

Video door phone set

Bastion *libra*



Assembly and operating manual

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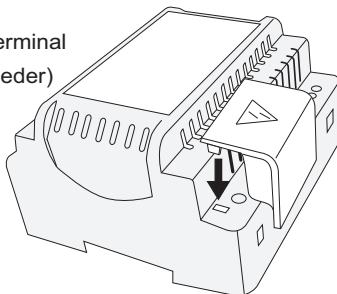
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1. OPERATING CONDITIONS

- Before installing and using the video door phone, read the assembly and operating manual.
- Electrical installation should be made in accordance with PN-IEC 60364-1 standard by an authorized person.
- Electrical installation should be made in such a way as to prevent exposure to direct lightning discharge.
- Video door phone elements should be used as intended. Using video door phone elements for other purposes, including with equipment other than specified in the manual or connecting them in other manner than prescribed by the manufacturer may lead to their damage, fire or electric shock.
- Do not cover the openings in the monitor housings.
- Do not insert any metal items in the openings in the monitor housing and the feeder as it may lead to electric shock or fire.
- The external panel should be installed in a place with low noise level.
- The external panel is powered with video door phone voltage. +Vcc and GND clamps on the external panel should not be connected to an external feeder.
- Video door phone elements should be connected to an electrical installation when the feeder is disconnected from the power network.

NOTE!

For affirmation of safety put on the mains terminal covering (plastic element attached to the feeder) after connect the feeder to the mains. Covering installation method is shown on drawing. All the connection make with the power supply turn off.



2. PURPOSE AND CHARACTERISTICS OF VIDEO DOOR PHONE

- Video door phone is designed for single family houses, companies, institutions and service providers.
- Two monitors may be connected to the external panel.
- Monitor featured with TFT colour display is used in the video door phone. It is a hands free duplex monitor (two-way voice communication without manual control of call direction).
- The external panel is wall-mounted.
- The panel is equipped with a colour camera and a LED display facilitating viewing visitors' faces at night.

3. ELEMENTS OF LIBRA VIDEO DOOR PHONE

MVC-6502 monitor

Hands free screen equipped with 5,8" TFT colour display. It is possible to set screen brightness, color and volume of the monitor. Function buttons allow for answering calls, launching viewing, transferring conversation to the second monitor (optional) and door release.

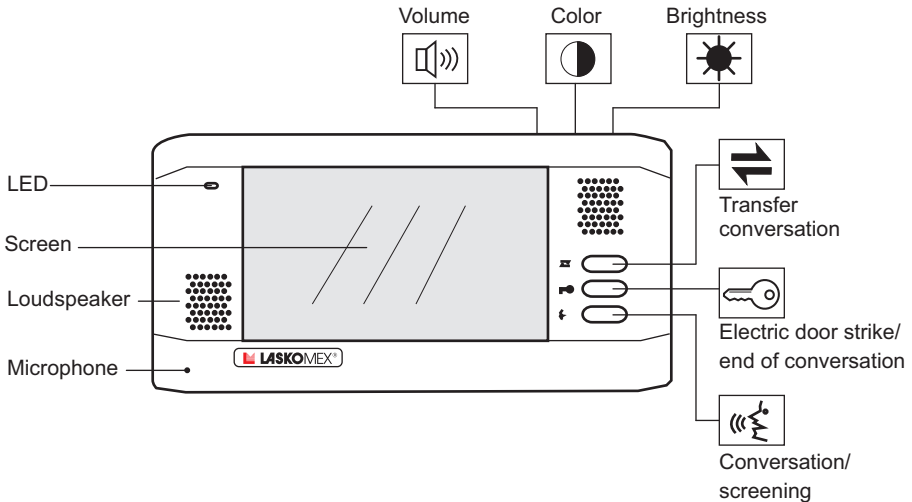


Figure 1. MVC-6502 videomonitor

BVC-6501 external panel

Vandal-proof panel with a colour camera, camera illuminator, loudspeaker, microphone and release button. The panel is wall-mounted. The panel is equipped with a transmitter releasing electro-catch after the button on the monitor is used.

