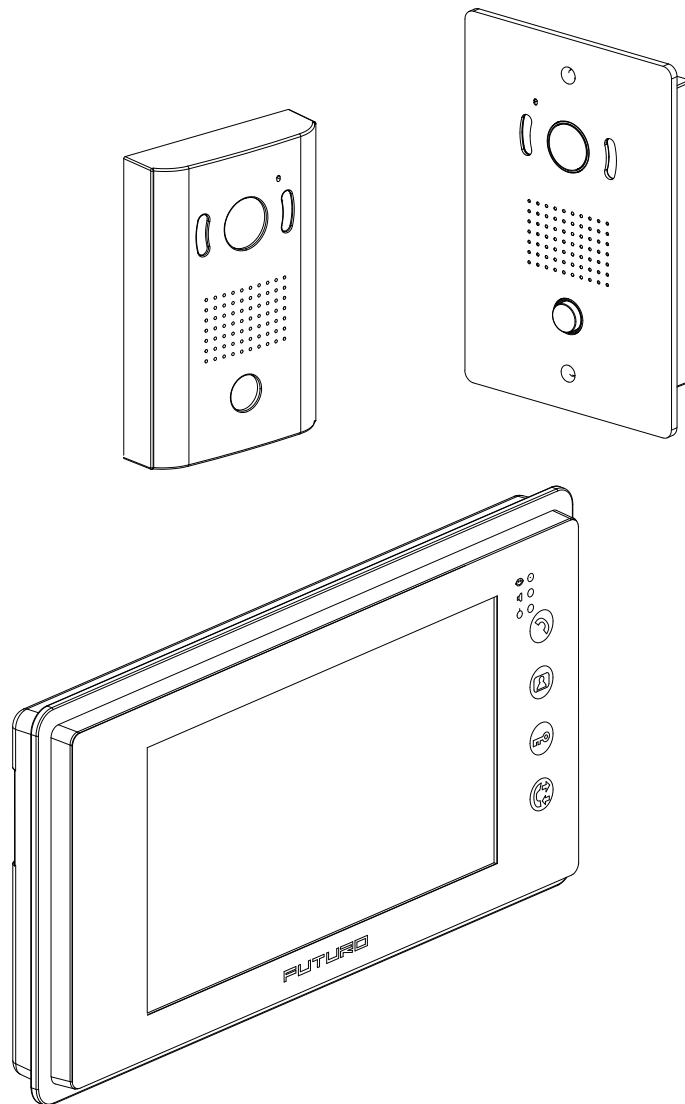


# FUTURO

**SERIES 4** THE ADVANCED 7" VIDEO INTERCOM SYSTEM



FUTURO-SD4B STANDARD 7" INTERCOM MONITOR  
FUTURO-SD4 WITH PHOTO RECORDING FUNCTION

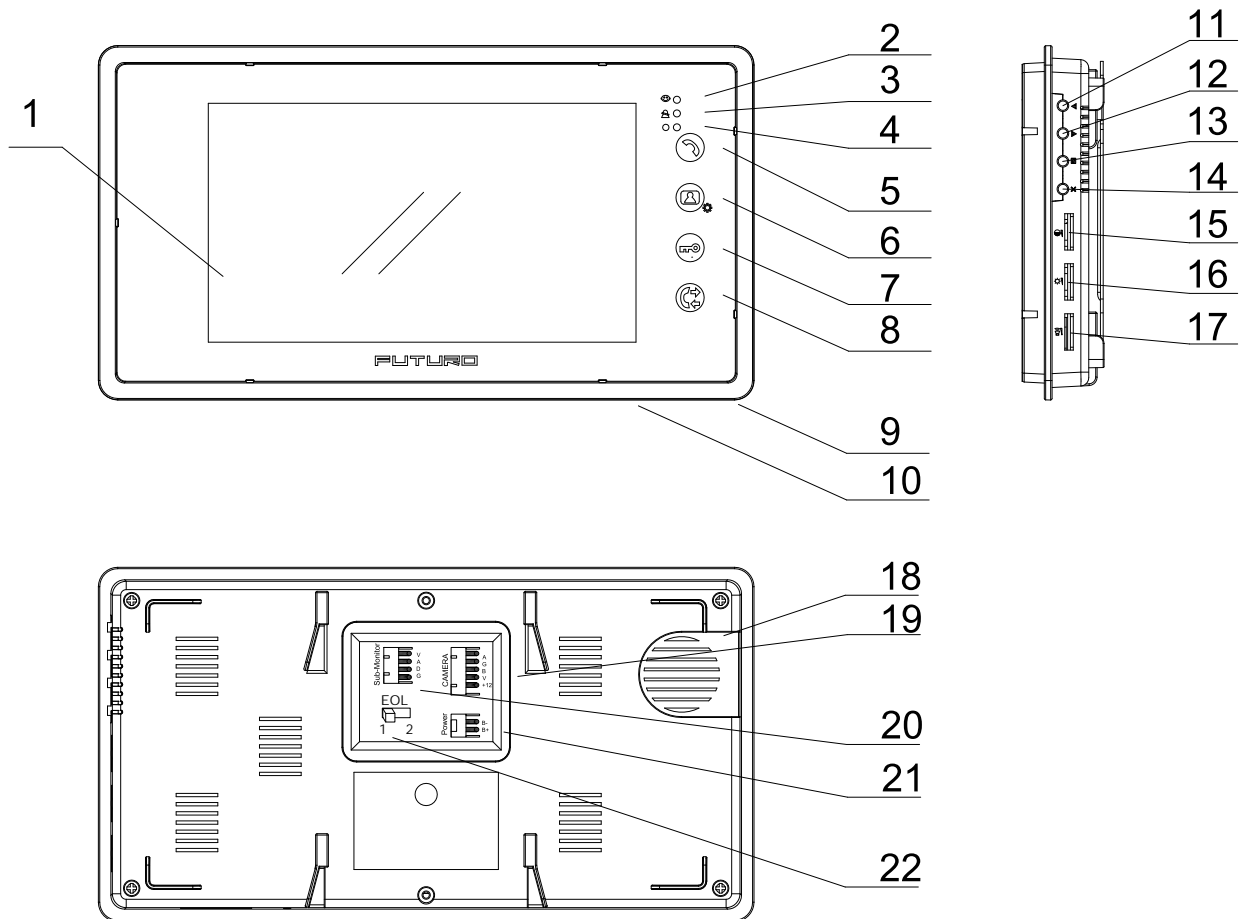
**VIDEOMAN**  
VIDEOMAN and FUTURO are a trademark  
of EOS Australia Pty Ltd

