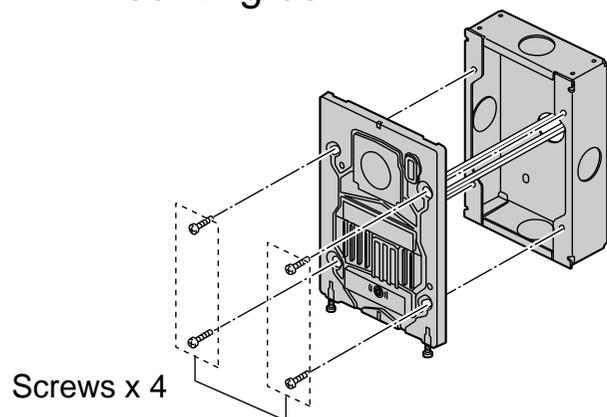
Screws x 4

Step 5 Attach the name plate to the door station and use screw A to secure the front panel.

Name plate

Screw A

• Write the name on the name plate as needed.

● **Important**
• On the bottom surface of the door station and the mounting base, there are holes to allow water to drain. Do not cover them up when installing.
• When existing wiring (such as chime wires) is used:
- It may contain AC voltage that may cause electric shock and/or damage the product.
- Never use the following types of wiring. Consult a qualified technician/dealer.

Door Station Installation

Door station installation position

●Installation height and area visible by the camera lens

You can use the [Wide/Zoom settings] setting on the main monitor station to select the area that is visible when a visitor calls; available settings are [Wide], [Zoom], and [All] (entire image display).

When set to wide (default)

(Units: mm)

Image range

Approx. 95°

Centre of door station

Approx. 2,000

Approx. 1,100

Approx. 1,450

Approx. 500

Approx. 900

View when looking from above

Approx. 500

Approx. 170°

Image displayed on main monitor station
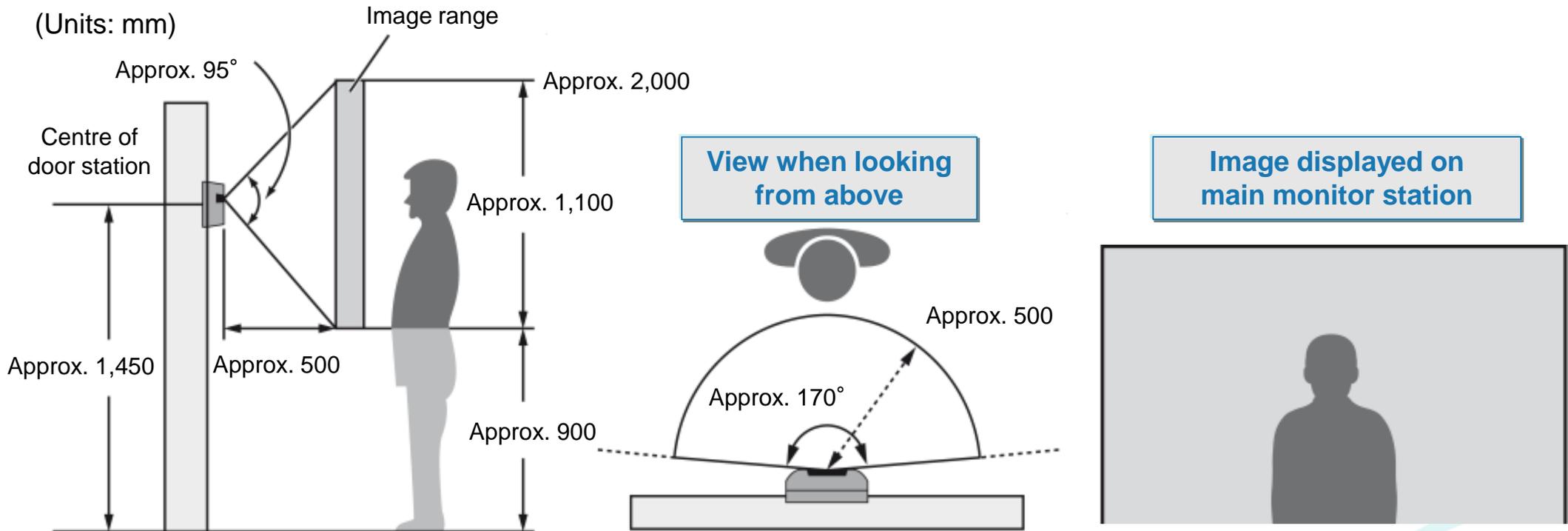
Door Station Installation

Door station installation position

When set to zoom

Displays a portion of the wide image at 2 times the size.
- Because a digital zoom is used, the image quality of zoom display is lower than that of wide display or entire image display.

Wide image display

Zoom Image display

Approx. twice the zoom vertically/ horizontally

Door Station Installation

Door station installation position

You can use the main monitor station's [Zoom position settings] setting to select the desired area visible when zooming. Refer to Installation Position and configure the main monitor station.

Up and down

(Units: mm)

Up

Centre of door station

Approx. 45°

Image range

Approx. 2,050

Approx. 550

Approx. 1,450

Approx. 500

Approx. 1,500

Centre (default)

Approx. 45°

Image range

Centre of door station

Approx. 1,650

Approx. 400

Approx. 1,450

Approx. 500

Approx. 1,250

Down

Approx. 45°

Image range

Centre of door station

Approx. 1,400

Approx. 550

Approx. 1,450

Approx. 500

Approx. 850
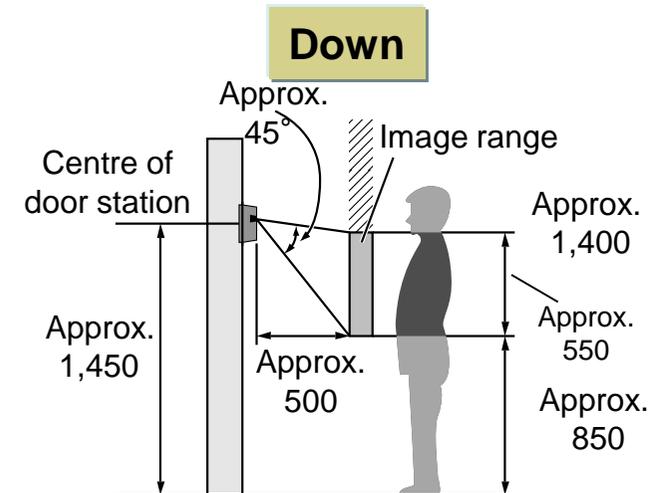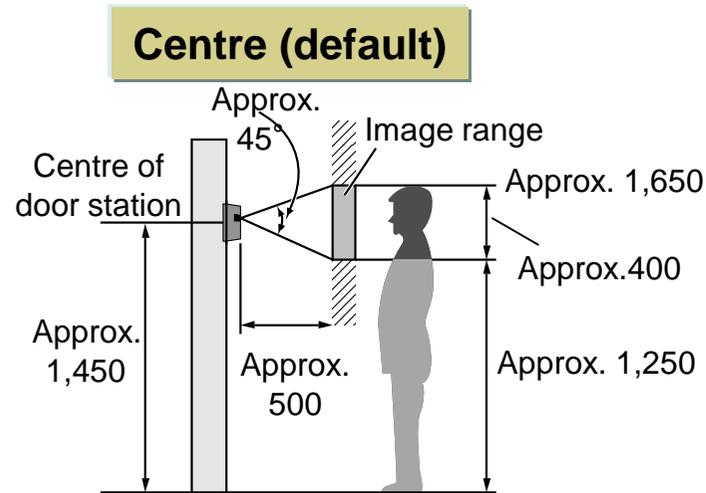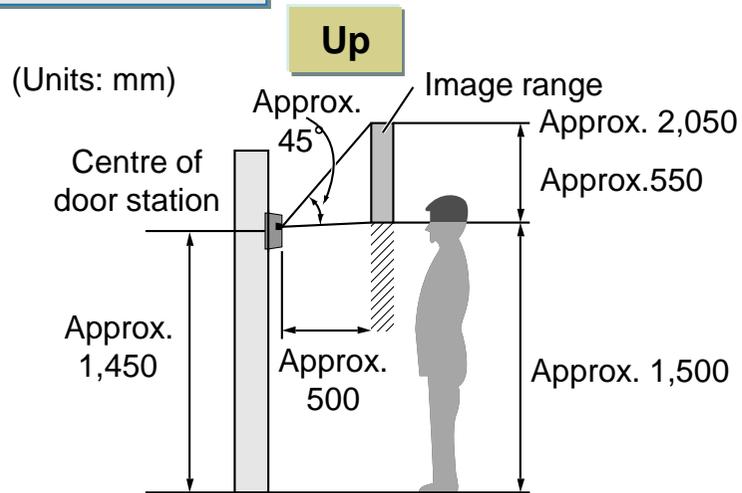
Left and right (when looking from above)

(Units: mm)

Left

Image range: Approx. 900

Approx. 500

Approx. 85°

Approx. 170°

Centre (default)

Image range: Approx. 900

Approx. 500

Approx. 85°

Right

Image range: Approx. 900

Approx. 500

Approx. 170°

Approx. 85°
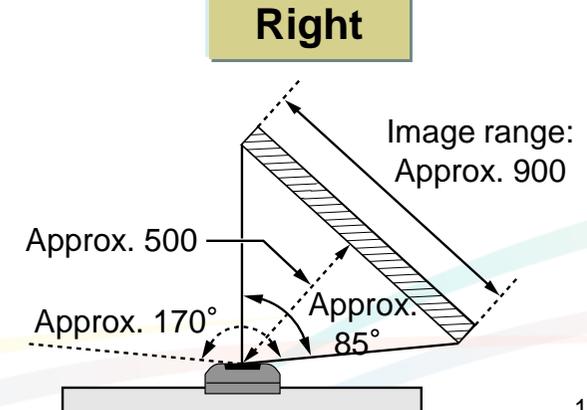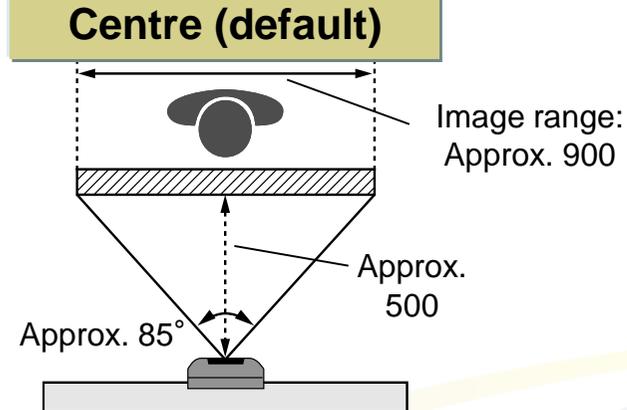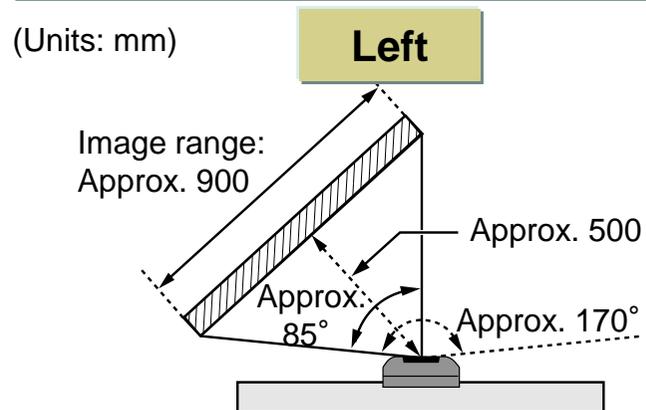
Door Station Installation

