SQ-07MTHD

7" video intercom
with touch screen

Technical support

Thank you for
choosing our equipment

User manual

SLINEX

SLINEX

Attention!

As a result of continuous upgrades and functionality improvements, technical characteristics of the device can be changed without any preliminary declaration. This manual can contain some inaccuracy or misprint. The owner reserves the right to make corrections to the information described in the user manual and device package. The last revision of this manual is available on www.slinex.com

Safety instructions

Read and keep that manual.

The device installation process should be carried out by the qulified specialists.

Use the device from −10 ˚C to +55 ˚C, always keep it within that temperature range.

Installation surface should be free from vibration and impact influence.

Keep this device far from open sources of heat, such as radiators, heaters, and ovens.

The device can be installed near other electronic equipment in case if the temperature of the environment does not exceed previously mentioned range.

The device should be protected from the direct influence of the natural phenomena, such as direct sunlight, rain or snow.

Don't use aggressive or abradant detergent for the device surface cleaning.

Use soft wet cloth or tissue to remove strong dirt.

Don't overpower outlets. It can cause fire or electric shock.

Nature protection

Don't throw away the device with other industrial or nutritive trash if you see that symbol. Some regions have separation and recycling systems for the electronic equipment. Connect with local authorities to receive information about recycling of electronic equipment for your region.

Rights and limitation of liability

Table of contents

SLINEX

SQ-07MTHD

1. Package

SQ-07MTHD indoor monitor – 1 pc.
Wall mounting bracket – 1 pc.
Connection wires – 7 pcs.
Mounting screws and anchors – 1 pkg.
User manual – 1 pc.

2. Specification

197 mm (7.75")
20 mm (0.78")
127 mm (5.00")
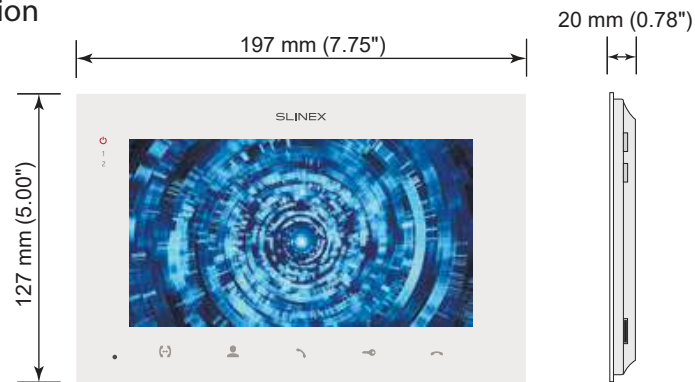
SCREEN
7", color IPS with touch screen

RESOLUTION
1024×600 px.

VIDEO SYSTEM
PAL / NTSC / AHD, TVI, CVI (720p,1080p)

AUDIO TYPE
Half duplex

CALL DURATION
120 seconds

MEMORY
MicroSD card, up to 64 Gb
Internal memory, up to 100 snapshots

STANDBY MODE POWER CONSUMPTION
3 W

WORKING MODE POWER CONSUMPTION
7 W

POWER SUPPLY
Built-in power supply, ~100–240 V

MOUNTING TYPE
Surface mount

DIMENSIONS
197×127×20 мм (7.75×5.00×0.78")

WORKING TEMPERATURE
−10 ... +55 ˚C (+14...+131 ˚F)

3. Description
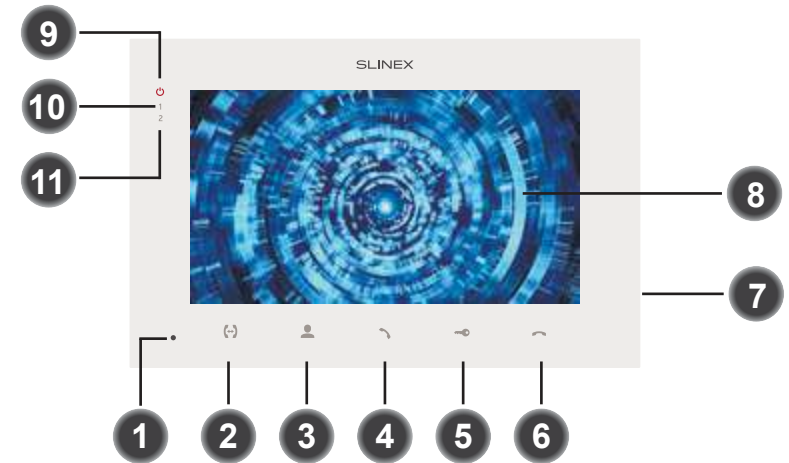
1   Microphone
2   «Intercom» button – call another monitor or incoming call redirection
3   «Monitor» button – outdoor panel or camera image monitoring
4   «Answer» button – incoming call answer and start talking with the visitor
5   «Unlock» button – door unlocking
6   «Hang Up» button – stop conversation with the visitor / current system settings menu exit
7   MicroSD memory card slot (on the side of the monitor)
8   Touch display
9   Power LED. Active when the power is on.
10   First outdoor panel LED. Active when the first outdoor panel is on.
11   Second outdoor panel LED. Active when the second outdoor panel is on.

3

4

4. Installation

4.1. Cable requirements

Disconnect all power cables before device installation.

This device can be connected with such cable types depends on the distance between door monitor and door panel:

a) Use 4-wire cable with such parameters:
- distance up to 25 meters (82 ft.) use a cable with 0,22 mm² square of one wire (AWG 24);
- distance 25 to 50 (82-164 ft.) meters use a cable with 0,41 mm² square of one wire (AWG 21);
- distance 50 to 100 meters (164-328 ft.) use a cable with 0,75 mm² square of one wire (AWG 18).
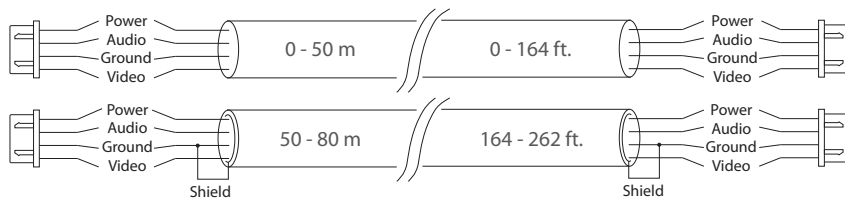
b) If the distance between door monitor and door panel is between 80 and 100 meters (262-328 ft.) then use a 3-wire cable with 0,75 mm² (AWG 18) square of one wire and RG-59 or RG-6 coaxial cable for the video signal.
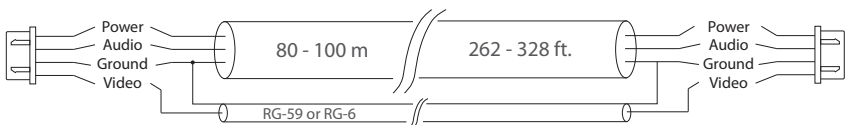
c) Shielded or non-shielded twisted pair (not recommended):
- distance up to 25 meters (82 ft.) non-shielded twisted pair can be used;
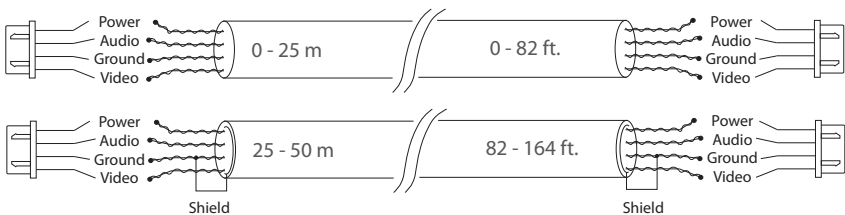
4.2. Schematic diagrams

