LASKOMEX®

Video door phone set
Bastion Apus II

1. Safety of operation and maintenance

- 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.
- Video door phone elements should be connected to an electrical installation when the feeder is disconnected from the power network.

2. Purpose and characteristic of video door phone

- Video door phone APUS II is designed for single family houses, companies, institutions and service providers.
- Two monitors may be connected to the external panel.
- **To external panel you can connect additional button to opening the door**
- The video doorphone is a hands-free device featuring a colour display. The half-duplex voice communication requires no manual channel switching: the direction is switched by voice.
- The external panel is wall-mounted.
- Outdoor panel have a keypad to acces by user code
- The panel is equipped with a colour camera and a LED display facilitating viewing visitors' faces at night.

3. Elements of Apus II video door phone set:

Monitor MVC-7002

This is a hands-free (loudspeaking) monitor with a 5.8" colour display with brightness, saturation and volume adjustment, and buttons for receiving calls, turning on the camera view and triggering the door release.
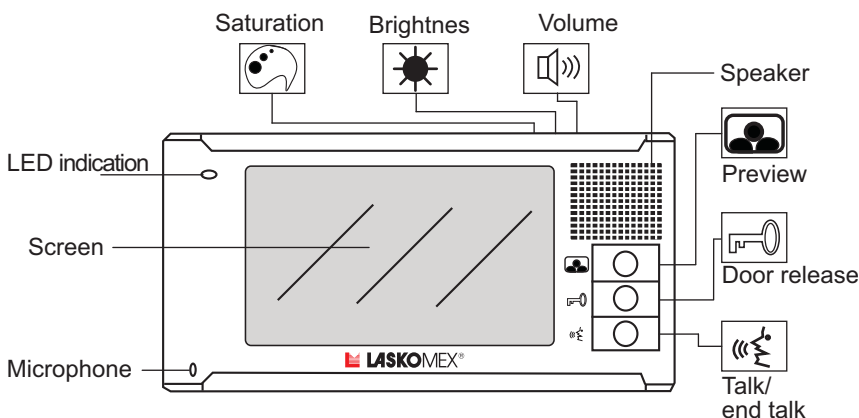

Fig 1. Monitor MVC-7002

BVC-6504 outdoor panel

An anti-vandal outdoor panel featuring a colour camera, LED camera illuminator, speaker, microphone and access keyboard with a calling button. The panel is surface-mounted and equipped with a door strike relay activated on pressing the monitor button.
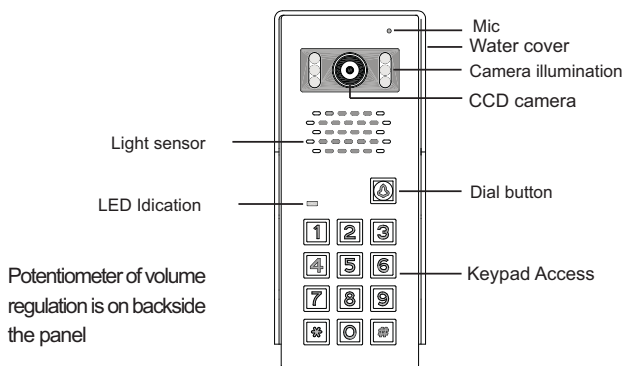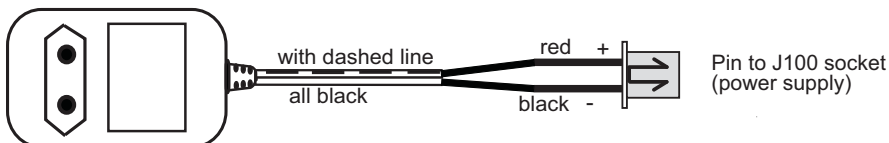

Fig 2. BVC-6504 outdoor panel

KSAD 1500120W1EU or GP005E-150-100 power adapted
A 15V DC/1.2A or 15V DC/1A power adapter with IP40 protection grade. It supplies power to the monitor and indirectly powers the outdoor panel. The access keyboard and door release will not work without connecting the door release power adapter (KSAD1350120WE1EU). The keyboard can be used to switch off the monitor power and open the door using user codes (see Point 7, section Combination lock operation).

with dashed line

all black

red   +

black   -

Pin to J100 socket (power supply)

Rys 3. KSAD 1500120W1EU or GP005E-150-100

The package also includes:
- monitor holding bracket
- mounting screws
- wires with connectors necessary to connect the kit

KSAD1350120W1EU door release power adapter
A 13.5V DC/1.2A power adapter which supplies power to the door release and indirectly powers the access keyboard. The wire marked with a grey dotted line is plus, and the solid white one is minus – see the figure under the power adapter. The wires should be connected according to the connection diagram.