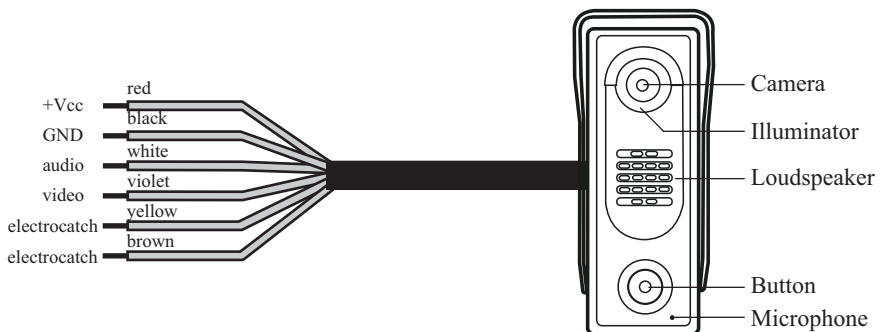


Figure 2. BVC-6501 external panel

ZS-15 feeder

DCV feeder, 15V DC/800 mA to mount on DIN rail.

Used to power the monitor and indirectly the external panel.

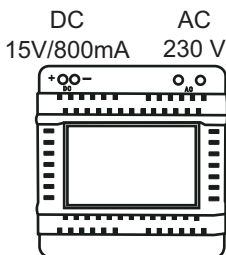


Figure 3. ZS-15 DCV feeder

The set is additionally featured with:

- assembly rail
- assembly screws
- pins necessary to connect the set

Additional elements **not included** in the basic set:

Electro-catch

Electro-catch of 12V AC/1A max. should be used in the video door phone. While selecting the electro-catch, take into account the mechanical build and type (left or right) of the door or gate to be blocked. Electro-catch of Openers&Closers company may be used (technical details at: www.laskomex.com.pl).

Feeder to electro-catch

ACV feeder: 12V AC/800 mA to mount on a DIN rail. Used to power to electro-catch.

4. BEFORE THE ASSEMBLY

Specify the places where video door phone elements are to be mounted.

- Mount the monitor in a place not exposed to strong light (e.g. close to the lamp, window etc.) as it may obstruct viewing image on the screen.
- Do not mount the monitor in place where it could be exposed to humidity e.g. in bathrooms.
- Do not mount the monitor near the sources of strong electromagnetic interference (wiring, TV sets etc.)
- Do not mount the monitor in heating sources - stoves, radiators etc.
- The external panel should be mounted in such a place that the camera lens is not directed to light source (sun, strong lamp post) because it will significantly obstruct or prevent viewing the visitors' faces.

- The image on the screen depends on the height the panel is mounted at. The recommended height is ca. 150 cm. Such height allows for viewing the face of an adult of average height standing ca. 50 cm from the panel. The assembly height should be determined on a trial basis.
- Do not mount the external panel at the distance exceeding 60 m from monitor (with the appropriate cable sections).
- Mount the feeder inside, in a place not exposed to humidity. Feeder should be mounted on a DIN rail in the electric installation box.
- The above recommendations relate to both the monitor feeder and door strike feeder. The door strike feeder may be mounted near the external panel (e.g. in the installation box of fence pillar).

Electric installation of video door phone.

Elements of video door phone may be connected with any cable with section meeting the requirements specified in Table 1.

At the distances between the monitor and the external panel exceeding 30 m, a 75Ω coaxial cable should be used to transmit video signal. The coaxial cable should be connected as presented in Figure 7.

The maximum distance between the external panel and the monitor should not exceed 60 m.

To put down in the ground and outside the room it is necessary to use the damp-proof cables. The number of wires in the cables is shown on the single line diagram (fig. 4).

NOTE: It is necessary to pay special attention on quality of connection`s wires and also on proper isolation of every connection especially when weather conditions appears. It is recommended to use hermetic cable box and shrink wrap in the place of joint the wires.

Maladjustment to those recommendation may lead to the impropriety activity of the door phone set.

Connection		Distance		
		<15m	<30m	<60m
external panel - monitor	+Vcc,GND,audio	0,4mm ²	0,75mm ²	0,75mm ²
	video	0,4mm ²	0,75mm ²	Coaxial cable
monitor - monitor		0,75mm ²	—	—
DCV feeder - external panel DCV feeder - monitor		1mm ²	1.5mm ²	2.5mm ²
DCV feeder - 230V		maximum 4m,		1mm ²

Table 1. Minimum cable section according to the distance between door phone elements