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# 1 Monitor Description

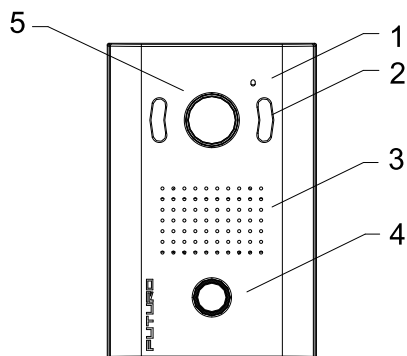
- FUTURO-SD4 : with Photo Recording Function
- FUTURO-SD4B : without Photo Recording Function



- |  |  |
|--|--|
| 1 7" TFT LCD SCREEN                                  | 12 ► FORWARD                           |
| 2 POWER & BABY MONITORING LED (WHITE)                | 13 ■ SETUP / MEMORY MODE               |
| 3 MELODY MUTE LED (RED)                              | 14 X DELETE PHOTO                      |
| 4 PHOTO RECORDING LED (GREEN)                        | 15 BRIGHTNESS                          |
| 5 TALK<br>/ Melody Volume / Baby Monitoring Activate | 16 CONTRAST                            |
| 6 MONITORING<br>/ Setup / Melody Select              | 17 SPEAKER VOLUME                      |
| 7 DOOR OPEN<br>/ Melody Mute / Save setup            | 18 SPEAKER                             |
| 8 INTERPHONE<br>/Paging                              | 19 DOORSTATION TERMINAL                |
| 9 FUTURO-SD-CARD SLOT                                | 20 SUB MONITOR TERMINAL                |
| 10 MICROPHONE  | 21 POWER TERMINAL                      |
| 11 ◀ BACKWARD  | 22 EOL(End of Line) Termination Switch |

## 2 Doorstation Description

### FUTURO-CZ4



1. MICROPHONE

2. LEDs for night vision

3. SPEAKER

4. CALL BUTTON

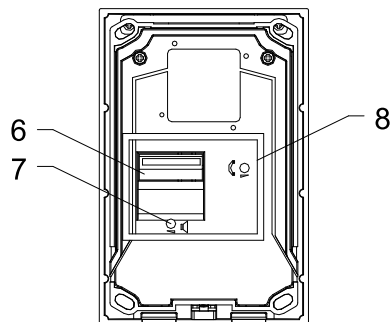
5. CCD CAMERA

6. TERMINAL

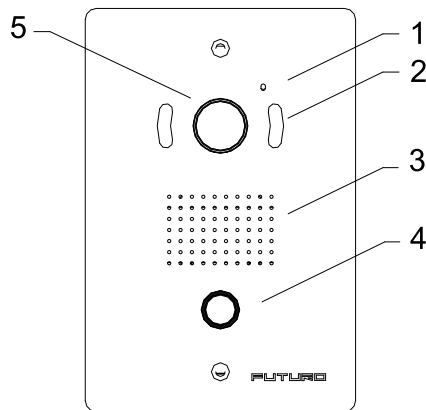
- A: AUDIO
- G: GROUND
- B: B+
- V: VIDEO
- D/O: Door Open  
Normally Open for an  
Electric Door Latch
- 12V: Constant power for  
the back light &  
Advanced recording

7. MICROPHONE SENSITIVITY  
ADJUST

8. SPEAKER OUTPUT ADJUST

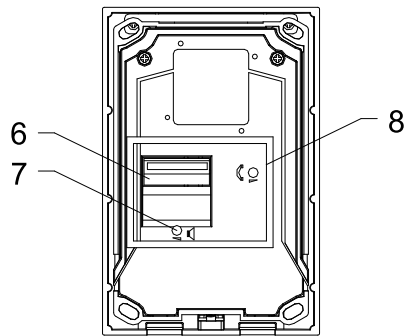


# FUTURO-CP4



- 1. MICROPHONE
- 2. LEDs for night vision
- 3. SPEAKER
- 4. CALL BUTTON
- 5. CCD CAMERA
- 6. TERMINAL

- A: AUDIO
- G: GROUND
- B: B+
- V: VIDEO
- D/O: Door Open  
Normally Open for an  
Electric Door Latch
- 12V: Constant power for  
the back light &  
Advanced recording



- 7. MICROPHONE SENSITIVITY  
ADJUST
- 8. SPEAKER OUTPUT ADJUST

## 3 Features and Operations

### Basic Operation

#### • Function Button Back Light

- 1) Function buttons become active with backlight if any of the buttons are touched, a call is made from a doorstation or other monitors, or a memory control button on the side of monitor is pressed.
- 2) Function buttons backlight will switch off and all buttons become inactive after 15 seconds automatically.

N.B. Function buttons are inactive while the backlight is off; touch to activate and touch again to use.

#### • Visitor's Call

- 1) When a visitor pushes the "CALL" button on the doorstation, the image of the caller will be shown on the monitor(s) with a melody tone.
- 2) Press the "TALK" button to talk with the caller.
- 3) Press the "DOOR OPEN" button to activate the electric door latch while talking with the visitor if it is installed.
- 4) Press the "TALK" button again to return to the standby mode to screen and audio stays off.

Note : When FUTURO-SD4 is equipped with the FUTURO-SD-Card(optional) and motion is detected by the camera, " **A**dvanced Recording Function" is activated and video footage is recorded onto FUTURO-SD-Card.

Regardless of whether the optional FUTURO-SD-Card is inserted in the monitor or not, FUTURO-SD4 records a still photo in the internal memory when the "CALL" button is pressed.

