# ORNO

# SINGLE FAMILY WIRELESS VIDEODOORPHONE SEMIS MEMO

Model: OR-VID-XE-1051



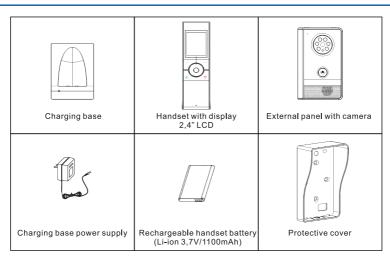
**OPERATION AND INSTALLATION INSTRUCTION** 



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# 2. PACKAGE CONTENTS



### 3. INTRODUCTION

Before using the device, read this Service Manual and keep it for future use. In case of any problems with understanding its content, please contact the seller. Installation and commissioning of the device by the customer are possible if the installer has basic knowledge of electrical systems and the use of proper tools. However, it is recommended that the device be installed by qualified personnel.

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.

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.

The latest version of the Manual can be downloaded from 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 open the device and do not repair yourself.
- 5. Do not use the device contrary to its dedication.
- 6. Do not install the handset near devices that emit strong magnetic fields such as TVs or speakers.
- 7. Do not install the handset in a place exposed to high humidity, vibrations, shocks and strong sunlight.
- 8. Turn off the power if there are "abnormal" sounds from the device.
- 9. After installation and assembly, remove the protective film from the monitor screen.



#### WARNING

It is forbidden to make connections to live devices!

Failure to comply with the above recommendation may result in permanent damage to the device.

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!

#### Simplified declaration of conformity

Orno-Logistic Sp. z o.o. declares that the type of radio device: OR-VID-XE-1051 Wireless videophone set is compliant with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following web address: www.orno.pl.

### 4. DESTINATION AND CHARACTERISTICS

Wireless digital technology.

2.4"TFT LCD display.

Video resolution: 320 × 240, 15 frames/sec.

Wide angle camera lens.

Viewing of the environment from the camera, remote control of the electric door strike and alarm signal in case of an attempt to remove the camera.

Hands-free mode.

Adjust: screen brightness and volume: call, call sound and camera ring tone.

6 LEDs for night vision at low light levels.

Internal memory for up to 100 photos.

Waterproof outdoor panel with IP55 camera.

Support for up to 2 cameras.

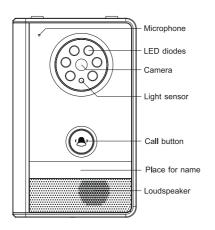
Range: up to 150m in an open area.

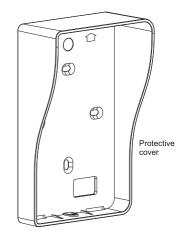
Power supply to the external panel from a 12VDC power supply unit (not supplied) or two LR14 type batteries (not supplied).

The electric strike requires additional 12V DC power supply.

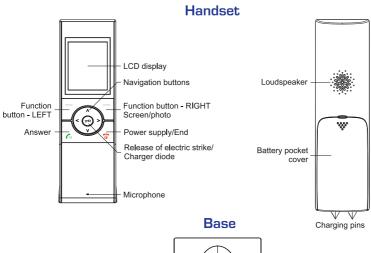
# **5. CONSTRUCTION OF DEVICE**

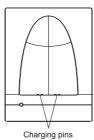
# 5.1 Construction of the external panel with camera





# 5.2 Construction of the handset and base





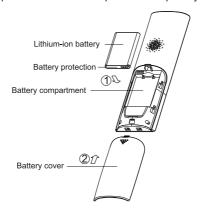
# 5.3 Description of the handset's functional buttons

_	Functional button - LEFT		Menu/Choose
٨	Navigation buttons	Up	Navigation - up Increasing image brightness
V		Down	Navigation - down Reducing image brightness
<		Left	Volume reduction
>		Right	Volume increase
<del></del>	Wicket opening button		Releasing the lock
Co.	Call button		Answer the call
<u></u>	End of call button		End of conversation/ ON/OFF the handset
_	Function button - RIGHT		Preview/ Image capture/ Back

### 6. INSTALLATION

# 6.1 Installation of battery in handset

Battery Li-Ion 3,7V, 1100mAh is included. Install it before using the device for the first time. Remember to remove the protective film and keep the correct polarity (+, -).