Additional components **not included** in the basic kit:
Door release (optional – not included in the basic kit)
The video doorphone should only be used with door releases rated at 13.5V DC/1A max. When choosing the door release, take into account the mechanical design of the gate of the door it will be installed with and the opening direction (left or right). Compatible models include door releases from Openers&Closers (for more details, visit www.laskomex.com.pl).

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 100 m from monitor (with the appropriate cable sections).
- Mount the feeder inside, in a place not exposed to humidity.
- 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.

Coaxial cable75Ω 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 100 m.

To put down in the ground and outside the room it is necesarry to use the damp-proof cables. The number of wires in the cables is shown on the single line diagram (fig. 4).
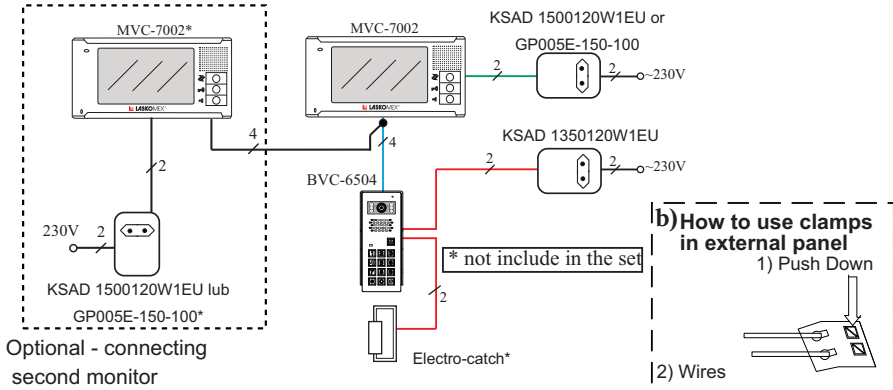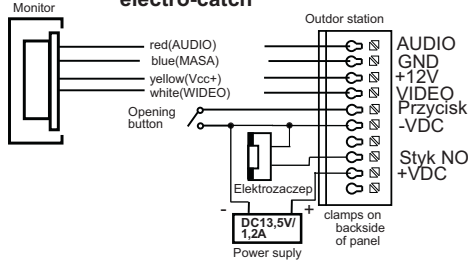
NOTE: It is necessary to pay special attention on quality of connection`s wires and also on proper isolation of every connection especially when weather conditions appears. It is recommended to use hermetic cable box and shrink wrap in the place of joint the wires.

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

Connection		Distance		
		<20m	**<50m**	**<100m**
outdoor station - monitor	**+Vcc,masa,audio**	0,2mm^2	0,44mm^2	0,75mm^2
	video	Coaxial cable		
monitor - monitor	**+Vcc,masa,audio**	0,2mm^2	———	
	video	Coaxial cable	———	
power adapter - outdoor station, power adapter - monitor		1mm^2	1.5mm^2	———
Power adapter - 230V		**maximum 4m,**	**1mm^2**	

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

Description of clamps with connected electro-catch

Monitor

red(AUDIO)
blue(MASA)
yellow(Vcc+)
white(WIDEO)

Opening button

Elektrozaczep

DC13,5V/ 1,2A

Power suply

Outdor station

AUDIO
GND
+12V
VIDEO
Przycisk
-VDC
Styk NO
+VDC

clamps on backside of panel

MVC-7002*

MVC-7002

KSAD 1500120W1EU or
GP005E-150-100

2 / ~230V

4

4

KSAD 1350120W1EU

BVC-6504

2 / ~230V

230V 2

KSAD 1500120W1EU lub
GP005E-150-100*

Optional - connecting second monitor

* not include in the set

Electro-catch*

b) How to use clamps in external panel
1) Push Down

2) Wires

Figure 4. Connection of Apus II video door phone - single line diagram.
b) How to youse clamps in external panel.