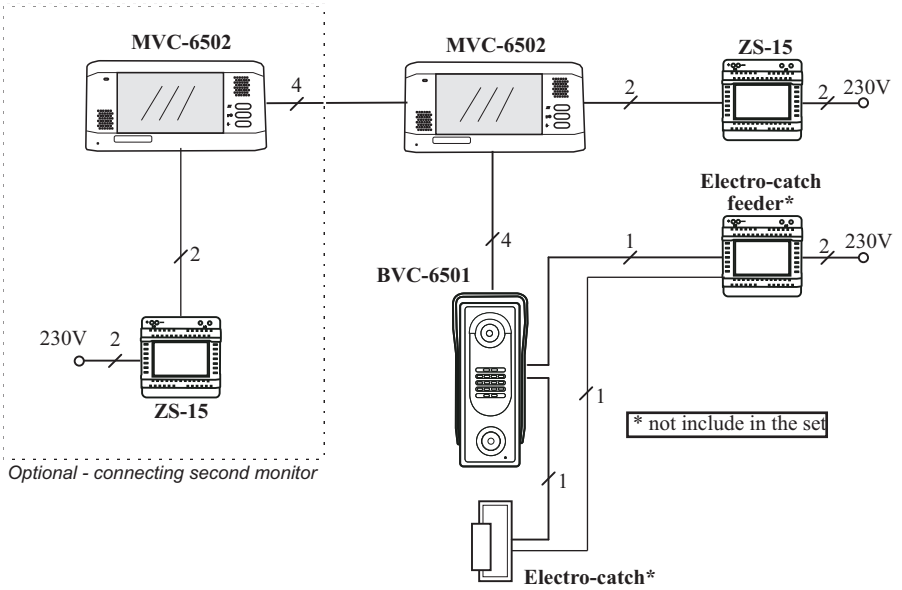


Figure 4. Connection of Libra video door phone - single line diagram

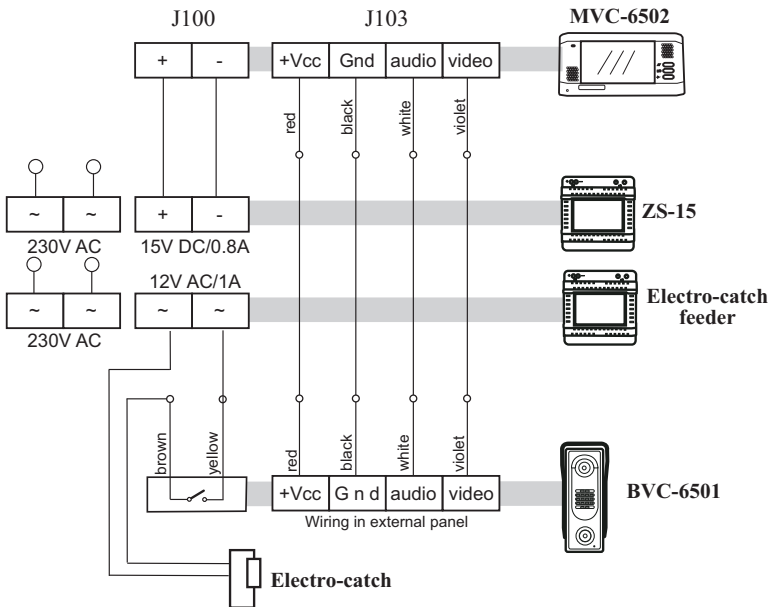


Figure 5. Block diagram of connecting elements of Libra video door phone

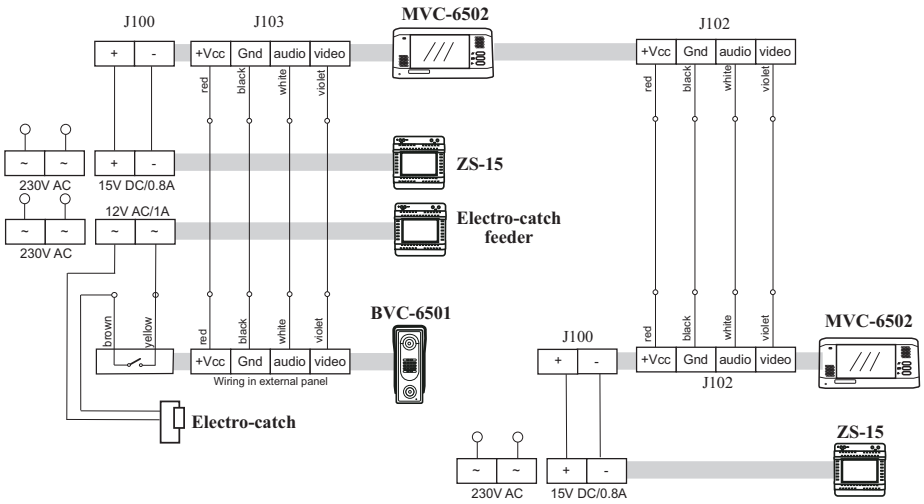


Figure 6. Block diagram of connecting elements of Libra video door phone with additional monitor