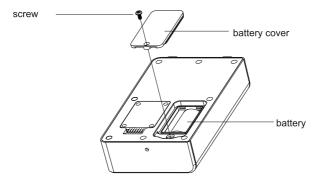
#### **IMPORTANT**:

- If the battery does not reach full capacity after being charged, replace it with a new one.
  When replacing an old battery, it should be replaced by a new good quality lithium-ion (Li-Ion)

# 6.2 Battery installation in the external panel

The external panel with the camera is powered by two LR14 type batteries (not included in the set) or by a 12V DC mains adapter (not included in the set).

- 1. Loosen the screw and remove the battery cover
- 2. Put 2 batteries in compartment with the correct polarity (+,-)
- 3. Replace the battery cover



# 6.3 Power supply of the base

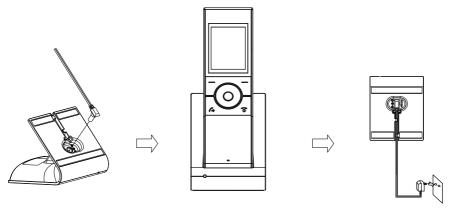
Connect the power supply plug of the power supply unit (power supply unit included) to the power outlet of the base, and then connect the power supply unit to the 230V~ network.

# 6.4 Charging the handset

Important:

Before using the handset for the first time, it should be charged for 5 hours (fully charged).

To charge the battery in the handset, it should be placed on a base unit (connected to the 230V~ mains supply via the power supply unit).



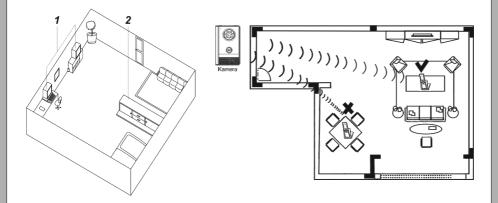
# 6.5 Installation of the external panel

The correct location of the external panel determines the comfort of working with the device, therefore it is recommended to adjust the mounting location and to test the operation of the device before making mounting holes. To do so, connect the device for a test according to the connection diagram, carefully examine the field of view of the camera and test it.

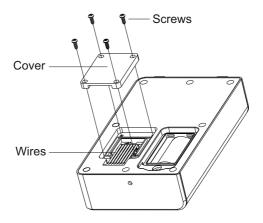
- 1. Select a suitable mounting location for the outdoor panel. Remember to keep the correct height, at which the camera will be located about 150 cm.
- 2. Mark 2 places on the wall through the holes in the canopy to mark 2 places for anchors and mounting screws.
- 3. Use 2 screws and mounting anchors to hang the protective cover on the wall or post at the desired height.
- 4. If the video intercom is to be able to control the electric door strike remotely, an additional power supply and electric door strike should be connected according to the connection diagram in Fig. 7.1.
- 5. Place the panel in a fixed protective cover.
- 6. Secure the panel by screwing the lower screw and complete the installation.

#### **IMPORTANT:**

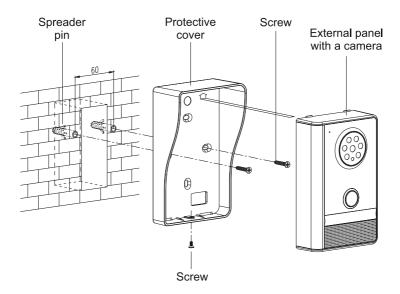
- Do not place the device close to other electronic devices such as a television, computer or other wireless devices.
- Choose a high, central place. Avoid wall type obstacles. Do not place the device near WiFi transmitters and microwave ovens.



Once connected to the terminals, tighten the wires and lead them in the designated trays.
 Use the screws to mount the cover.



2. Choose a suitable location for the outdoor panel. Mount the protective cover to the wall, place the outdoor panel with camera in it and screw it in from below.

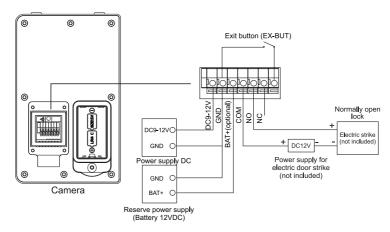


# 7. WIRING DIAGRAMS

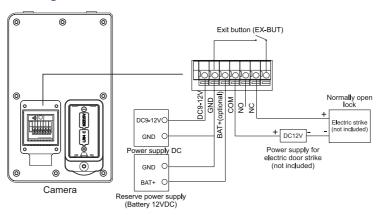
#### **IMPORTANT:**

To control the electric door strike, it is possible to use an additional power supply adapted to the parameters of the used electric door strike.

# 7.1 Connecting mode 1



# 7.2 Connecting mode 2



#### **IMPORTANT:**

The camera can be powered by batteries or a power supply unit (not included). Do not operate the camera with batteries or power supply unit simultaneously. If the camera is powered by a power supply, the preview function is available. If it is powered by batteries, the preview function is not available until the power mode is changed to power mode.