Diagram 1. SQ-07MTHD outdoor panels, cameras and locks connection.
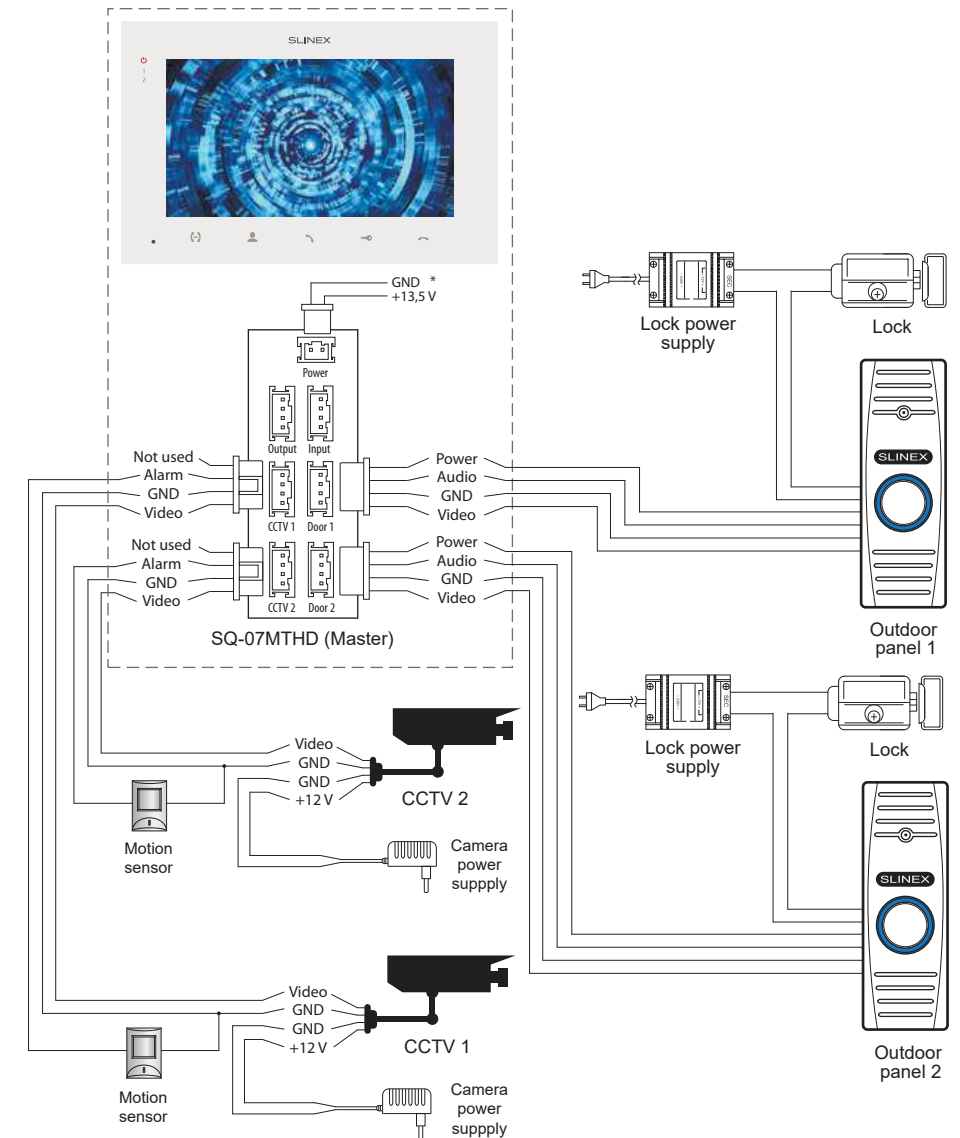
Diagram 2. SQ-07MTHD system connection.

SQ-07MTHD (Master)

SQ-07MTHD (Slave)

SQ-07MTHD (Slave)

SQ-07MTHD (Slave)
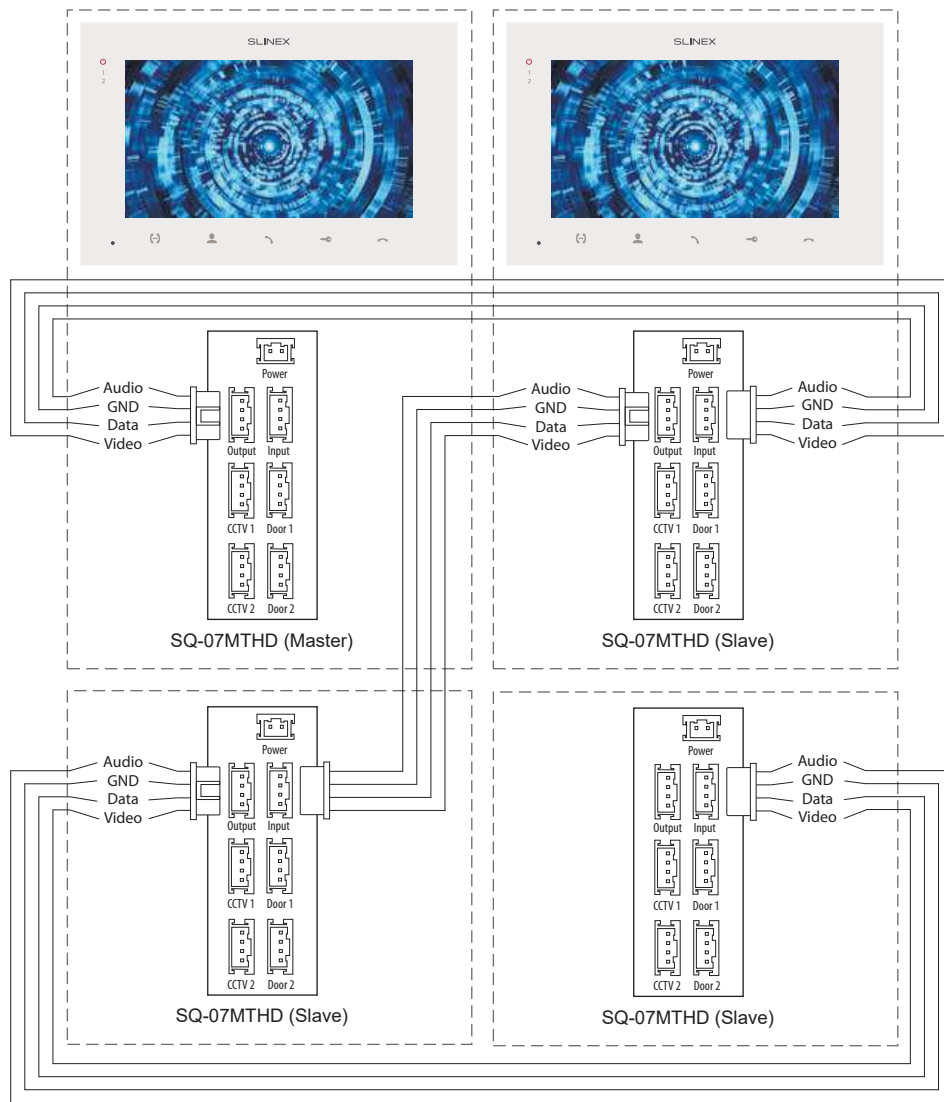
Notes:

    *   *Use «Power» plug to connect external power supply +13,5 V. While use external power supply please keep main power cord ~100-240 V disconnected from the outlet, otherwise it can damage monitor circuits.*

    **   *Outdoor panels, cameras, power supplys, locks and motion sensors illustrated on the schemes are optional devices and aren't included into monitors kit.*

4.3. Unit mount

1) Take the surface mount bracket from the kit and place it 150-160 cm from the floor line.

