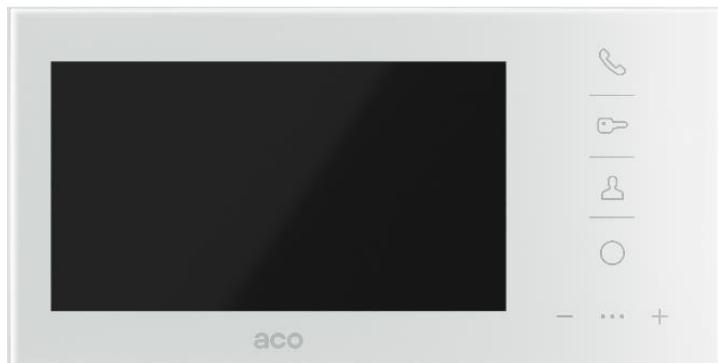


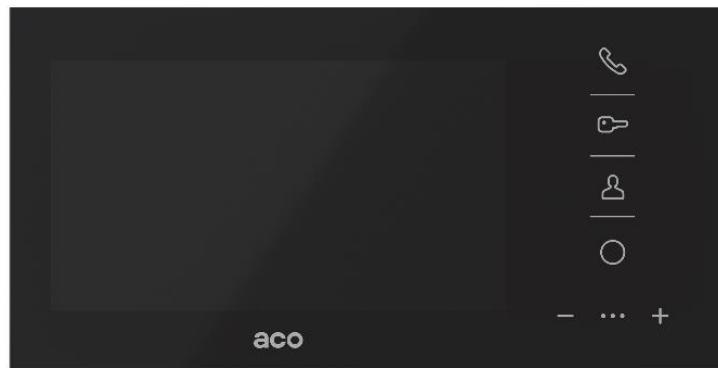
DIGITAL VIDEO MONITOR OPERATION AND INSTALLATION INSTRUCTIONS INS-MP7

GENERAL INFORMATION



Digital video monitor INS-MP7 is designed to work with Familio PV and INSPIRO panels in multi-family solutions, where video and audio transmission is required.

The video monitor features a modern design and its completely flat front is made of glass. The applied hands-free system eliminates the need to use a handset to conduct a conversation. The front panel features a touchscreen keypad with backlit icons to operate the monitor.



INS-MP7 monitor supports more than one receiver at the same address. It also supports external ringing, volume control of ringing and calls, adjustment of image parameters, the ability to control external devices, supports complete privacy of the conversation, as well as image preview and opening the door without the need for conversation.

OPERATION



When a call is made from the panel, the monitor switches on the display to allow viewing from the panel camera, plays the ringing tone from the panel and flashes **the handset, key and monitor icons in sequence**. To answer the call, touch **the handset icon**. When the call is answered, a voice connection is established with the panel and **the handset, key and monitor icons light up**. Additionally, the volume bar LEDs light up and the call volume adjustment becomes active by touching **the + and - icons**. If the call volume is completely muted (volume bar goes out), the microphone in the monitor is also switched off (mute). The call will be ended by touching **the handset icon**.

The monitor has a function of signalling a missed call from the panel. If a call from the panel is not answered, **the monitor icon will blink in the standby mode**. To cancel the missed call signalling **touch the monitor icon**.

Activation of the e-lock is possible in both standby mode (depending on the panel configuration) and talk mode. To activate the electric door strike just touch **the key icon**. Each activation of the e-lock is signalled by a sound signal ("beep"). While the line is busy (other users are talking) it is not possible to actuate the electric door strike. Activation of an additional

output (I/O module) is possible during a conversation by touching **the F2 icon** (to activate the possibility of controlling an additional output "without a conversation" configure the panel).

You can switch on the preview at any time as long as the line is free (other users are not talking). To do this touch **the monitor icon**. It is also possible to preview the image permanently by holding down **the monitor icon** for at least 5s. Activation of this function will be confirmed by five quick beeps and brightening of **monitor icon**. The preview will be switched on until it is switched off - by touching **the monitor** for at least 5s or until any monitor is called from the panel. Preview activation is limited to 60 minutes. After that time, the preview will be switched off automatically. If the second camera is active, during the preview, touching the F2 icon switches the image between the panel camera and an additional camera. In talk mode, the image switching is done with **the monitor icon**.

A monitor working in a system with other monitors indicates the occurrence of a busy line. This is done by blinking the centre LED of the volume bar. A busy line occurs when there is a call from a panel to another monitor. When the line is busy, it is not possible to switch on the viewer or activate the e-lock. When attempting to execute a blocked function, the monitor will beep three times and will not execute the command.

The monitor supports auto-opening. This function is used to switch on the automatic activation of the e-lock after calling the monitor. It can be activated e.g. during office working hours - in this way each call to the monitor with the auto-open option activated will trigger the e-lock. The auto-opening is activated by holding down **the key icon** for at least 5s. Activation of this function will be confirmed by four quick beeps and brightening of **the key icon**. Deactivating the auto-opening function is done similarly - by touching the key for at least 5s. When you call the monitor with the auto-open function enabled, it will make a single ringing sound to signal the activation of the e-lock. With the auto-open function enabled, all monitor functions (except answering calls from the panel) are still available. In the case of several monitors working on the same address, auto-open should be enabled only on one of them.