# 8. TECHNICAL MODE

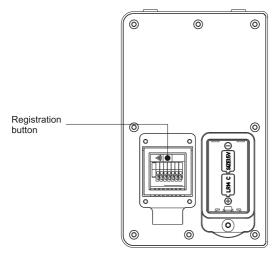
# 8.1 Turning the handset on and off

To turn the handset on/off, press and hold the button .

# 8.2 Registration of the handset with external panel

To register the handset with an external panel, follow the steps below:

- 1. On the back of the camera, under the cover of the terminals for connecting cables, there is a hole with a registration button **?**. Insert a small screwdriver into the hole and press the button for 3 seconds. A beep will sound and the call button on the front of the camera will be highlighted.
- 2. Press the left function key on the handset and select Registration in the menu. With the Λ or V button, select the camera (select 1-2) you want to log in. Press the button —, below MENU on the handset to confirm the settings. The camera will now auto search for the handset to register. The correct registration of the handset will be confirmed by a single beep.



3. Press the button — below the MENU sign on the handset, then select the Registration menu. The following screen will appear indicating that the camera has successfully registered the handset.



4. To logout the external panel, select 1 or 2 and press the left function button — below Ⅲ. The display will show Ⅲ? Press the button — below ✓, to confirm. Press the button — below ☐, to return to the main menu.

#### **IMPORTANT:**

- 1 It can take up to 60 seconds to register the external panel
- 2. It can take up to 20 seconds to register the handset.
- 3. The product supports up to 2 cameras and 2 handsets

# 8.3 Energy saving mode

#### 1. Turning off

If the external panel is battery-powered, the handset does not support the preview function by default. Press and hold the registration button and release it when you hear "bi" sound. Press and hold the registration button again for 3 seconds - the outdoor panel will make short intermittent "bi-bi-bi" beeps and will switch from power saving mode to normal mode. The preview function is now available.

#### 2. Turning on

Press the registration button for 3 seconds - short intermittent sounds will sound and the external panel will return to power saving mode. The preview function is now switched off.

### 9. OPERATION

# 9.1 Monitoring

The screen automatically displays the menu related to the registered external panels.

- 1. In standby mode, press the button below **Screen**.
- 2. If only one external panel is registered, the screen will display one item. When an external panel is registered, the handset automatically switches to preview mode.
- 3. When recording two external panels, the display will show either Screen 1 or Screen 2. Use the Λ or V button to select the appropriate monitor and then press under **Select**.
- 4. In the preview mode, press the **Answer** button to switch to the call function.

#### **IMPORTANT:**

The monitoring time is up to 45 seconds.

### 9.2 Anti-tamper alarm

If someone tries to remove the external panel from the holder, a signal will be heard on the external panel and on the handset. The call button is inactive during an alarm. To switch off the alarm sound, press the or button on the handset.

#### **IMPORTANT:**

Alarm time is up to 5 minutes

### 9.3 Call up the handset

When you press the call button on the external panel, the associated handset will start ringing and a camera preview will appear on the handset screen.

- 1. Press the button of to reject the call.
- 2. Press the button of to answer the video call. To end, press the button o.
- 3. If you do not answer the call, the monitor will return to the home screen. A blinking missed call icon will appear in the upper left corner, reminding you to view the saved images. Press the button on the home screen or view the images in "Gallery Overview".

#### **IMPORTANT:**

Missed call icon is displayed if Auto Photo is enabled

#### **IMPORTANT:**

- The ringing time may take a maximum of 15 seconds
- The maximum conversation time is 45 seconds. After this time, the conversation will automatically be switched off.

# 9.4 Opening

During a conversation or during a preview it is possible to open the door remotely (after connecting a suitable electric door strike). To open the door press the button

# 9.5 Backlighting

- 1. If the external panel is powered from a 12V DC power supply, the call button will be highlighted.
- 2. The backlighting does not work if the external panel is powered by a battery.
- 3. During registration, ringing, alarm, preview and conversation, the button lighting will flash.

#### **IMPORTANT:**

When calling, alarm and monitoring, if the external panel is battery-powered, in power-saving mode, the backlight switches off and does not flash.

#### 9.6 MENU function

To enter the menu options, press the left function button — below the Menu text. Use the Λ or V buttons to select the appropriate Menu item and then press the left function button — below Select.

#### 9.6.1 Volume

This function allows you to adjust: speech volume, ring volume and ringing time.