Door station installation position

Entire image display

The area above and below the wide image is visible.
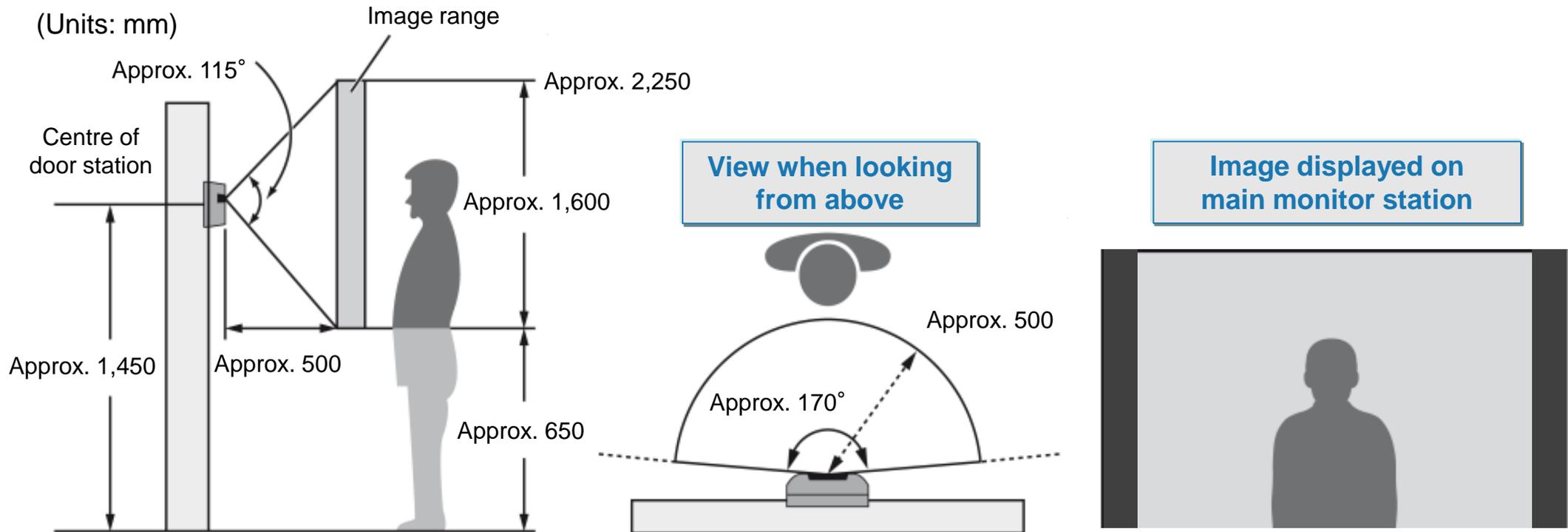
(Units: mm)

Image range

Approx. 115°

Centre of door station

Approx. 2,250

Approx. 1,600

Approx. 1,450

Approx. 500

Approx. 650

View when looking from above

Approx. 500

Approx. 170°

Image displayed on main monitor station

Main Monitor Station Installation

Main Monitor Station Installation

Installing the main monitor station

Step 1 Attach the mounting bracket to the wall securely.

・Install the mounting bracket on a vertical flat wall.

Mounting bracket

Vertical, flat wall

Hole in wall

Screws (locally procured)

60 mm

83.5 mm

7 mm

50 mm
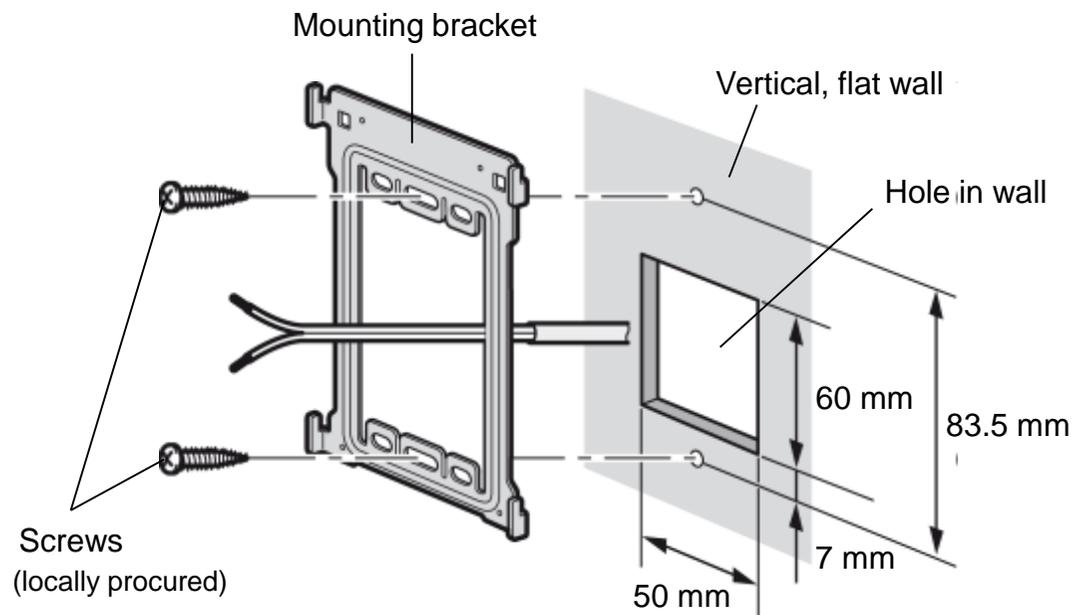
Main Monitor Station Installation

Installing the main monitor station

Step 2 Connect the DC cable and wires.

How to connect the DC cable:
1 Remove screw A and then remove the terminal cover.
2 Loosen screw B and push in the wires of the DC cable to the terminal connectors (non-polar), then tighten the screws.

Bare wire at tip

12 mm

32 mm

Screw B
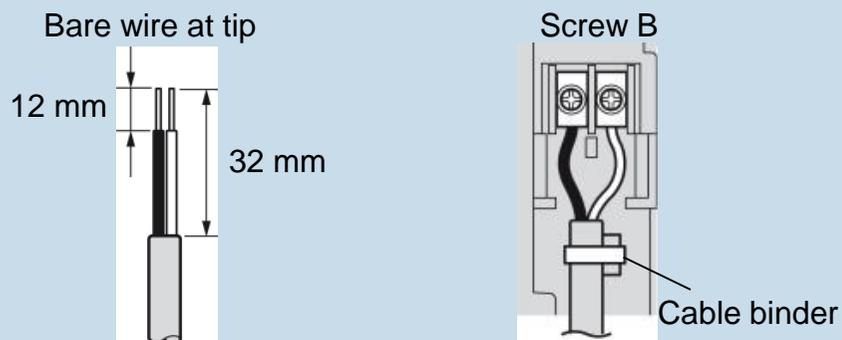
Cable binder

3 Use the cable binder to secure the DC cable (double-coated area) to the main monitor station.
4 Make sure to replace the terminal cover.

Screws A
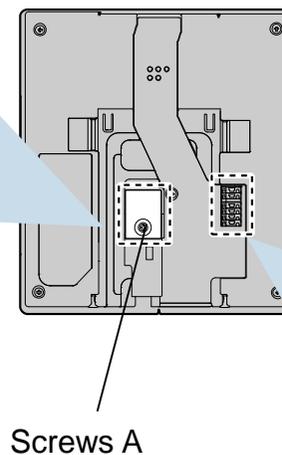
How to make wiring connections:
While pressing on the button with a pointed object such as a screwdriver, insert the wire into the terminal connector. (To disconnect a wire, while pressing on the button, pull out the wire.)

Bare wire at tip   Terminal   Button

9 mm

Wiring from door station
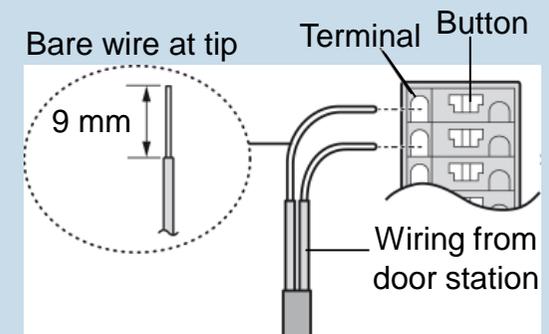
Step 3 Mount the main monitor station to the mounting bracket.

1 Line up the tab on the bottom of the bracket with the groove on the main monitor station (1).
2 Line up the tab on the top of the bracket with the groove on the main monitor station, and push the main monitor station down until it is secure (2).

(1)

(2)
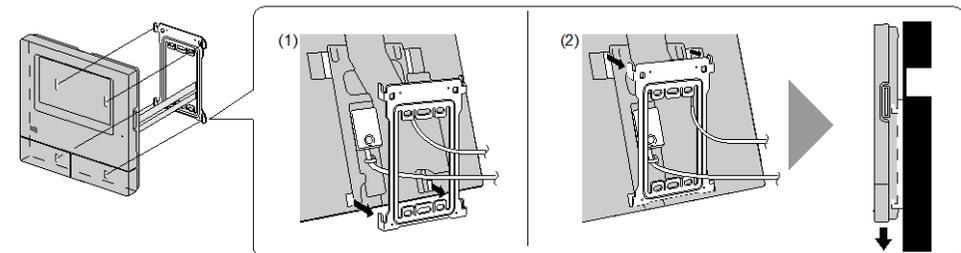
Main Monitor Station Installation

Main monitor station installation position

● **About the installation position of the main monitor station and mounting bracket**

• Place the main monitor station in a location that your eyes are the same height as the centre of the display.
• For the following reasons, leave at least 20 cm of space above, below, and to the left and right sides of the main monitor station:
- To prevent malfunction and sound cutting out
- To ensure SD cards can be inserted and removed, and to make sure the reset button can be used (the SD card slot is on the side of the main monitor station; the reset button is on the bottom.)
• After deciding where to install the main monitor station, attach the mounting bracket in the location shown on the right.

20 cm

20 cm

SD card slot

20 cm

Reset button

20 cm

Main monitor station installation position

82.5 mm

82.7 mm
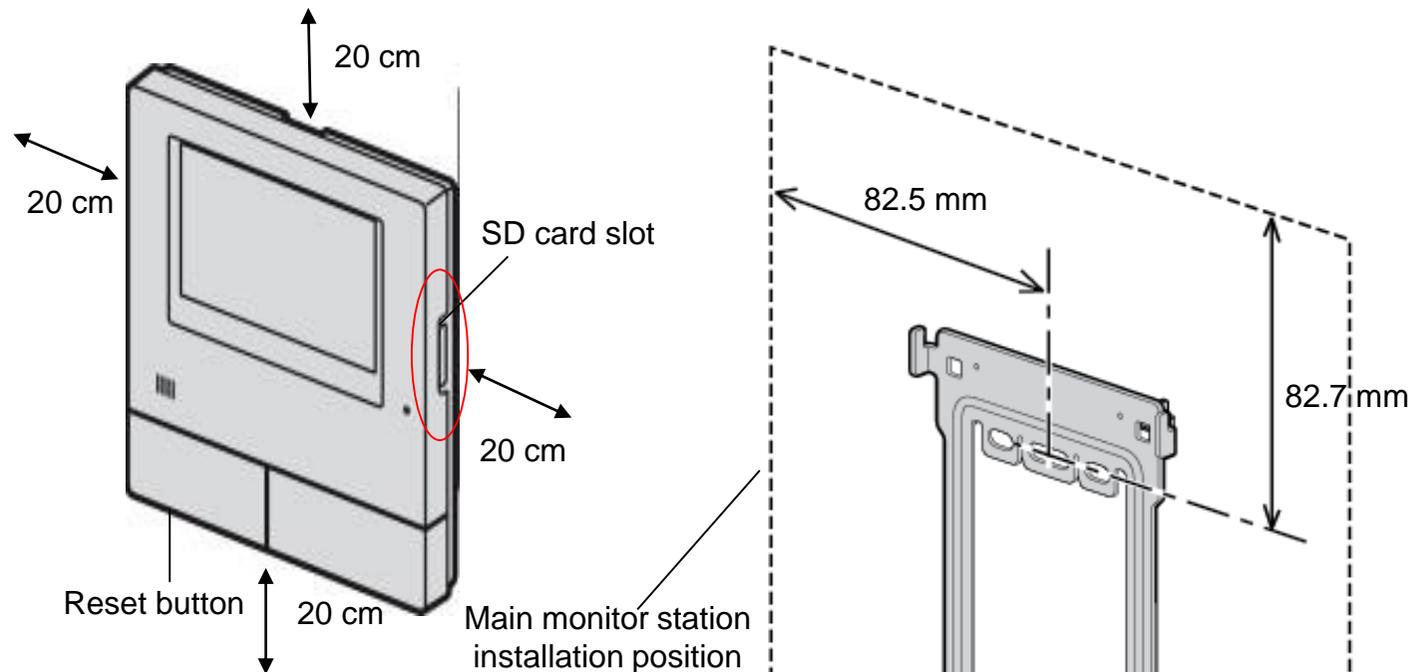
Power Supply Unit Installation

Power Supply Unit Installation

Installing the power supply unit (VL-PS240)

How to connect the power cable (AC/DC)

Connect the power supply unit and AC/DC cables.