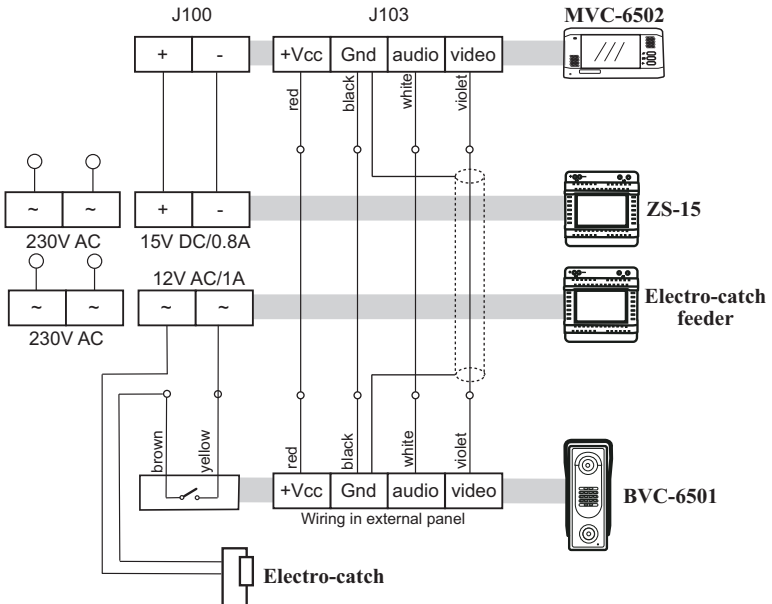


Figure 7. Block diagram of connecting elements of Libra video door phone in use with coaxial cable

5. ASSEMBLY AND CONNECTING ELEMENTS OF VIDEO DOOR PHONE

Assembly and connecting MVC-6502 monitor

To facilitate the assembly, mount a standard cable box in the wall where the monitor is to be mounted and insert the wiring of the video door phone. After the assembly, the monitor should wholly cover the cable box. This will facilitate connecting and mounting the monitor.

- The monitor is mounted on a metal grip screwed to the wall. To mount the grip, put it at the wall where it is planned to be mounted and mark places for dowels.
- Drill openings in the marked places and mount the grip to the wall using the dowels.
- Connect the plugs (included in the set) for J100 and J103 sockets to the wiring in accordance with the diagram, soldering them to the wiring. Secure the soldered places and isolated wiring cables against short circuit using shrink wrap or insulation. Connect the plugs to the sockets.
- Mount the monitor at the assembly jig.

Connecting an additional monitor

- In order to connect two MVC-6502 monitors to one external panel, power supply (J100 socket) should be connected in the additional monitor and the two monitors should be connected using J102 sockets. J103 socket in the second monitor is not used. See Figures 4 and 6.

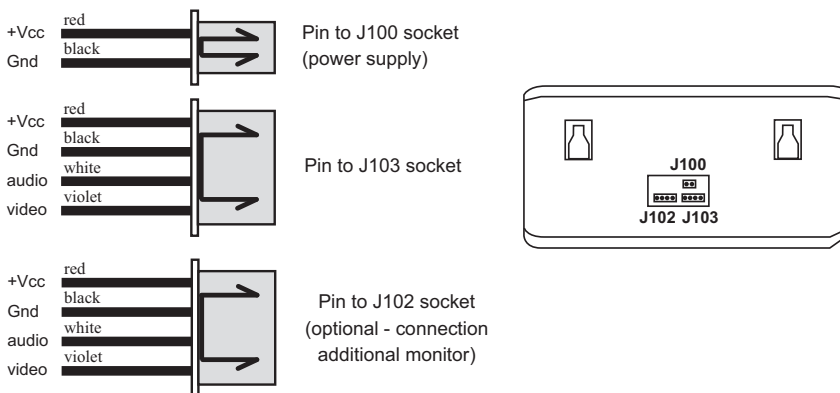


Figure 8. Connectors in MVC-6502 monitor

Assembly and connecting the external panel.

- Twist off the screw mounting the panel and the housing.
- Put the housing in the assembly place, mark places and drill openings for dowels. The camera lens should be located at the height of ca. 150 cm (see Figure 9a).
- Put the wire through the round opening in the housing and mount the housing to the wall (Figure 9c).

- Connect the wires in accordance with the diagram. A cable with colour wires (see Figures 2 and 5) is located in the external panel. Connect those wires with the wiring of the video door phone using a soldering iron, protecting the joint with shrink wrap or insulation.
- Put the panel to the housing and screw the assembly screws (Figure 9d).

