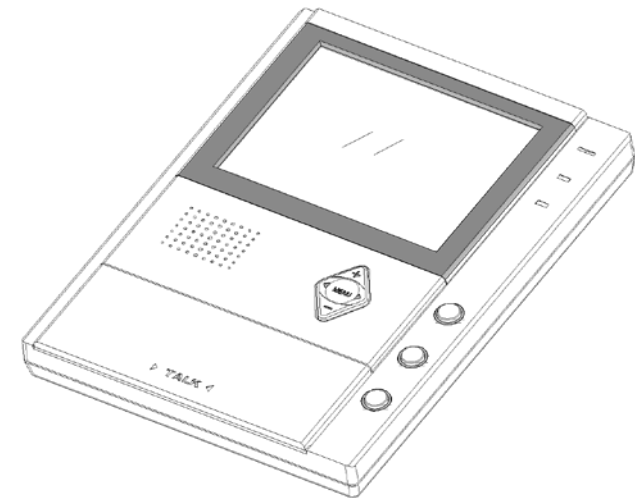


SINGLE FAMILY VIDEO INTERCOM SYSTEM

DPM-451 USER'S MANUAL



The design and specifications can be changed without notice to the user.

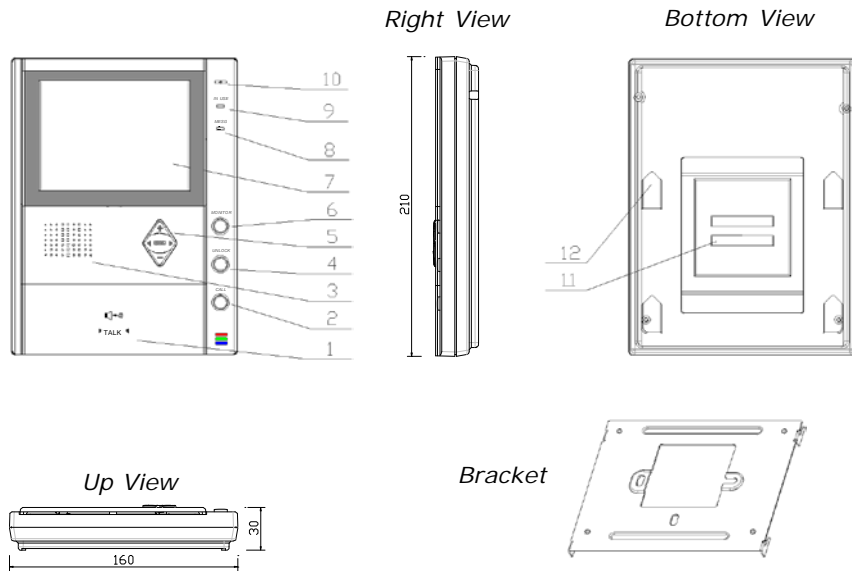
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FEATURES

- 15 CHORD TUNES SELECTABLE, INTERCOM FUNCTION
 - CONNECTING 2-4 OUTDOOR STATIONS BY MEANS OF VT-MDS SWITCHER
 - CONNECTING UP TO 5 MONITORS OR AUDIO PHONES DIRECTLY
-

DPM-451 series (4-wires)

1. Monitor parts and functions



Dimensions: 160(W)×210(H)×30(D) mm

1. TALK Button

2. INTERCOM Button

3. Speaker

4. UNLOCK Button

5. Menu Buttons

Up, Down (Increase, Decrease)

Left, Right (Menu, Return)

6. MONITOR Button

7. TFT-LCD 5 Inch Screen

8. LED for unlock state

9. LED for In-use

10. Microphone

11. Wiring Terminals

12. Mounting Bracket Hold

8. SPECIFICATIONS

- 1) Power supply for indoor monitor: DC 15~18V (supplied by Adaptor)
- 2) Power supply for Door Station: DC 10~12V (Supplied by Indoor Monitor)
- 3) Power consumption: Standby 0.5W; Working status 15W (for kits)
- 4) Monitor screen: 5 Inch TFT-LCD, 960(H)*234(V) resolution
- 5) Camera Lens: 3.6mm, 72 degree horizontal visual angle
- 6) Resolution: >300 TV lines
- 7) Video signal: 1Vp-p, 75Ω, CCIR standard
- 8) Connection mode: 4 wiring, polar
- 9) Monitor time: 30 seconds
- 10) Talking time: 90 seconds