Step 1 Strip the AC/DC cables as follows:

〈AC cable〉
45 mm
7 mm

〈DC cable〉
25 mm
7 mm

**Power supply unit
(with cable covers removed)**

〈Top view〉

AC cable binder hole

AC IN terminal

〈Bottom view〉

DC cable binder hole

DC OUT terminal

Step 3 Connect the AC/DC cable to the AC IN terminal/DC OUT terminal on the top and bottom of the power supply unit, and then secure the wires by tightening the screws.

*1
AC cable
Screws
DC cable
*1
Cable binders

Cable covers (1)
Screws (2)

*1 Make sure that there are no bare wires exposed outside the product.
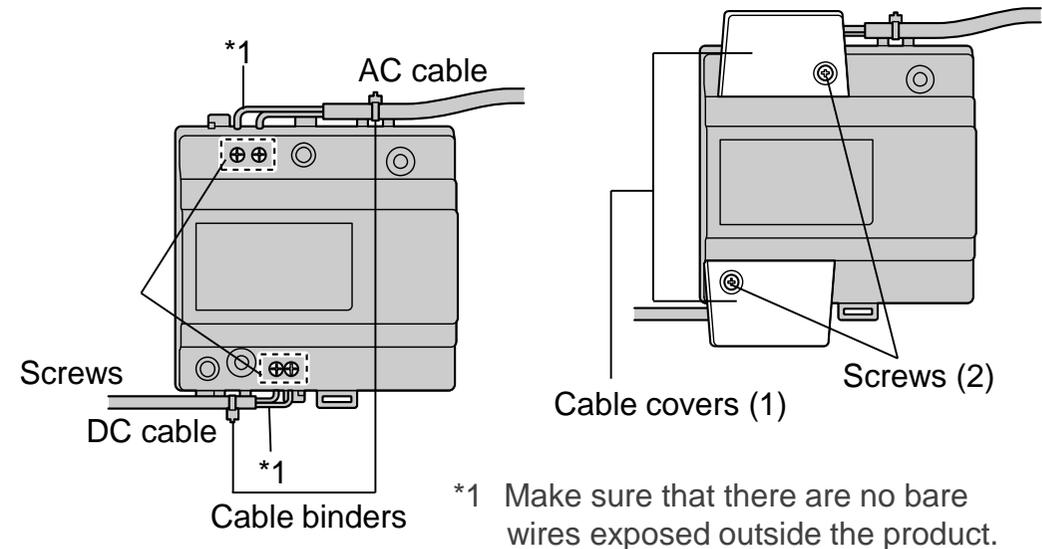
Step 4 Use the cable binders to secure the AC/DC cables (double-coated area) to the power supply unit.

Step 2 Remove the screws (2) and then remove the cable covers (1).

Step 5 Make sure to replace the cable covers (1).

Power Supply Unit Installation

Installing the power supply unit (VL-PS240)

● **About the 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.

● **Precautions for wiring**
- Make sure you turn off the power at the breaker before performing any wiring work.
- Always connect AC or DC cables to the appropriate connection terminals. Incorrectly connecting the AC or DC 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 cable binders and attach the cable covers.

Attach to the DIN rail

Attach in the order described below so that hook (b) is positioned at the bottom.

Step 1	Hang hook (a) on the DIN rail (1).
Step 2	Pull and hold the lever down (2).
Step 3	Secure hook (b) to the DIN rail (3).

Hook (a)

(1)

(3)

Hook (b)

(2)
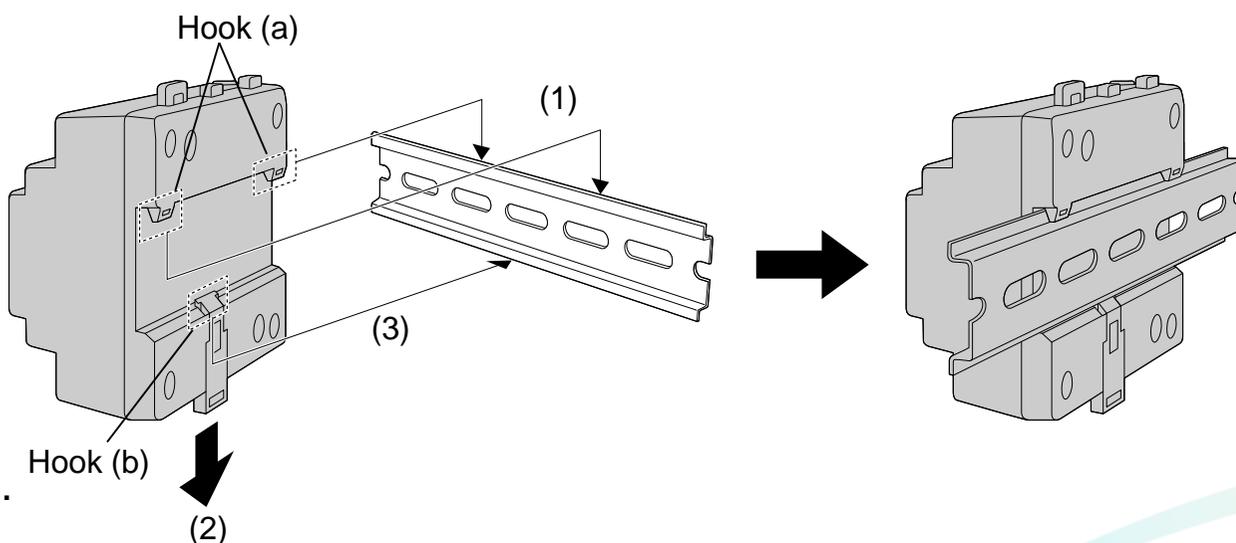
Initial Setup

Initial Setup

## Setting the language, date and time

This operation can only be performed on the main monitor station.
A language selection screen is displayed when the main monitor station is first used.

Step 1   Touch the language that you want to use and then touch [Next].

Select language
English
Français
Deutsch
1/2

Step 2   Configure the date and time by touching [+] and [−].

Time and date settings
YYYY - MM - DD   hh : mm
2013 - 1 - 1   0 : 00
+ + +   + +
− − −   − −
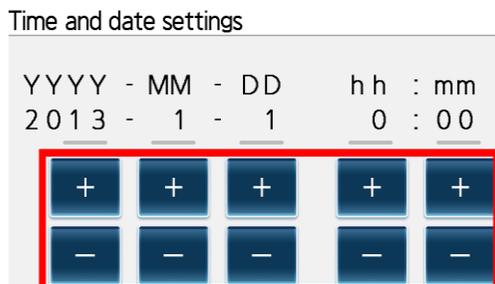
Step 3   Touch [OK] to complete the settings.

Time and date settings
YYYY - MM - DD   hh : mm
2013 - 1 - 1   0 : 00
+ + +   + +
− − −   − −
OK
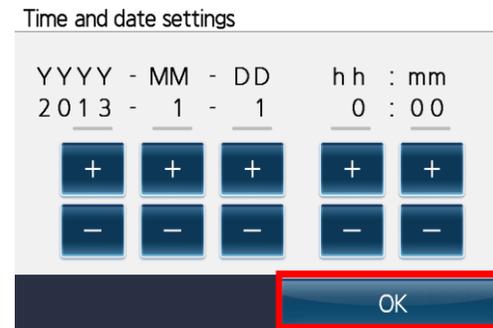
• A beep sounds and the screen turns off.

Initial Setup

Changing the date and time

This operation can only be performed on the main monitor station.

Step 1 Touch the screen to display the top screen.


Step 2 Touch [wrench icon].

Step 3 Touch [settings icon].

Step 4 Touch [Initial settings].

Step 5 Touch [Time and date settings].

Step 6 Perform steps 2 and 3 on the left.

Step 7 To end the operation, press OFF.

Initial Setup

Setting Demo mode

Demo mode is a special mode for using the product in a display at a store.

Step 1 From the top menu, touch [wrench icon] .

Step 2 Touch [wrench+ icon] .
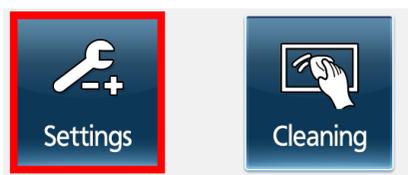
Step 3 Touch [▼] twice.
and
Touch [Other].

>Change settings

Other

Step 4 Touch [Demo mode].

Demo mode

Step 5 Touch [Next].

Next

Step 6 Select the setting to use from [On] or [Special SD card required]

On

Special SD card required

●Off
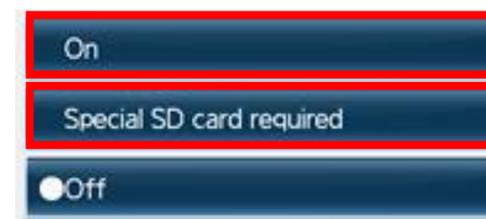
* Do not use this setting unless the product is being used in a sales display.

Initial Setup

Registering wireless monitor stations

Additional wireless monitor stations can be registered.

Main monitor station operations

Step 1 From the top menu, touch → →[Register/Cancel] → [Register].

Step 2 Touch [Sub monitor station].

Step 3 Select the number of the wireless monitor station to be registered.

After this, complete the wireless monitor station operations within about 2 minutes.

Wireless Monitor Station operations

Step 4 When "Please register the device." is displayed on the wireless monitor station screen, press   .
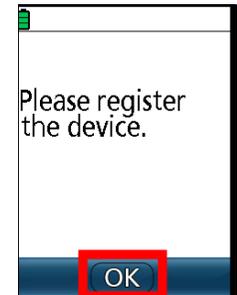
Step 5 Press [F1] (Yes).
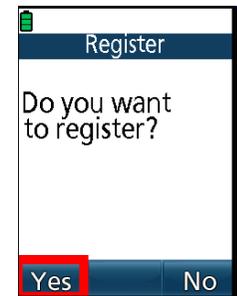
Main monitor station operations

Step 6 To end the operation, press [OFF] on the main monitor station.

Installing Wireless Sensor Cameras

Installing Wireless Sensor Cameras

Install the wireless sensor camera

Step 1   Attach the wall mount bracket to the wall that has the cable access hole and caulk the bracket.

1 Secure the wall mount bracket.

Mounting screws x 4

46 mm

83.5 mm

Cable access hole

DC cable
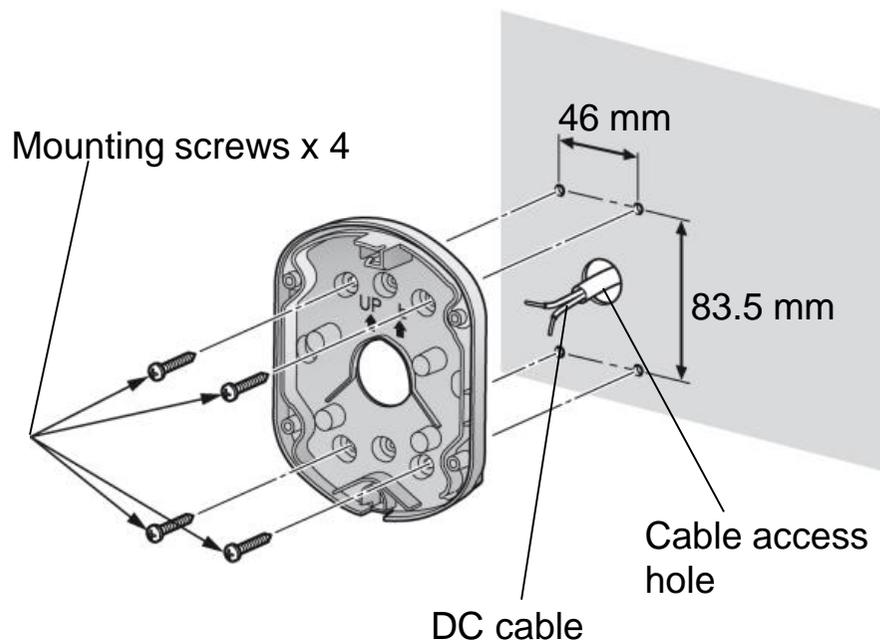
2 Use a water-resistant sealant to caulk around the bracket, except for the bottom part.

