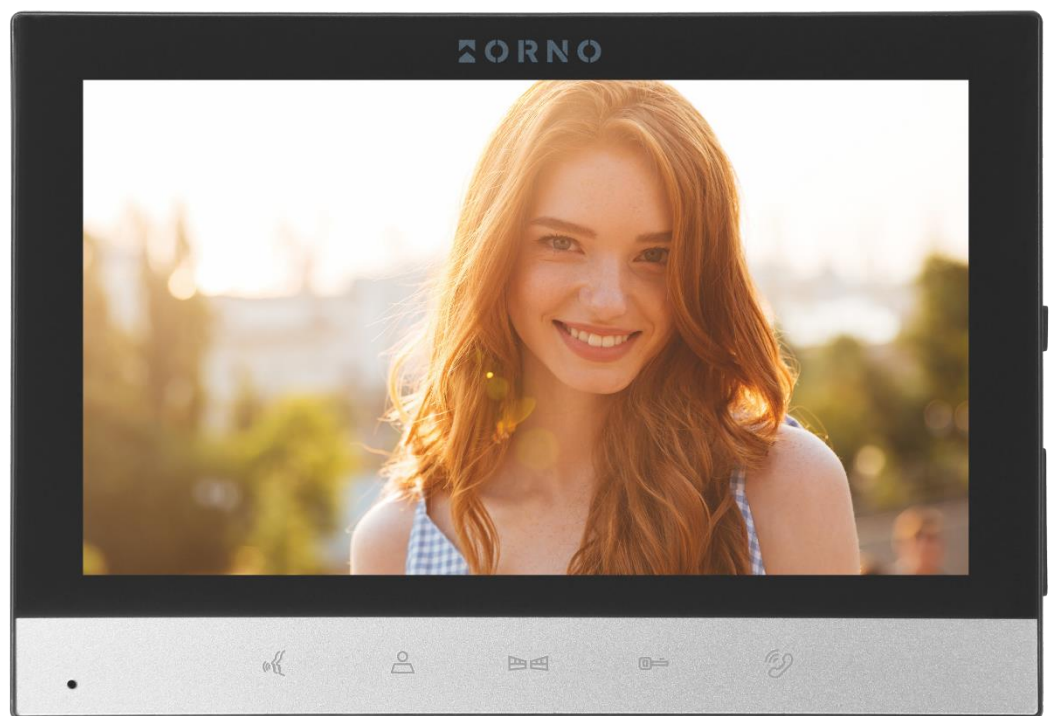




# Operating and installation instructions

## Video doorphone set Alerto

OR-VID-MD-1084/B



**CE STOP!**

Be sure to read the instruction manual before installation!  
Damage resulting from incorrect connection  
**ARE NOT SUBJECT TO REPAIR UNDER WARRANTY!**



## TABLE OF CONTENTS

<b>1. SAFETY INSTRUCTIONS.....</b>	<b>3</b>
<b>2. CHARACTERISTICS OF THE SET .....</b>	<b>3</b>
<b>3. TECHNICAL DATA.....</b>	<b>4</b>
<b>4. SET CONSTRUCTION .....</b>	<b>5</b>
<b>5. INSTALLATION.....</b>	<b>5</b>
MONITOR INSTALLATION .....	5
OUTDOOR UNIT WITH CAMERA INSTALLATION.....	6
<b>6. WIRING DIAGRAMS .....</b>	<b>7</b>
<b>7. SET OPERATION .....</b>	<b>8</b>
INCOMING CALL .....	8
MONITORING.....	8
CALL FORWARDING TO AN ADDITIONAL MONITOR.....	9
INTERCOM.....	9
<b>8. SETTINGS MENU .....</b>	<b>10</b>
SYSTEM SETTINGS.....	10
DOORBELL SETTINGS.....	10
OPERATING MODE SETTINGS .....	11
ALARM SETTINGS .....	11
IMAGE SETTINGS .....	12
FILES.....	12
<b>9. ALARM INSTRUCTIONS .....</b>	<b>13</b>
<b>10. CLEANING AND MAINTENANCE.....</b>	<b>13</b>
<b>11. TROUBLESHOOTING .....</b>	<b>14</b>



## 1. SAFETY INSTRUCTIONS

Before using the device, read this Service Manual and keep it for future use. The manufacturer is not responsible for any damage that can result from improper device installation or operation. Any repair or modification carried out by yourselves results in loss of guarantee. Installation and commissioning of the equipment by the customer are possible if the installer has basic knowledge of electrical systems and the use of proper tools. In view of the fact that the technical data are subject to continuous modifications, the manufacturer reserves a right to make changes to the product characteristics and to introduce different constructional solutions without deterioration of the product parameters or functional quality. Additional information about ORNO products is available at [www.orno.pl](http://www.orno.pl). Orno-Logistic Sp. z o.o. holds no responsibility for the results of non-compliance with the provisions of the present Manual Orno-Logistic Sp. z o.o. reserves the right to make changes to the Manual – the latest version of the Manual can be downloaded from [www.orno.pl](http://www.orno.pl) Any translation/ interpretation rights and copyright in relation to this Manual are reserved.

1. Disconnect the power supply before performing any activities.
2. Do not immerse the product in water or other liquids.
3. Do not operate the device with damaged housing.
4. Do not break the seals or open the device and do not repair it yourself.
5. Do not use the device contrary to its dedication.
6. Do not install the monitor near devices that strongly emit magnetic fields such as TV, speakers.
7. Do not install the monitor in a place exposed to high moisture, vibration, shock and strong sunlight.
8. Turn off the power if there is a concerning sound coming from the device.
9. Remove the protective film from the monitor screen after installation and mounting.



