

User manual





## Safety instructions

Read and keep that manual.

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

Use the device from the -40 °C to +50 °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 current 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.

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#### 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 into the information described in the user manual and device package.

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# 1. Package

Video door station ML-20IP – 1 pc.

Angle bracket – 1 pc.

Surface mount bracket – 1pc.

Rain shield – 1 pc.

Flush mount bracket – 1 pc.

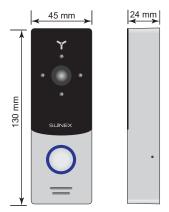
Power supply – 1 pc.

External Wi-Fi antenna – 1pc.

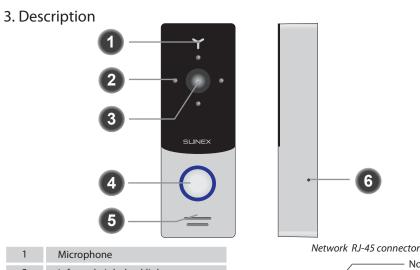
Mounting screws and nuts – 1 pkg.

User manual – 1 pc.

# 2. Specification



Sensor type	1/4" CMOS with mechanical IR cut filter
Sensor resolution	1,0 Mp
View angle	145°
Backlight type	Infra-red, 1 m. distance
Voltage	+12 V
Lock relay continuous current	1A
Power consumption	Maximum 3 W
Mounting type	Surface or flush mount
Size	45 × 130 × 24 mm
Working temperature	−40 +50 °C



1	Microphone	Network KJ-45 Connector
2	Infra-red night backlight	Not connected Not connected
3	Video camera	Green wire Not connected Not connected
4	Call button	
5	Speaker	White & green wire Orange wire
6	Rain shield mounting hole	Type B White & orange wire

#### Connection wires color code for ML-20IP door station

White & green	Network, white & green wire
Green	Network, green wire
White & orange	Network, white & orange wire
Orange	Network, orange wire
Red	Power, +12 V
Black	Ground
Yellow	Video (analog, for the 4-wire monitors)
White	Audio (analog, for the 4-wire monitors)
Brown	2 wires for the lock connection
Grey wire with SMA connector	External Wi-Fi antenna

### 4. Installation

### 4.1 Cable requirerments

Disconnect all power cables before device installation.

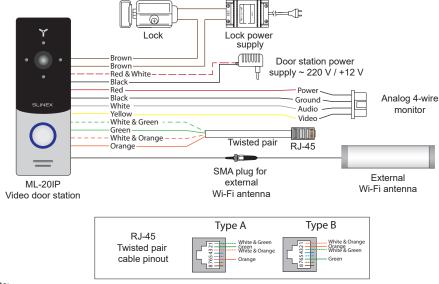
This device can be connected with such cable types:

- a) Use 2- or 4-wire cable for the video door station power and electronic lock power
  - distance up to 25 meters use a cable with 0,22 mm<sup>2</sup> square of one wire;
  - distance 25 to 50 meters use a cable with 0,41 mm<sup>2</sup> square of one wire;
  - distance 50 to 100 meters use a cable with 0,75 mm<sup>2</sup> square of one wire.
- b) Local network connection should be made with shielded or non-shielded twisted pair:
  - distance up to 25 meters non-shielded twisted pair can be used;
  - distance 25 to 100 meters shielded twisted pair should be used.

Also wireless Wi-Fi connection can be used for the local network. In that case, there is no need to use twisted pair cable. Instead of twisted pair cable you should use Wi-Fi antenna connected to the SMA plug of the video door station.

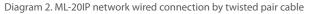
### 4.2 Schematic diagrams

Diagram 1. ML-20IP power and lock connection



Note:

Volume setting can be made by the screwdriver inserted into the hole on the back part of the door station. The hole is situated on the bottom part of the back pannel and covered by the rubber cap.



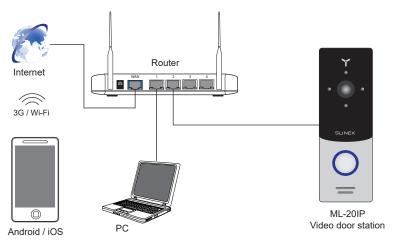


Diagram 3. ML-20IP network wireless Wi-Fi connection