2) Mark and drill four halls in the wall.

3) Take four anchors from the kit and hammer them into the drilled halls.

4) Fix surface mount bracket on the wall by four screws from the kit.

5) Connect all communication wires and fix the monitor on the surface mount bracket.
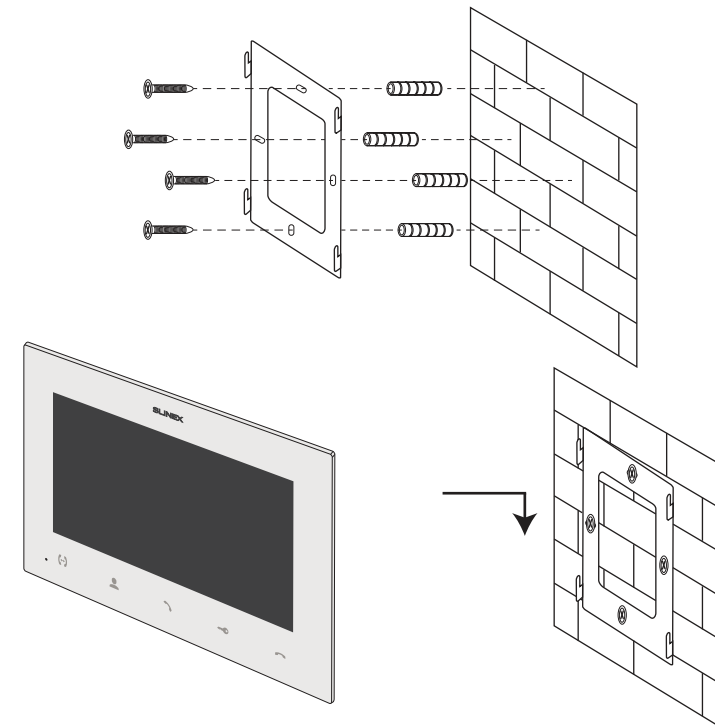
5. Operation

5.1. Incoming call

Standby mode

Visitor presses call button on the first outdoor panel

Visitor presses call button on the second outdoor panel

Melody is ringing on the monitor and outdoor panel, image from the outdoor panel appears on the monitor screen

Press «Answer» button to start conversation with the visitor

Answer

Press «Hang up» button to stop conversation or incoming call

Hang up

Melody stops ringing and conversation starts, talking time is 120 seconds

Press «Unlock» button to open lock connected to the current outdoor panel. Built-in relay will open the lock

Unlock

20 seconds

Standby mode

Notes:
1) Monitor will be automatically switched into standby mode if the user doesn't answer incoming call during 60 seconds;
2) Image and sound from the outdoor panel will be active during 20 seconds after the moment user presses   Unlock   button. It let the user know if the visitor passed through the door.
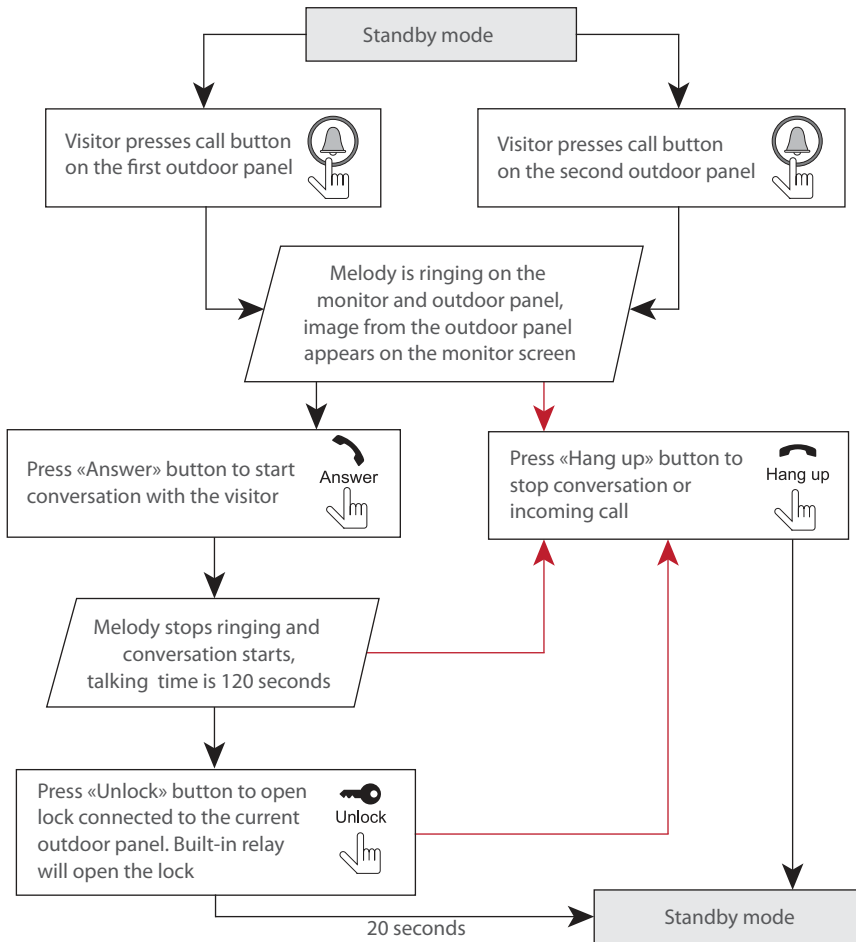
5.2. Outdoor panel and camera image view

Standby mode

Press «Monitor» button on the monitor
Monitor

Monitor will display the image from the first outdoor panel (monitoring time – 60 seconds)

Press «Monitor» button on the monitor again
Monitor

Monitor will display the image from the first CCTV camera (monitoring time is unlimited)

Press «Monitor» button on the monitor again
Monitor

Monitor will display the image from the second outdoor panel (monitoring time – 60 seconds)

Press «Monitor» button on the monitor again
Monitor

Monitor will display the image from the second CCTV camera (monitoring time is unlimited)

Press «Monitor» button on the monitor again
Monitor

Standby mode

Press «Hang up» button to stop monitoring or conversation
Hang up

20 seconds

Press «Unlock» button to open lock connected to the current outdoor panel. Built-in relay will open the lock
Unlock

Press «Answer» button to start conversation with the visitor
Answer

Notes:

1) If only one outdoor panel connected to the monitor then you can escape monitoring mode by pressing «Monitor» ● button one more time. (all other sources of video signal should be disabled in the monitor settings).

2) If several monitors connected into one system, the user can view the image from outdoor panels and cameras on any monitor inside this system. The image will be transferred from the «Master» monitor outdoor panels and cameras to the «Slave» monitors.