FUTURO-SD4B model does not have any of the photo recording function.

The monitor will switch back to standby mode automatically after 120 seconds if answered, or 40 seconds if not answered.

#### • Intercommunication between monitors

- 1) Touch the function button area to activate the buttons.
- 2) Press the "INTERPHONE" button briefly on a monitor to call another monitor(s).
- 3) Press the "TALK" button briefly on a called monitor to commence communication with the calling monitor.
- 4) Press the "TALK" button again to end communication and return to standby mode.

Note : When a visitor presses the "CALL" button at the doorstation while there is communication between monitors, the conversation will be overridden and the system will be switched to Visitor Call Mode.

#### • Paging

- 1) Touch the function button area to activate the buttons.
- 2) Press and hold the "INTERPHONE" button on the monitor 4 ~ 5 seconds until "BEEP" sound then intercommunication is established without the called monitors' required to answer.  
During this Paging mode, the "MELODY MUTE" LED (Red) on the monitor will blink.
- 3) Press the "TALK" button to return to standby mode from any monitor.

#### • Baby Monitoring

- 1) Touch the function button area to activate the buttons.
- 2) Press the "INTERPHONE" button from the monitor in baby's room.
- 3) Press and hold the "TALK" button on the other called monitor until a "BEEP" sound.  
When "BABY MONITORING" is activated between monitors, the "POWER & BABY MONITORING" LED (Blue) on the monitors will blink and the other monitor will be able to hear audio from the baby's room.
- 4) Press the "TALK" button again to deactivate the baby monitoring function.

Note : To prevent a visitor's call disturbing a sleeping baby, it is recommended to mute the call melody on baby's monitor.

#### • **Monitoring**

- 1) Touch function button area to activate the buttons.
- 2) The view from the doorstation camera can be checked by pressing the "MONITOR" button.
- 3) Press the "MONITOR" button again to return to the standby mode.

#### • **Monitor Video and Audio Adjustment**

The screen brightness, contrast and melody volume can be adjusted by the buttons on the right hand side of the monitor.

#### • **Door Open**

- 1) While monitoring or talking with visitors, press "DOOR OPEN" button to release the electric door latch if it is installed.
- 2) When more than one doorstation is in the system, it activates the electric door latch associated with the doorstation.

## Monitor Function Setup

#### • **Melody Setup**

- 1) Touch function button area to activate the buttons.
- 2) Press and hold the "MONITOR" button on the monitor for 4 ~ 5 seconds until a "BEEP" is heard to select a different call melody tone.
- 3) A choice of 16 different tones can be selected by pressing the "MONITOR" button sequentially.
- 4) Press the "DOOR OPEN" button to select and save when a preferred melody is selected.

#### • **Melody Volume Setup**

- 1) Touch function button area to activate the buttons.
- 2) To change the melody volume, press and hold the "MONITOR" button on the monitor for 4 ~ 5 seconds until a "BEEP" is heard.
- 3) A preferred volume level can be selected by pressing the "TALK" button.
- 4) Press the "DOOR OPEN" button to confirm when the desired melody volume level is achieved.

#### • **Melody Mute Setup**

- 1) Touch function button area to activate the buttons.
- 2) Press and hold the "DOOR OPEN" button on the monitor for 4 ~ 5 seconds in standby mode until a "BEEP" is heard. The "MELODY MUTE" LED (Red) on the monitor will remain on. In this mode, there will be no door call sound heard from this monitor when the "CALL" button is pressed by callers. If only one monitor is in the system, the melody heard at the doorstation will also be muted.
- 3) To un-mute Melody, repeat the process above.

## Photo Recording and Playback ( Not available on FUTURO-SD4B )

The FUTURO-SD4 is equipped with **B**asic Photo recording function. An **A**dvanced photo recording function is also available when an optional FUTURO-SD-Card is installed in the monitor.

### • **Date / Time setup for Photo Recording**

- 1) Press the ■ SETUP/MODE button → "System Information" display mode
- 2) Press the ■ SETUP/MODE button again → "Internal Memory" playback mode B
- 3) Press the ■ SETUP/MODE button again → "SD Card Memory" playback mode A
- 4) Press the ■ SETUP/MODE button again → "Date / Time" setup mode
  - 4.1) Press the ◀ BACKWARD or ▶ FORWARD button to setup the "Hour"
  - 4.2) Press the ■ SETUP/MODE button → "Minute"
  - 4.3) Press the ◀ BACKWARD or ▶ FORWARD button to setup the "Minute"
  - 4.4) Press the ■ SETUP/MODE button → "Year"
  - 4.5) Press the ◀ BACKWARD or ▶ FORWARD button to setup the "Year"
  - 4.6) Press the ■ SETUP/MODE button → "Month"
  - 4.7) Press the ◀ BACKWARD or ▶ FORWARD button to setup the "Month"
  - 4.8) Press the ■ SETUP/MODE button → "Date"
  - 4.9) Press the ◀ BACKWARD or ▶ FORWARD button to setup the "Date"

### • **Basic Photo Recording**

The FUTURO-SD4 monitor records a single photo image when the "Call" button on the doorstation is pressed. These photos are stored into the monitor's internal memory and can NOT be downloaded. To prevent multiple photos of the same visitor, the system will record a photo once every 3 seconds.

Note : When there (are) is new visitor photos, the Green LED will be stayed ON until checked.

### **To playback the recorded photo (Internal Memory "B")**

- 1) Press the ■ SETUP/MODE button → "System Information" display mode
- 2) Press the ■ SETUP/MODE button → "Internal Memory" playback mode B
- 3) Press the ◀ BACKWARD or ▶ FORWARD button to display next photo

### **To delete recorded photos (Internal Memory "B")**

- 1) Display a photo that needs to be deleted as described above
- 2) Press the X DELETE button → display next photo



### • **Advanced Photo Recording**

When FUTURO-SD4 is equipped with an optional FUTURO-SD-Card and a doorstation camera detects a significant motion, the monitor records a short video clip onto the FUTURO-SD-Card.