Water resistant sealant

Wall mount bracket

The bottom part of the bracket has a water drain hole on it; do not caulk it
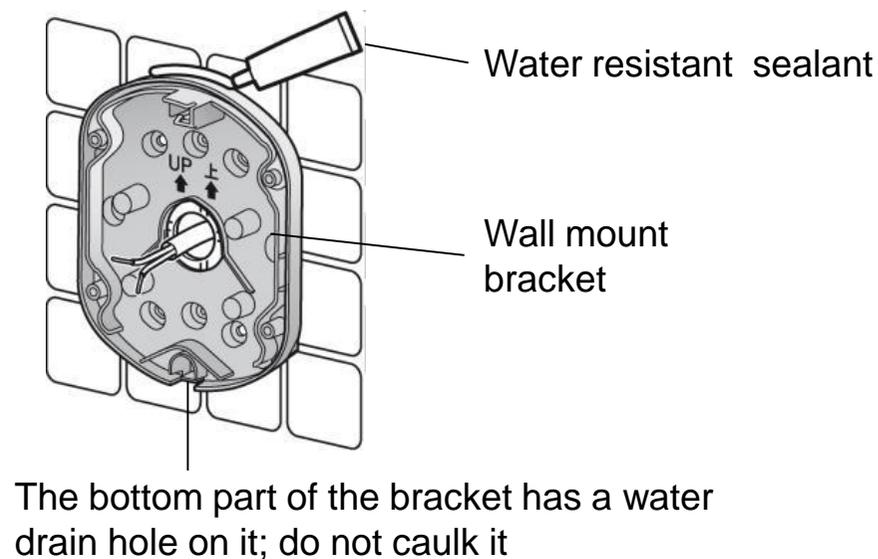
- Mount the wall mount bracket so that the "UP" mark faces up, and caulk as shown here, making sure to fill in any gaps. (If the bracket is not properly waterproofed, water may enter, which may result in fire or electric shock.)

Installing Wireless Sensor Cameras

Install the wireless sensor camera

Step 2   Open the cover on the rear and connect the DC cable.

1 Open the cover.

Cover

Lift the tab to open the cover
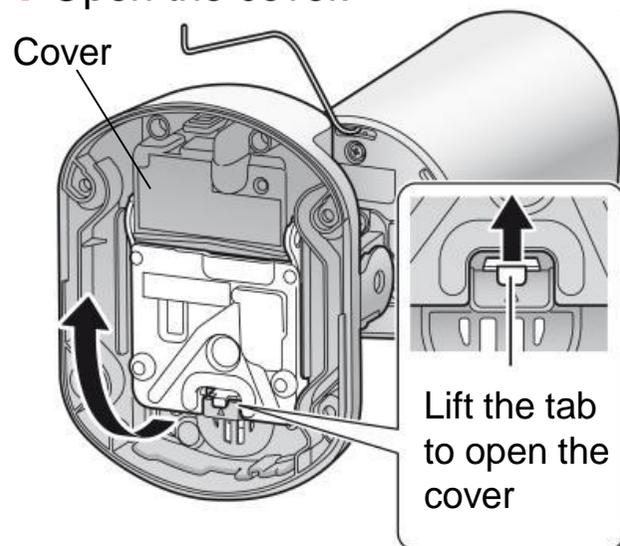
2 Strip the DC cable.

32 mm

12 mm
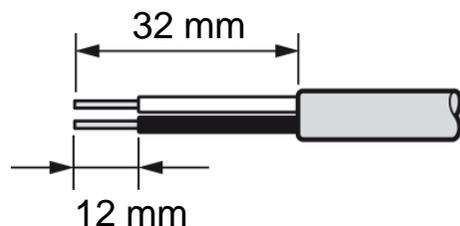
3 Remove the water-resistant rubber (1) from the wireless sensor camera and attach it to the DC cable.

Pass the DC cable through the recessed area of the water-resistant rubber and attach the cable.

Water-resistant rubber

(1)

(2)
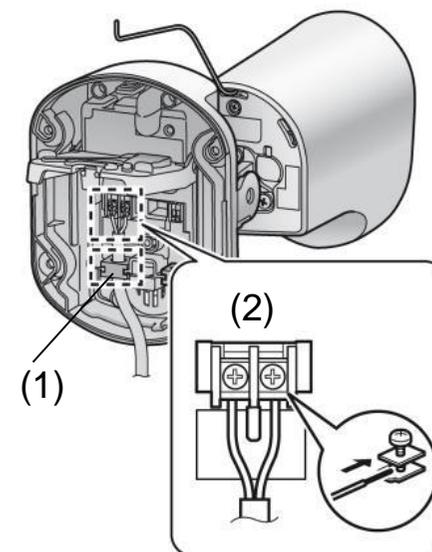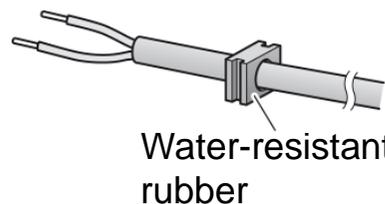
4 Loosen the screws (2) and push in the wires of the DC cable to the terminal connectors (non-polar), then tighten the screws.
- Secure the water-resistant rubber attached to the cable to its original position.

Installing Wireless Sensor Cameras

If connecting an external sensor

Step 3 Connect wires to the external input terminal.

**1** Strip the wires.

32 mm

12 mm
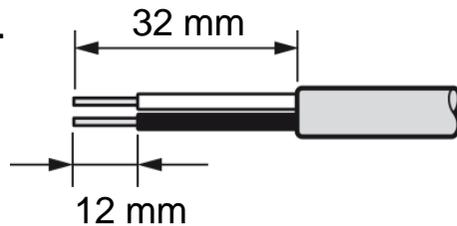
2 Remove the water-resistant rubber (3) from the wireless sensor camera and attach it to the wires.

3 Connect the wires to the terminals (4) and reattach the water-resistant rubber and secure it in its original position
• Insert the wires while pressing the terminal buttons with the tip of a screwdriver.

(4)

(3)

Step 4 Close the cover (push closed until it clicks).

Step 5 Attach the wireless sensor camera to the wall mount bracket and secure it.
  • After attaching the 4 screws, attach the screw covers.

Screws

Screw covers
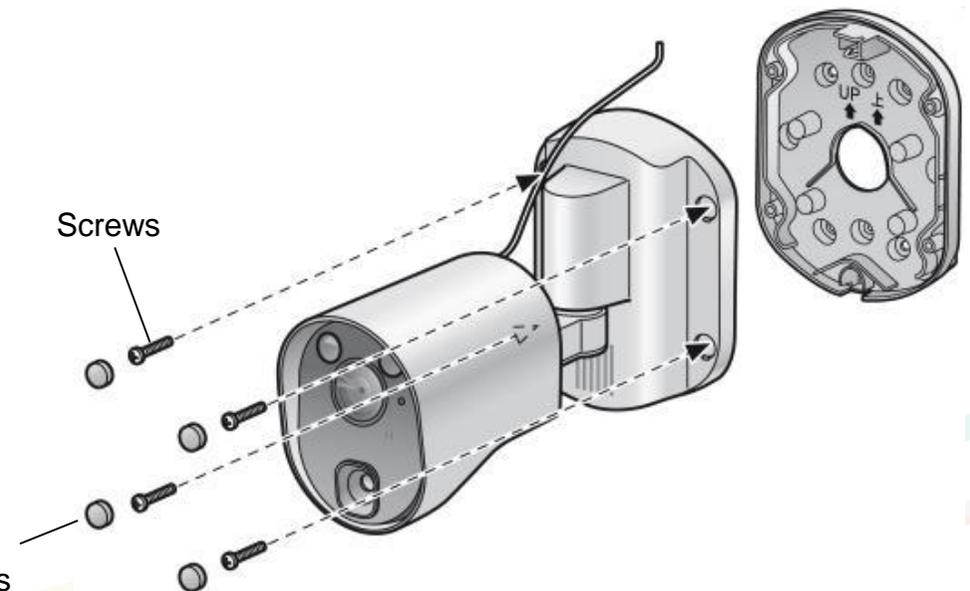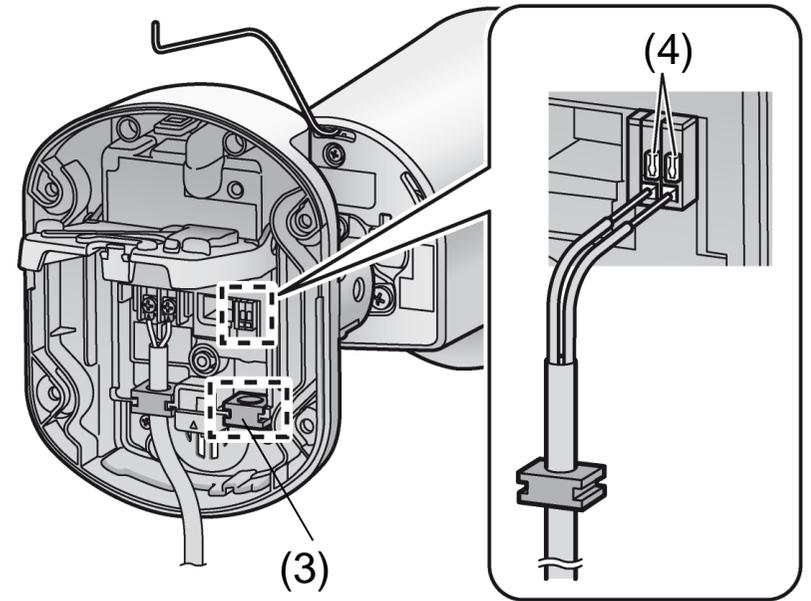
Installing Wireless Sensor Cameras

Step 6 Adjusting the wireless sensor camera angle.
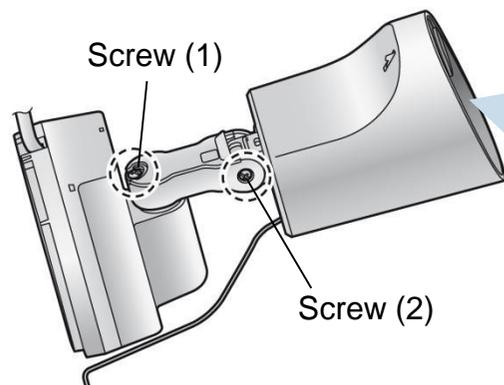
Screw (1)

Screw (2)

Adjusting angle left and right:
1 Loosen screw (1) and adjust the angle left or right.
2 Tighten screw (1)

Adjusting angle up and down:
1 Hold the wireless sensor camera in one hand and loosen screw (2) to adjust the angle up or down.
2 Tighten screw (2).

Step 7 Turn on the wireless sensor camera, monitor the wireless sensor camera image, confirm the viewable area and the wireless sensor camera audio.

• If you're not satisfied with the viewable area, adjust the camera angle and confirm the results.
• If the Video Intercom System includes a sub monitor, take it to the camera installation location and confirm the image displayed on the sub monitor while adjusting the camera angle as necessary.

Step 8 After you have adjusted the angle, attach the safety wire to the wall.

Washer

Safety wire

Mounting screw
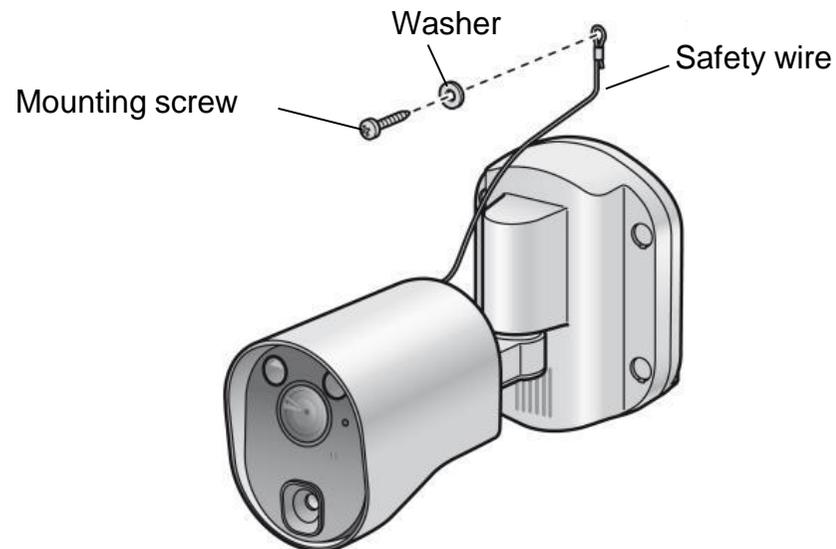
• Attach the safety wire high on the wall so that the wireless sensor camera does not strike anyone in the event the wireless sensor camera becomes detached from the wall.
• Do not hang from the wireless sensor camera.