Each household is a user of electrical and electronic equipment, and hence a potential producer of hazardous waste for humans and the environment, due to the presence of hazardous substances, mixtures and components in the equipment. On the other hand, used equipment is valuable material from which we can recover raw materials such as copper, tin, glass, iron and others. The WEEE sign placed on the equipment, packaging or documents attached to it indicates the need for selective collection of waste electrical and electronic equipment. Products so marked, under penalty of fine, cannot be thrown into ordinary garbage along with other waste. The marking means at the same time that the equipment was placed on the market after August 13, 2005. It is the responsibility of the user to hand the used equipment to a designated collection point for proper processing. Used equipment can also be handed over to the seller, if one buys a new product in an amount not greater than the new purchased equipment of the same type. Information on the available collection system of waste electrical equipment can be found in the information desk of the store and in the municipal office or district office. Proper handling of used equipment prevents negative consequences for the environment and human health!

01/2024

## 2. CHARACTERISTICS OF THE SET

The videodoorphone is designed for installation in 1-family buildings.

### Functions:

- simultaneous view and hold of a conversation with a person in front of an entrance;
- direct control of an electric door strike;
- gate control;
- adjustment of monitor parameters (image brightness, saturation, volume)
- infrared LED lighting enables night vision;
- intercom function when additional monitors are used.

### Key features:

- big 7" LCD color monitor;
- 12 bell sounds to choose from with volume adjustment;
- built-in internal memory that holds up to 103 photos;
- the possibility to record photos and videos on a microSD card and play them back on the monitor;
- set can be expanded to include two outdoor units, two CCTV cameras, four monitors, and two motion sensors;
- 4-wire installation;
- an electric door strike (12V DC max. 300mA) that does not require an additional power supply.



### 3. TECHNICAL DATA

TYPE OF THE DEVICE:	single-family
INSTALLATION METHOD:	4-wire
COMMUNICATION SYSTEM:	wired

#### MONITOR

SCREEN SIZE:	7"
RESOLUTION:	1024x600
STANDARD:	PAL
FUNCTIONS:	call, monitoring, door and gate control, monitor parameters and volume control, intercom
NUMBER OF MELODIES:	12
VOLUME CONTROL:	yes
CALL TIME:	120s
MONITORING TIME:	60s
POWER SUPPLY:	15V DC 1A
POWER CONSUMPTION:	standby <2,9W; work <5W
ELECTRICAL STRIKE CONTROL:	yes (12V DC max. 300mA – powered from monitor)
GATE CONTROL:	yes (dry contact)
WORKING TEMPERATURE:	-20°C ~ +50°C
INSTALLATION:	surface-mounted
MATERIAL:	plastic
DIMENSIONS:	180x125x22mm
NET WEIGHT:	0,31kg

#### OUTDOOR UNIT

SENSOR TYPE:	CMOS 1/2.9'
RESOLUTION:	700 TVL
VIEWING ANGLE (VERTICAL/HORIZONTAL):	65° / 120°
NIGHT LIGHTING:	IR
NUMBER OF DIODES:	6
NIGHT VISION RANGE:	≤1m
TWILIGHT SENSOR:	yes
INGRESS PROTECTION:	IP65
POWER SUPPLY:	12V DC from monitor
POWER CONSUMPTION:	standby <0,1W, work <3W
WORKING TEMPERATURE:	-20°C ~ +50°C
INSTALLATION:	surface-mounted
MATERIAL:	plastic
DIMENSIONS:	50x136x31mm
NET WEIGHT:	0,17kg



## 4. SET CONSTRUCTION

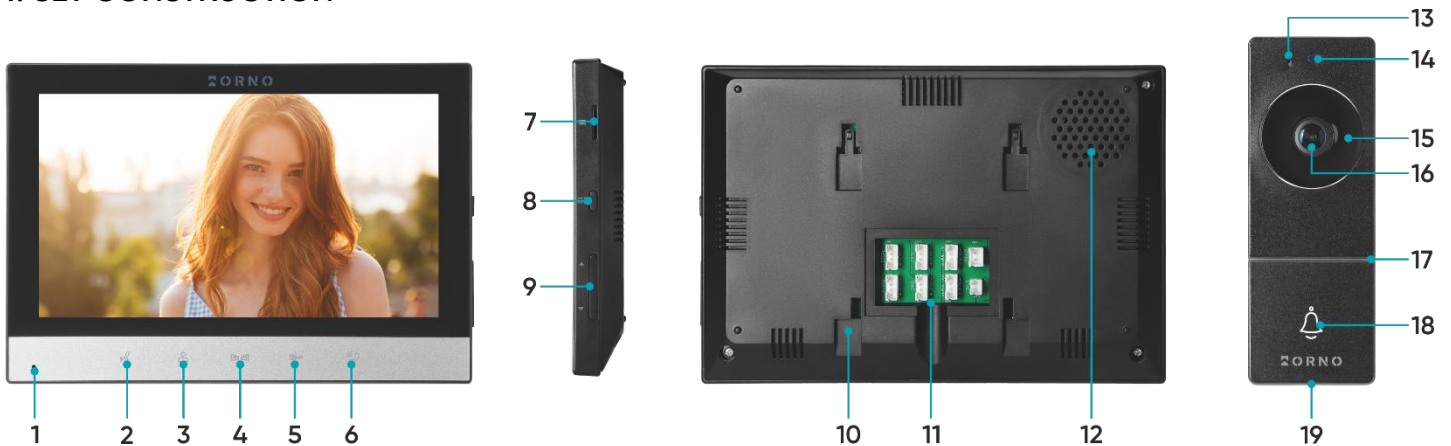


fig. 1 Construction of the monitor and the outdoor unit with camera

### MONITOR

1. Microphone
2. Call forwarding
3. Monitoring
4. Gate opening
5. Wicket opening
6. Answer/end the call
7. MicroSD card slot
8. Menu button
9. Up/down navigation button  
(during a call, the button is used to adjust the volume)
10. Holes for mounting bracket
11. Connection terminals
12. Loudspeaker