This footage can be also viewed on a computer and still images can be made from the video footage and saved as jpeg images. Motion recording is usually triggered when movement is detected in front of the camera in a well lit area.

Note : When the system is recording video in Advance Photo Recording mode, the Green LED will blink as it records.

Note : When more than one doorstations are installed with FUTURO-CPU4, the Advanced photo recording function is only available from the doorstation which is connected to the CAMERA#1 position of the FUTURO-CPU4.

### **To Insert a new FUTURO-SD-Card into the FUTURO-SD4 monitor**

- 1) Insert the card into the FUTURO-SD-Card on the slot in the standby mode (while the screen is off)
- 2) Wait for 2 minutes for initializing the card. During this initialization period, the monitor will create necessary files in the card automatically. Do NOT remove or power off during this initialization period.

### **To playback the Advanced Recording photos (SD Card Memory "A")**

- 1) Press the ■ SETUP/MODE button → "System Information" display mode
- 2) Press the ■ SETUP/MODE button → "Internal Memory" playback mode B
- 3) Press the ■ SETUP/MODE button → "SD Memory" playback mode A  
The recorded photo and video from "SD Memory" / "Internal Memory" will playback automatically.
- 4) Press the ◀ BACKWARD or ▶ FORWARD button to stop motion playback and display a photo frame by frame.
- 5) Press the "MONITOR" button, to return to standby mode

### **To playback the Advanced Recording photos (SD Card Memory "A") on a PC**

- 1) Remove the FUTURO-SD-Card from FUTURO-SD4 in the standby mode (while the screen is off)
- 2) Insert it into the card slot on a PC
- 3) The computer will detect the card on the PC
- 4) In the card, find and run the "mplayer.exe" program to playback the video
- 5) On the "iBox Player" screen, click the "File" > "Open file"
- 6) Double click the "record\_0.tag" or "record\_1.tag" file
- 7) Click the "Play" icon on "iBox Player" screen to playback
- 8) Click "Pause" icon to stop or to playback frame by frame  
In this mode, a single left-mouse-button click will capture a still photo and save it as a ".jpg" file in the "\capture" folder of FUTURO-SD-Card.

Note:

"-1 ": Backward playback frame by frame

"+1": Forward playback with frame by frame

The numbers in the captured file name represents : "Year"( two digits) "Month"(two digits) "Date"(two digits) and \_ "Hour"(2 digits) "Minute"(2 digits) "Second"(2 digits) and \_ number of frame

### **To delete ALL recorded photos(SD Card Memory "A")**

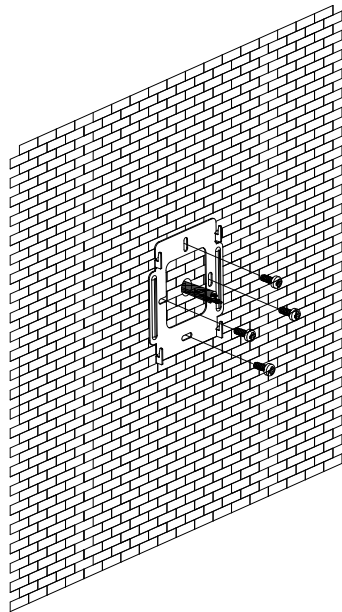
**\*\* WARNING! IT WILL DELETE ALL RECORDED DATA IN SD CARD \*\***

- 1) Playback video footage as described above
- 2) Press and hold the XDELETE button for 3 seconds

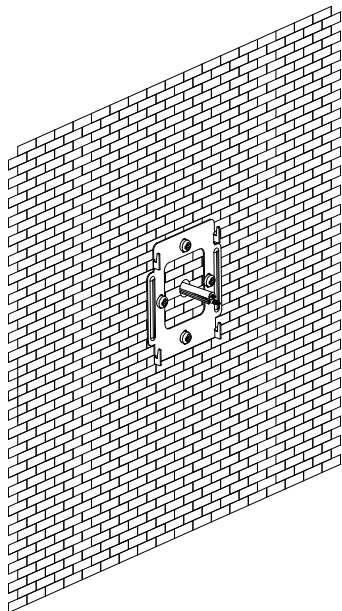
Note: The video clip can not be deleted individually.

## 4 Monitor Installation Guide

### FUTURO-SD4/SD4B



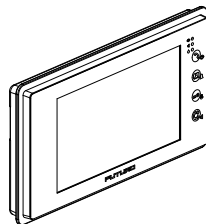
Mount the bracket approximately 155CM~160CM from the ground.



Connect all the necessary wires to the terminals.

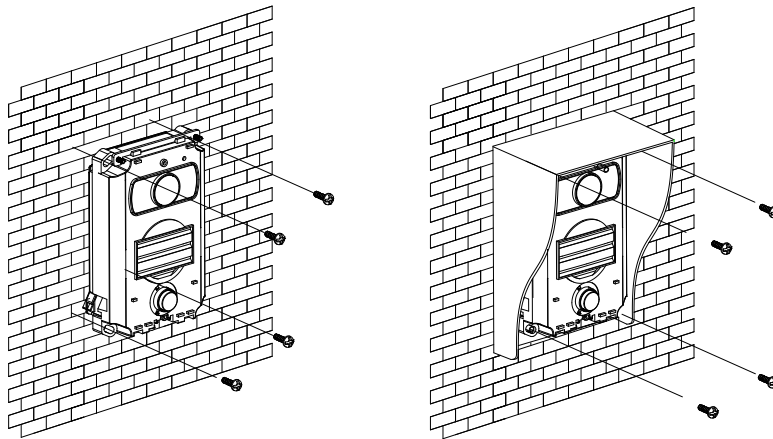
Mount the monitor onto the bracket.

Monitor Dimensions  
(W/H/D)  
235 x 128 x 25 mm



## 5 Doorstation Installation Guide

### FUTURO-CZ4 (Surface Mount)



Remove the front metal cover and install main body to wall.

Connect wires to the terminals.

Install the main body on the wall approximately 155CM~165CM from the ground.