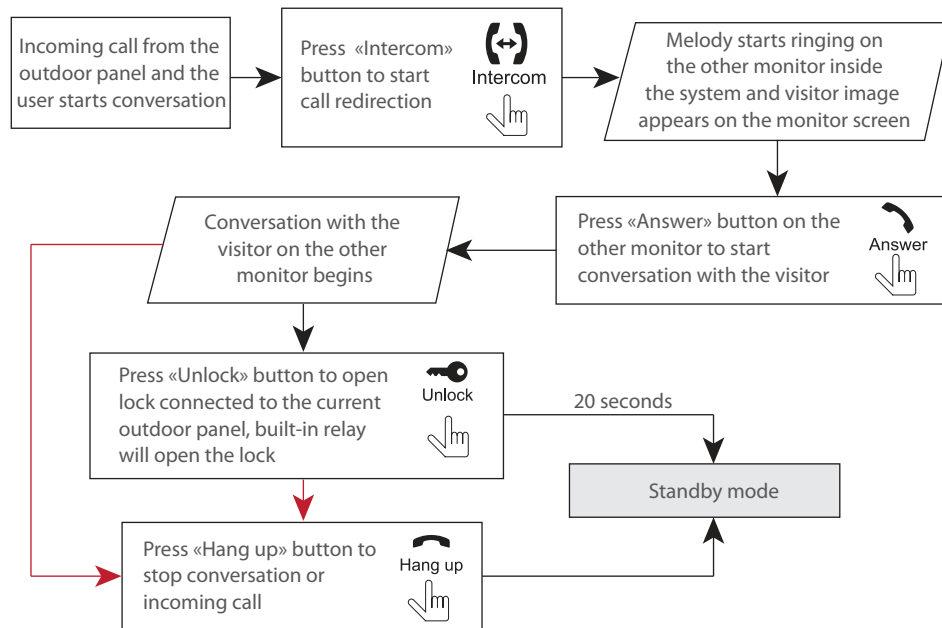*3) If someone press call button on the outdoor panel while monitoring is active then the image from this outdoor panel appears on the monitor screen and call melody starts. Press «Answer» ✆ button to start conversation.*

5.3. Incoming call redirection

Two monitors connected into one system are used.

Incoming call from the outdoor panel and the user starts conversation → Press «Intercom» button to start call redirection — Intercom → Melody starts ringing on the other monitor inside the system and visitor image appears on the monitor screen

Conversation with the visitor on the other monitor begins ← Press «Answer» button on the other monitor to start conversation with the visitor — Answer

Press «Unlock» button to open lock connected to the current outdoor panel, built-in relay will open the lock — Unlock → 20 seconds → Standby mode

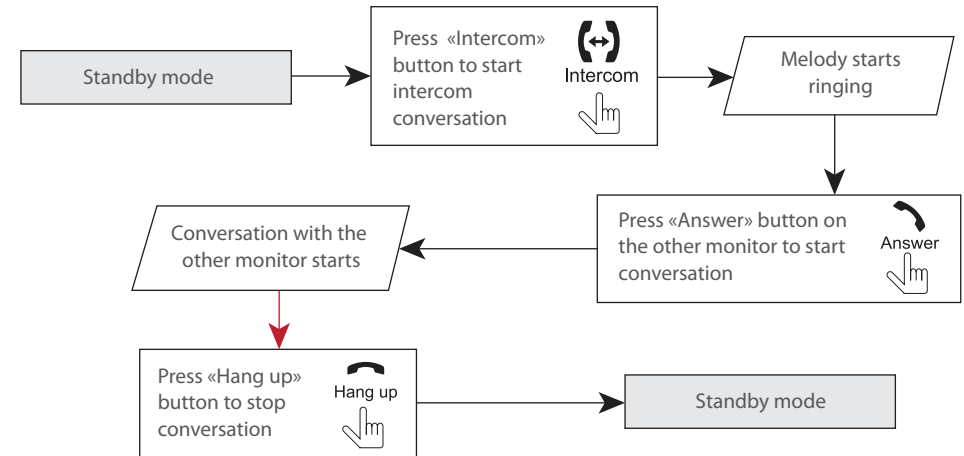Press «Hang up» button to stop conversation or incoming call — Hang up → Standby mode

Note:

If incoming call is successfully redirected to the other monitor and other user answers the call then current monitor enters standby mode.

5.4. Intercom

Two monitors connected into one system are used.

Standby mode → Press «Intercom» button to start intercom conversation — Intercom → Melody starts ringing

Conversation with the other monitor starts ← Press «Answer» button on the other monitor to start conversation — Answer

Press «Hang up» button to stop conversation — Hang up → Standby mode

Note:

If somebody presses call button on the outdoor panel while intercom is active then the image from this outdoor panel appears on the monitors screens and call melody starts ringing. Press «Answer» ✆ button to start conversation with the door panel.

6. Main menu.

In standby mode press any part of the screen to enter main menu. In main menu press any icon to enter corresponding sub menu. Press ‹ button on the bottom right corner of the screen to exit from current sub menu or to exit into standby mode.
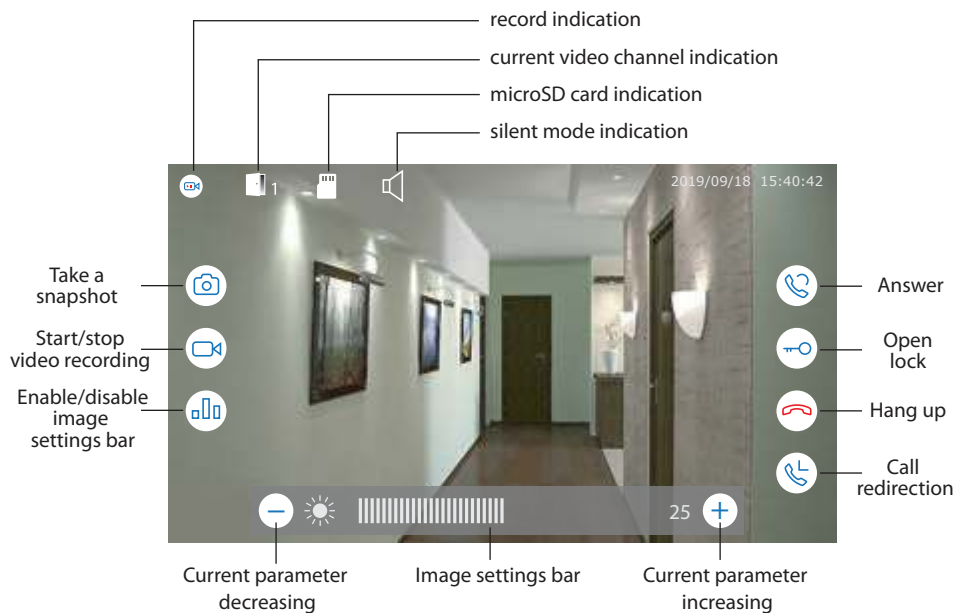
Press ← «Home screen» icon on the top left corner of the screen to exit from settings menu.