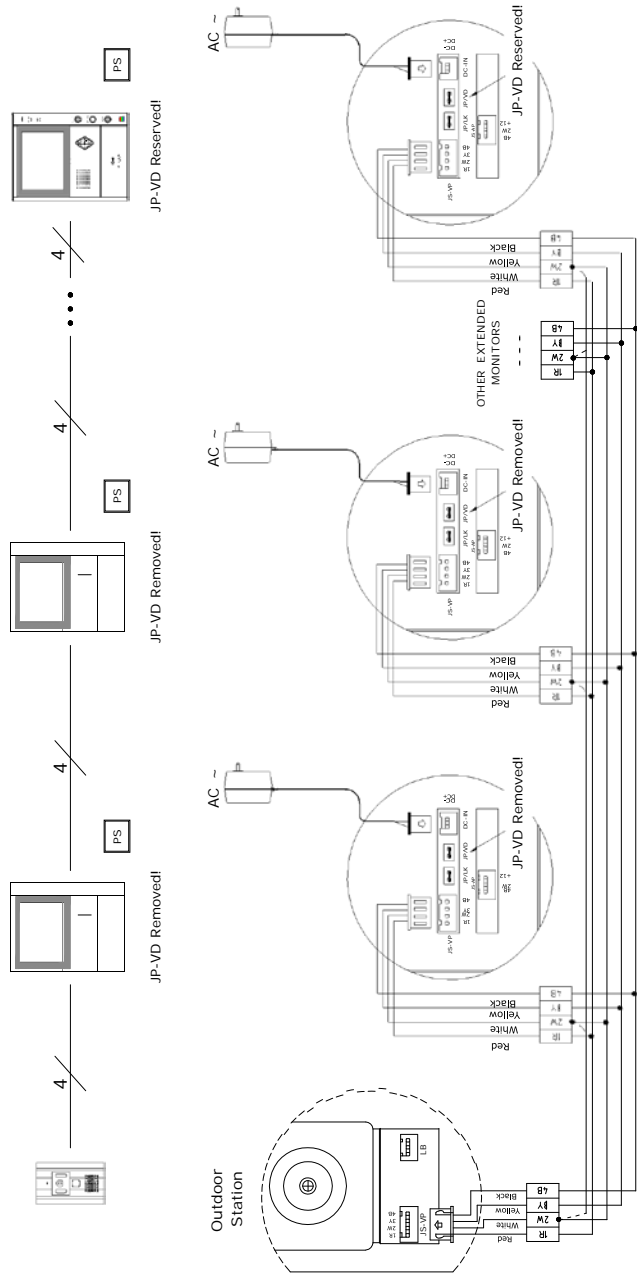
9. PRECAUTIONS

- 1) All parts should be protected from violence vibration or dropping.
- 2) Please do the cleanness with soft cotton cloth, please do not use the organic or chemical clean impregnate.
- 3) Image distortion may occur if the video door phone is mounted too close to magnetic field e. g. Microwaves, TV, computer etc.
- 4) Please keep away the video door monitor from wet, high temperature, dust, and caustic and oxidation gas in order to avoid any unpredictable damage.

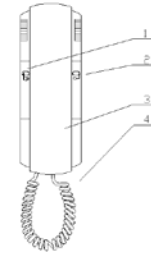
10. TROUBLE SHOOTING

Phenomenon	Check points
No power	Is the power cord properly inserted in the AC outlet, or the AC is not supplied?
No sound and calling	Make sure that 4B is connected correctly.
No image visible	Is the Brightness or Color correctly adjusted? Make sure that 3Y is connected correctly.
No enough volume	Is the Ring or Talk Volume correctly adjusted?
The image isn't clear	Is the protect cover film on the Door Camera lens removed? Is the Brightness or Color correctly adjusted? Make sure the lens of outdoor camera is clean Make sure the JP-VD jumper is correctly set.