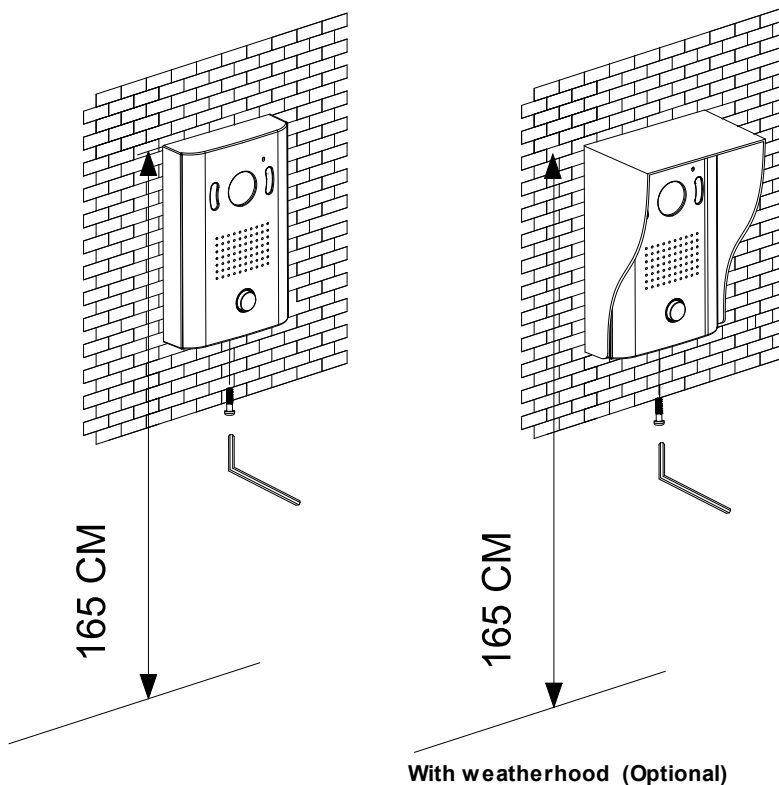
Mount the front cover onto the main body.

Note:

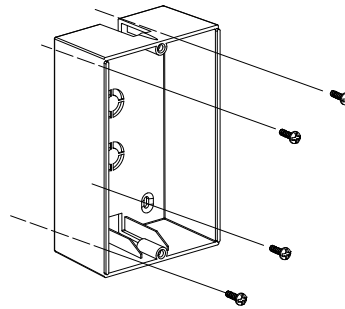
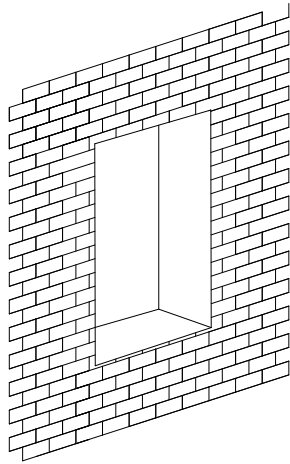
Keep the unit away from direct snow, rain and direct sunlight into the camera lens.

If necessary, please use the optional weather hood for further protection from the elements.

Dimensions(W/H/D) :  
99 x 148 x 28mm  
(overall)

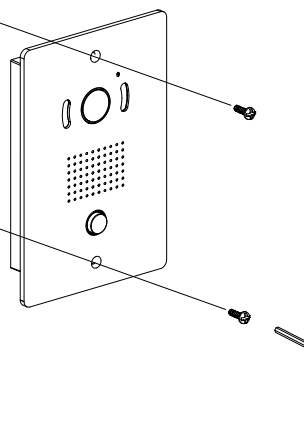
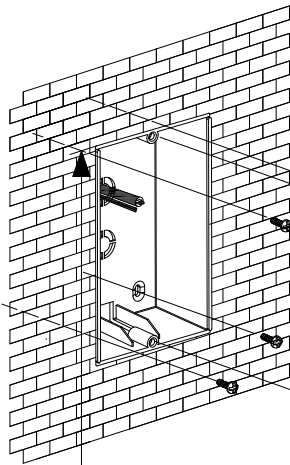


## FUTURO-CP4 (Flush Mount)



Mount the embedding box inside wall approximately 155CM~165CM from the ground.

Dimensions(W/H/D):  
98 x 155 x 55 mm  
(Embedding Box)



Connect all the necessary wires to the terminals.

Install the doorstation into the embedding box

Dimensions(W/H/D) :  
128 x 182 x 4 mm  
(Cover Plate)

Note:  
Keep the unit away from direct snow, rain and direct sunlight into the camera lens.

165 CM

## 6 Technical Specification

### Monitor

<b>FUTURO-SD4B ( no photo recording function )</b>	
Power	FUTURO-PS4(Switching Mode Power Adaptor) Input: 240VAC, 450mA, 50Hz Output: 13VDC, 1.2A
Display	7" Colour TFT-LCD
Transmitted Method	Doorstation : 5 wires (Polarity conscious) Sub monitor: 4 wires (Polarity conscious)
Call Tone	16 different Poly-Phonic Melodies
Screen off timer	Standby : 40 sec, While talking: 120 sec
Recommended cable requirements between Monitor & Doorstation	<p>&lt; 50M                      4 of 14/020 Shielded cable (Connect shield to GND)</p> <p>AND</p> <p>RG-59/U coaxial cable for Video signal (Connect shield to GND)</p> <p>&lt; 100M                      4 of 24/020 shielded cable (Connect shield to GND)</p> <p>AND</p> <p>RG-59/U coaxial cable for Video signal (Connect shield to GND)</p>
Operating Temperature	0 °C ~ 40 °C
Operating Humidity	Less than 90%
Dimensions (W/H/D)	235mm x 128mm x 25mm
Weight	860g
<b>FUTURO-SD4 (photo recording function) only</b>	
Internal Photo Memory	Up to 80 photos triggered by CALL button
External Video Memory	Optional FUTURO-SD-Card triggered by motion detection