J100

J102

MVC-7002

+ -

audio | masa | +Vcc | video

Red | Black

Red | Blue | Yellow | White

~ ~
230V AC

+ -
15V DC/1.2A

KSAD 1500120W1EU or
GP005E-150-100

13,5V DC/1,2A

~ ~
230V AC

+ -

KSAD 1350120W1EU

Red | Blue | Yellow | White

+VDC | NO | -VDC | PRZ. | audio | zaś. GND | zaś. +12V | video

Clamps in external panel

CAUTION!!
The orders of terminals in BVC-6504 is changed
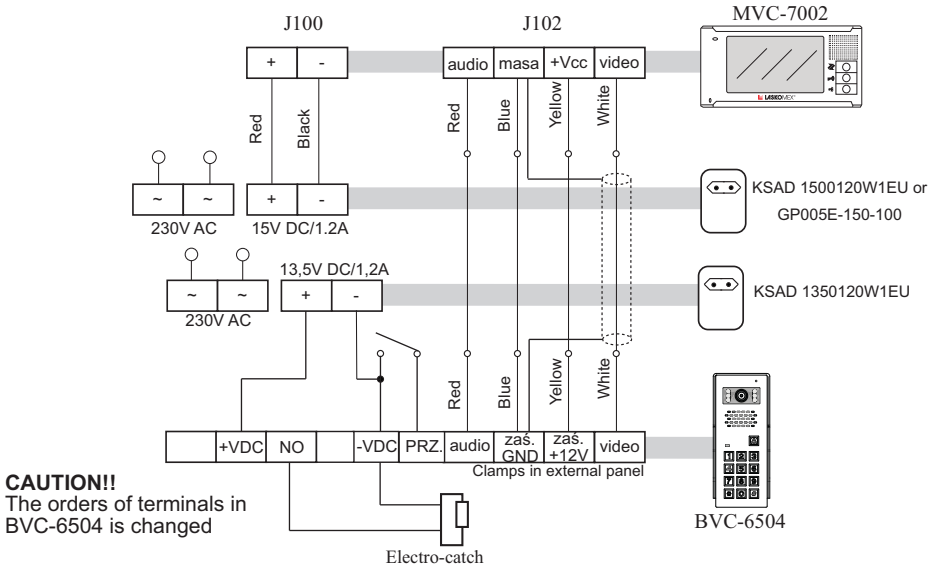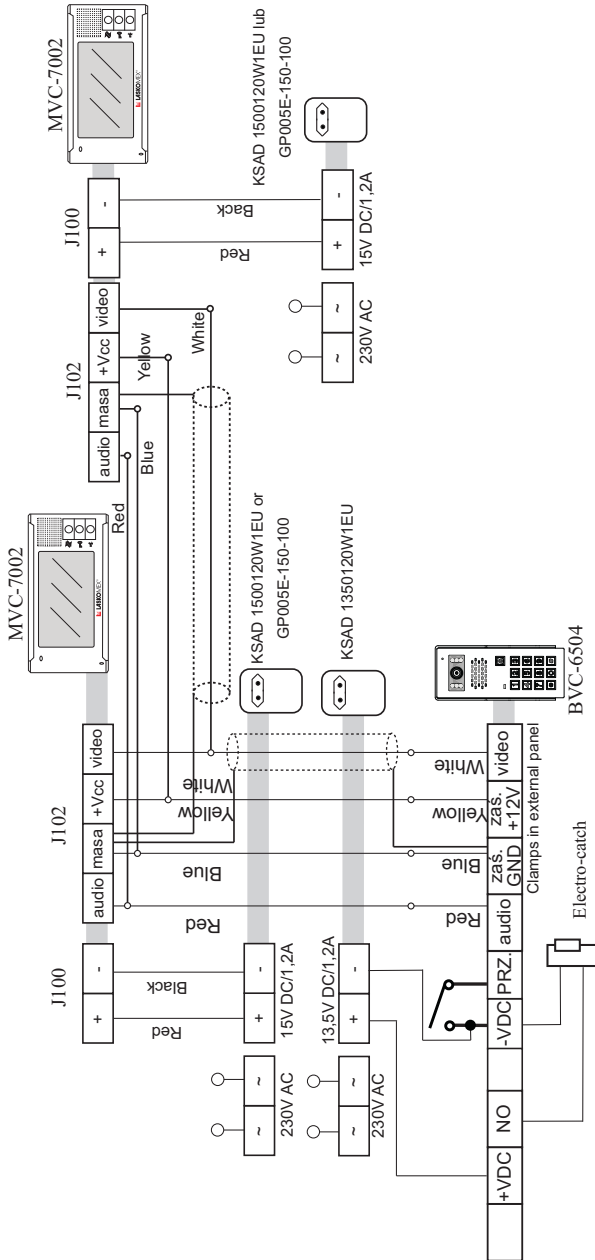
Electro-catch

BVC-6504

Figure 5. Block diagram of connecting elements of Apus II video door phone

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CAUTION!!
The orders of terminals in BVC-6504 is changed

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

5. Installing and connecting the video doorphone components
Installing and connecting the MVC-7002 monitor
For easier installation, all the wires of the video doorphone can be run to a standard cable box installed in the wall. Once mounted, the monitor should cover the whole box. This will make it easier to install and mount the monitor.