Step 9 Test the sensor detection and image recording.

Using external sensors

About the external input terminal (for an external sensor connection)

Choose an external sensor that is compatible with the specifications of the external input terminal.
- After connection, use the main monitor station to select the contact type ([Make contact] or [Break contact]) that matches the device.

Cover

Bracket cover

Lift the tab to open the cover

External input terminal

Do not connect anything to this terminal.
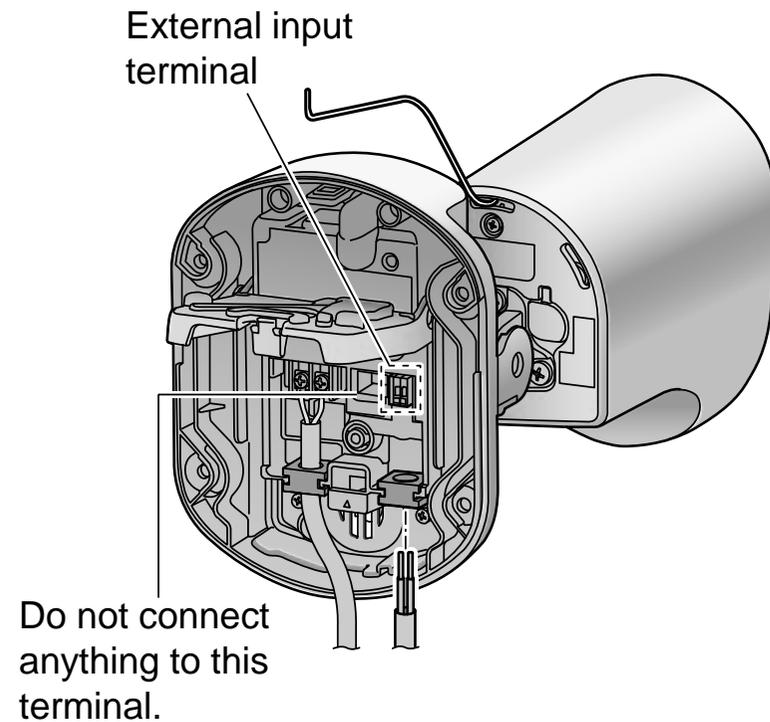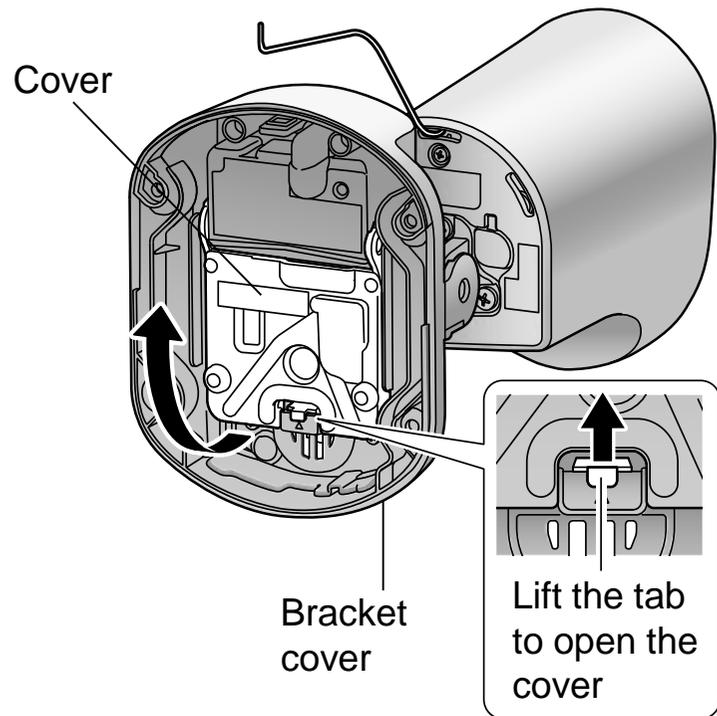
Wire type and length

Wiring run		Wire type*1		
		Diameter		Length (Max.)
Wireless Camera - Power supply unit	①	φ 0.65 mm	22 AWG	50 m
		φ 1.0 mm	18 AWG	100 m
Power supply unit - AC power source	②	φ 1.2 mm	17 AWG	No requirement
		φ 2.0 mm	12 AWG	
Camera - External sensor	③	φ 0.5 mm - φ 0.8 mm (24 AWG - 20 AWG)		According to specification of connected device. Must be no φ 0.8 mm 20 AWG longer than 20 m.

*1 Type: Single-pair cable with outer sheath (jacket)
　　Conductor: Copper solid
　　Outer diameter ①,③: φ 8 mm (Max.)
　　●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 IEC60227 shall be used.

Installation location for the wireless sensor camera

If your Video Intercom System includes a sub monitor, it can be used to easily check the signal status.
(If there is no sub monitor, use a camera.)

■**Using the sub monitor to confirm**
　　By taking the sub monitor to the installation site, you can confirm the signal status on the sub monitor's screen.

Sub monitor signal condition

Strong　　　　　　　　　　　　　　　　　　　　Week　　　　Out of range

Install within this range
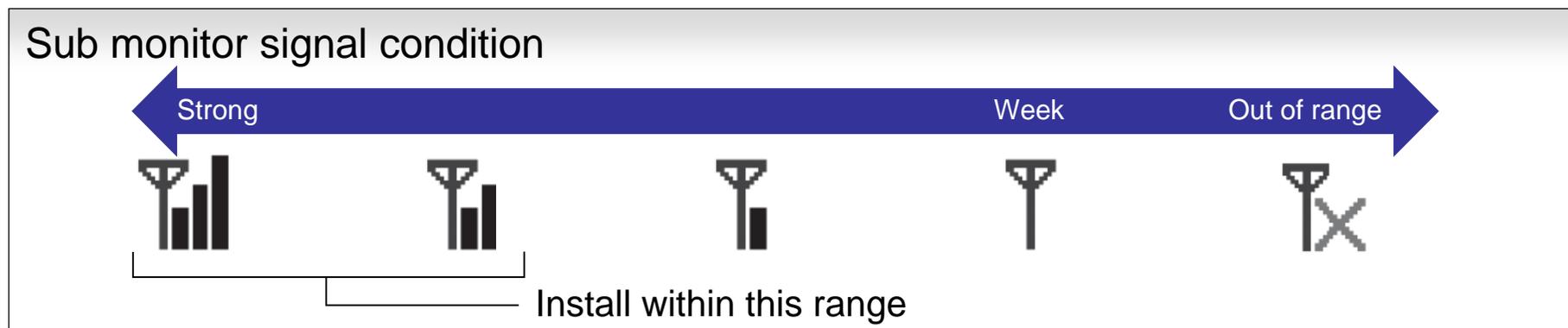
■**Using the camera to confirm**
　　Temporarily connect the camera and the power supply unit to turn on the camera, and then register it to the main monitor.
　　Later, you can take the camera to the installation site and confirm the signal status using the camera's indicator lamp.
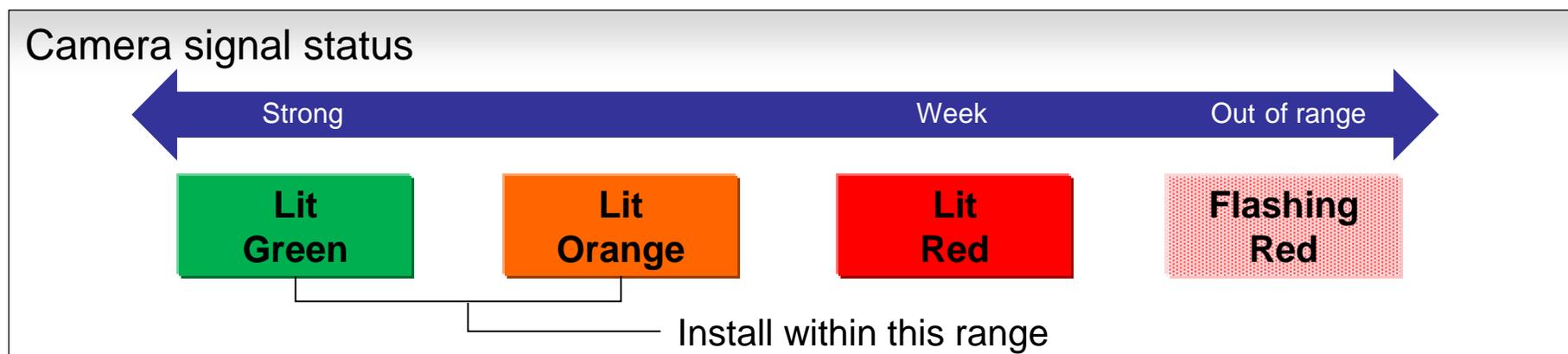
Camera signal status

Strong　　　　　　　　　　　　　　　　Week　　　　Out of range

Lit Green	Lit Orange	Lit Red	Flashing Red

Install within this range

* Install a wireless sensor camera in a location where objects enter from side.
　　This will allow it to better detect the heat of the moving object.

35

Registering the wireless sensor camera

Registering the wireless sensor camera to the main monitor station

Register the wireless sensor camera after connecting it to a power supply.
- Register 1 wireless sensor camera at a time. Multiple wireless sensor cameras cannot be registered at the same time.
- These operations are for VL-WD812EX model wireless sensor cameras. See the wireless sensor camera's manuals as required.

Main monitor station operations

Step 1 From the top menu, touch ⚙ .

Step 2 Touch 🔧 .
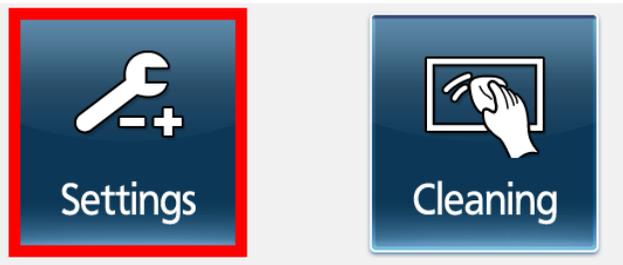
Step 3 Touch [Register/Cancel] → [Register].

Register/Cancel

Step 4 Touch [Camera].

Step 5 Touch the number of the wireless sensor camera to be registered.

After this, use the wireless sensor camera and complete the following steps within about 5 minutes.

Registering the wireless sensor camera

Registering the wireless sensor camera to the main monitor station

Wireless sensor camera operations

Step 6 With the power connected to the wireless sensor camera, press the register button on the rear side of the wireless sensor camera.

• The register button is located behind the register button cover (1). Peel open the register button cover and use the thin end of the sensor range cap removement tool to press and hold the register button (2) for about 3 seconds. After this make sure to firmly close the register button cover.
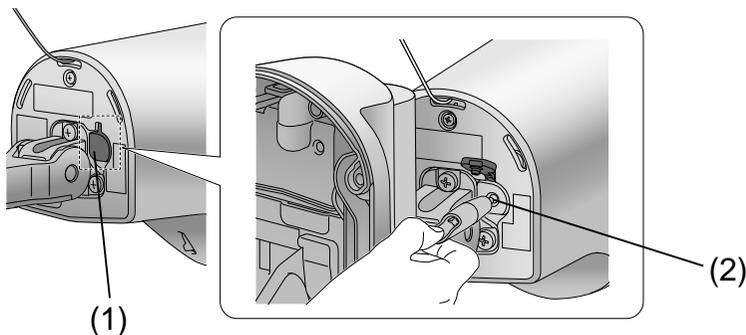
• The wireless sensor camera's indicator lamp (3) flashes in green during registration. When registration is complete, a beep sounds and the indicator lamp lights in green.

