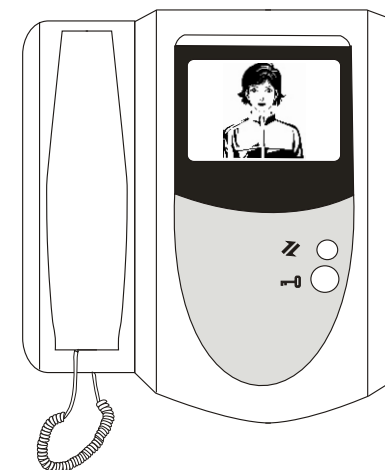
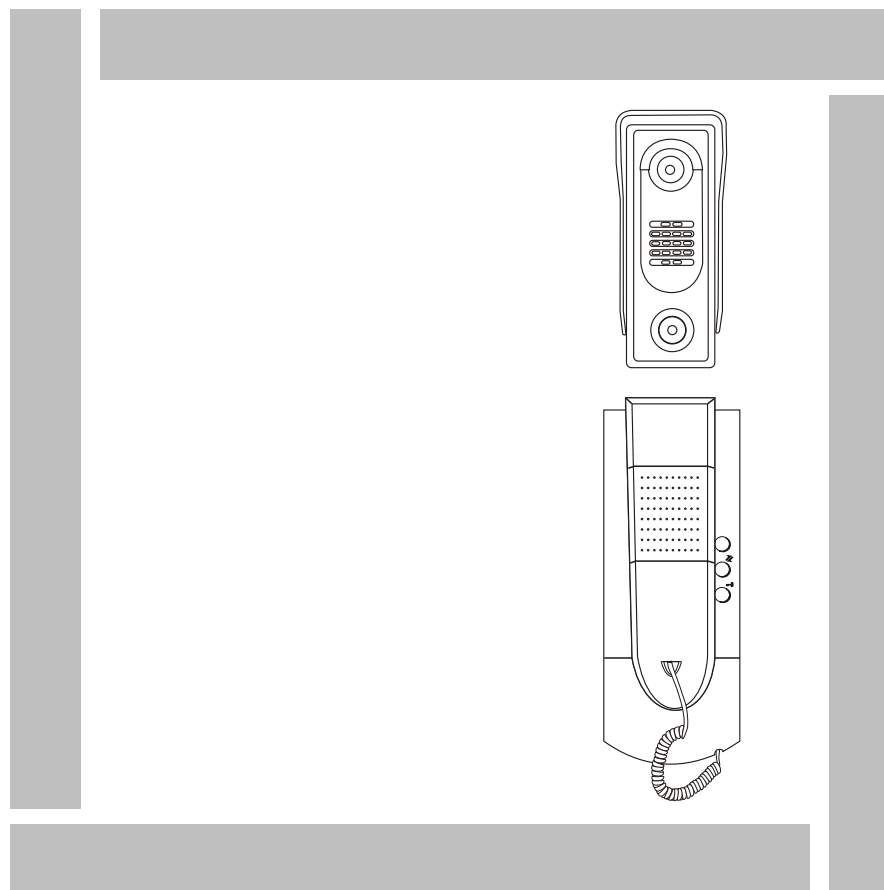


# VIDEO DOORPHONE SET



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## USER AND INSTALLATION MANUAL

**Correct Disposal of This Product (Waste Electrical & Electronic Equipment)**

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.



## INTRODUCTION

Prior to putting the device into operation we advise studying this User and Installation Manual. In case of any part of the Manual being unclear, we advise contacting with a distributor.

Self-installation and putting into operation is possible when one has a basic knowledge of electrotechnics and uses proper tools. It is however recommended to use services of professional installers.

Producer will not take any responsibility for damages that may occur in case of unproper installation or usage of the appliance, or when repairs/modifications are made by the user.

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## Dear customer!

Thank you for choosing our new reliable and functional video doorphone set, which will improve your security, and thanks to its modern design it will fit in every interior.

Video doorphone ELTCRAC allows you to carry on a conversation with a person by the entrance and their simultaneous surveillance, as well as operating the door release blocking the entrance door. Video doorphone may be expanded by other indoor monitors and audio phones.