### Status LED description

LED Status	ON	BLINK
Blue	POWER	Baby Monitoring (one way audio)
Red	Melody Mute	Paging ( two way audio)
Green	New Photo recorded	Recording status by motion

## Doorstation

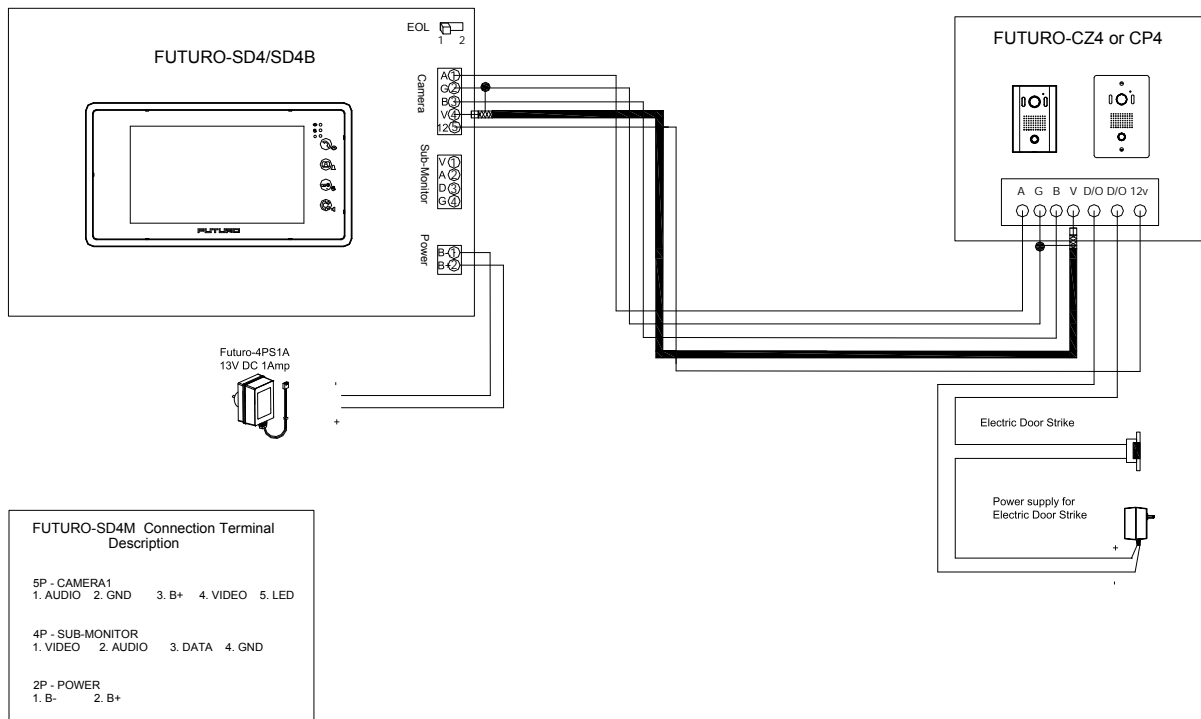
FUTURO-CZ4 (surface mount) / FUTURO-CP4 ( flush mount )	
Power	Operation Power (B+)                      12VDC from Monitor Button Back Light Power (12V)        12VDC from Monitor
Camera	1/3" Colour CCD sensor, Viewing angle 110 °
Door Release (D/O)	Voltage free Dry Contact, Normally Open
Night Vision LED's	6 White LED's
Operating Temperature	0 °C ~ 40 °C
Operating Humidity	Less than 90%
Dimensions (W/H/D) mm	FUTURO-CZ4                      99 x 148 x 28  FUTURO-CP4                      128 x 182 x 4 (Metal Plate) 98 x 155 x 55 (Embedding Box)

## Power supply for Monitors

FUTURO-4PS1A	
Input	100 - 240VAC, 50 ~ 60Hz, 0.45Amp
Output	13.0VDC, 1.2Amp
Operating Temperature	0 °C~ 40 °C
Operating Humidity	Less than 90%