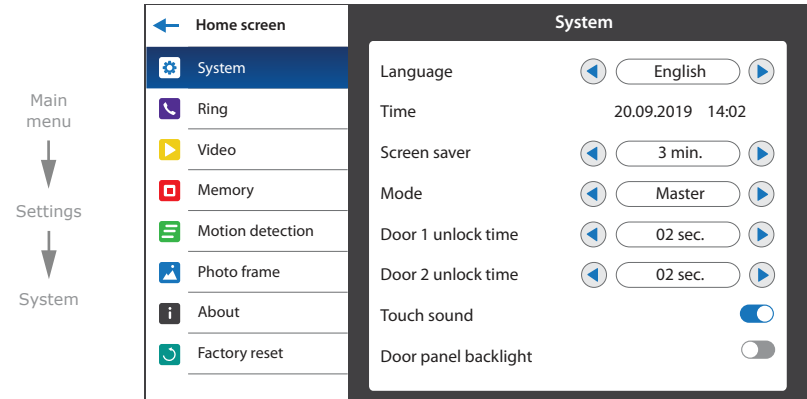All settings are saved automatically after changing its value.

Main
menu

Outdoor panels and cameras monitoring is available directly from the main menu of the monitor by

touching corresponding icons:

Door 1 – door 1 image monitoring;

Door 1 – door 2 image monitoring;

CAM 1 – camera 1 image monitoring;

CAM 2 – camera 2 image monitoring.

record indication

current video channel indication

microSD card indication

silent mode indication

Take a
snapshot

Start/stop
video recording

Enable/disable
image
settings bar

Answer

Open
lock

Hang up

Call
redirection

Current parameter
decreasing

Image settings bar

Current parameter
increasing

7. Settings
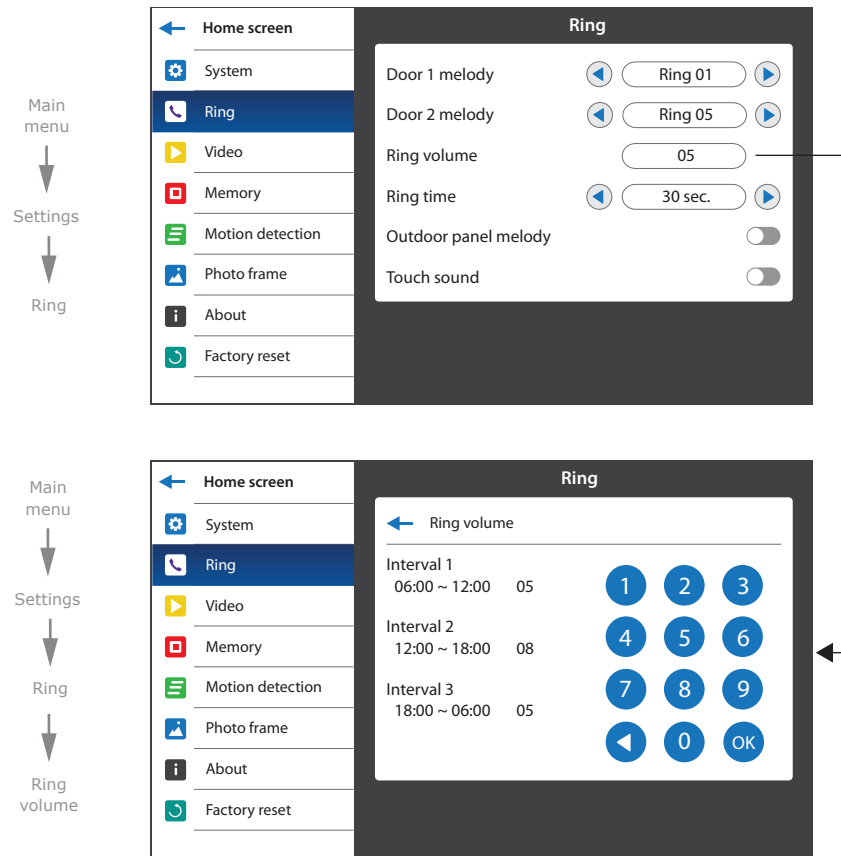
7.1. System settings

There are eight main bookmarks in settings menu:

System – monitor system settings, language setting, time setting, etc.;

Ring – ring melody setting, ring volume and ring time settings;

Video – outdoor panels and cameras video standard settings;

Memory – memory information, internal memory and microSD card formatting;

Motion detection – program and hardware motion detection settings;

Photo frame – custom user photo viewing settings in standby mode;

About – program software version;

Factory reset – restore factory default settings.

Settings → System:

Language – menu language setting;

Time – date and time settings;

Screen saver – date and time screensaver display in standby mode;

Mode – choose «Master» if you use one monitor in the system or if it is the monitor which all the door panels and CCTV cameras are connected to. Choose «Slave» if there is more than one monitor in the system and no door panels or CCTV cameras are connected to this monitor;

Door 1 unlock time – door 1 relay unlocking time, from 1 to 10 sec.;

Door 2 unlock time – door 2 relay unlocking time, from 1 to 10 sec.;

Touch sound – enable/disable screen touch sound;

Door panel backlight – enable/disable door panel call button backlight.
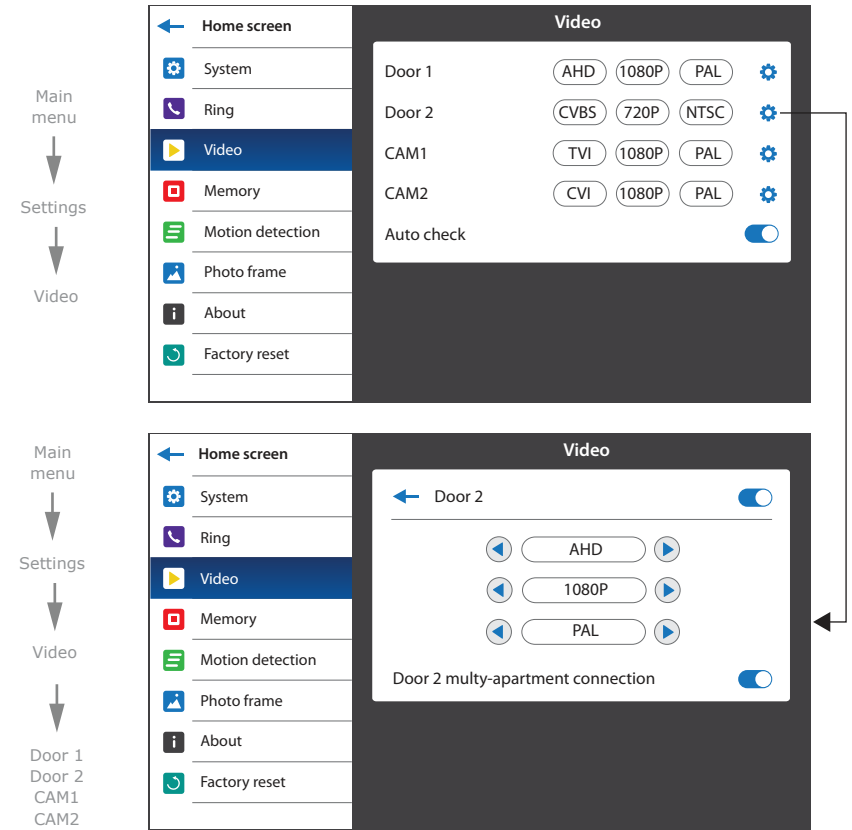
7.2. Ring settings