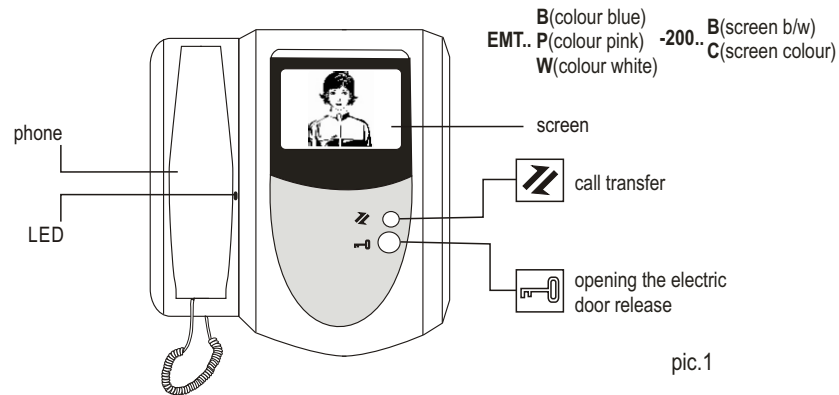
## Description of the set

- infrared illumination improving night visibility (B/W) or using extra bright LEDs (colour)
- compatible with up to 4 B/W additional monitors or 2 colour monitors and audio phones
- internal transfer of the call to the other monitor or audio phone
- operating the door release (compatible with regular door releases)

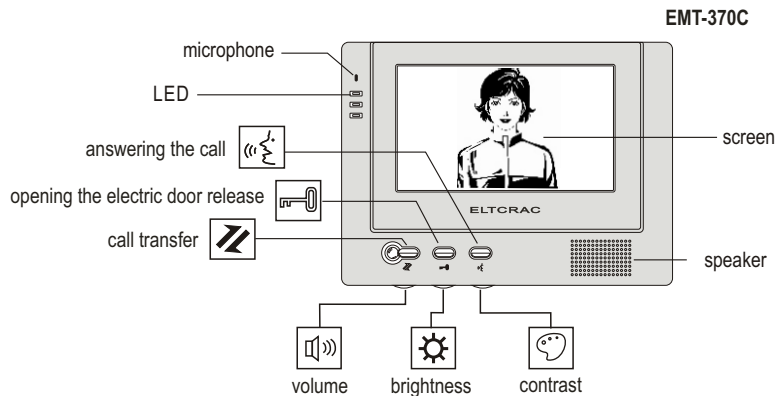
## Equipment

The manual contains the description of all the equipment that may be included in the Video Doorphone Set. List of the set equipment is on the label on the Video Doorphone box.

### 1. EMT.. -200.. (pic.1), EMT -370C (pic.2) or EMT -350C (pic.3) Monitor



pic.1



pic.2

## Technical specification

Indoor Monitor:

**EMTB-200B**  
**EMTP-200B**  
**EMTW-200B**  
**EMTB-200C**  
**EMTP-200C**  
**EMTW-200C**

Supply voltage:  
 Working temperature:  
 Power consumption:  
 Display:  
 Dimensions:

**DC15V**  
**0°C ÷ 70°C**  
**Standby 70mA; Working 700mA**  
**4 in. and 3.5 in. TFT screens are available**  
**243 x 198 x 79**

Indoor Monitor:

**EMT-370C**

Supply voltage:  
 Working temperature:  
 Power consumption:  
 Display:  
 Dimensions:

**DC15V**  
**0°C - 70°C**  
**w stanie spoczynku 70mA; w stanie pracy 700mA**  
**ekran 7" TFT**  
**240 x 175 x 38**

Indoor Monitor:

**EMT-350C**

Supply voltage:  
 Working temperature:  
 Power consumption:  
 Display:  
 Dimensions:

**DC15V**  
**0°C ÷ 70°C**  
**Standby 70mA; Working 700mA**  
**Colour vision, 5,8 in. TFT screen**  
**220 x 104 x 25**

Outdoor Station:

**ESAC-5B**  
**ESAC-5C**

Supply voltage:  
 Working temperature:  
 Power consumption:  
 Dimensions:

**DC15V**  
**-20°C ÷ 70°C**  
**1/3"CCD 3.6mm/F2.0 72°**  
**135 x 58.5 x 40**

Audio phone:

**EMT-9T**

Supply voltage:  
 Working temperature:  
 Power consumption:  
 Dimensions:

**DC15V**  
**0°C ÷ 70°C**  
**Standby 70mA; Working 120mA**  
**195 x 90 x 40**

power supply:  
**ESD-5B 230 K2**

Supply voltage:  
 Working temperature:  
 Output voltage:  
 Power consumption:  
 Dimensions:

**AC(-)230V 50Hz**  
**0°C ÷ 70°C**  
**DC15V / AC14,5V**  
**≤12W**  
**87 x 87 x 60**

## Troubleshooting

### 1. No sound and vision, the control lights are out.

- no power supply
- „Power Switch" at the bottom of the monitor is off (pic.12)
- damaged or wrongly connected connection cable

### 2. Faint or blurred picture.

- check and adjust the elements described in "Use and adjustment of video doorphone"

### 3. Interferences, disturbances, no sync on the screen (the monitor flickers)

- the diameter of the connection cable does not correspond with the cable length
- the connection is too long use screened cable (see Electric wiring)
- the connection cable is of bad quality
- there is a source of electromagnetic interferences nearby use screened cable (see Electric wiring)

### 4. A view on the screen becomes distorted when the receiver is brought close to the monitor.

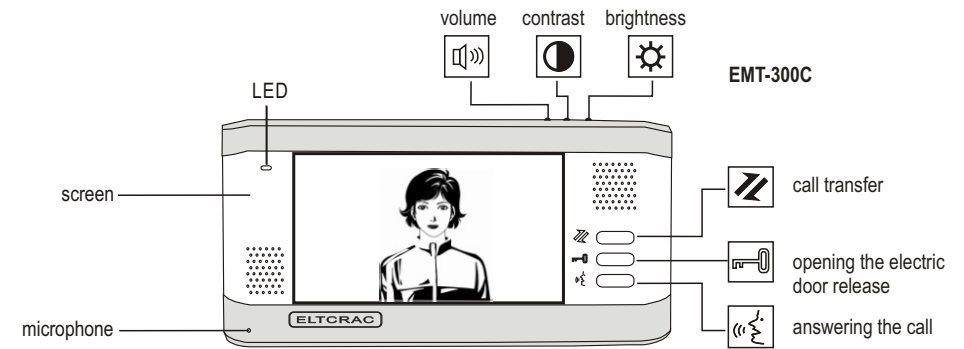
It is a normal reaction as magnetic field caused by electromagnets which are inside the receiver distorts it.

## Cleaning & conservation

When the monitor or the camera need cleaning one should use a soft, slightly wet rag with small amount of cleaning substances recommended for cleaning of plastics.

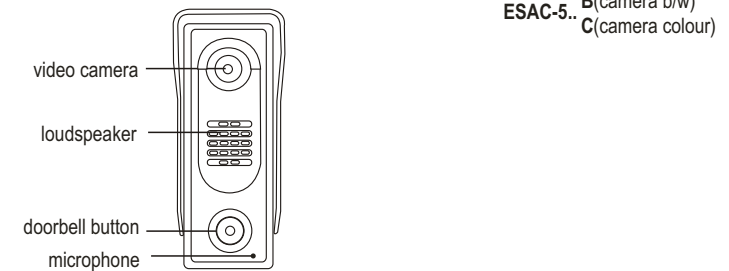
### Attention!

Usage of cleaning substances containing dissolvents, benzines etc, or abrasives is forbidden!



