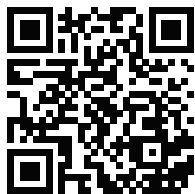


Design. Uniqueness. Innovations

Technical support



Техническая
поддержка

SLINEX

Design. Uniqueness. Innovations

ML-20CRHD



AHD 1080P
(2 MP)



EM-Marin



User manual



1-14

Инструкция по эксплуатации



15-28

SLINEX

Safety instructions

Read and keep that manual.

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

Use the device from the -40°C to $+50^{\circ}\text{C}$, 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.

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.

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.

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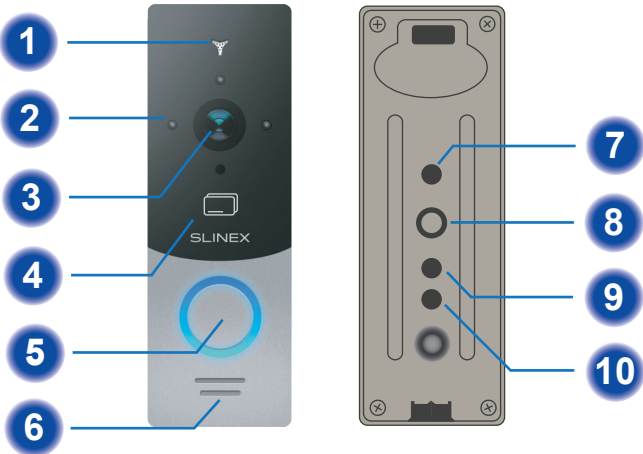
1. Package

- ML-20CRHD outdoor panel – 1 pc.
- Wall mounting bracket – 1 pc.
- Angle bracket – 1 pc.
- Rainshield – 1 pc.
- Flush mounting box – 1 pc. (optional)
- Mounting screws and anchors – 1 pkg.
- User manual – 1 pc.

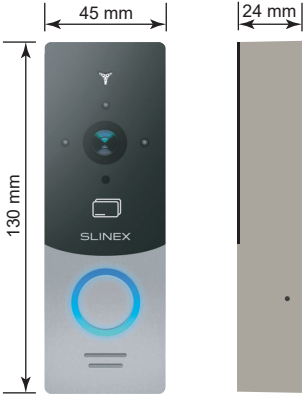
2. Specification

SENSOR TYPE	LOCK RELAY CONTINUOUS CURRENT
1/2.9" CMOS	1 A
RESOLUTION	VOLTAGE
1920×1080 px.	+12 V
VIDEO OUTPUT	POWER CONSUMPTION
AHD 1080p (2 MP), AHD 720p (1 MP) or CVBS (PAL)	2.5 W in working mode
VIEW ANGLE	INSTALLATION TYPE
115°	Surface or flush (optional) mount
NIGHT BACKLIGHT	DIMENSIONS
Infrared, 1.5 meters distance	45×130×24 mm
	WORKING TEMPERATURE
	–40 ... +50 °C

3. Description



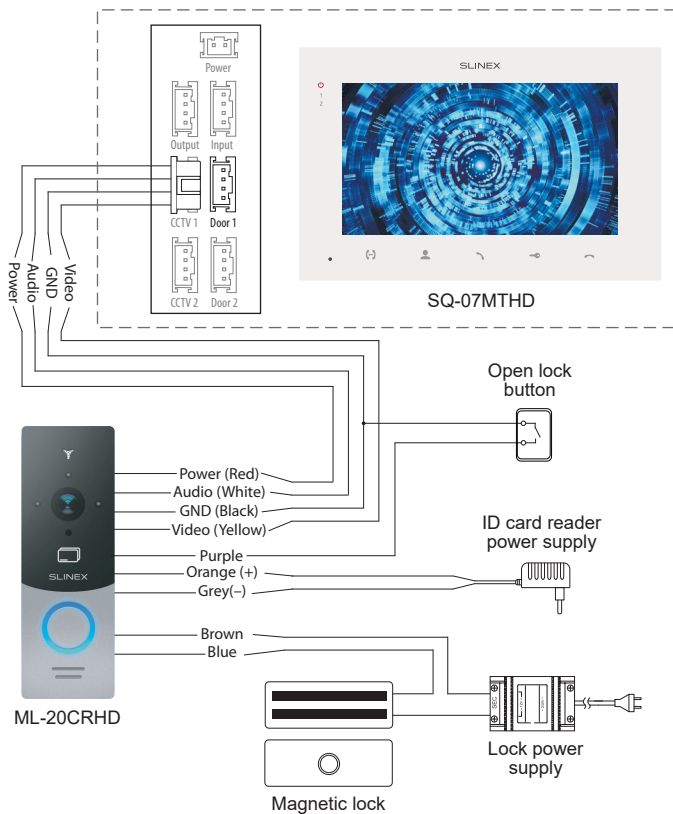
- 1 Microphone
- 2 Night infrared backlight
- 3 Video camera
- 4 ID card reader
- 5 Call button
- 6 Speaker
- 7 Video camera mode button
- 8 Communication cable
- 9 ID card reader reset button
- 10 Speaker volume potentiometer