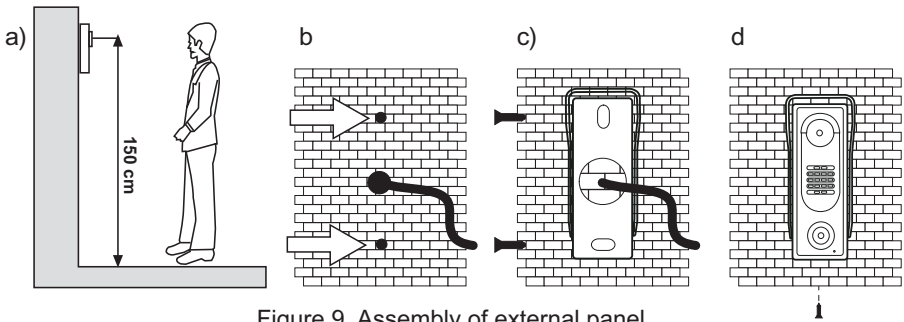


Figure 9. Assembly of external panel

Feeder assembly

The feeder is designed for mounting on a DIN rail. The feeder may be mounted in the installation box with a DIN rail or on a metal grip previously screwed to the wall with dowels (included in the set). Connect the wires in accordance with the diagram.




To ensure safety put on the mains terminal covering (plastic element attached to the feeder) after connect the feeder to the mains.

Assembly of electro-catch

Electro-catch is controlled by a transmitter located in the external panel. The electro-catch requires an additional ACV feeder. Mount the electro-catch in the gate or the door as prescribed by the manufacturer. Then, in accordance with the diagram (Figures 5,6,7) connect the wires (yellow and brown) in the external panel, feeder wires and electro-catch.

6. OPERATING VIDEO DOOR PHONE

- By pushing the release button in the external panel, the doorbell signal in the monitor will be activated and the monitor will switch on, displaying image from the camera (If an additional monitor is mounted the doorbell signal and the image from the camera will appear on two monitors).
- Push button ☞ (conversation - see Figure 1) to launch voice communication. In the case of two monitors mounted, once the voice communication is launched on one monitor, the other one switches off.
- Should the voice communication after launching fail to activate, the monitor will be automatically switched off after ca. 1 minute.
- The conversation may last up to ca. 100s. After this time, the conversation is automatically ended.

- To close the conversation push ☎ (conversation) button.
- It is possible to release the electro-catch at any time during the conversation by pushing the button  on the screen. The electro-catch's transmitter operates for up to ca. 5 s. Its operation period does not depend on the length of button pushing. **The electro-catch is activated once the button  is released.**
- The image from the camera may be activated on the screen at any time. In order to do so push ☎ (conversation) button. Simultaneously with activating the camera, the voice communication is established.
- Pushing the transfer conversation button  during the voice communication will transfer the conversation to the second monitor - the first monitor switches off, and on the second monitor the doorbell sounds and the image from the camera is shown (no audio mode).
- In order to receive the transferred conversation push ☎ (conversation) button.
- It is possible to set volume, color and brightness on the MVC-6502 monitor (see Fig.1).

7. MAINTENANCE

Video door phone elements should be cleaned with a damp duster. Alternatively, use preparations for plastic elements cleaning.

ATTENTION!

Do not use preparations including solvents or abrasive materials to clean the video door phone elements, as their use may lead to permanent damage of the housing surface!

Avoid letting the video door phone elements contact with water or detergents during cleaning as it may lead to the damage of video door phone or electric shock!

8. TECHNICAL DATA

MVC-6502 monitor

Screen size	5,8"
Dimension	220x110x30
Supply voltage	15V DC/0.8A
Operation temperature	0°C...70°C

BVC-6501 external panel

Dimension	135x55x40
Operation temperature	-20°C...70°C

ZS-15 feeder

Input voltage	230V AC
Output voltage	15V DC/ 800 mA max.
Dimension	87x87x60
Operation temperature	0°C...70°C

INSTRUCTION ON ENVIRONMENT PROTECTION

This product was marked with a symbol of crossed dustbin according to European Directive 2002/96/WE on used electric and electronic equipment. Used equipment cannot be placed with other wastes from households. Product user is obliged to give it to the firm which collects used electronic or electric equipment such as local collection points, shops, places appointed by the producer or commune waste collection units.



List of collecting units of used Laskomex equipment is available on www.laskomex.com.pl website or telephone No. 42 671 88 68.

Product packing should be removed according to environment protection regulations.

Remember!

Selective collection and recycling of used electronic and electric equipment considerably contributes to the protection of human health and life as well as protection of natural environment.

Return of packaging materials for the material recycling saves raw materials and reduces generating of wastes.



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