



# Operating and installation instructions

## Video doorphone set Pacto

OR-VID-MB-1083/B



**CE STOP!**

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



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### 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!



## 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;
- built-in RFID reader allows access with proximity cards and tags;
- infrared LED lighting enables night vision;
- adjustment of monitor parameters (image brightness, saturation, volume);
- intercom function when additional monitors are used.

### Key features:

- high quality color camera;
- outdoor unit housing for surface mounting (rainshield included);
- 4,3" LCD color monitor;
- set can be expanded with two additional monitors;
- 16 ringtones to choose from;
- 4-wire installation (electric door strike connected to the outdoor unit by 2 wires; no additional power supply required).

## 3. TECHNICAL DATA

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

### MONITOR

SCREEN SIZE:	4,3"
RESOLUTION:	480x272
STANDARD:	PAL
FUNCTIONS:	call, monitoring, door and gate control, monitor and volume control, intercom
NUMBER OF MELODIES:	16
VOLUME CONTROL:	yes
CALL TIME:	120s
MONITORING TIME:	40s
POWER SUPPLY:	15V DC 1A
POWER CONSUMPTION:	standby <2W; 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:	137x143x21mm
NET WEIGHT:	0,26kg



## OUTDOOR UNIT

SENSOR TYPE:	CMOS 1/2.9'
RESOLUTION:	700 TVL
VIEWING ANGLE (VERTICAL/HORIZONTAL):	51° / 104°
NIGHT LIGHTING:	IR
NUMBER OF DIODES:	6
NIGHT VISION RANGE:	approx. 1m
RFID READER:	125kHz RFID-tags/cards (max. 24 users)
MAXIMUM TRANSMITTING POWER:	<66 dBμA/m at 10m
INGRESS PROTECTION:	IP65
POWER SUPPLY:	15V DC from monitor
POWER CONSUMPTION:	standby <1W, work <3W
WORKING TEMPERATURE:	-20°C ~ +50°C
INSTALLATION:	surface-mounted
MATERIAL:	aluminum
DIMENSIONS:	58x175x39mm
NET WEIGHT:	0,21kg

## 4. SET CONSTRUCTION

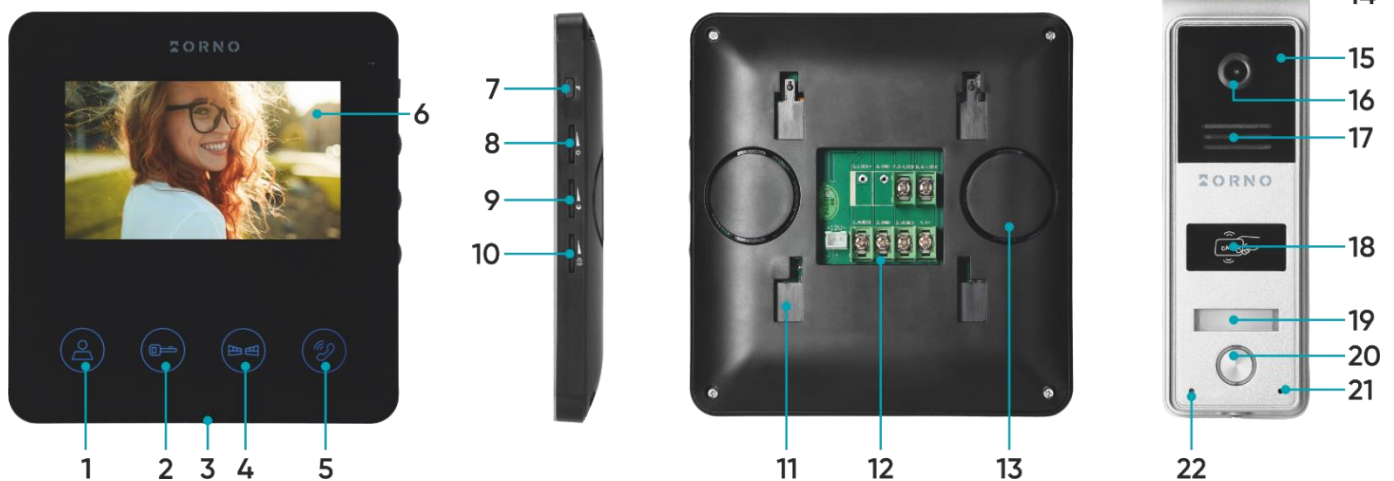


fig. 1 Construction of the monitor and the outdoor unit with camera.