(1)

(2)

(3)
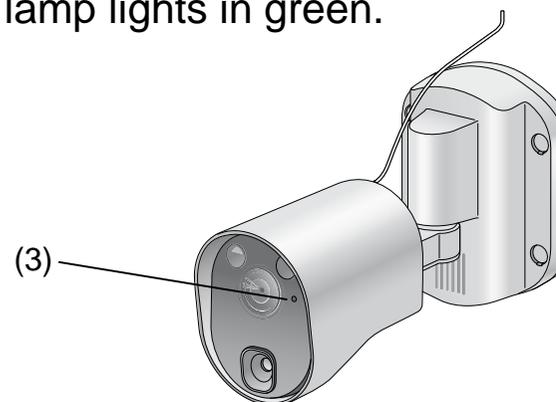
Main monitor station operations

Step 7 To end the operation, press [OFF] on the main monitor station.

* Install a wireless sensor camera in a location where objects enter from side. This will allow it to better detect the heat of the moving object.

Viewing wireless sensor camera images

Monitoring the outside with the wireless sensor camera

You can monitor the sounds and images from the wireless sensor camera.

Main monitor station operations

Step 1 From the top menu, touch [⦿] .
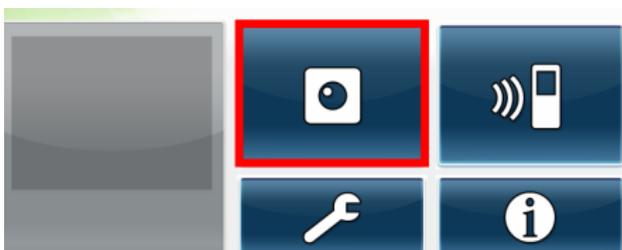
**Step 2** Touch the number of the wireless sensor camera (1) that you want to monitor with and then the image (2).

Step 3 The images from the wireless sensor camera is displayed.

• Press [⦅ TALK] to speak to the monitored party.
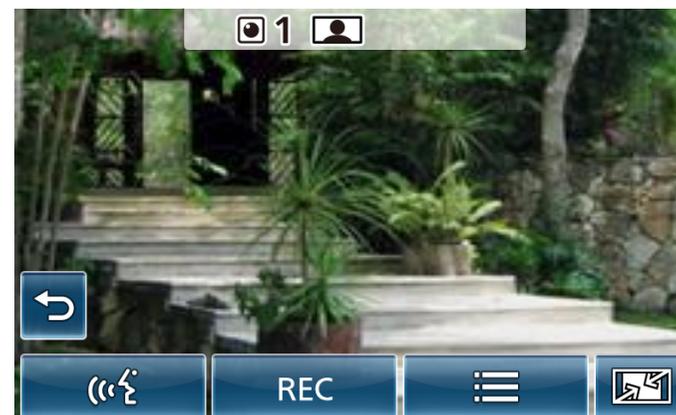
Step 4 To end the operation, press [OFF] .

Viewing wireless sensor camera images

Monitoring the outside with the wireless sensor camera

Wireless monitor station operations

Step 1   Press and select the wireless sensor camera you want to monitor with by pressing .
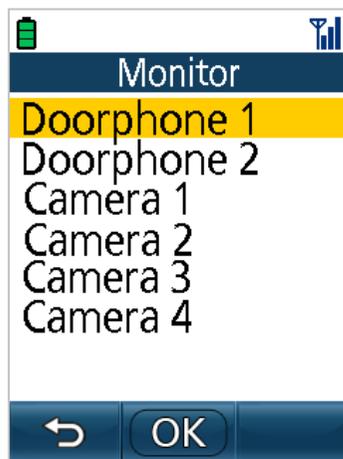
Step 2   Press .

Step 3   The images from the wireless sensor camera are displayed.

•Press TALK to speak to the monitored party.

Step 4   To end the operation, press OFF .

Registering DECT Repeaters

Panasonic
VL-FKD2

Registering DECT Repeaters

Registering DECT repeaters to the main monitor station

DECT repeaters can be registered and used with this product.

Main monitor station operations

Step 1 From the top menu, touch [🔧] → [🔧₊] → [Register/Cancel] → [Register].


Step 2 Touch [Repeater].

Step 3 Select the number of the DECT repeater to be registered and then touch [Next].

Step 4 Select the device that you want the DECT repeater to connect to.

After this, use the DECT repeater and complete the DECT repeater operations within about 2 minutes.

DECT repeater operations

Step 5 Connect power to the DECT repeater that you want to register, and then press the PROGRAM (1) for about 3 seconds.

•The [⊽/ID] indicator (2) flashes in green.
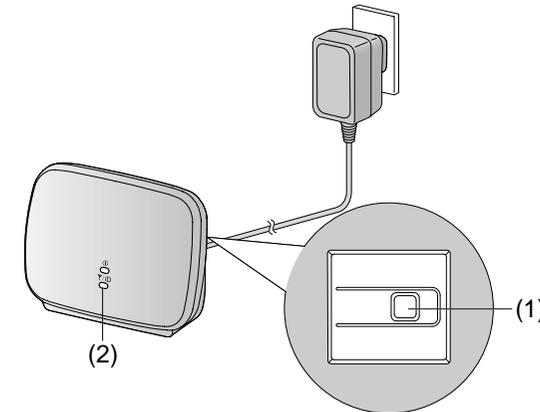
•The indicator lights when the registration is completed.

Main monitor station operations

Step 6 To end the operation, press [OFF] on the main monitor station.

Cancelling wireless monitor stations/ wireless sensor cameras/DECT repeaters

Cancelling wireless monitor stations, wireless sensor cameras, and DECT repeaters

-Cancelling can only be performed on the main monitor station.

Step 1 From the top menu, touch 🔧 .

Step 2 Touch 🔧 .
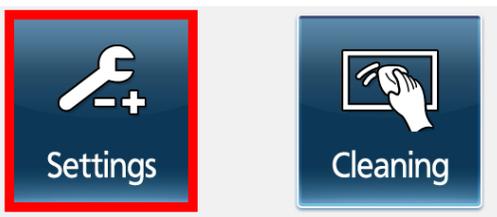
Step 3 Touch [Register/Cancel] → [Cancel].

Step 4 Select the type of device to be cancelled.
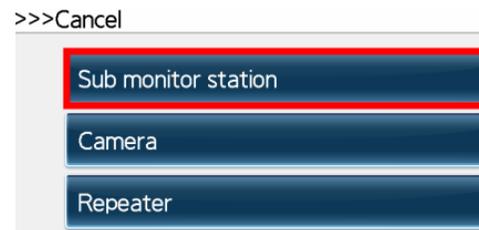
Step 5 Select the device to cancel from the displayed list.
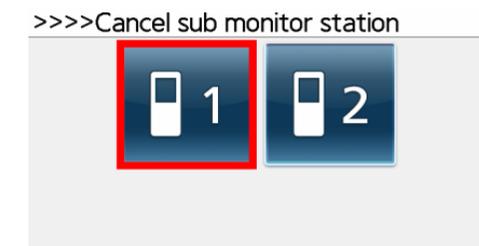
(Wireless monitor station example.)

Step 6 Confirm the message and then touch [Yes].
  • A beep sounds and "Cancel completed" is displayed.

Step 7 To end the operation, press OFF .

* Cancel any wireless monitor stations, wireless sensor cameras, or DECT repeaters that you no longer use or that are registered to another main monitor station.

Specifications

Main Monitor Station (VL-MWD501EX)

|	
Power source	Power supply unit (VL-PS240) 24 V DC, 0.5 A
Power consumption	Standby: approx. 1.4 W During operation: approx. 10 W
Dimensions (mm) **(height x width x depth)**	Approx. 180 x 165 x 21 (excluding protruding sections)
Weight	Approx. 470 g
Operating environment	Ambient temperature: approx.0℃ to +40℃ Relative humidity (non-condensing): up to 90%
Display	Approx. 5 inches, wide colour display
Talking method	Hands-free
Installation method	Wall mount (mounting bracket supplied)
Frequency range	1.88 GHz to 1.90 GHz
Option output (A contact)	Rated load: 24 V AC/DC, 0.3 A or lower Minimum applicable load: 5 V DC, 0.001 A (Output when there is a call from the door station.)
Included Accessories	Power supply unit (VL-PS240) x 1, Mounting bracket x 1, Cable binder x 1

• **Compatible SD cards**
  The following SD cards, that comply with the SD standards, can be used (we recommend SD cards manufactured by Panasonic).

  - Supported SD card types
    SD memory card*1: 2 GB
    SDHC memory card*2: 4 GB - 32 GB
    SDXC memory card: 48 GB and 64 GB
  - Format
    SD memory card: FAT16
    SDHC memory card: FAT32
    SDXC memory card: exFAT

*1 miniSD and microSD memory cards can also be used. However, an adaptor is required.
*2 miniSDHC and microSDHC memory cards can also be used. However, an adaptor is required.

Front view

Side view

165

21

180

Panasonic

VL-MWD501

TALK

OFF
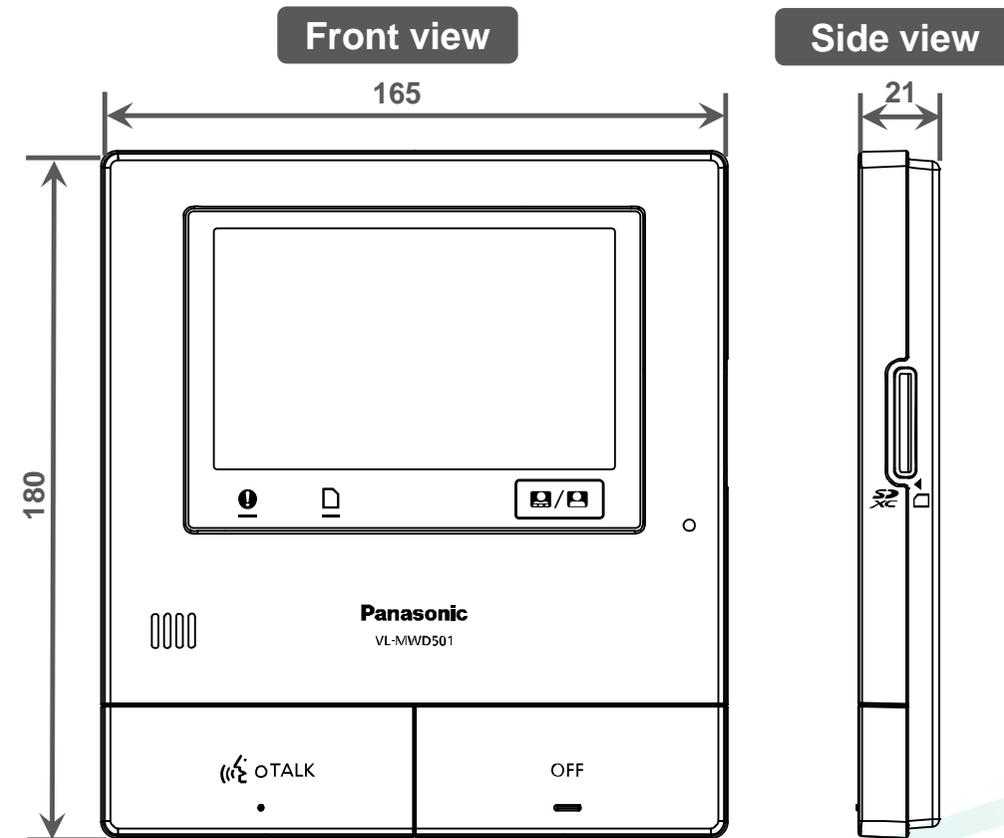
Power Supply Unit (VL-PS240)
(indoor use only)

| Power source	Input: 220-240 V AC, 0.2 A,50/60 Hz Output: 24 V DC, 0.6 A
Dimensions (mm) (height x width x depth)	Approx. 116 x 100 x 54 (excluding protruding sections)
Mass (weight)	Approx. 230 g
Operating environment	Ambient temperature: approx. 0℃ to +40℃ Relative humidity (non-condensing): up to 90%
Installation method	Attach to DIN rail
Included Accessories	Cable binder x 2