The monitor has a bell function. In standby mode, when the bell rings, the monitor plays the ringing tone twice and the image from the second camera (if active) switches on. In talk mode, the ringing tone is played only once and does not interrupt the call or switch the camera automatically.

CHANGE OF THE SETTINGS

The monitor allows you to adjust the ringing volume and the brightness and saturation of the picture. You can adjust the ringing volume by touching the + or - volume control icon in standby mode. The monitor will then play a ringing tone at the selected volume and wait for you to change it with the + and - icons. As the actual ringing tone is generated by the panel, the ringing tone itself may be different. If the parameters are not changed for 5s the monitor will save the set parameters.

Adjustment of image parameters (brightness, colour saturation) is possible only when the monitor preview is switched on in standby mode (**monitor icon**). After touching the + or - icons, the brightness ruler on the display will turn on. Brightness changes are possible with + and - icons. After touching the **monitor icon** the display switches to the colour saturation adjustment mode. Another touch on the monitor icon will switch off the adjustment mode.

After connecting a second camera to the monitor, activate its input by holding down the **F2 icon** for at least 5s during the preview. Similarly, the input can be deactivated.

PARAMETERS

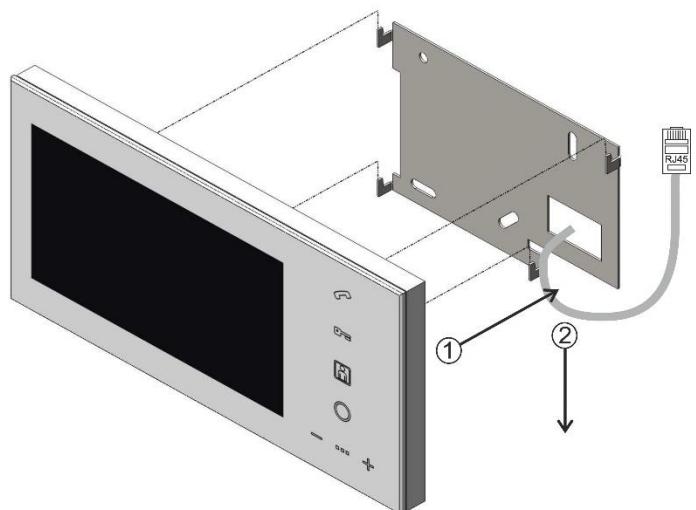
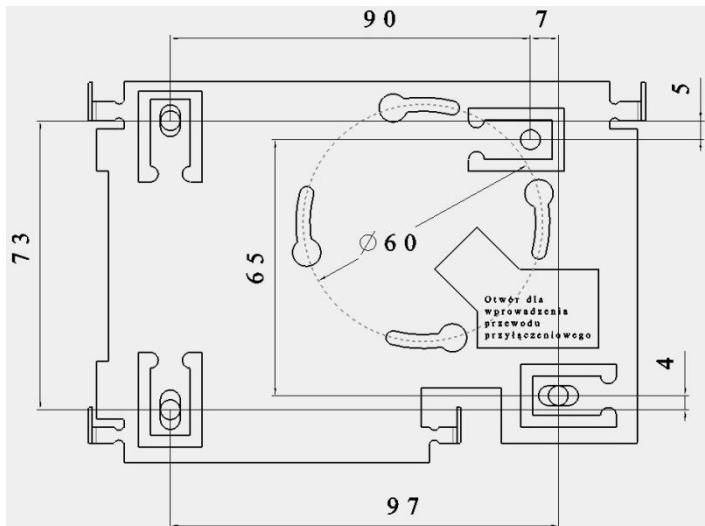
• Power supply voltage	15VDC ±5%
• Stand-by power consumption	~150mW
• Maximum power consumption	460mA
• Diagonal LCD display	7" (640 x 480)
• Connector type	RJ45 socket / ARK screw terminals
• Topology of the system	category 5e twisted pair cable
• Front panel material	Glass
• Dimensions of the mounting plate	14cm x 9,2cm
• Monitor front dimension	24cm x 12cm
• Resistance of the ringing tone input (RING)	≤ 20Ω, input type: normally open contact (NO)

Note ! If the glass front of the video monitor is damaged, its further use may cause injuries !

ASSEMBLY AND SYSTEM CONNECTION

Mounting the monitor

Installation should start with the surface-mounting plate. It has three oblong holes and one single hole, from which the assembly should start. The shape of the other holes makes it easier to level the already seated sheet. On the left side of the monitor (looking at the display) there is a microphone. The installation should be done in such a place, that it is not covered.