### MONITOR

1. Monitoring
2. Wicket opening
3. Microphone
4. Gate opening
5. Answer/end the call
6. LCD display
7. Melody selection
8. Brightness adjustment
9. Saturation adjustment
10. Talking volume adjustment
11. Holes for mounting bracket
12. Connection terminals
13. Loudspeaker

### OUTDOOR UNIT

14. Rainshield
15. Night light
16. Camera lens
17. Loudspeaker
18. RFID reader
19. Nameplate
20. Call button
21. Microphone
22. Indication LED



## 5. INSTALLATION

### MONITOR INSTALLATION

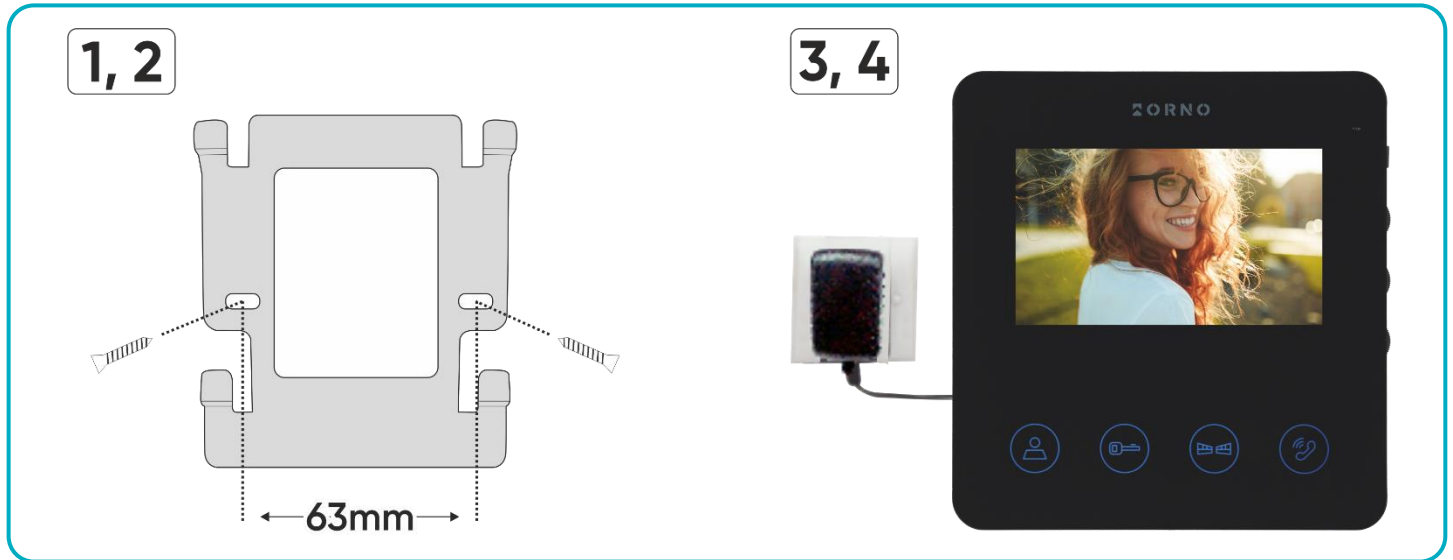


fig.2 Monitor installation

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

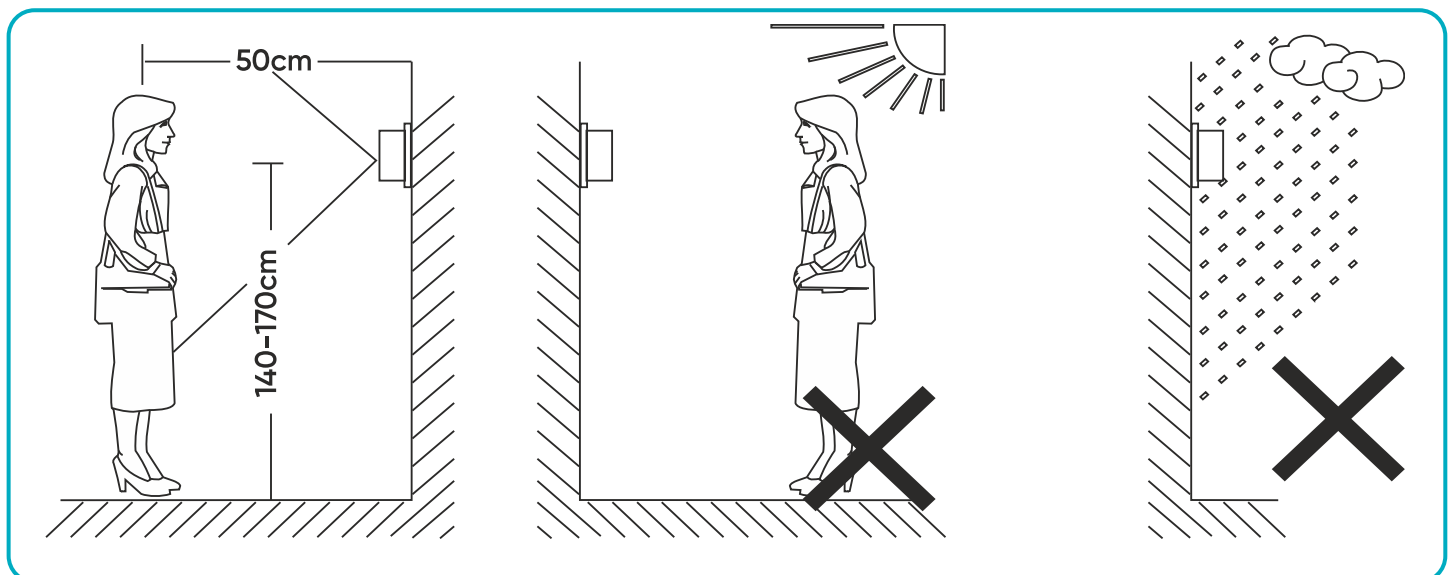


fig.3 Outdoor unit placement

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.



1. Drill holes in the wall and insert the wall anchors into them. Pull through the wires and screw the rainshield to the desired location with screws. To put your name on the outdoor unit, press the nameplate on the right side and slide it to the right. When the plate pops off, remove the namecard and sign your name. Insert the namecard back and slide the nameplate into the outer unit.
2. Connect the wires according to the wiring diagram and place the outdoor unit in the rainshield.
3. Secure the outdoor unit by screwing in the security screw from below.