- The monitor is mounted on a metal holding bracket fixed to the wall. To fix the bracket, place it against the wall in the intended place of installation and mark holes for rawl plugs.
- Drill the holes as market and fix the bracket to the wall using rawl plugs.
- Connect the wires to the J102 socket connector provided with the kit, as shown in the diagram, by soldering them to the wiring system. Protect all soldered connections and isolated portions of the wires against short-circuit with a shrinking sleeve or insulating tape. Plug the connectors to the sockets.
- Mount the monitor on the holding bracket.

Installing and connecting the additional monitor
For connecting two MVC-7002 monitors to a single outdoor panel, run a separate power supply (J100 socket) to the additional monitor and connect the two monitors. See Figure 4, 5 and 6 (p. 7, 8)
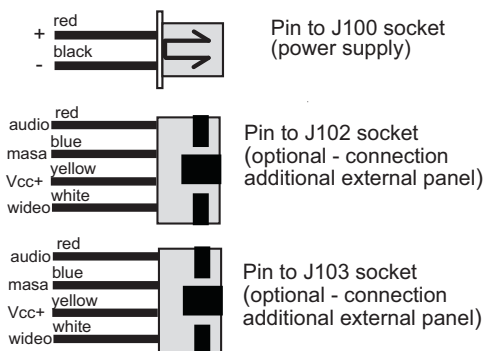

Fig 7. Connectors in MVC-7002 monitor

Installing and connecting the BVC-6504 outdoor panel.
- Unscrew the screw holding the panel to the hood.
- Place the hood at the intended place of installation, mark holes for the rawl plugs and drill the holes (Fig. 8b, p. 10). The camera lens should be placed at a height of approx. 150 cm (see Fig 8a, p. 10).
- Pull the wiring system cable through the circular hole in the casing and fasten the casing to the wall (Fig. 8c, p. 10).
- Connect the wires according the diagram (see Fig. 5, p. 7). As shown in Fig. 5, the

wires should be connected to the outdoor panel with snap-on connectors (see Fig. 4b, p. 7). Place the panel against the hood and secure it with the mounting screw (Fig. 8D, p. 10).
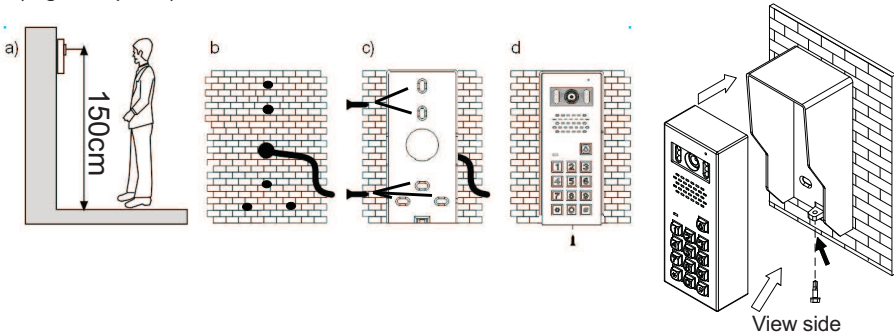

Fig. 7. Outdoor panel installation

Installing and connecting the power adapter
The wire marked with a grey dotted line is plus, and the solid white one is minus – see Fig. 3. The wires should be connected according to the connection diagram.

+ red
- black

Pin to J100 socket (power supply)

Fig. 8. Power socket connector of the monitor

Installing and connecting the door release
The door release is controlled by the relay in the outdoor panel and must be powered from a separate DC power adapter.

Install the door release in the gate or the entrance door according to the manufacturer's recommendations. Then proceed to connect the wires in the outdoor panel (two black wires), power adapter wires and the door release, as shown in the connection diagram (see Figures 5, 6).