7.5 Wiring Diagram of Extended Monitors (1 Door Station to N Monitors)

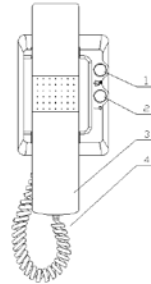


2. Audio Phone parts and functions



1. Intercom Button
2. Unlock Button
3. Handset
4. Handset Curve

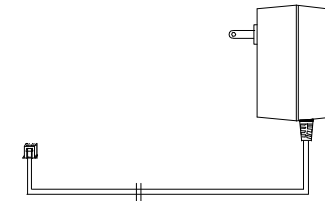
Dimensions: 215(H)x80(W)x45(D)



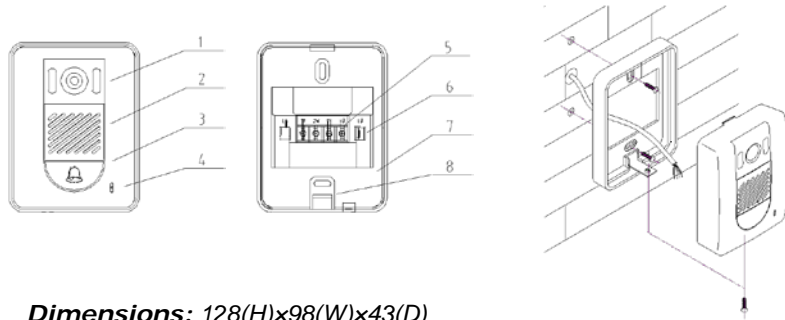
1. Intercom Button
2. Unlock Button
3. Handset
4. Handset Curve

Dimensions: 210(H)x90(W)x45(D)

3. AC Adaptor



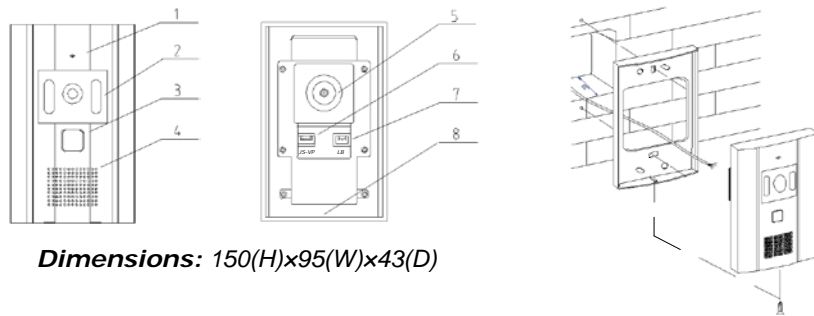
4. Outdoor Stations parts and functions



Dimensions: 128(H)x98(W)x43(D)

- 1. Camera
- 2. Speaker
- 3. Call Button
- 4. Microphone

- 5. Connection Terminal
- 6. Unlock Port LB
- 7. Mount Bracket
- 8. Fixing Hook



Dimensions: 150(H)x95(W)x43(D)

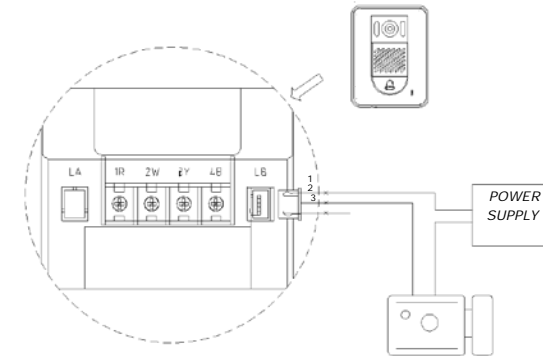
- 1. Microphone
- 2. Camera
- 3. Call Button
- 4. Speaker

- 5. Camera angle adjust
- 6. Connection Port
- 7. Unlock Port LB
- 8. Mount fixing position

7.4 Electronic Latch connecting

— With Jumper (Dry contact mode).

Extra power supply for latch must be installed, and nearly all kinds of electronic latch can be used, please see Note 2 for reference. Incidentally, in this mode, you can continue talking and monitoring during unlock operation.



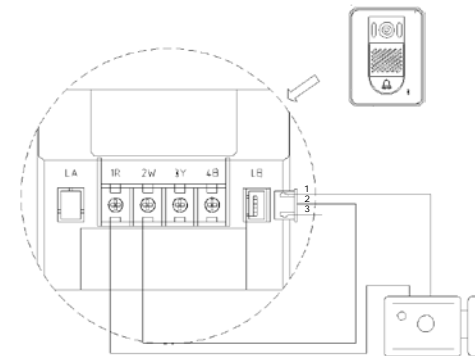
Dry contact mode

— Without Jumper (DC output for latch mode)

The Latch can directly connect with the Outdoor Station and the power through monitor. During unlock operation, the monitor will close screen automatically.