# 7 Wiring Diagram

## 1 monitor and 1 doorstation



**Note**

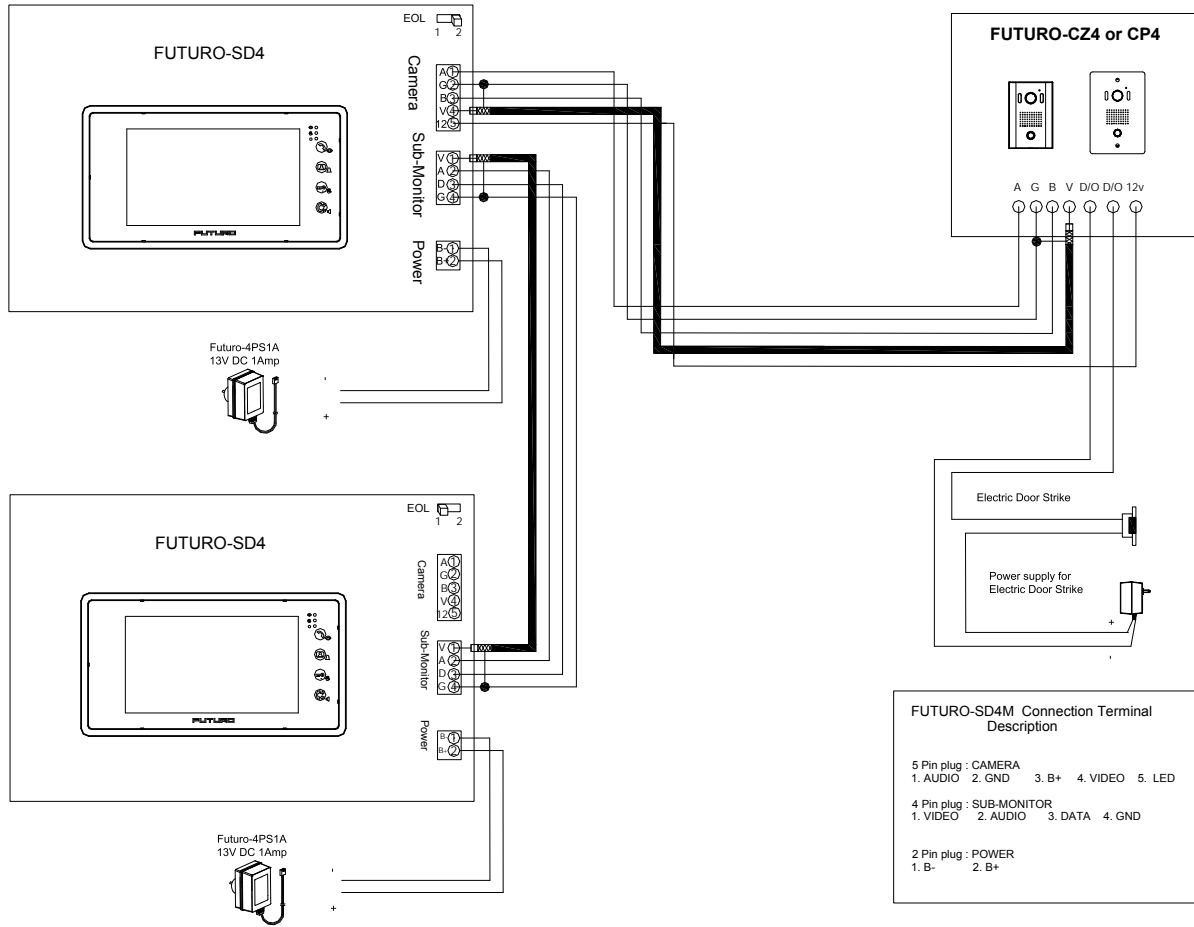
1. Signal description and voltage

Camera terminal

A	Audio	appx 4.6VDC when Standby / 12V DC when Door Open
G	Ground	
B	Camera power	12V DC
V	Composite Video	
12V	Constant power for the back light & Advanced recording	12V DC
DO/DO	Door open, Normal Open A contact	

2. EOL ( End of Line ) signal termination switch setting : "1"

## 2 monitors and 1 doorstations



**FUTURO-SD4M Connection Terminal Description**

5 Pin plug : CAMERA  
 1. AUDIO 2. GND 3. B+ 4. VIDEO 5. LED

4 Pin plug : SUB-MONITOR  
 1. VIDEO 2. AUDIO 3. DATA 4. GND

2 Pin plug : POWER  
 1. B- 2. B+

**Note**

**1. Terminal description and voltage**

**Camera terminal**

A	Audio	appx 4.6VDC when Standby / 12V DC when Door Open
G	Ground	
B	Camera power	12V DC
V	Composite Video	
12V	Constant power for the back light & Advanced recording	12V DC
DO/DO	Door open, Normal Open A contact	

**Sub Monitor terminal**

V	Video	Normal: 0V DC, When Sub Monitor is on: appx 0.5V DC
A	Audio	Normal: 4.6V DC, When intercommunicates: appx 3.6V DC
D	Data	
G	Ground	

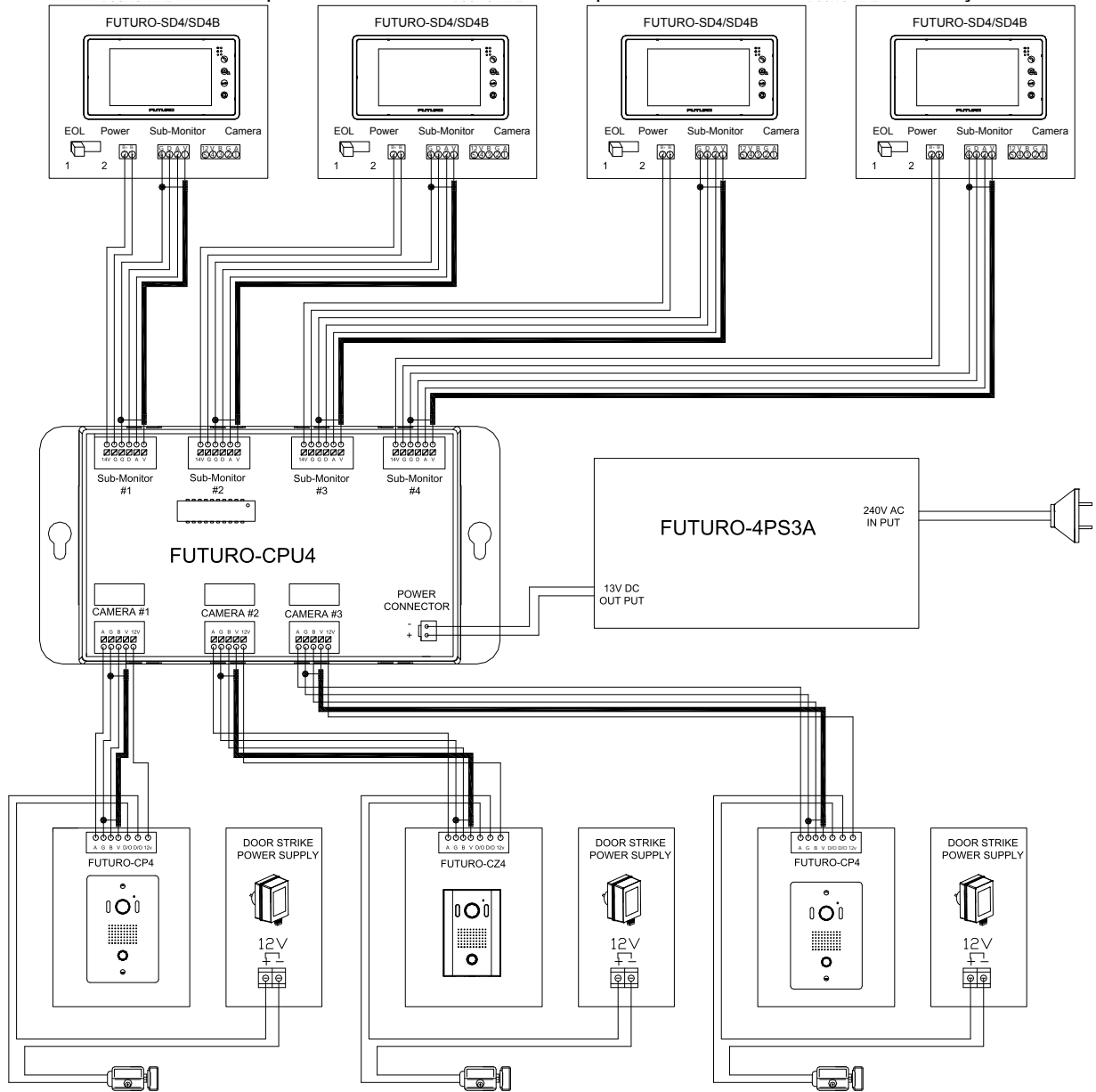
2. EOL ( End of Line ) signal termination switch setting : the first monitor "2" & the last monitor "1"  
 [ When more than 2 monitors are loop-in-loop-out (Daisy Chain) set the switch to "2" on all monitors but the last one set to "1".  
 eg. Select "2" if another monitor is connected to the sub-monitor plug. ]