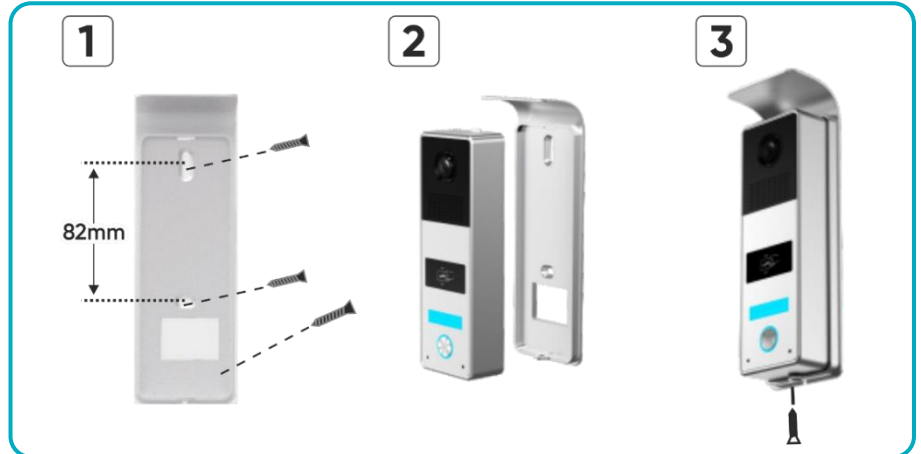


fig.4 Outdoor unit with camera installation

## 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.

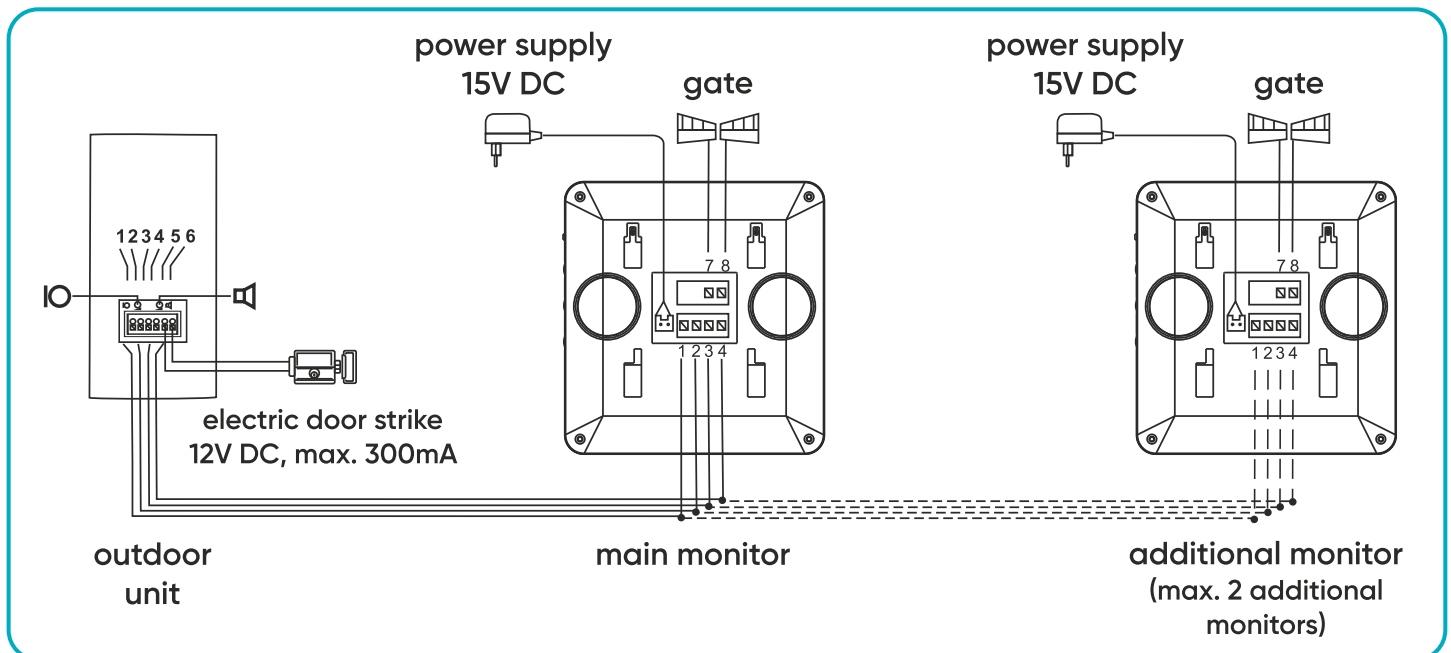


fig.5 Wiring diagram

### LEGEND

- |            |                  |                            |          |                                     |
|------------|------------------|----------------------------|----------|-------------------------------------|
| 1 – audio  | 3 – video        | 5 – electric door strike + | 7 – gate | – loudspeaker volume adjustment     |
| 2 – ground | 4 – power supply | 6 – electric door strike - | 8 – gate | – microphone sensitivity adjustment |



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


### CONVERSATION

Pressing the call button on the external panel will cause the monitor to ring and the image of the visitor will appear on the screen. To start the call, press the  button on the monitor panel, to end the call, press the  button again. The maximum call time is 120s.


### MONITORING

It is possible to activate the camera to observe the surroundings without a call from the outdoor unit. To do this, use the  button when the monitor is in standby mode. The duration of the monitoring function is about 40 seconds. In monitoring mode, the loudspeaker of the external panel remains muted. To start a call, press the  button.




### REMOTE WICKET OPENING

If an electric door strike is connected to the device, it is possible to open the wicket remotely from the monitor panel. To do this, during a call or monitoring, use the  button.


### REMOTE GATE OPENING

If an automatic gate control unit is connected to the device, it is possible to open the gate remotely from the monitor panel. To do this, use the  button.


### CHANGING THE MONITOR SETTINGS

With the controls located on the side of the monitor it is possible to adjust the brightness of the image , color saturation , and talking volume .

### CHANGING THE RINGTONE

The monitor has 16 built-in ringtones. During monitoring and conversation, it is possible to select the desired melody with the  button located on the side of the monitor.