Main menu

↓

Settings

↓

Ring

Home screen		Ring	
⚙ System	Door 1 melody	◄ Ring 01 ►	
📞 **Ring**	Door 2 melody	◄ Ring 05 ►	
▶ Video	Ring volume	05	
⏹ Memory	Ring time	◄ 30 sec. ►	
☰ Motion detection	Outdoor panel melody	⬜	
🖼 Photo frame	Touch sound	⬜	
ℹ About			
↺ Factory reset			

Main menu

↓

Settings

↓

Ring

↓

Ring volume

Home screen		Ring	
⚙ System	← Ring volume		
📞 **Ring**	Interval 1		
▶ Video	06:00 ~ 12:00 05	1 2 3	
⏹ Memory	Interval 2	4 5 6	
☰ Motion detection	12:00 ~ 18:00 08	7 8 9	
🖼 Photo frame	Interval 3		
ℹ About	18:00 ~ 06:00 05	◄ 0 OK	
↺ Factory reset			

Settings → Ring

Door 1 melody – choose the melody for the first outdoor panel;

Door 2 melody – choose the melody for the second outdoor panel;

Ring volume – choose volume level (from 00 to 10) depending on the time of a day and also ringing time of the melody;

Ring time – melody ringing time from 03 to 45 sec.;

Outdoor panel melody – enable/disable calling melody on the outdoor panel;

Touch sound – enable/disable beep sound on keyboard or screen touch.

7.3. Video settings

Main menu

↓

Settings

↓

Video

Home screen		Video	
⚙ System	Door 1	AHD 1080P PAL ⚙	
📞 Ring	Door 2	CVBS 720P NTSC ⚙	
▶ **Video**	CAM1	TVI 1080P PAL ⚙	
⏹ Memory	CAM2	CVI 1080P PAL ⚙	
☰ Motion detection	Auto check	🔵	
🖼 Photo frame			
ℹ About			
↺ Factory reset			

Main menu

↓

Settings

↓

Video

↓

Door 1
Door 2
CAM1
CAM2

| Home screen		Video	
⚙ System	← Door 2	🔵	
📞 Ring		◄ AHD ►	
▶ **Video**		◄ 1080P ►	
⏹ Memory		◄ PAL ►	
☰ Motion detection	Door 2 multy-apartment connection	🔵	
🖼 Photo frame			
ℹ About			
↺ Factory reset			

Settings → Video

Here you can manually define type of the video signal for every outdoor panel and camera. Monitor maintains such kind of videostandards: CVBS (PAL or NTSC), AHD, TVI, CVI (1080p or 720p).

Also auto check function can be enabled/disabled. If this function is enabled then monitor automatically detects type of the connected video source for every input (outdoor panel or camera) independently.

Door 2 multy-apartment connection – when this function is enabled, monitor powers up an outdoor panel only after the moment user presses the 📞 button on the monitor. When this function is disabled, monitor powers up an outdoor panel at the moment visitor presses the call button on the outdoor panel like usual. If you use an ordinary 4-wire outdoor panel then just disable this function.

7.4. Memory settings
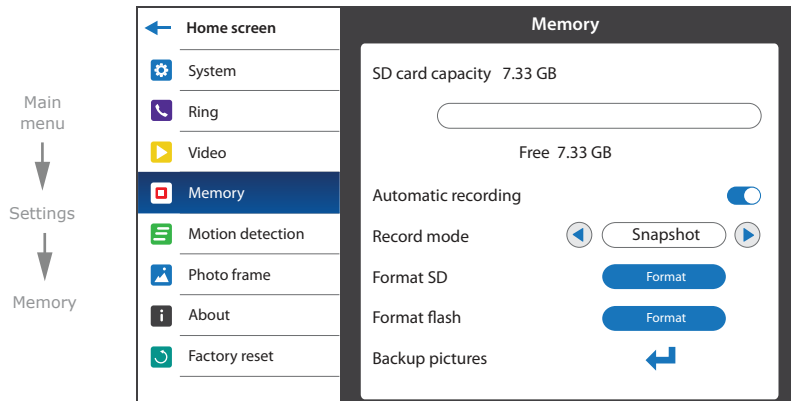
Settings → Memory

SD card capacity – micro SD card capacity and free space information;;

Automatic recording – enable/disable automatic replacing of an old files if there is a lack of free disk space on microSD card;

Record mode – record type when incoming call occurs (take a «Snapshot» or «Record» video);

Format SD – micro SD card formatting. Please format microSD card before use it. Recommended to use microSD cards of the 6-th class and above;

Format flash – internal memory formatting. Format internal memory for the first time using it;

Backup pictures – copy snapshots from internal memory to microSD card.

7.5. Software motion detection settings
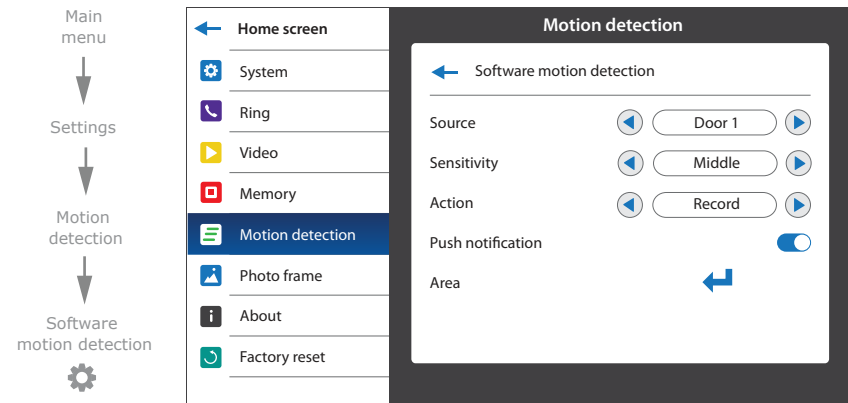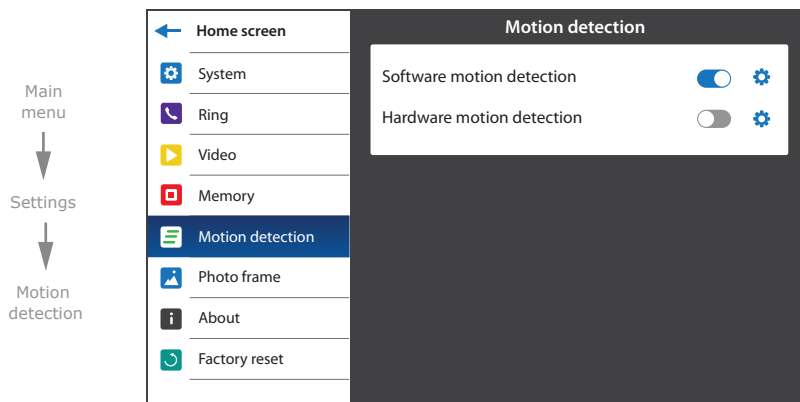
Software motion detector can detect motion without any external sensors using any camera image changes with the time. Camera power, that is used for motion detection should be constantly on to let the monitor observe image changes and detect motion.