### OUTDOOR UNIT

13. Microphone
14. Twilight sensor
15. Night light
16. Camera lens
17. LED indicator
18. Call button
19. Loudspeaker

## 5. INSTALLATION

### MONITOR INSTALLATION

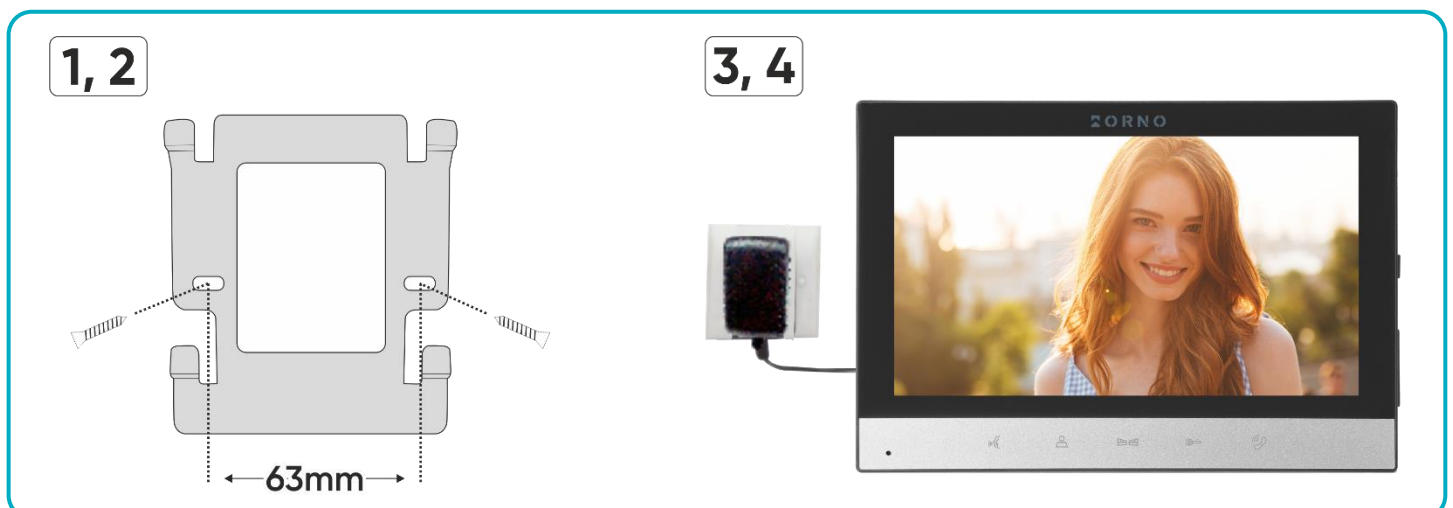


fig. 2 Monitor installation

1. Drill holes in the wall and insert wall anchors into them.
2. Screw the monitor mounting bracket to the wall with screws.
3. Connect the wires to the monitor and hang it on the mounting bracket.
4. Connect the power supply to the 230V AC outlet.



## OUTDOOR UNIT WITH CAMERA INSTALLATION

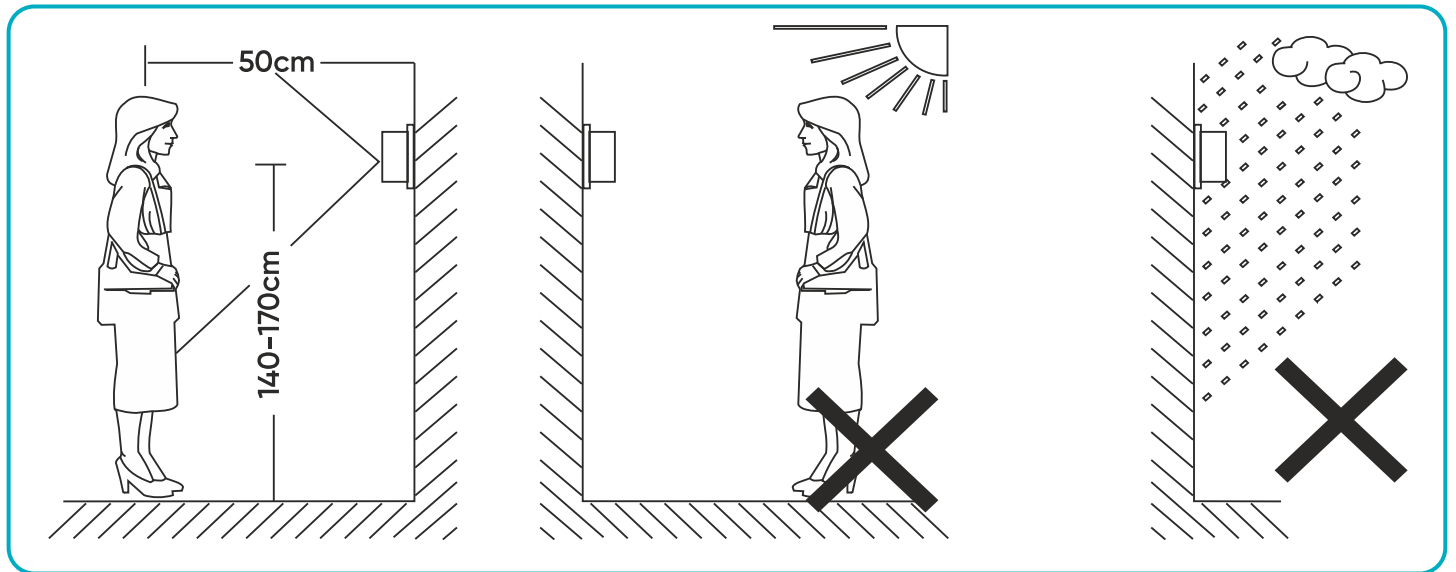


fig. 3 Outdoor unit placement

Recommended installation height of the outdoor unit is 140-170cm.