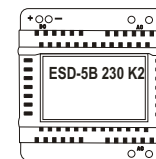
pic.3

### 3. ESAC-5 (pic.4),



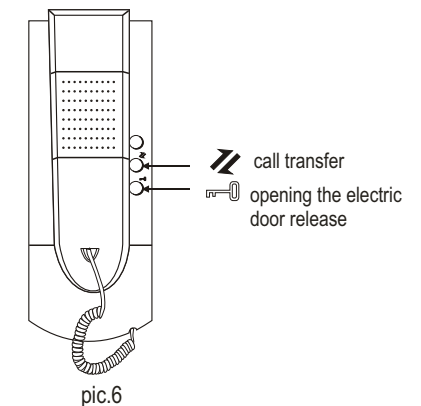
pic.4

### 4. ESD-5B 230 K2 (pic.5) power supply



pic.5

### 5. EMT-9T audio phone (pic.6)



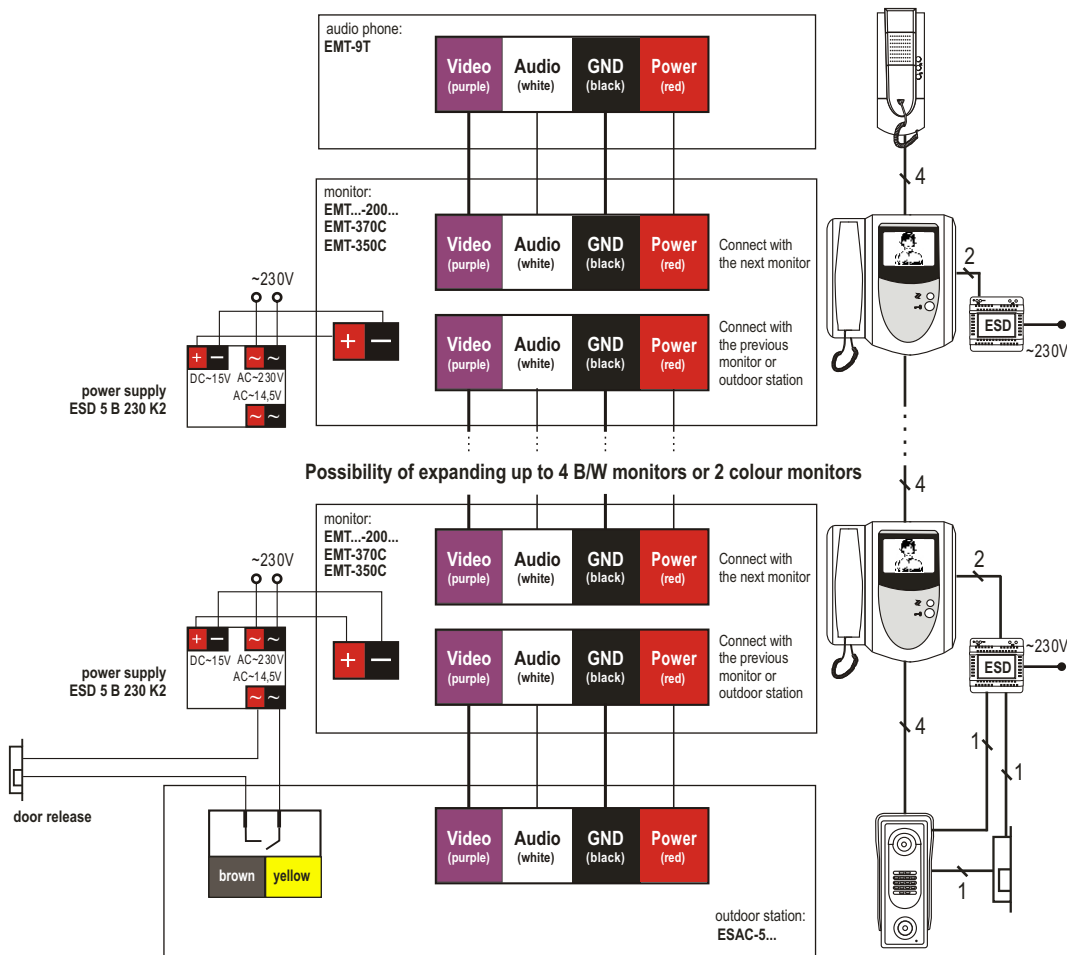
pic.6

## Electric wiring

Designing the electrical installation one should use the right wires' diameter, as follows:

- for a distance up to 30m between "ESAC-5" outdoor station and "EMT.." monitor:  $0.5\text{mm}^2$
- for a distance over 30m between "ESAC-5" outdoor station and "EMT.." monitor:  $1.0\text{mm}^2$  (for VIDEO and GND signals a concentric cable  $75\Omega$  is recommended) and  $2 \times 1\text{mm}^2$  (for POWER and AUDIO signals)
- for a distance up to 10m between "ESD 5B 230K2" power supply and "EMT.." monitor:  $1.0\text{mm}^2$
- for each consecutive 10m distance between "ESD 5B 230K2" power supply and "EMT.." monitor the diameter should be widened by  $0.5\text{mm}^2$

In order to decrease the interferences, the "Video" and "GND" wires (marked as bold lines) should have a bigger diameter than the other wires. It can be done by putting together parallel 2 wires or by using a concentric cable. You should not join video doorphone wires in one cable with other wires, e.g. doorbell or alarm wires. Any current or telecom cables staying in touch with the cables connecting the outdoor station with the monitor can worsen the performance of the VDP.



pic. 7

**Attention!** Usage of other types of cables than recommended is allowed, one must however test the connection of whole VDP set in order to evaluate its performance.

When extending the set, do not install other types of monitors or audio phones than recommended.

## IMPORTANT. REMEMBER!

1. Do not install the monitor near devices that emit strong magnetic field, such as TV, loudspeakers etc.
2. Do not install the monitor in places with high air humidity.
3. Do not open the covers of the devices, especially the indoor monitor to avoid the risk of electric shock.
4. Do not install the indoor monitor in places exposed to strong vibrations and quakes, as well as strong sunlight.
5. Do not connect the devices to 230V power supply before connecting all the necessary elements of the set.

## Installing the door release

Door release (not included) is connected according to the diagram (pic.7).

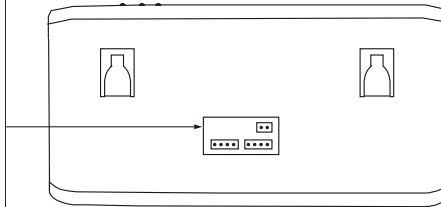
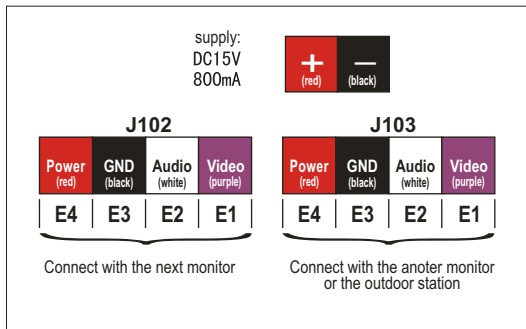
In the ELTCRAC's video doorphone **regular door releases** can be used with the voltage of 8-13 V and maximum power consumption 400 mA.

## Video doorphone use and adjustment

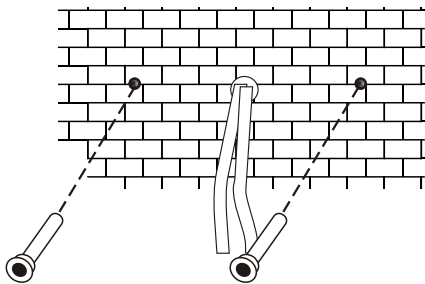
1. Pushing the button on ESAC-5..., outdoor station is signaled by a bell sound and lighting up the monitor screen, on which an image of the person standing in front of the outdoor station appears.
2. Immediately after picking up the phone (EMT...-200.. monitor) or pushing the button (loudspeaking monitors EMT-350C and EMT-370C), the image is additionally highlighted by LEDs (colour version) or IR diodes (B/W version), which improves the visibility in darkness.
3. At any time you have the possibility to open the electric door release (if available) by pushing the button Electric door release has a time constant of opening (3 sec.)
4. After opening the electric release, the image on the screen disappears.
5. If we do not answer the phone, the image will be displayed for about 1 minute and then the monitor will go black.
6. If we have more indoor monitors or audio phones installed, the person answering the call can transmit it to the other indoor monitor or audio phone by pushing the button After pushing the button all the other monitors or audio phones will make a bell sound and the person, who answers it will be able to communicate with the person standing next to the outdoor station. You can transmit the call many times.
7. If you want to switch on the preview on the indoor monitor, you should pick up the receiver (EMT...-200..) or push the button (EMT-350C and EMT-370C).
8. The adjustment of the set consists in setting the appropriate brightness and contrast of the screen and the volume level of the bell. In case of EMT...-200.. monitor, these elements are available after removing the monitor from the holder (pic.12).
9. In EMT-350C and EMT-370C monitors, the elements for adjusting brightness and contrast, bell volume and in addition outdoor station microphone sensitivity are in the lower part of the monitor.