Software motion detection has a number of settings described below:

Source:

«Door1» – motion detection on Door1;

«Door2» – motion detection on Door2;

«CAM1» – motion detection on CAM1;

«CAM2» – motion detection on CAM2;

Sensitivity:

«Lowest» – the lowest software detector sensitivity;

«Low» – low software detector sensitivity;

«Middle» – middle software detector sensitivity;

«Hight» – high software detector sensitivity;

«Highest» – the highest software detector sensitivity;

Action:

«Snapshot» – save photo if software motion detection occurs;

«Record» – save video if software motion detection occurs;

Push notification – enable/disable status LED notification if software motion detection occurs.

**Area** – motion detection area setting defines the part of the image in which motion detection performed;

Use up/down/right/left arrow keys to move motion detection area in corresponding direction of the image while [icon] mode;

Use right/left arrow keys to move right motion detection area border or up/down arrow keys to move bottom area border while [icon] mode;

Press [icon] or [icon] icon to change between moving and resizing motion detection area modes.

7.6. Hardware motion detection settings
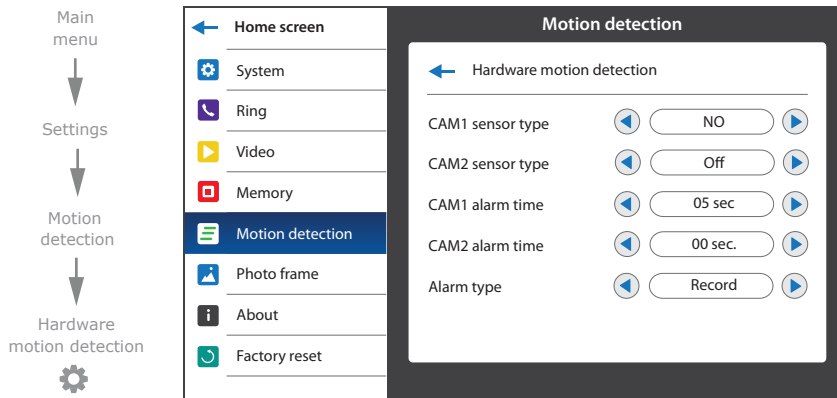
Hardware motion detection can detect motion by means of external device (hardware motion sensor). There are two types of sensors that can be connected to the monitor: sensor with normally opened contacts (NO) and sensor with normally closed contacts (NC).
Depending on the type of sensors that are used appropriate settings must be made in the hardware motion detection settings menu.

External motion sensor connection schematics.
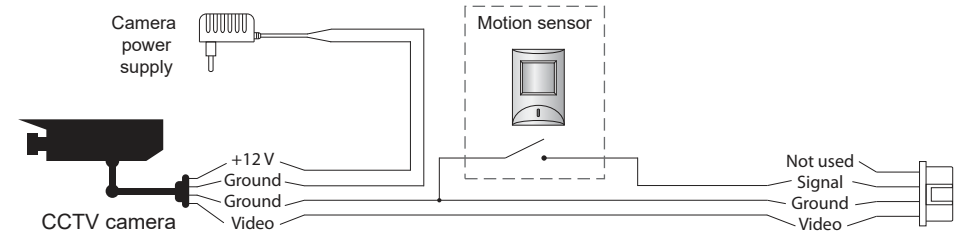
Hardware motion detection has a number of settings described below:

CAM1 sensor type:

«NO», motion sensor with normally disconnected contacts are used;

«NC», motion sensor with normally connected contacts are used;

«Off», motion sensor is not used;

CAM2 sensor type:

«NO», motion sensor with normally disconnected contacts are used;

«NC», motion sensor with normally connected contacts are used;

«Off», motion sensor is not used;

CAM1 alarm time – alarm melody ringing time (from 00 to 10 seconds), activated by CAM1 motion sensor;

CAM2 alarm time – alarm melody ringing time (from 00 to 10 seconds), activated by CAM2 motion sensor;

Alarm type:

«Snapshot» – save photo if motion detection occurs;

«Record» – save video if motion detection occurs.
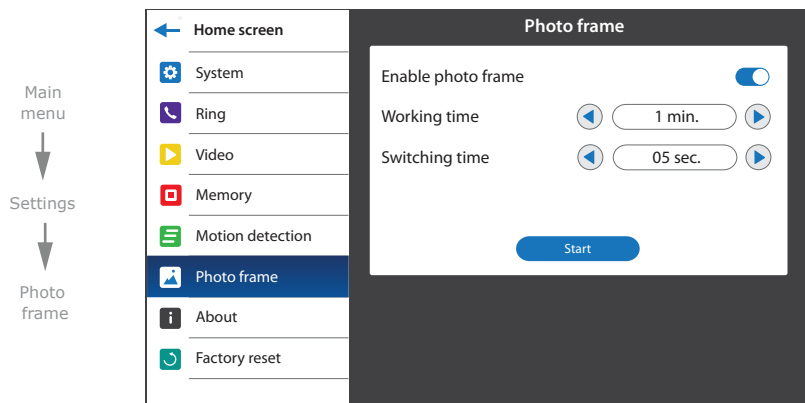
7.7. Photo frame settings

Photo frame function shows custom images on the screeen while the monitor is in standby mode.

Intructions as for adding custom images into «Frame» folder you can find on page 24 (section 8.4).

Settings → Photo frame

Enable photo frame – enable/disable photo frame function in standby mode;

Working time – photo frame working time, from 1 to 30 minutes or «Always active»;

Switching time – time interval for changing images, from 01 to 05 seconds;

Start – start images playback.
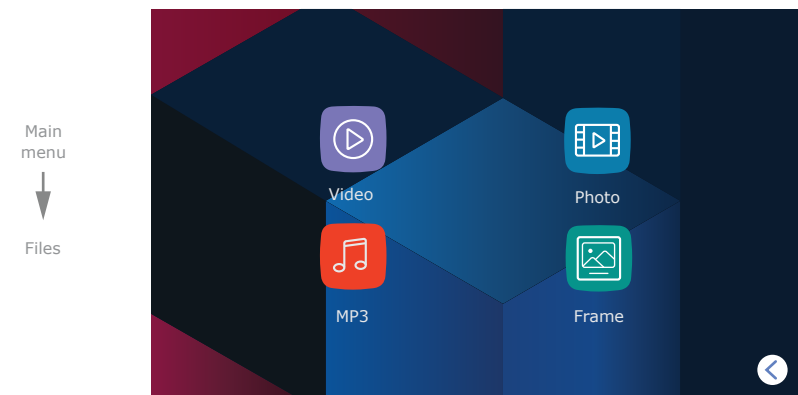
7.8. Monitor software version
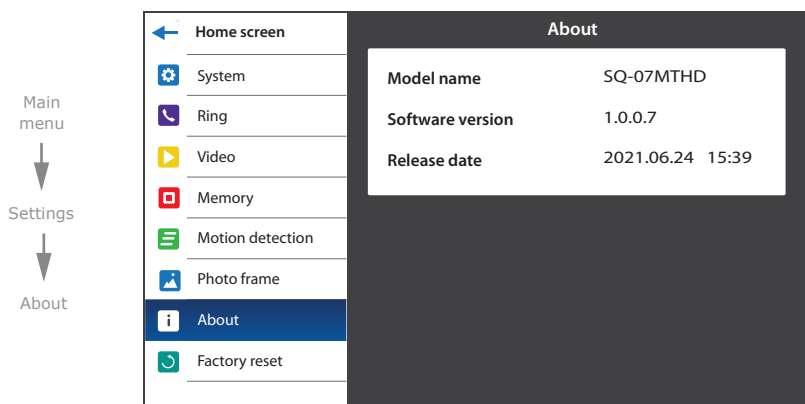
In this bookmark you can find model name, version and date of software release.