The correct location of the outdoor unit determines the comfort of working with the device. It is recommended to test the device before making mounting holes. Do not place the outdoor unit and monitor in the same room as feedback may occur.

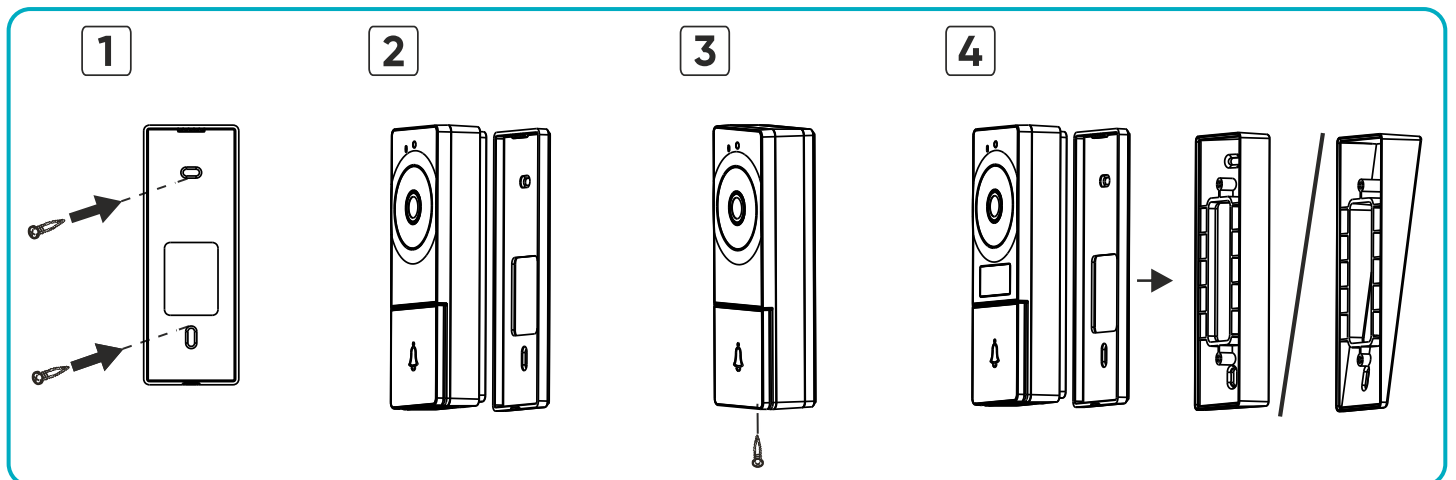


fig. 4 Outdoor unit with camera installation

1. Drill holes in the wall and insert the wall anchors into them. Pull through the wires and screw the mounting bracket to the desired location with screws.
2. Connect the wires according to the wiring diagram and place the outdoor unit in the mounting bracket.
3. Secure the outdoor unit by screwing in the safety screw from below.
4. To mount the camera at an angle, use one of the angle-mounting brackets. Screw the chosen bracket to the wall first, attach the regular mounting bracket to it and then place the external panel in the bracket. Secure the whole thing with a safety screw.



## 6. WIRING DIAGRAMS

Before drilling the installation holes, it is recommended to carry out a functional test of the device. To do this, connect the device for a test according to the wiring diagram. The first person holding the camera should use the button to call the second person who is at the monitor. This person should then carefully inspect the camera's field of view in order to correct the module's position if necessary.

Once the measurements have been taken accurately, proceed with the mounting holes after switching off the power supply.