### Installation of EMT-350 indoor monitor

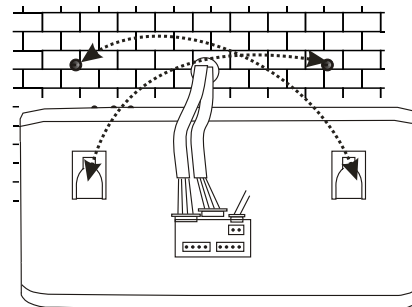
1. Choose the place of indoor monitor installation (pic.15)
2. Using the delivered diagram, drill holes in the wall and insert the anchors (pic.20)
3. Connect the wires using plugs according to the diagram (pic.7)
4. Hang the monitor on the anchors (pic.21)



pic.19



pic.20

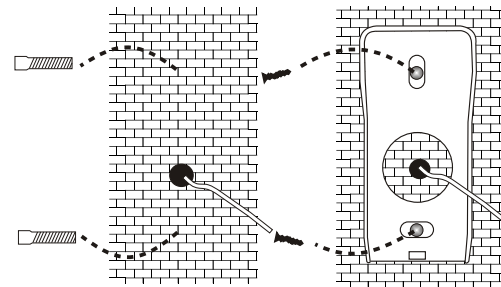


pic.21

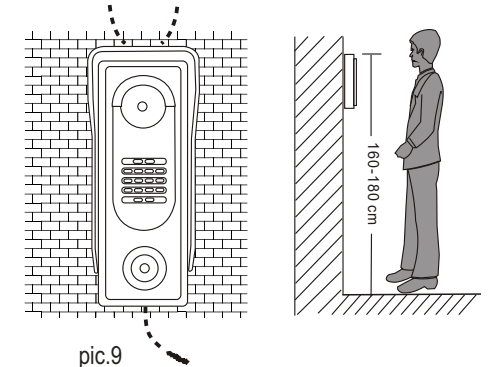
### Installation of ESAC-5 mini outdoor station

In order to adjust an optimal range of the camera chose the best place for mounting and position of the outdoor panel. Places where the camera lens would be exposed to direct rays of light (sun, reflectors, street lights) should be avoided. It could cause incorrect performance and worsening of visibility.

1. Unscrew the screw and remove the protection cap.
2. Mount the protection cap to the wall, post, etc. (pic.8)
3. Connect the wires using plugs according to the diagram (pic.7)
4. Mount the outdoor station to the protection cap and screw the screw (pic.9)



pic.8



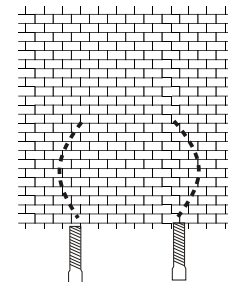
pic.9

### Installation of EMT-9T audio phone

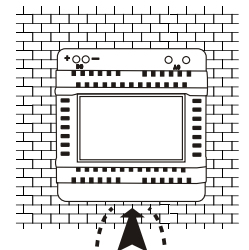
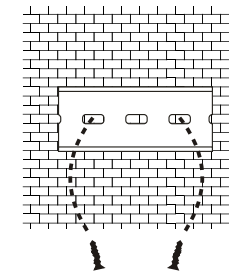
1. Mount the screws to the wall using the diagram.
2. Connect the connection cables using terminal plugs according to the diagram (pic.7)
3. Hang up the receiver.