Front view

INPUT : 220 - 240 V 〜 50 / 60 Hz 0.2 A

STRIP LENGTH
7mm

CAUTION
KEEP DRY.
INDOOR USE ONLY

⊞ ⊟ OUTPUT : 24 V ⎓ 600 mA

116

92

100

Side view

54
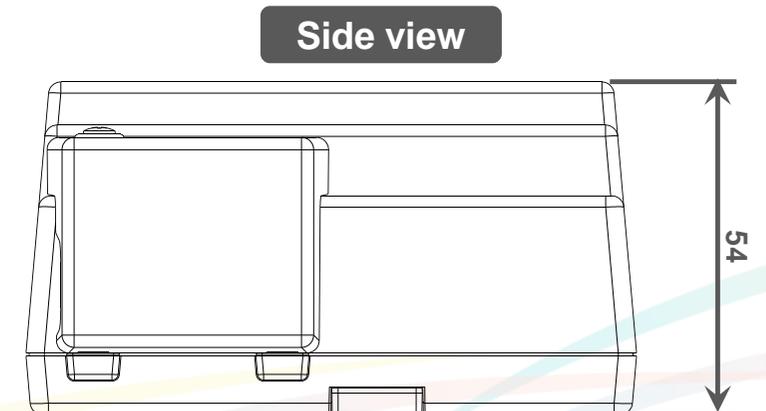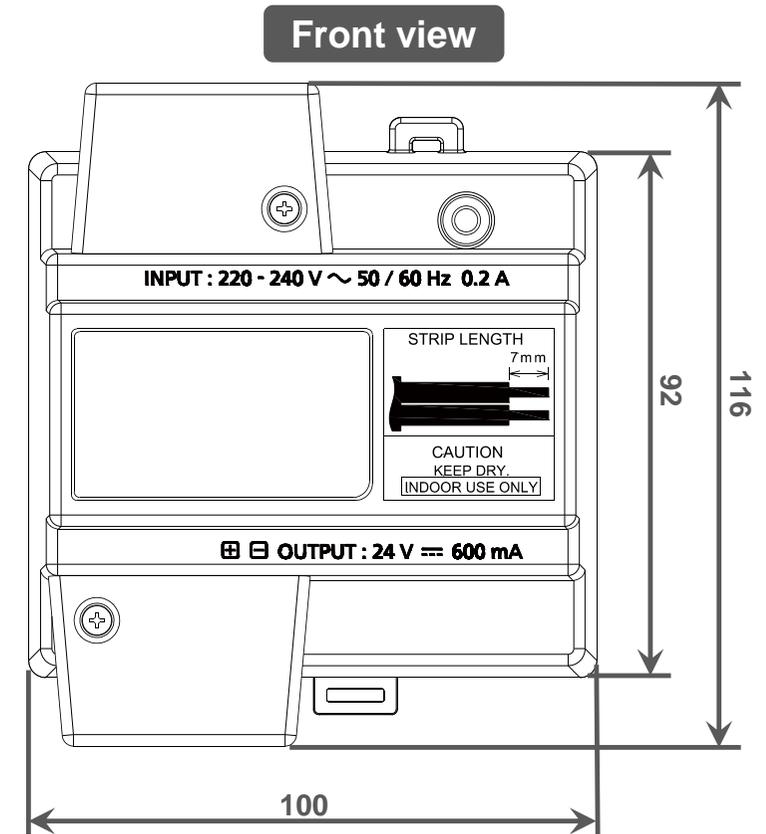
Specifications: Door Station

Door Station (VL-V554EX/VL-V554UEX)

|	
Power source	Power supplied by the main monitor station 20 V DC, 0.23 A
Dimensions (mm) (height x width x depth)	**VL-V554EX:** approx. 169 x 118 x 30 (excluding protruding sections) **VL-V554UEX:** approx. 169 x 118 x 16.5 (excluding sections embedded into the wall)
Mass (weight)	**VL-V554EX:** approx. 405 g **VL-V554UEX:** approx. 345 g
Operating environment	Ambient temperature: approx. -10 ℃ to +50 ℃ Relative humidity (non-condensing): up to 90 %
Viewing angle	Horizontally: approx. 170˚ Vertically: approx. 115˚
Installation method	**VL-V554EX:** surface mount (mounting base supplied) **VL-V554UEX:** flush mount (flush mounting box supplied)
Minimum illuminance required	1 lx (within approx. 50 cm from the camera lens)
Lighting method	LED lights
IP rating	IP54*1
IK rating	Compliant with IK07
Included Accessories	Mounting base x 1 (EX only), Flush mounting box x 1 (UEX only), Screw x 4, Name plate x 2, Hex wrench x 1

Front view

118

169

Panasonic
VL-V554

Side view

35.8

30

16.5
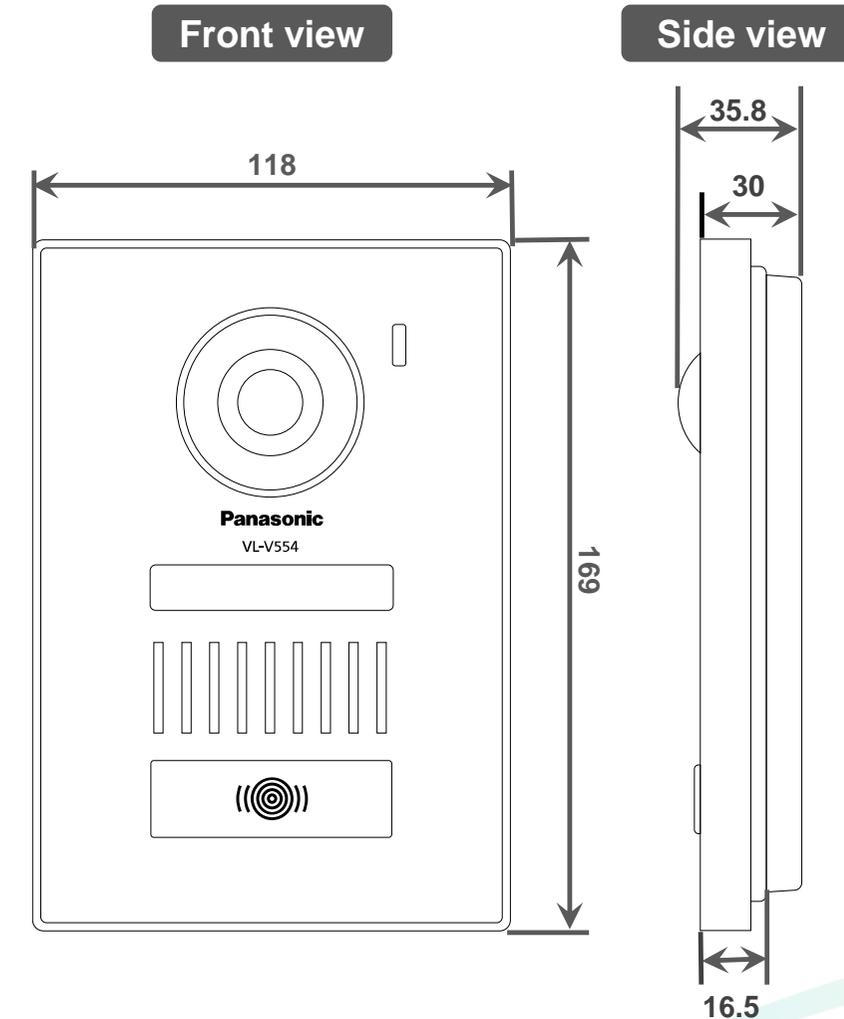
*1 Water resistance is only assured if the door station is installed correctly according to the instructions in the Installation Guide, and appropriate water protection measures are taken.

Specifications: Wireless Monitor Station

Wireless Monitor Station (VL-WD613EX)

■ Main body

Power source	Rechargeable Ni-MH (AAA x 2)
Dimensions (mm) (height x width x depth)	Approx. 173 x 52 x 30 (excluding protruding sections)
Mass (weight)	Approx. 160 g (including the batteries)
Operating environment	Ambient temperature: approx. 0℃ to +40℃ Relative humidity (non-condensing): up to 90%
Display	Approx. 2.2 inches, colour display
Frequency range	1.88 GHz to 1.90 GHz
Talking method	Hands-free
Operating time *1	Standby use: approx. 80 hours
Charging time *2	Approx. 8 hours
Transmitting range	Approx. 100 m (line-of-sight distance from the main monitor station)

*1 When used fully charged in an operating temperature of 20℃.
*2 When the operating temperature is 20℃. The charging time may increase when the operating temperature is lower than this.

Front view

52

F1 F2
MONITOR
TALK OFF

Panasonic
VL-WD613

0

Side view

30

173
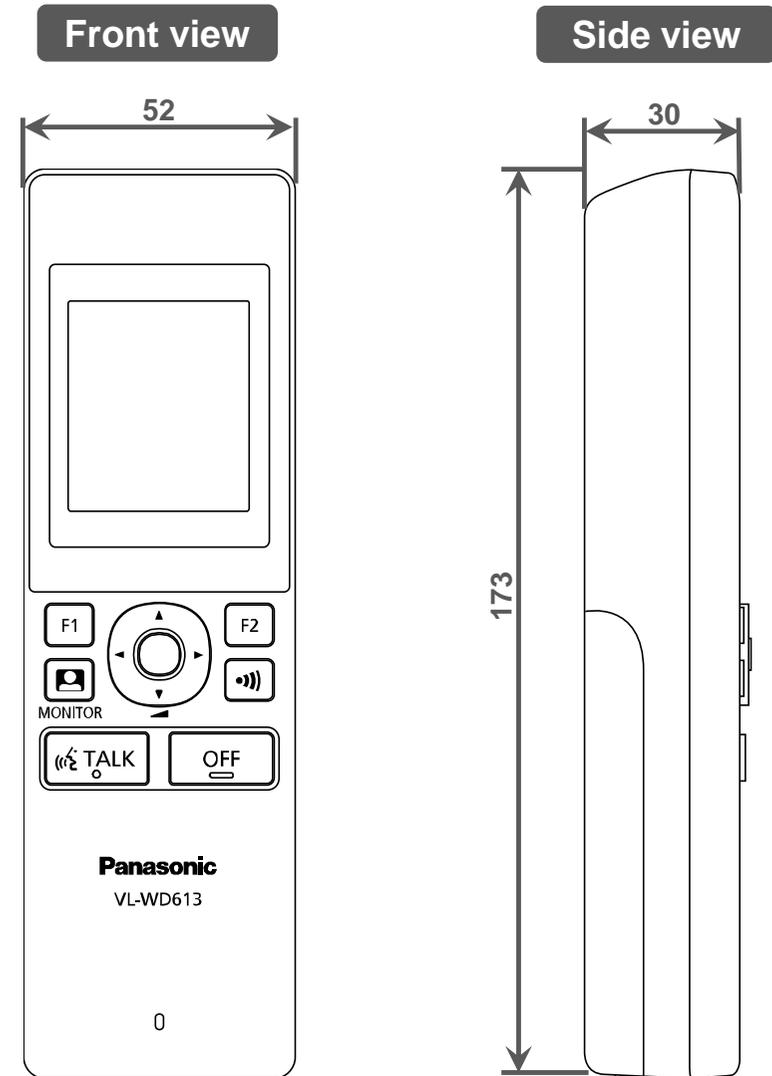
Specifications: Wireless Monitor Station

Wireless Monitor Station (VL-WD613EX)

■ Charger

|	

Power source	AC adaptor (PNLV226BX/PNLV226E)
	  Input: 220-240 V AC, 0.1 A, 50/60 Hz
	  Output: 5.5 V DC, 0.5 A

Power consumption	Standby: approx. 0.4 W
	      (when the sub wireless monitor
	        station is not placed in the charger)
	During charging: approx. 1.4 W

Dimensions (mm) **(height x width x depth)**	Approx. 43 x 81 x 76 (excluding protruding sections)
Mass (weight)	Approx. 70 g (excluding the AC adaptor)
Operating environment	Ambient temperature: approx. 0℃ to +40℃ Relative humidity (non-condensing): up to 90%
Included Accessories	AC adaptor x 2 (PNLV226BX x 1, PNLV226E x 1) *1 Rechargeable battery x 2, Charger x 1

*1 Please use the plug type that matches the power supply in your region from the two
    plug types provided.