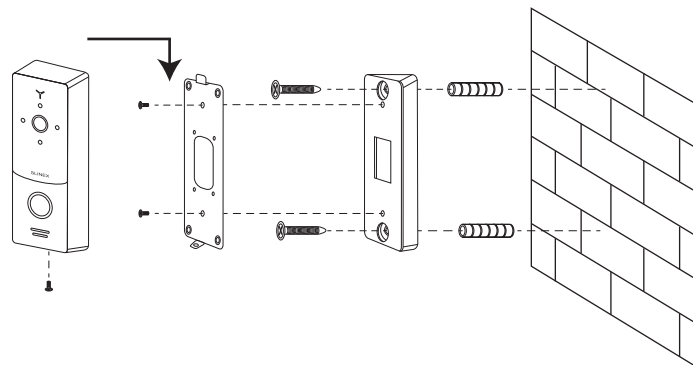
Wire colors

- | | |
|---------------|---------------------------------------|
| Red | Power (to the monitor) |
| Black | Ground (to the monitor) |
| Yellow | Video (to the monitor) |
| White | Audio (to the monitor) |
| Blue | COM. (Common) relay terminal |
| Green | N.O. (Normally opened) relay terminal |
| Brown | N.C. (Normally closed) relay terminal |
| Purple | Open lock button |
| Orange | Door panel power supply, +12V |
| Grey | Ground (for power supply) |

4. Schematic diagram

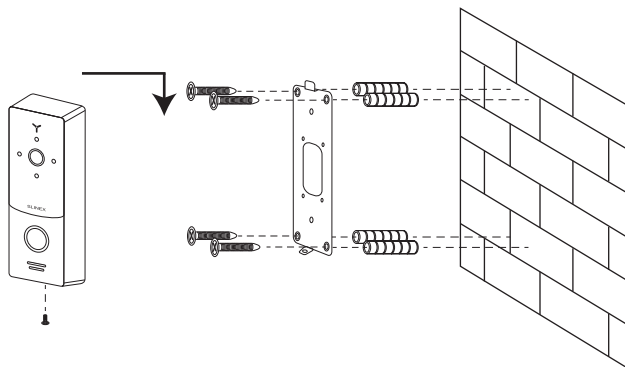


5. Installation



Angle mounting:

- 1) Take the angle bracket from the kit and situate it 150-160 cm from the floor line;
- 2) Mark and drill two holes inside the wall;
- 3) Take two nuts from the kit and hammer them into the drilled holes;
- 4) Fix angle bracket on the wall by two screws from the kit;
- 5) Fix wall mounting bracket on the angle bracket by two screws from the kit;
- 6) Connect all communication wires and fix the door panel on the wall mounting bracket by the screw from the down side.



Flat mounting:

- 1) Take the wall mounting bracket from the kit and situate it 150-160 cm from the floor line;
- 2) Mark and drill four holes inside the wall;
- 3) Take four nuts from the kit and hammer them into the drilled holes;
- 4) Fix the wall mounting bracket on the wall by the screws from the kit;
- 5) Connect all communication wires and fix the door panel on the wall mounting bracket by the screw from the down side.

6. ID card reader settings

Connect +12V power supply through the orange (+) and grey (-) wires of the door panel communication cable.

Memory reset

Press and hold «ID card reader reset button» during 5 seconds (button situated on the back side and signed as 9 on page 5), until repeatable sound will be heard. It means that ID card reader memory was formatted.

Manager ID card setup

- 1) Press «ID card reader reset button» shortly to enter manager ID card setup mode. User will hear a short sound and door panel backlight becomes blue;
- 2) Take the ID card that should be used as manager card and touch it near card reader zone on the front of the door panel. If manager card setup was successful then user will hear long sound. (If user doesn't touch ID card near card reader during 10 seconds then door panel will be automatically switched into standby mode). Only one manager ID card can be added to the card reader memory.

«Unlock ID cards setup» and «delete card» modes

- 1) In standby mode situate management card near the card reader to enter «unlock cards setup» mode. Door panel will emit double sound and backlight of the call button will become blue;
- 2) Situate every unlock ID card that needs to be added near card reader, one by one. After each card reading, double sound signal can be heard. In case if current ID card has been already added to the card reader memory then three time sound signal can be heard while touching it near the card reader;
- 3) When all unlock ID cards have been added then situate management card near the card reader to enter «delete card» mode. Door panel will emit double sound and backlight of the call button will become red;
- 4) Situate any unlock ID card that needs to be deleted near card reader while «delete card» mode is active. After double short sound current ID card will be deleted from the door panel list;
- 5) While «delete card» mode is active, situate management card near the card reader to exit into standby mode.
- 6) Wait for 10 seconds without any actions in «unlock cards setup» or «delete card» modes to exit into standby mode automatically.
- 7) Maximum unlock ID cards quantity that can be added to the card reader memory is 248 pcs.

Sound and visual indication.

Door unlock successful – double short «beep» and call button backlight becomes blue twice;

No such unlock card – triple short «beep» and call button backlight becomes red twice;

«Unlock ID cards setup» mode – call button backlight is constantly blue;

«Delete card» mode – call button backlight is constantly red;

Standby mode – call button backlight is constantly white;

Card setup successful – double «beep»;

Card is already added – four times short «beep».

7. Video camera settings

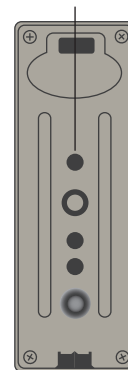
Outdoor panel video camera can work in three basic modes:

AHD 1080p (2 MP) – default mode, AHD 720p (1 MP) or analog CVBS (PAL). AHD is a high-resolution mode, so it has better image quality than analog CVBS mode. While using high-resolution AHD modes, the monitor must maintain that kind of signal, otherwise there will be no image on the monitor screen.

To switch video camera modes remove resin cap on the back cover of the outdoor panel. Then press and hold camera mode button during 5 seconds to switch from the current mode to the next one in a such sequence:

AHD-H (1080P) → AHD-M (720P) → PAL → AHD-H (1080P) ...

Camera mode switching button is under resin cap



8. 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 recommendations 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.