### Installation of ESD-5B 230 K2 power supply

1. Remove the metal rail by pulling the plastic clamp.
2. Mount the power supply in the electrical box equipped with a DIN rail or directly to the wall, previously mounting the removed metal rail to it (pic.10). Connect the wires according to the wiring diagram (pic.7)
3. **IMPORTANT! The 230V power supply is connected after mounting and connecting all the equipment included in the set.**



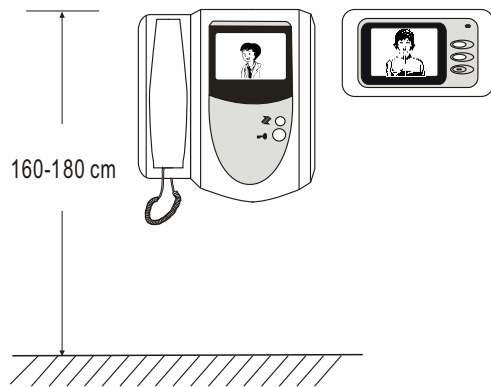
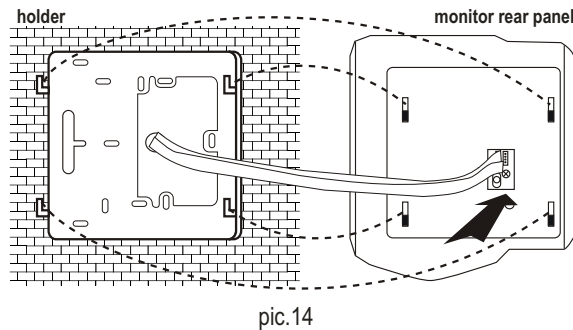
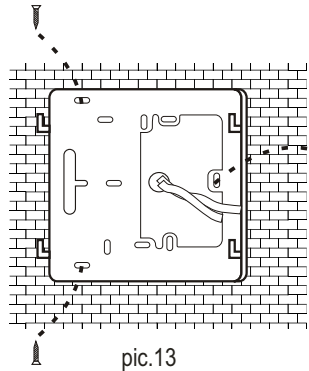
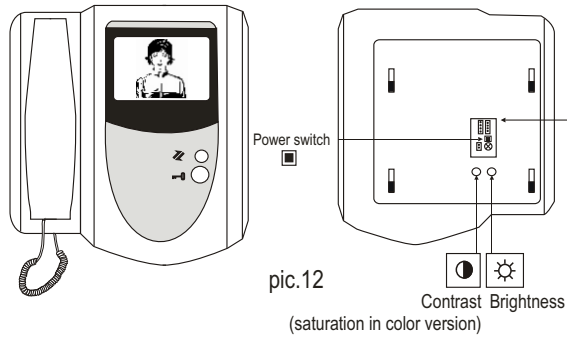
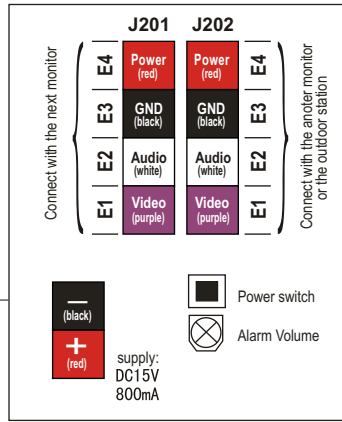
pic.10



pic.11

### Installation of EMT-200 indoor monitor

1. Choose the place of mounting the indoor monitor (pic. 15)
2. Mount the monitor holder to the wall using the delivered screws (pic.13).
3. Connect the wires using the plugs according to the diagram (pic.7)
4. **Push the "Power Switch" button** (if available) (pic.12)
5. Hang the monitor on the holder (pic.14)



### Installation of EMT-370C indoor monitor

1. Choose the place of indoor monitor installation (pic. 15)
2. Mount the monitor holder to the wall using the delivered screws (pic.18).
3. Connect the wires using plugs according to the diagram (pic.7)
4. Hang the monitor on the holder.