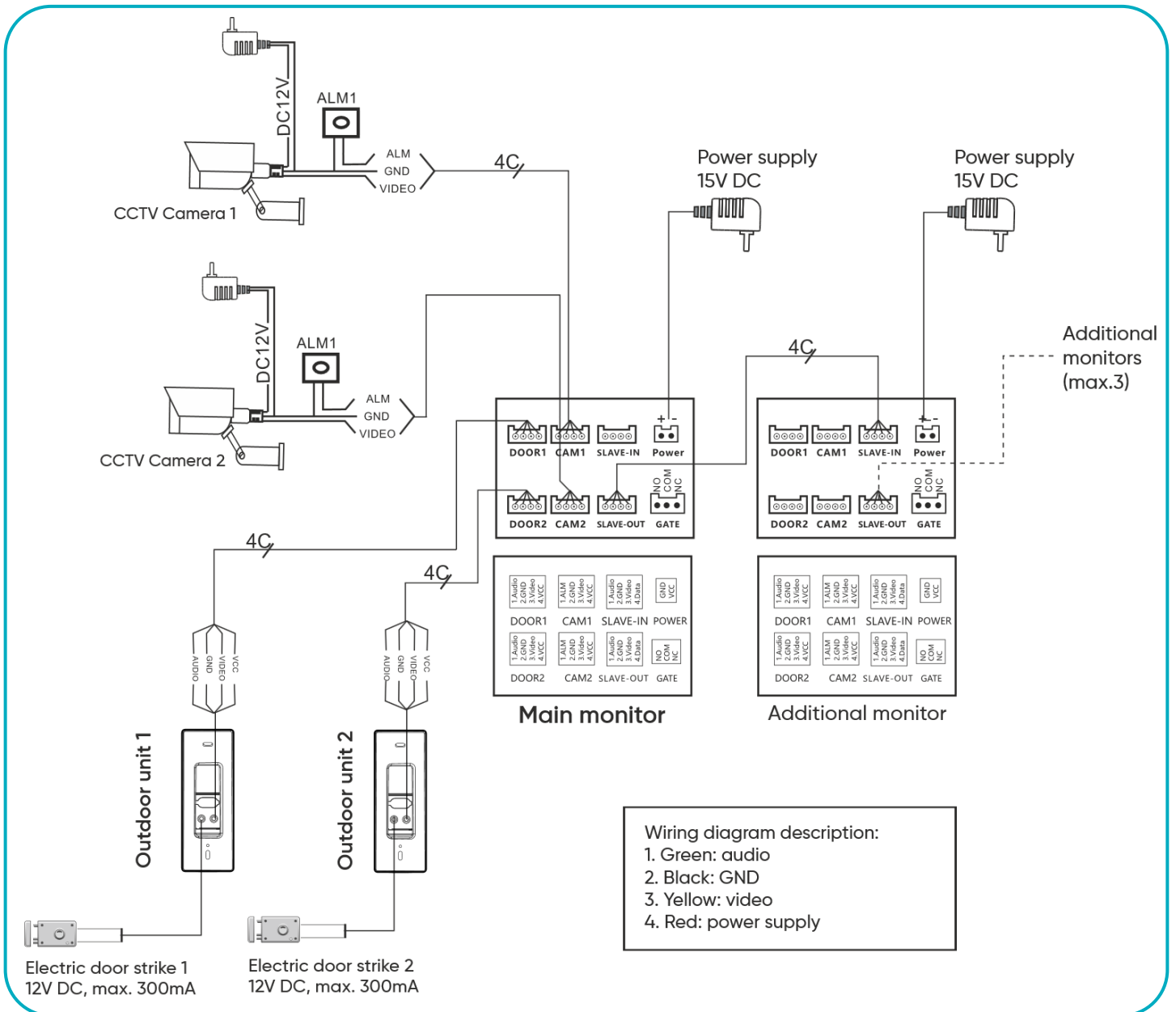


fig. 5 Wiring diagram

It is forbidden to make connections to live equipment!

Failure to adhere to this recommendation may result in permanent damage to the device and loss of health.

The set does not include an electric door strike and automatic gate control unit!





The video doorphone cables should not be routed in one cable with the cables of other installations such as bell, alarm, etc. Any power and telecommunication cables emitting strong magnetic fields (e.g. loudspeaker columns, TV set) in direct contact with the cables connecting the outdoor unit to the monitor may adversely affect the operation of the set.

**If the user has other connection cables than the recommended ones, it is allowed to use them, however, it is necessary to make a test connection of the set in order to check its correct functioning.**

When designing the electrical installation, take into account the appropriate cable cross-section:

up to 30m - recommended cable XzTKMXpw 3 x 2 x 0,5mm

from 30m to 100m - recommended cable XzTKMXpw 3 x 2 x 0,8mm

The connection to the electromagnetic lock should be made with 2 x 1mm<sup>2</sup> cable.

The set is compatible with any electric door strike with 12V DC supply voltage and current consumption of max. 300 mA.

The total length of the installation must not exceed 100 meters.


We absolutely do not recommend the use of twisted-pair cables.

## 7. SET OPERATION

### INCOMING CALL


1. Press the call button on the outdoor unit to connect the outdoor unit with the monitor. The doorbell sound will be heard from the outdoor unit and the monitor.


**Note:** if the call buttons on both outdoor units are pressed at the same time, the signal from the unit whose button was pressed first will take priority. The second outdoor unit can connect to the monitor only after the connection with the first outdoor unit ends. Outdoor units do not signal when the monitor goes back into standby mode (applies only to sets with the second outdoor unit connected).

2. The image from the outdoor unit is automatically displayed on the monitor. To start a call press  on the monitor. The maximum call length is 120 seconds. The monitor will go into standby mode if an incoming call is not answered within 90 seconds.

3. During the call, you can remotely release the electric door strike by pressing  on the monitor.

4. Depending on the monitor's mode of operation (see page 11):

If the monitor is in recording mode, when the call button is pressed, a video recording will automatically be recorded, and pressing the menu button  will trigger the recording of additional video (each video recording lasts 14 seconds).




If the monitor is in photo mode, when the call button is pressed, a single shot from an outdoor camera will automatically be saved, and pressing the menu button  will save another picture.





If the monitor is in monitoring mode no files will be automatically saved.

5. Pressing again  on the monitor during a call will end the call.

### MONITORING


To use monitoring, set the DOOR1/CAM1/DOOR2/CAM2 in the alarm settings menu to operating mode *on* (device connected) or *off* (no device).

1. Pressing the monitoring button  on the monitor will display the view from the outdoor camera. Pressing the monitoring button  again will switch the view to the next connected device (in order: DOOR1, CAM1, DOOR2, CAM2). After the view from the last connected device, another press of the monitoring button  will exit monitoring mode. The maximum viewing time for each device is 60 seconds.

2. When monitoring from an outdoor unit (DOOR1/DOOR2), you can press the call button  to start a conversation with the outdoor unit. During the call, you can release the door strike , record a video/save a photo  (depending on the monitor mode). Press again  to end the call and return to standby mode.