The Latch is rated voltage is 12V, less than 500mA consumption.

Note: Please use right and specific Latch.



DC output mode

„ Note 1: JP-VD is used for setting the video impedance. When there is only one

Monitor, keep the jumper (which is already on JP-VD). But when multi Monitors are installed, be sure of taking away all JP-VD of Monitors except only the last Monitor.

„ Note 2: LB includes 3 wiring Terminals: ‘1’-Normally Opened Terminal, ‘2’-Common Terminal, ‘3’- Normally Closed Terminal. If the latch is activated when powering, connect it between ‘1’ and ‘2’ terminal; if the latch is deactivated when powering, connect it between ‘2’ and ‘3’ terminal.

„ Note 3: JP-LK is used for Latch selection, refer to Electronic Latch connecting parts . It’s recommended to use RVVP 4x0.3mm2 Shielded Cable. If distance is over 30m, we suggest to use additional co-axle cable (RG-59) to connect 3Y, 2W pin.

„ For Outdoor station type with screw terminals, connect according to the Labels.

7.3 Connecting Audio Phone

Connect with Audio phone to Indoor Monitor directly without additional Power Supply;

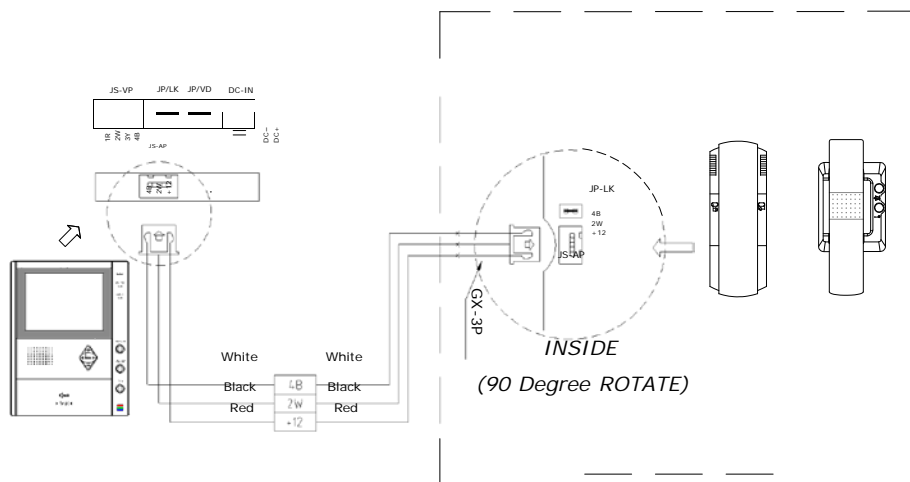
JP-LK Jumper is same as the one of Indoor Monitor.

Connect JS-AP Terminal in Audio Phone’s PCB board to JS-AP Terminal of Indoor Monitor.

Two 3-core Terminal Wirings standby, the color in turn is :

1-RED(+12), 2-BLACK(2W), 3-WHITE(4B)

The rest wiring and Shield Layer will be connected to the 2W wirings in Both



5. Operation Instructions

■ Operation for Basic Video Doorphone

- 1) When visitor presses the Call Button on the Outdoor Station, the monitor rings, at the same time, the screen displays the visitor image.
- 2) When press TALK Button, you can talk with the visitor for 90 seconds; During the talk state, press TALK Button again to end the conversation. If nobody answers the phone, the screen will turn off within 30 seconds automatically. If the system connects two or more Monitors, and while any Monitor starts to talk, the other Monitors will be automatically shut off.
- 3) When Monitor is standby, press MONITOR Button, the screen will display the view of the Outdoor Station. During monitoring state, press TALK Button, you can speak to the Outdoor Station, or press MONITOR again to turn off. However, monitoring state is limited to 30 seconds and will be shut off automatically.
- 4) Press Unlock Button to release the Electronic Latch during monitoring or talking.
- 5) Image quality can be adjusted by means of Contrast and Brightness rheostats.
- 6) The ring and talk volume can be adjusted individually.