Front view

43

81

Side view

76
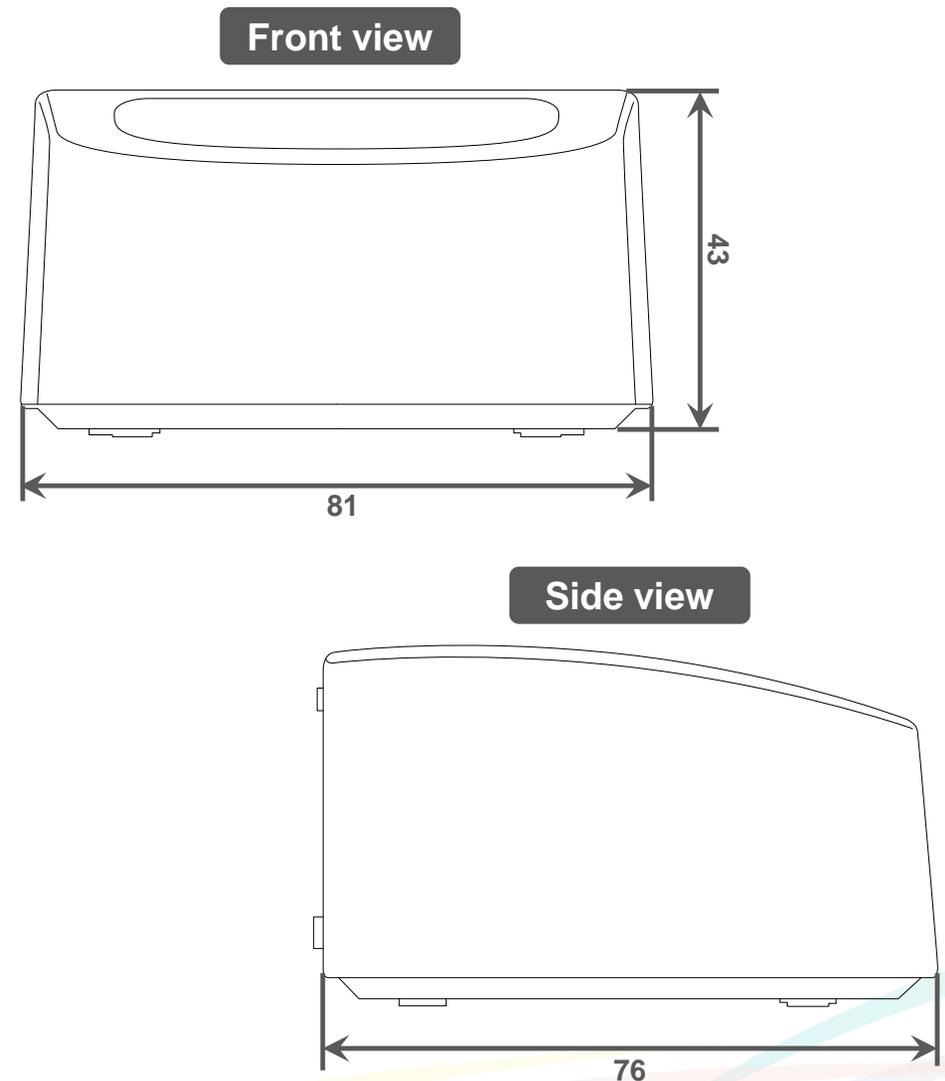
Specifications: Wireless Sensor Camera

Wireless Sensor Camera (VL-WD812EX)

Power source	Power supply unit (VL-PS241) 24 V DC, 0.4 A

Power consumption	During standby: approx. 1.5 W
	During operation:
	  approx. 4.5 W (when the LED lights are not lit),
	  approx.8 W (when the LED lights are lit)

Dimensions (mm) **(height x width x depth)**	Approx. 160 x 118 x 290 (when the camera is front facing and including the wall mount bracket)
Mass (weight)	Approx. 960 g
Installation method	Wall mount (wall mount bracket supplied)
Operating environment	Ambient temperature: approx. -20 ℃ to +50 ℃ Relative humidity (non-condensing): up to 90 %
Transmitting range	Approx. 100 m (line-of-sight distance from the main monitor)
Frequency range	1.88 GHz to 1.90 GHz
Image sensor	0.3 M pixel CMOS
Minimum illuminance required	1 lx*1
Focal length	Fixed (0.4 m - infinity)
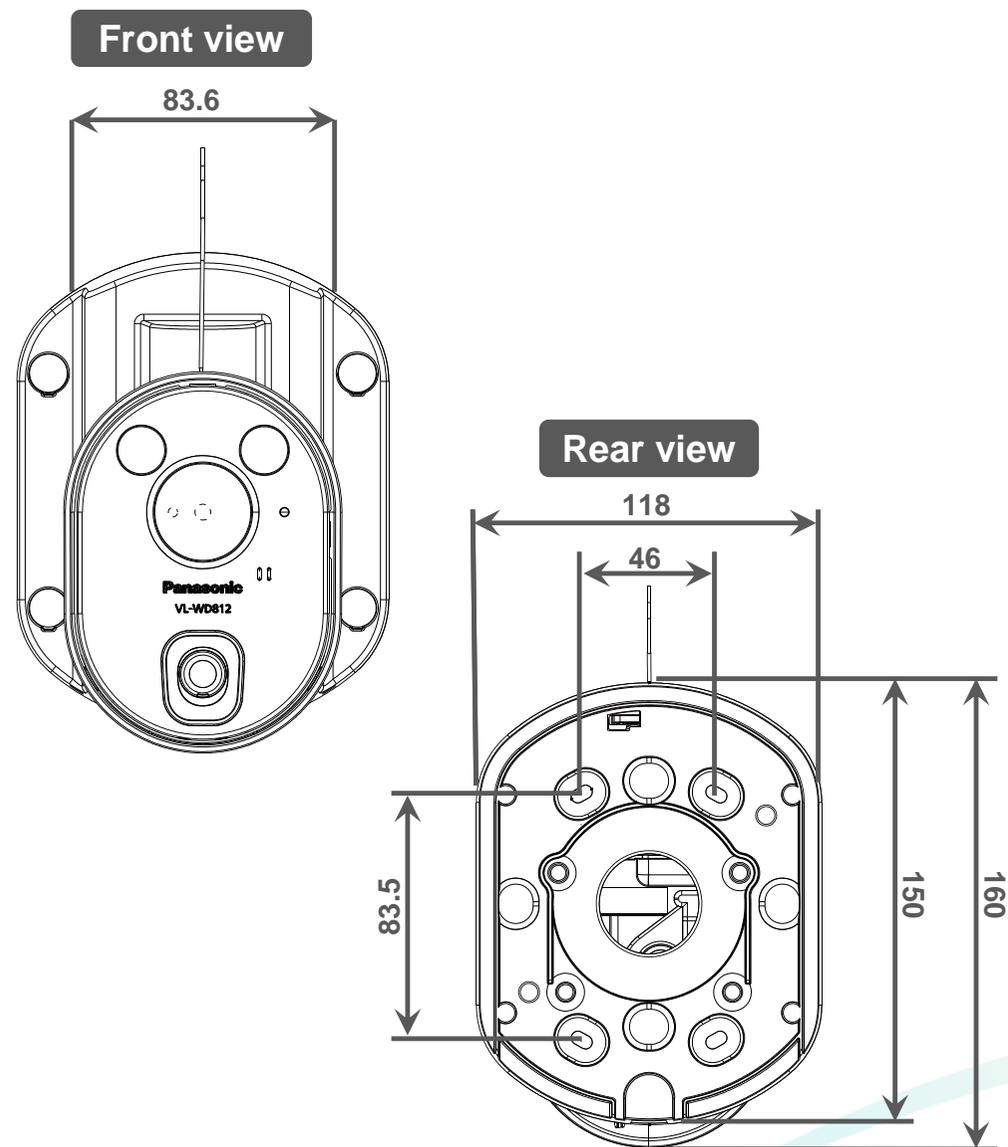
*1 The minimum illuminance required when the camera's [Brightness] setting is set to [+3].

Front view

83.6

Rear view

118

46

83.5

150

160

Wireless Sensor Camera (VL-WD812EX)

Angular field of view (camera angle)	Horizontal: approx. 53°, vertical: approx. 41°
Sensor detection method	Pyroelectric infrared sensor (heat sensor) and motion detection
Sensor detection range	・**Heat sensor** (when the surrounding temperature is approx. 20 ℃) Horizontal: approx. 63°, vertical: approx. 20°, detection range: approx. 5 m ・**Motion detection sensor** Horizontal: approx. 53°, vertical: approx. 41°
Lighting method	2 white LED lights*2
IP rating	IP54*3
Adjustable mounting angles	Horizontal: ±90°, vertical: facing forward - facing down approx. 60° (adjustable when mounting)
Heat sensor adjustable angles	Manually adjustable to 2 angles
Included Accessories	Power supply unit (VL-PS241) x 1, Wall mount bracket x 1, Screw x 4, Sensor range cap x 1 set of 4, Cap removement tool x 1, Screw cover x 4, Washer x 1

Side view

290
142
120.2
94

*2 Approx. 8.5 lx when 3 m in front of the camera, and approx. 4 lx when 3 m away and 20° to the left or right of the camera.

*3 Water resistance is only assured if the camera is installed correctly according to the instructions in the Installation Guide, and appropriate water protection measures are taken. Do not install the camera in areas directly exposed to water or rain.
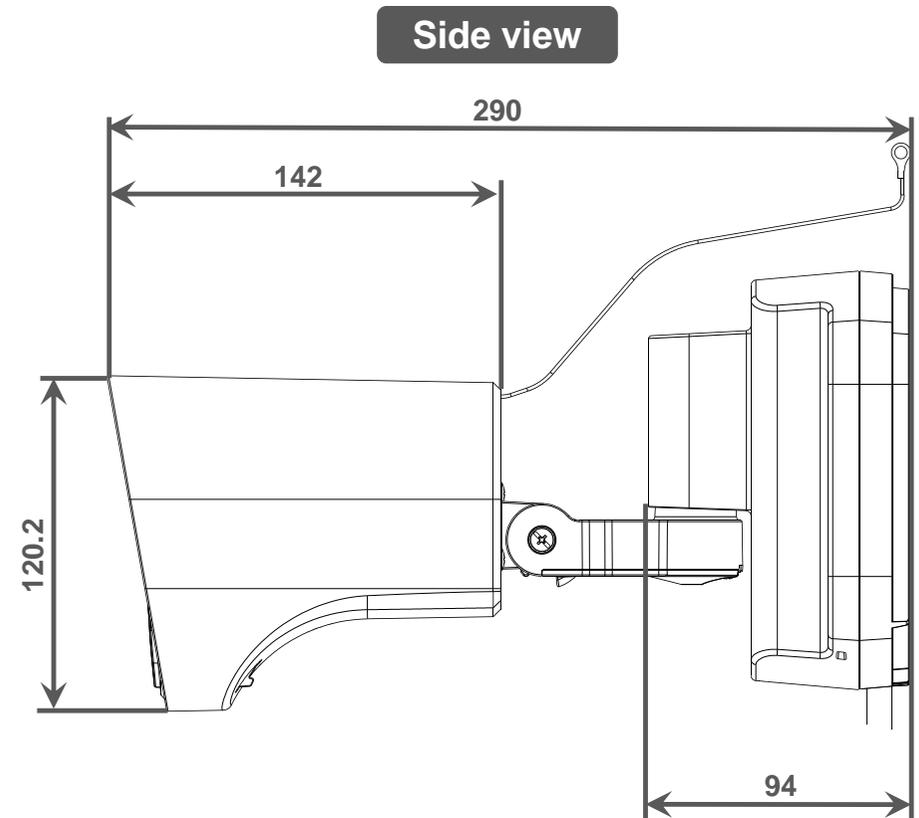
Specifications: DECT Repeater

DECT Repeater (VL-FKD2EX)

Power source	AC adaptor (PQLV219BX/PQLV219E)
	  Input: 220-240 V AC, 0.1 A, 50/60 Hz
	  Output: 6.5 V DC, 0.5 A

Power consumption	During standby: approx. 1.5 W During operation: approx. 2.3 W (when transmitting)
Dimensions (mm) (height x width x depth)	Approx. 82 x 111 x 39
Mass (weight)	Approx. 88 g (excluding the AC adaptor)
Operating environment	Ambient temperature: approx. 0℃ to +40℃ Relative humidity (non-condensing): up to 90%
Frequency range	1.88 GHz to 1.90 GHz
Transmitting range	Approx. 100 m (line-of-sight distance from the main monitor)
Included Accessories	AC adaptor x 2 (PQLV219BX x 1, PQLV219E x 1) *1

*1 Please use the plug type that matches the power supply in your region from the two
    plug types provided.

Front view

111

82

Panasonic

VL-FKD2

Ⓘ

Ⅴ/ID

Side view

39

82