**Note:** if only one outdoor unit is connected to the set, you can exit the monitoring mode by pressing the monitoring button  again. The other devices (CAM1/DOOR2/CAM2) must be set from the settings menu to the *off* mode of operation.

**Note:** if you are using two monitors, you can also start monitoring mode simultaneously on another monitor. The same images will appear on both monitors.



**Note:** if in monitoring mode, a person outside initiates a call from any outdoor panel, the device will automatically end its operation in this mode. The monitor will display the image from that particular outdoor unit and a doorbell will be heard.

**Viewing time:** 60 seconds

**Call and conversation time:** 120 seconds




## CALL FORWARDING TO AN ADDITIONAL MONITOR


The forwarding function requires the connection of at least two monitors and one outdoor unit. In order for the function to work properly, it is necessary to correctly designate the monitors as main (master) and additional (slave) in the settings menu (see page 11).

1. During an ongoing call between the outdoor unit and the main monitor, press the forward button  to redirect the call to another monitor.
2. When the call is redirected, the main monitor will go into standby mode and a doorbell will sound from the monitor to which the call was redirected. An image from the outside unit will be displayed on the screen. The call can be answered  and continued like any other call (with the ability to open the gate, record photos/video).

## INTERCOM





The intercom function requires at least two monitors to be connected. In order for the function to work properly, it is necessary to correctly designate the monitors as main (master) and additional (slave) in the settings menu (see page 11).

1. To start an intercom call press the  button on any monitor.
2. The doorbell will be heard from the other monitors. The conversation can be started by pressing the  button on the monitor.
3. To end the intercom press the  button again.

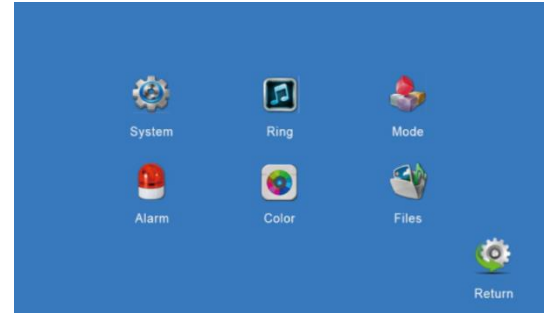
**Note:** if a call button is pressed on an outdoor unit during an intercom call, the intercom will turn off automatically. The monitor will display the image from the outside unit and the doorbell will sound. By pressing  you can start a conversation with the visitor.



## 8. SETTINGS MENU

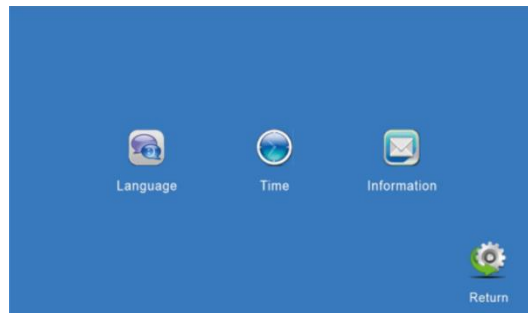
**Note:** The settings menu can be navigated using two buttons: the menu button  and the up/down navigation button . After opening the setting menu, the menu button  serves as the confirmation button while the up/down button  is used to navigate between categories and options in the settings.

**Note:** after 60 seconds of inactivity, the monitor goes into standby mode by default.



### SYSTEM SETTINGS

Enter the system settings by selecting the *System* tab in the main menu.



#### Language

Option to change the language of the monitor. Choose from English, Chinese, Polish, Hungarian, Slovak, Czech, French, German, Arabic, Hebrew, Russian.

#### Time and date

Set the current date and time.

#### Information

Check system information.

**Software version and release date:** check the number and date of the last update.

**SD formatting:** format the microSD card - it is recommended to do this before using the microSD card for the first time.

**Flash formatting:** format the monitor's internal memory.

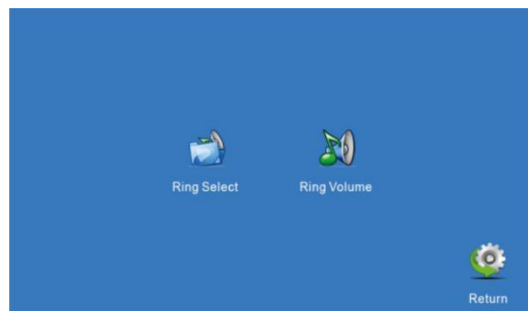
**Photo backup:** transfer photos from the monitor's internal memory to the microSD card.

**Update:** after saving updates to the microSD card, you can update the system on the monitor.

**Reboot:** reset the set system.

### DOORBELL SETTINGS

Enter the doorbell settings by selecting the *Ring* tab in the main menu.



#### Ring select

Select a bell sound for each outdoor panel.

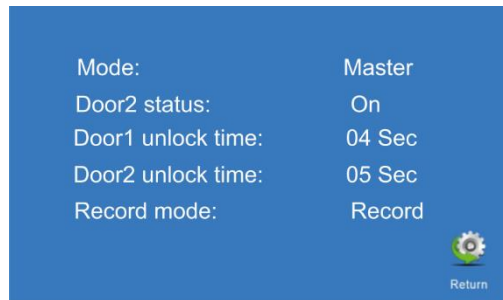
#### Ring volume

Set different volume levels and bell lengths for three different time intervals. The bell length can be set from 15 to 60 seconds.



## OPERATING MODE SETTINGS

Enter the operating mode settings by selecting the *Mode* tab in the main menu.