3. Maximum number of monitors in a system using loop-in-loop-out method is 3(three).



## 4 monitors and 3 doorstations with Futuro-CPU4(Central Power and Video Distribution Unit)

FUTURO-CPU4 is an optional device that enables multiple monitors and doorstations in a system.



N.B. The Advanced Photo Recording function is only available from CAMERA#1.

### Note

#### 1. Terminal description and voltage

Camera terminal #1 ~ #3

A	Audio	4.6VDC when Standby / 12V DC when Door Open
G	Ground	
B	Camera power	12V DC
V	Composite Video	
12V	Constant power for the back light & Advanced recording	12V DC

## Sub Monitor terminal #1~ #4

V	Video	Normal: 0V DC, When Sub Monitor is on: appx 0.5V DC
A	Audio	Normal: 4.6V DC, When communicating: appx 3.6V DC
D	Data	
G	Ground	
G	B- of Power terminal	
14V	B+ of Power terminal	

## Power terminal to FUTURO-4PS3A

B+	To + of FUTURO-4PS3A, 13V DC
B-	To - of FUTURO-4PS3A, GND

2. EOL ( End of Line ) signal termination switch setting on ALL monitors: "1"

## Troubleshooting

	Symptom	Possible reason	Action
1	The background image is OK but a visitor's face appears too dark.	The doorstation is facing a bright back light.	Please relocate the doorstation or provide adequate illumination for visitor's face.
2	Poor Video or Audio quality.	Distance between the monitor to camera or sub-monitor is too far.  Electromagnetic interference through the system.  Wrong EOL switch setting.	Please replace cable with high performance cable or relocate the unit to closer location. Remove the interference source or relocate the unit or cable. Ensure appropriate cables are used and check wires for continuity or shorts  Correct EOL switch setting.
3	Pressing the "CALL" button on the doorstation will not sound a melody on a monitor(s) but Video is OK.	Melody Mute is active on the monitor.	Clear Melody Mute function.
4	Pressing the "CALL" button will sound a melody and turn on screen but no image on the screen.	V(Video) wire is not connected.	Check continuity and connect V wire correctly.
5	Pressing the "CALL" button on the doorstation will not sound a melody on monitor(s) and will not turn on the screen.	A(Audio) wire is not connected.	Check continuity and connect A wire correctly.
6	Pressing "DOOR OPEN" won't open an Electric Door latch.	Cable and power adaptor for the door latch faulty.	Check continuity of cable and check power to the door latch.
7	Will not record any photo	It is FUTURO-SD4B.	Replace it with FUTURO-SD4.
8	Will not record even if there is a motion.	It is FUTURO-SD4B.  No FUTURO-SD-Card has been inserted.	Replace it with FUTURO-SD4.  Insert a FUTURO-SD-Card.
9	Feedback noise	Incorrect setup of doorstation.	Adjust speaker and microphone sensitivity at doorstation.

## 8 Maintenance & Warranty Statement

### MAINTENANCE

1. All components should be protected from violent vibration, impact, knocking and dropping.
2. If necessary, clean the lens and screen with dampened cloth. Do not use chemical cleaning agents as this may damage the lens.
3. Image distortion may occur if the monitor is installed near microwave ovens, TVs, computers, DC/AC adaptors or any other electromagnetic field generating appliances.
4. Keep all monitors and cameras away from high temperature, dust, caustic and oxidation gas.
5. Use only with the FUTURO-4PS1A/3A power supply which is supplied by the authorised EOS AUSTRALIA PTY LTD (VIDEOMAN) supplier.
6. Do not open or access the internal circuitry or wiring of this unit - doing so will void and null warranty. Please ensure this unit is only installed and serviced by qualified professionals.

### WARRANTY STATEMENT

This equipment is warranted to be free from defects in material and workmanship for a period of twelve months from the date of purchase as indicated on the proof of purchase and/or by serial number on the product.

Warranty is return to base only and does not cover any onsite call charges that may be incurred.

Defective units returned to base by the purchaser at his/her own expense during this period will be repaired (or replaced at the option of the distributor) with an equivalent piece of refurbished and tested equipment. The repaired equipment is then warranted for the balance of the initial warranty period or for 3 months, whichever is longer.

All warranty return to base repair or replacements will be without charge provided that the equipment has not been subjected to electrical or physical misuse or due to unauthorised repair or modification.

The foregoing warranty is in lieu of all other warranties, express or implied, including, but not limited to, merchantability or fitness for a particular purpose.

The purchaser's exclusive remedy with respect to any and all losses or damages resulting from any cause whatsoever, shall be repair or replacement as specified above.

Distributor shall in no event be liable for any consequential or incidental damages, however occasioned, whether by negligence or otherwise. No suit or action shall be brought against manufacturer more than one year after the accrual of the cause of action therefore. No agent, employee or representative of the distributor nor any other person is authorised to modify this warranty in any respect. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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