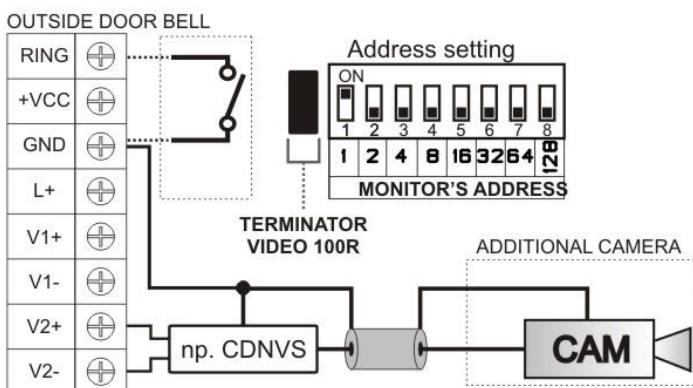


The monitor address is programmed at the switches located on the back of the monitor so that the sum of digits at the switched switches corresponds to the planned address. The video terminator jumper must be left on in each monitor. Its disconnection is required only in exceptional cases discussed in the scheme catalogue.

Connecting the monitor.

12345678	1 Orange - white	GND	Power
	2 Orange	+15VDC (+VCC)	
	3 Green - white	- Signal line (GND)	
	4 Blue	V+ (V1+)	Video
	5 Blue - white	V- (V1-)	
	6 Green	+ Linii sygnału (L+)	
	7 Brown - white	GND	Power
	8 Brown	+15VDC (+VCC)	

The connections of the monitor can be made, interchangeably, with RJ45 socket or screw connectors. If an RJ45 connector is used, **the twisted pair must be crimped as shown**. All connectors must be crimped equally according to the T568B standard. Before switching on the power, make sure that all connections are made according to the diagram, **RJ45 plugs are crimped correctly and there are no short circuits between wires**. The connection should be made **with power supply switched off**.

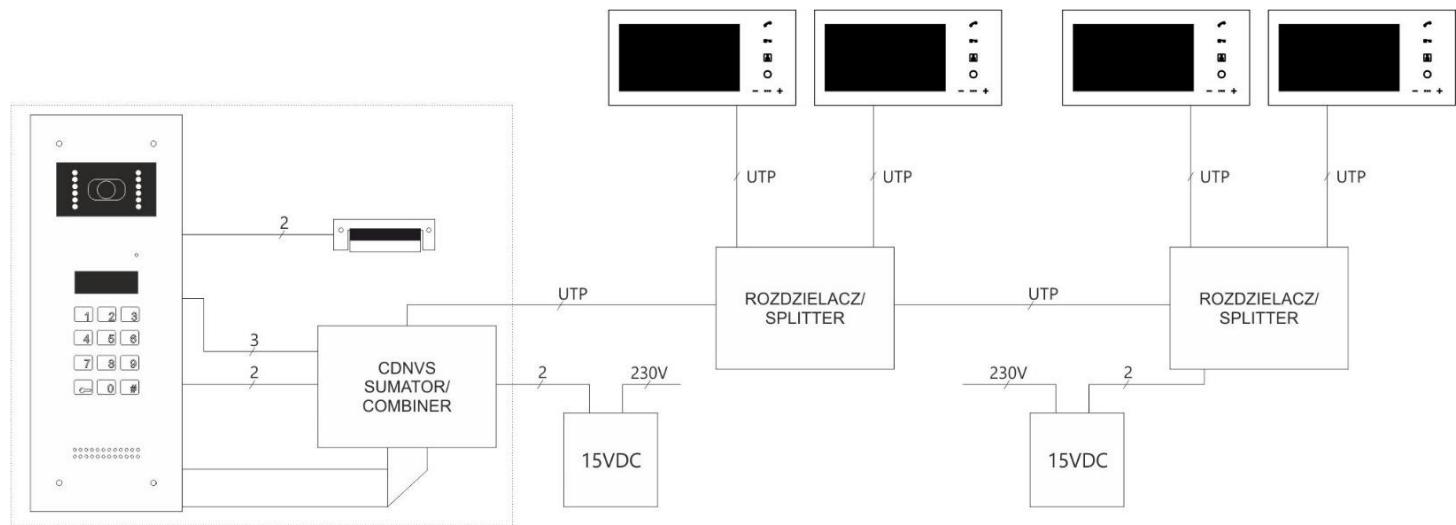


Using screw terminals we connect: power supply to +VCC and GND terminals, signal line (+) to L+ terminal, signal line (-) to GND terminal, video respectively to terminals: V1+ and V1-. Additional, symmetrical video signal is connected to terminals V2+ and V2-.

Normally-open button for calling the bell function, connected between the RING and GND terminals.

The maximum length of the connection (twisted-pair cable category 5e) **between the monitor and the place of power supply connection is 70m**. Due to significant current consumption by the monitor in the image display mode, and because of the possibility of calling the preview, it should be assumed that each active 4-output distributor supplying 4 x INS-MP7 monitors should have a power supply connected. The total length of the bus based on twisted-pair cable category 5e is 300 m counting from the first panel to the furthest monitor.

BASIC WIRING DIAGRAM OF THE MONITOR



More diagrams are available in the catalogue of video system diagrams and/or extended manuals for panels and control panels.

RULES FOR DISPOSAL OF WASTE ELECTRICAL EQUIPMENT

Waste electrical appliances must not be stored with other waste. They should be stored in places intended for this purpose. Please contact responsible institutions or waste recycling companies. - Directive 2002/96/EC of 27.01.2003