- 1. Use the buttons Λ or V to select the item you want.
- 2. Use the < or > buttons to set the desired volume or time level.
- Press the left function button below Select to save the settings and return to the menu.
- 4. You can also set the selected volume level using the buttons < or > in standby mode.

# 9.6.2 Level of brightness

This function allows you to adjust the image brightness.

- Use the < or > buttons to set the selected brightness level. Each time you press the < or > buttons, the screen displays the selected brightness level.
- Press the left function button below Select to save the settings and return to the menu.
- You can also set the selected brightness level using the buttons < or > in the standby mode.

#### 9.6.3 Button sounds

This function allows you to disable button sound.

- Use the Λ or V buttons to select "On" or "Off".
- 2. Press the left function button below **Select** to save the setting and return to the menu.

### 9.6.4 Ring tone

This function allows you to select the ringtone. There are 3 sounds to choose from.

- Use the ∧ or V buttons to select the next sounds: ("Ring 1", "Ring 2", "Ring 3") to listen to the sound.
- 2. With the selected sound, press the left function button below **Select** to save the setting and return to the menu.

### 9.6.5 Image settings

This function allows the person who presses the call button on the external panel to automatically take a picture.

- 1. Use the Λ or V buttons to select: "On" or "Off".
- 2. Press the left function button below **Select** to save the setting and return to the menu.

# 9.6.6 Browse gallery (Menu: "Browse gallery")

This function makes it possible: View saved images, delete selected or all images.

- 1. Use the < or > buttons to browse through the saved images.
- 3. To delete all images, select the icon . by pressing the button . You will be asked whether to delete everything. Press the button below , to delete. Press the right function button below **Return**.
- 4. Press the button below  $\Box$ , to return to the main menu.

### 9.6.7 Date/time

This function allows you to set the clock and date.

- 1. Press the < or > buttons to select: hour, minute, year, month, day.
- Use the Λ or V buttons to set the correct value. Set the time in 24-hour format and the date YYYYY-MM-DD.
- 3. Press the left function button below Select to save the settings and return to the menu.

# 9.6.8 Door opening (Menu "Door opening")

This function allows you to set: camera volume, ringing time and door opening time.

- Press the Λ or V buttons to choose the position you are interested in: "Volume", "Ring time". "Unlock time".
- 2. Use the < or > buttons to set the desired volume level or time.
- Press the left function button below Select to save the settings and return to the menu.

# 9.6.9 Language

This function allows you to set the menu language.

- 1. The screen displays 8 languages to choose from. Each has a number assigned to it. Above them, the green number of the current language is displayed.
- 2. Use the  $\Lambda$  or V buttons to set the number of the language you want to dial. The Polish language has the number 2.
- Press the left function button below Select to save the settings and return to the menu.

#### 9.6.10 Wallpaper

This function allows you to set the menu wallpaper. There are three styles to choose from.

#### 9.6.11 Version

This function allows you to check the software version.

#### 9.6.12 Factory settings (Menu "Factory settings")

This function allows you to change all settings to the factory settings.

- Use the Λ or V button to select "YES" or "NO".
- Press the left function button below Select to save the settings and return to the menu.

# 10. TECHNICAL DATA

Item	Value				
External panel					
Frequency	2.400GHz~2.4835GHz				
Capacity	2.0Mbps				
Transmission power	19dBm (TYP)				
Modulation type	GFSK				
Image sensor type	colour, CMOS				
Video compression standard	H.264				
Camera resolution	640 × 480				
White balance	Auto				
Camera viewing angle (diagonal)	vertical 92°, horizontal 63°				
number of LEDs	6 pcs.				
Power requirements	(+9V-12V)±5%/2×LR14(C), batteries 1,5V				
Power consumption	500mA Max(batteries) 200mA Max(+12V DC)				
Working temperature	-20°C∼+55°C				
Humidity	up to 80%				
Dimensions	105 × 167 × 50mm				
Number of handsets supported	Max. 2				
Leakage class	IP55				
Handset					
Range in the open field	150m				
Frequency	2.400GHz~2.4835GHz				
Screen	2.4" colour LCD				
Capacity	2.0Mbps				
Sensitivity	-85dBm				
Type of demodulation	GFSK				
Resolution	320 × 240 (RGB)				
Transmission power	19dBm (TYP)				
Power supply	BL-5C, 3.7V, 1100mAh (Li-lon battery)				
Power consumption	400mA Max				
Working temperature	-10°C∼+40°C				
Humidity	up to 80%				
Dimensions	Handset: 52.7 × 188.2 × 26.3mm Base: 80 × 95.2 × 103.7mm				
Number of supported panels	Max. 2				



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