6. Video doorphone operation
- Pressing the calling button (🔔) on the outdoor panel triggers a calling signal in the monitor and switches on the camera view (if an additional monitor has been installed, the camera view will display on both monitors).
- To switch on voice communication, press the button «ϟ (talk, see Fig. 1). In two-monitor installations, if voice communication has been established by one of the monitors, the other one will switch off after approx. 1 minute.
- If voice communication is not activated after calling, the monitor will automatically switch off after approx. 1 minute.
- The talk time is limited to approx. 120 seconds, after which the phone will automatically hang up.
- To hang up, press the button «ϟ (talk) again.

- The door release can be activated at any time during the conversation by pressing the button ⌐⍉ on the monitor. The release continues while the button remains pressed.
- The camera view on the monitor can be switched on at any moment by pressing the button ▣ (view). Pressing the button again will switch the view to the next entrance, and pressing the button yet again will switch off the camera view.
- sequential operation. To activate voice communication in the camera view mode, press the button ⍾ (talk).
- The MVC-7002 monitor features controls for volume, brightness and colour saturation adjustment (see Fig. 1).

ATTENTION!
The camera view is activated with a delay of approx. 2 seconds after pressing the View/Talk button.

7. Programming mode in panel BVC-6504
Entering programming mode
1) press *, you will hear 2 short sounds
2)enter your 4 digit administrator code, you will hear 3 short sounds, red LED is flashing you are now in programming mode
3) to exit programming mode press the * key.
Adding user codes
1)press *, you will hear 2 short sounds
2)enter your 4 digit administrator code, you will hear 3 short sounds, red LED is flashing you are now in programming mode
3)enter the location 01 to 40 (31-40 are the latching code locations). If a series of bleeps are heard at this point then the location has a code stored, you may proceed as this is only a warning.
4)enter the desired 4 digit user code, if the code lock retunes immediately to the programmiong mode base level then the code is not permitted as it already exits else where in another locations, if the code is permitted then you will hear 3 short sounds
5)return to step 2 to enter more user codes or press the * key to exit programming mode.

ATTENTION!
In default configuration is not programmed any user code.

DELETING USER CODES
1)press *, you will hear 2 short sounds
2)enter your 4 digit administrator code, you will hear 3 short sounds, red LED is flashing you are now in programming mode
3)enter user location (01-40), you will hear 3 short sounds
4)press button #, you will hear 3 short sounds
5)return to step 3 to delete more codes or press the * key to exit programming mode.

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Operation lock with code

1) enter your 4 digit user code,

2) The red LED is lit this means user code is correct (door open)

3) Led diode turn off , 6 short sounds (door locked)

ATTENTION!! If code is entered incorrect 3 times the operation of opening door by code is blocked (about 1min). Blocade is signaling by means of external panel you will hear long sound.

CHANGING THE ADMINISTRATOR CODE

1)remove power from the unit and press and hold down the * key

2)apply power whilst holding button down, the unit will then give long continuous sound.

3)when the tone has stoped, release the * key and enter your new 4 digit administrator code

Reset (without administrator code)

1) press *, you will hear 2 short sounds

2)enter your 4 digit administrator code, you will hear 3 short sounds, red LED is flashing

3) press #,you will hear 2 short sounds, LED is flashing

4) again press #,you will hear 2 short sounds, LED is flashing

5) press # 7 times , you will hear 5 short sounds, LED is off

8. Video doorphone maintance

Components of the video doorphone should be cleaned with a wet cloth or with cleaning agents designed for plastics.

ATTENTION!

Do not use solvents or abrasive cleaners, as they can result in permanent damage to the surface of the casing! Avoid any contact of doorphone components with water or cleaning agents, as this might result in damaging the device and electric shock!

9. Technical data
Monitor MVC-7002
Screen size	5,8''
Dimension	220x110x28mm
Supply voltage	15V DC/0.8A
Operation temperature	0°C...40°C

BVC-6503 external panel
Dimension	182x75x60mm
Operation temperature	-20°C...55°C
Degree of protection	IP43
Angle of view vertical/horizon 36°/48°	

Power supply	**KSAD 1500120W1EU**	**or GP005E-150-100**
Input voltage	230V AC	230V AC
Output voltage	15V DC/1,2A max.	15V/1A
Dimension	81x43x67	81x43x67
Operation temperature	0°C...40°C	0°C...40°C
Degree of protection	IP40	IP40

Notes:

Notes:

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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