### INTERCOM FUNCTION

When an additional monitor is connected, an intercom connection (connection between two monitors) is possible. The intercom function can be started from any monitor. To do this, press the  button on the monitor for about 2 seconds. The intercom connection can last for a maximum of 60 seconds. If the intercom call is not answered for 30 seconds, the monitor will go into standby mode.



## 8. RFID READER

Set contains 7 RFID tags (if a tag is lost, it is possible to configure additional cards/tags): 5 blue users tags, 1 yellow tag used for adding new users, 1 red tag (used to delete all saved users). The tags are pre-configured and do not need to be programmed when the device is installed.

### ADDING NEW USERS (max. 24 users)

Place the yellow tag close to the RFID reader on the outdoor panel. A double signal confirms the entry into new user programming mode. Afterwards, place the user tag you want to add close to the RFID reader (you will hear a single signal indicating the successful addition of a user). If you want to add more users tags, place them one by one close to the RFID reader without exiting the programming mode. The device will automatically return to normal operation mode if you don't perform any action for 20 seconds (you will hear a long signal).

### DELETING ALL USERS

Place the red tag close to the RFID reader on the outdoor unit. A long signal confirms the deletion of all users from the memory of the device. The device will automatically return to operation mode. Use the yellow tag to program new users.

## 9. 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,
- do not place the camera in direct sunlight,
- before installing the device in the chosen place, make sure that there is no signal interference,
- 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.

## 10. 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.



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**Simplified declaration of conformity**

Orno-Logistic Sp. z o.o. declares that the type of radio device OR-VID-MB-1083/B Video doorphone set Pacto is compliant with the Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following web address: [www.orno.pl](http://www.orno.pl)