**Mode** Designate the monitor as a main (master) or additional (slave) monitor.

**Door2 status** Enable/disable view from second outdoor unit.

**Door1/Door2 unlock time** Set the electric door strike release time for Door1 or Door2 (from 1 to 10 seconds).

**Record mode** Option to enable automatic recording:  
**Record mode:** when the call button on the outdoor unit is pressed, a 14-second video from the outdoor unit will be automatically recorded.  
**Photo mode:** when the call button on the outdoor unit is pressed, a single snapshot from the outdoor unit will be automatically saved.

## ALARM SETTINGS

Enter the alarm settings by selecting the *Alarm* tab in the main menu.



**Cam1/Cam2 sensor type** Each camera channel corresponds to the I/O mode, which means that when an alarm is activated, the corresponding channel for either recording or taking pictures will also be activated.  
**ON:** setting the I/O to ON will cause the internal monitor recognise the sensor type automatically.

**I/O status types:**

**NO:** *normally open* means that the sensor is kept at a constant low voltage in normal operation. If the output voltage changes from low to high, then an alarm is activated.

**NC:** *normally closed* means that the sensor is under constant high voltage. If the output voltage changes from high to low, then an alarm is activated.

**OFF:** set I/O to OFF if the unit is not connected to external sensors.

**Cam1/Cam2** Enable/disable CCTV camera view.

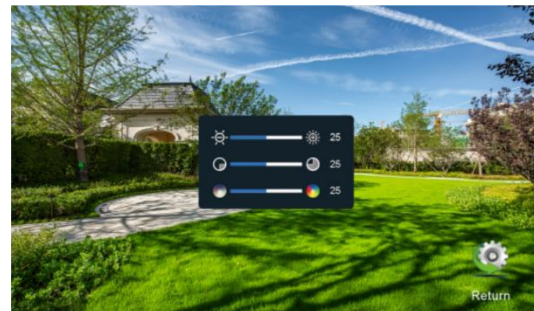
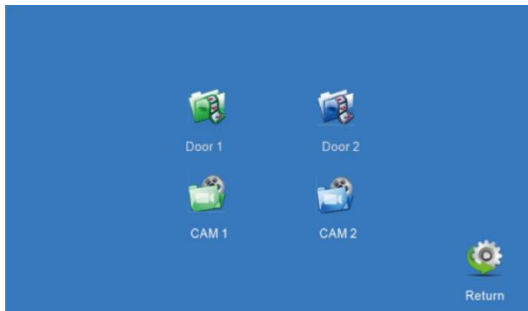
**Cam1/Cam2 ring time** Set the time for which the alarm will be activated when the sensor detects activity (from 0 to 30 seconds).

**Alarm record** Option to enable automatic recording when an alarm is triggered:  
**Record mode:** when an alarm is triggered, a 14-second video from the CCTV camera will be automatically recorded.  
**Photo mode:** when an alarm is triggered, a single snapshot from the CCTV camera will be automatically saved.



## IMAGE SETTINGS

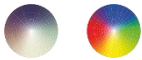
Enter the image settings by selecting the Image tab in the main menu. In order to get the best possible image, you can configure the parameters of each connected camera (image brightness, contrast and color saturation) by adjusting the values under the current lighting conditions.



Brightness: the value can be set from 0-50, the default setting is 25.



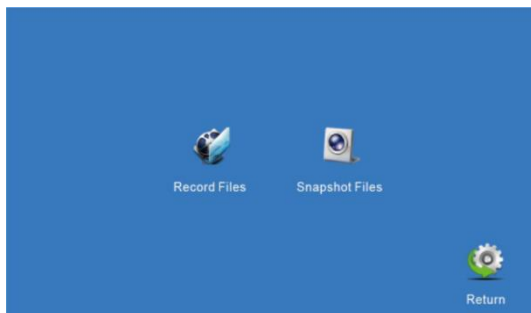
Contrast: the value can be set from 0-50, the default setting is 25.



Color saturation: the value can be set from 0-50, the default setting is 25.

## FILES

View saved files by selecting the *Files* tab on the main menu.



### Record files


Open the video recordings folder. By selecting any video, you can choose to play it, delete it, or delete all files of that category.

### Snapshot files

Open the photo folder. By selecting any photo, you can choose to open it, delete it or delete all files of that category.



## 9. ALARM INSTRUCTIONS

Cam1 and Cam2 are equipped with an alarm function. For the alarm function to work properly, it is required to connect a motion sensor to the selected camera according to the diagram below. If motion is detected, an alarm will be triggered: a bell sound will be played from the main monitor (for up to 120 seconds). Pressing the  button on the monitor will turn off the alarm and the monitor will return to standby mode. If the monitor has been set to record/photo mode during the alarm a video recording (14s) or photo will also be recorded.