7.9. Factory reset
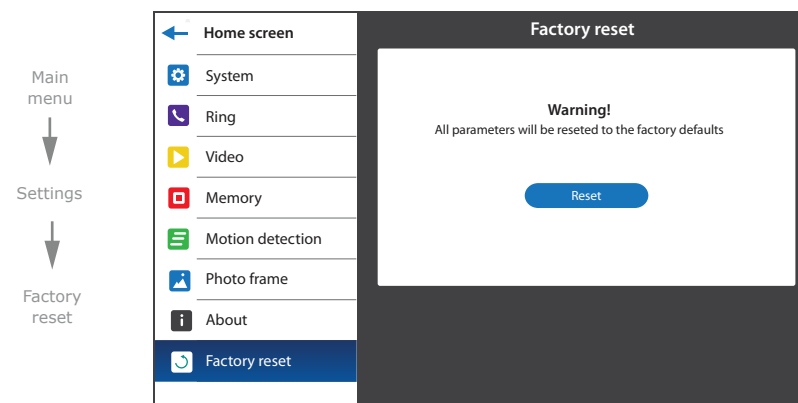
Press «Reset» button to restore factory default settings of the monitor.
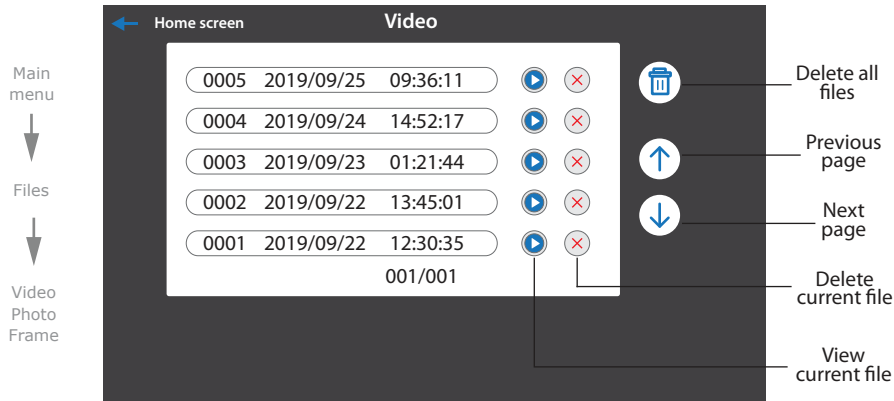
8. File manager

Press «Files» icon in the main menu to enter file manager.

There are four folders available here:

Video – video playback;

Photo – photo playback;

MP3 – custom user ringtones;

Frame – custom user images.

8.1. Video playback

Press «Files» icon in the main menu then press «Video» folder icon.

Press ▶ icon on the right side of the file to start current file playback. Also you can stop playback, delete current file, set up volume or get back to the list of video files using the buttons on the bottom of the screen:

Pause	–	start/stop playback;
Delete	–	delete current file;
🔊+	–	increase playback volume;
🔊–	–	decrease playback volume;
◀	–	get back to the files list.

8.2. Photo playback

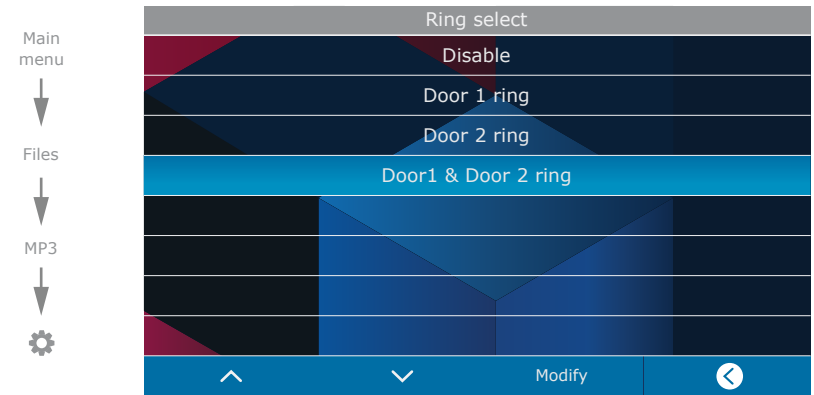Press «Files» icon in the main menu then press «Photo» folder icon.

Press ▶ icon on the right side of the file to start its viewing. Also you can go to previous or next photo, delete current photo or get back to the list of photos using the buttons on the bottom of the screen:

⌄	–	previous file viewing;
⌄	–	next file viewing;
Delete	–	delete current file;
◀	–	get back to the files list.

8.3. Custom MP3 ringtone

Create «RING» folder in the root of microSD card, if it isn't already created by the monitor. Paste MP3 files you would like to use as a ringtone into this folder. File names should have only English letters and figures in its names and its quantity should not exceed 8 symbols to be visible on the monitor.

Insert microSD card into the monitor and press «Files» icon in the main menu. Then press «MP3» icon to enter to the «MP3» folder, choose the file you would like to use as a ringtone and press ⚙ icon near its name. In a new window choose the number of the outdoor panel to apply current melody:

8.4 Custom user images playback

Create «FRAME» folder in the root of microSD card, if it isn't already created by the monitor. Paste JPG images you would like to view into this folder. File name should have only English letters and figures in its name and its length should not exceed 8 symbols to be visible on the monitor .

Insert microSD card into the monitor and press «Files» icon in the main menu. Then press «Frame» icon to enter to the «Frame» folder and press ▶ icon on the right side of the file to start viewing.

Note that JPG images resolution should not exceed 2560×1440 pixels. Other image formats and resolutions are not supprted.

You can go to previous or next photo, delete current photo or get back to the list of photos using the buttons on the bottom of the screen in the same way as in photo playback mode.

10. Limited warranty

Manufacturer guarantees product normal functioning during the warranty period if the user keeps all safety instructions described in that manual.

Warranty period is 12 months from the moment of the product purchasing (warranty period could be extended up to 24 months or more, depending on the local regulations).

Warranty period allows user to make guarantee repair in cases when normal functioning of the product was violated by the fault of manufacturer and the user haven't offend transporting, installation and working conditions.

This limited warranty does not cover any damage to the product that results from improper installation, accident, abuse, misuse, natural disaster, insufficient or excessive electrical supply, abnormal mechanical or environmental conditions, or any unauthorized disassembly, repair or modification.

Warranty void in such cases:

- the product was damaged by the fault of the customer;
- the product wasn't properly installed according reccomendations from the manual;
- the sticker on the backside of the product was broken;
- the product was not used for its intended function.

This limited warranty covers only repair, replacement, refund or credit for defective products, as provided above. Manufacturer is not liable for, and does not cover under warranty, any damages or losses of any kind whatsoever resulting from loss of, damage to, or corruption of, content or data or any costs associated with determining the source of system problems or removing, servicing or installing products. This warranty excludes third party software, connected equipment or stored data. Manufacturer is therefore not liable for any losses or damage attributable to third party software, connected equipment or stored data.

In the event a product has been discontinued, manufacturer shall either repair the product, offer to replace it with a comparable product or provide a refund at the lesser of the purchase price or the product's current value.

Repaired or replacement products will continue to be covered by this limited warranty for the remainder of the original warranty term.