■ Operation for Adjustment

- 1) During monitoring or talking, directly press the **Up** or **Down** key to adjust the image Brightness. Pressing **MENU** and **RETURN** will sequentially switches to Brightness, Contrast, Ring Volume, Talk Volume adjustment, and items and value are showed.
- 2) During adjustment, if no key was pressed within 5 seconds, the OSD will be shut off.

■ Operation for Intercom

- 1) When system is connected with multi Monitors, intercom is available.
- 2) Intercom calling can be initiated by any Monitor. Press INTERCOM button, IN USE led will lighten, and other Monitors will ring. If TALK Button is pressed in another Monitor, the intercom talking is connecting.
- 3) If INTERCOM button is pressed, but no Monitor answers, you can press the TALK button to cancel, or it will exit automatically after 30 seconds.
- 4) Intercom function is prior to monitor function, but calling function is always first.

■ Operation for Ring selection

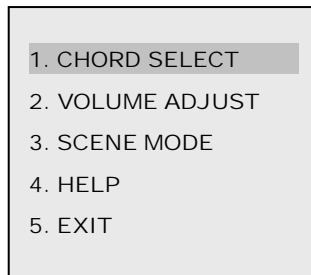
- 1) When Monitor is standby, press UNLOCK Button and hold 2 seconds, until it enters Chord melody selection state and plays current melody.
- 2) Press UNLOCK Button again to select preferred chord melody sequentially, one more time Chord Select Button is pressed, next melody is switched and played.
- 3) Press TALK Button to confirm melody selection; if wait 30s and no Button pressed, Monitor will exit Chord melody selection state.

- 4) When Monitor is standby, press MONITOR Button,
 - **Operation for Multi Outdoor Stations or Cameras (Only if is installed)**
 - 1) When a Outdoor Station calls, Monitor image and talk will be switched automatically.
 - 2) All Monitors can survey each Outdoor Station in turn. Press TALK Button in standby, the image of 1st Door Station is displayed firstly, press again to talk; If press MONITOR one more time, the image will switch to next Outdoor Station, etc. After monitoring the last image, press MONITOR will exit, or shut off within 30 seconds.
 - 3) During monitoring or talking state, press UNLOCK Button will just open the lock connected with the being supervised Outdoor Station.

■ **Operation for OSD Menu**

Main Menu

- When the Monitor is in standby, press **MENU** Button will activate the OSD menu.
- Use **Up** or **Down** Button to move selected items, and press **MENU** Button to enter, **RETURN** Button to back. If **EXIT** item is the next one, OSD menu will close.
- If no Button was pressed in 20 seconds, the OSD menu will be closed automatically.



- 1) **Chord Select**
 - After entering the CHORD SELECT screen, the Calling Ring is showed firstly, pressing INTERCOM button will switch to the Intercom Ring setting.
 - Use **Up** Button to select next chord tune, and **Down** Button to play the selected chime again, pressing **MENU/RETURN** Button to save and return main menu.
- 2) **Volume Adjust**
 - After entering the VOLUME ADJUST screen, ring volume is showed firstly, pressing INTERCOM button will switch to talking volume adjust.
 - Use **Up** or **Down** Button to increase or decrease the volume of responding volume, pressing **MENU/RETURN** Button to save and return main menu.
- 3) **Scene Mode**
 - After entering the SCENE MODE screen, current scene mode is displayed.
 - Use **Up** or **Down** Button to set the image mode among Standard, User config, Soft, and Brighten, pressing **MENU** to save and return main Menu.
- 4) **Help**
 - The screen will display simplified operation instruction.

6. MOUNTING INSTRUCTION

6.1 Monitor Mounting

Accessory fittings:

- Bracket (Two 4X25 screws are needed for fastening the Mounting Bracket)
- Special 4 core wire which already connected with Monitor.

Installation steps:

- Installation height of Indoor Monitor, usually from 145- 160CM
- Fix bracket on 86 Installation Box or wall surface directly, then install Monitor.

6.2 Outdoor Station Mounting

- The height same as Indoor Monitor, usually at 145~160CM.
- The location for Outdoor Station should keep away from snow, rain, or intensity light.

7. SYSTEM WIRING

7.1 Terminals and descriptions as below:

- **1R** Power positive. +12V present when Outdoor Station calling or being monitored.
- **2W** Power negative (GND)
- **3Y** Image signal (Video signal)
- **4B** Talk and control signal (Audio signal)

7.2 Basic 1-1 system wiring drawing