**Note:** make sure the CCTV camera supports the CVBS video format.

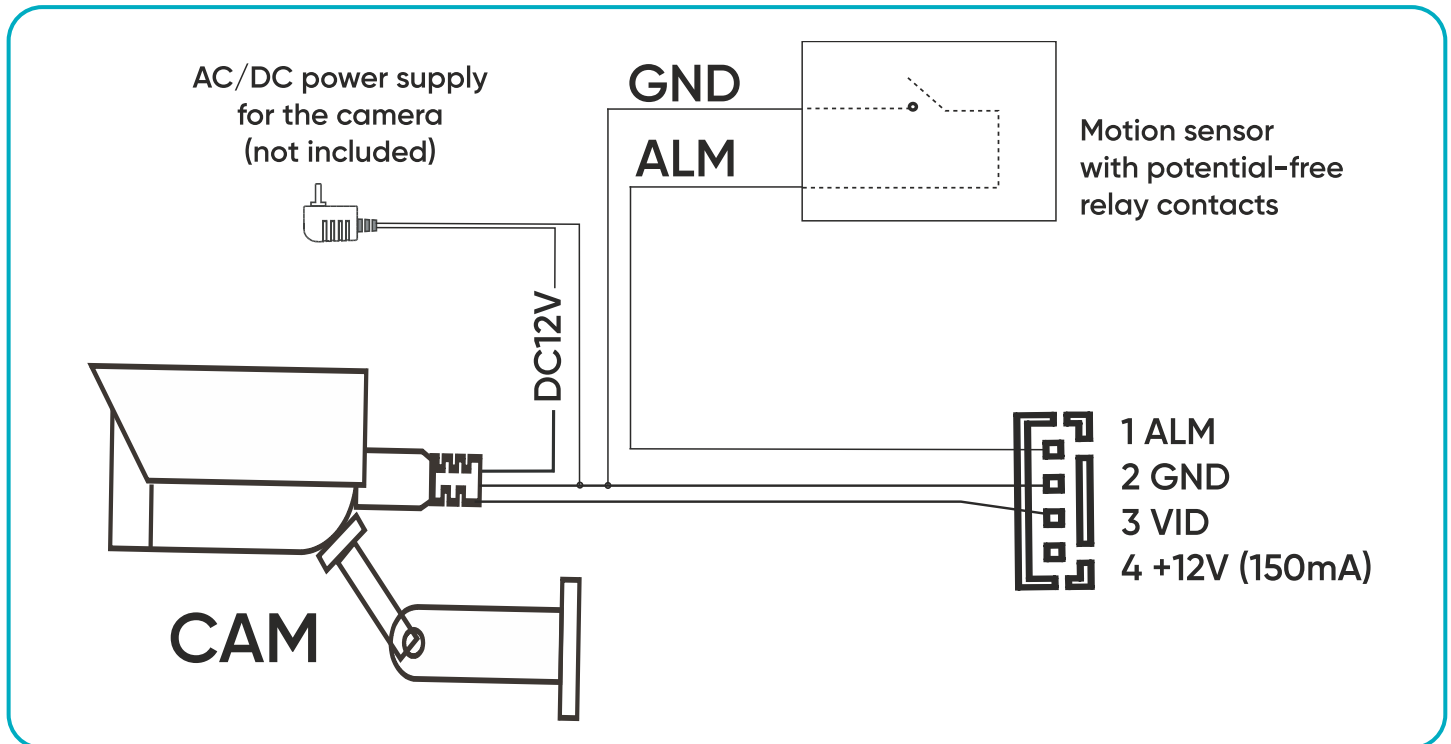


fig. 6 Wiring diagram

Any input type (NO/NC) can be connected to terminals Cam1 and Cam2.

The ALM terminal of the alarm sensor should be connected in parallel with the ALM terminal on the monitor. The alarm sensor and the camera must have their own external power supply. The GND terminal of the alarm sensor should be connected in parallel with the GND terminal of the camera.

For NO alarm contacts, connecting GND and ALM will activate the alarm.

For NC alarm contacts, disconnecting GND and ALM will activate the alarm.

## 10. CLEANING AND MAINTENANCE

- The monitor should not be placed in a location exposed to high temperatures, in direct sunlight or high humidity locations (e.g. bathrooms),
- the monitor should not be placed near a television set or other objects that may cause interference to the signal,
- do not touch the device with wet hands,
- clean with a soft slightly damp cloth with mild cleaning agents designed for plastic; do not use cleaning agents based on solvents, gasoline, etc., or agents containing abrasive substances,
- do not place the camera in direct sunlight,
- before installing the device in the chosen place, make sure that there is no signal interference,
- avoid turning off the device while recording, data may be lost.



## 11. TROUBLESHOOTING

### 1. No audio/video, no indicator light

- a) no supply voltage,
- b) damaged or incorrectly connected connecting cable, check your installation for technical requirements,
- c) check that the installation is not exposed to water, moisture etc.,
- d) check that the camera lens is not obstructed by an object that prevents proper view.

### 2. No video but audio is normal

- a) check that all connections are made correctly with regard to technical requirements,
- b) check that the camera lens is not obstructed by an object that prevents proper view.

### 3. No audio when calling

- a) ensure that the monitor volume is not set to the lowest setting,
- b) ensure that there are no objects in the vicinity of the device that could cause interfering with the signal,
- c) check that all connections are made correctly with regard to technical requirements.


### 4. Outdoor unit cannot call the monitor

- a) check that all connections are made correctly with regard to technical requirements.



### 5. Electric door strike not working

- a) check the independent operation of the electric door strike by connecting it to the required voltage, etc.,
- b) check that the parameters of the electric door strike are consistent with the operating manual.

### 6. Cannot hear the visitor when answering a call

- a) press the  button to activate two-way intercom,
- b) check that all connections are made correctly with regard to technical requirements.

### 7. You can hear the visitor when you receive a call, but you cannot answer them

- a) press the  button to activate two-way intercom (pressing the  button on the monitor, the outdoor unit cannot hear the indoor unit,
- b) check that all connections are made correctly with regard to technical requirements.

### 8. Numerous distortions on the image, no synchronization (image flashes)

- a) connection cable has a cross-section not suitable for the length,
- b) connection too long - use a twisted pair cabling,
- c) bad quality of the cable,
- d) a strong source of electromagnetic interference - use a twisted pair cabling.

### 9. Audio on the monitor is coupling

- a) check your installation for technical requirements,
- b) check whether the installation is not exposed to water and moisture, etc.

### 10. Scratched monitor

- a) check whether the protective film is removed from the screen.