



VIDEO SWITCHER

VPP404

VPA404

VPA408

Installation and user manual

IMPORTANT SAFEGUARDS

READ THE INSTRUCTIONS

Be sure to read all the safety and operating instructions before using the device.

KEEP THE INSTRUCTIONS

Be sure to keep all the safety and operating instructions for possible future need and queries.

FOLLOW THE INSTRUCTIONS

Be sure to follow all the safety and operating instructions.

WATER AND HUMIDITY

Do not use the unit near water – for example near a bath tub, or in any area showing evidences of humidity.

POWER SUPPLY

This equipment can be fed only by the type of supply quoted by a production code on the device. Do not overload electric adapters and extension cords as this can result in fire or electric shock.

REPAIR

Do not attempt to open covers and to service this unit yourself, refer all repairs to qualified service personnel.

UNPACKING

Transfer package is a safe covering for device transportation. We recommend to keep the wrapping for relevant future usage.

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INTRODUCTION

Programmable video switchers VPP404, VPA404, VPA408 is a apparatus, which enables displaying of 4 or 8 cameras on one output.

The switching can be provided manually or with the help of programmed sequence. It is possible to set up cameras, which are at the right time available for automatic switching. This makes possible to disconnect temporarily uninteresting or disconnected cameras. An operator attention can be focused only on important camera images.

The video switchers VPA404 and VPA408 contains 4 (8) alarm inputs. The video switchers itself remembers the last setting of active cameras, a programmed sequence and the time of switching an alarm output, even after the unit had been switched off.

MAIN CHARACTERISTICS

- 4 (8) video inputs
- 2 identical video output
- on screen menu control
- programmable switching sequence for the monitor output
- alarm input for each video input
- potentialless alarm output *
- 2 alarm setting modes *
- acoustic and optical alarm signaling *

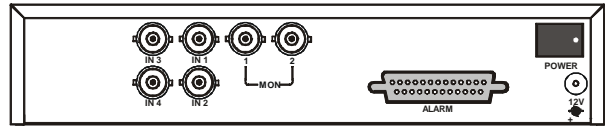
* for VPA404 and VPA408 only

OPERATING ELEMENTS AND FUNCTIONS

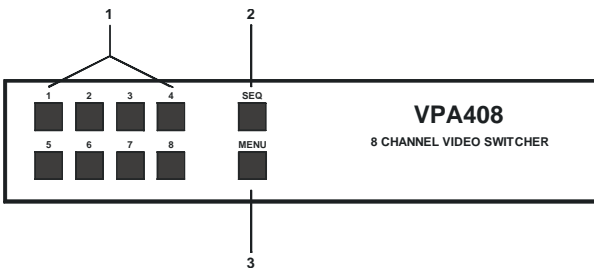
Pict.1: Front panel VPP404 / VPA404



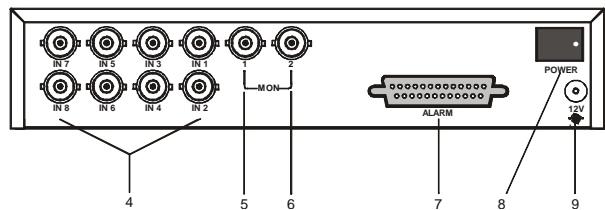
Pict.3: Back panel VPA404



Pict.2: Front panel VPA408



Pict.4: Back panel VPA408



1. 1 - 8

Press the button 1 – 8 to display the appropriate camera image.

2. SEQ

Press the button SEQ to start the automatic camera switching, according to the programmed sequence.

3. MENU

Press the button MENU to display the control menu on the screen.

4. IN1 – IN8

Video inputs for cameras 1 – 8.

5. MON 1

Main video output.

6. MON2

Spot video output.

7. ALARM

Connector for connecting alarm inputs and outputs. This connector enables connecting of alarm contact makers, sensors, etc.

8. POWER

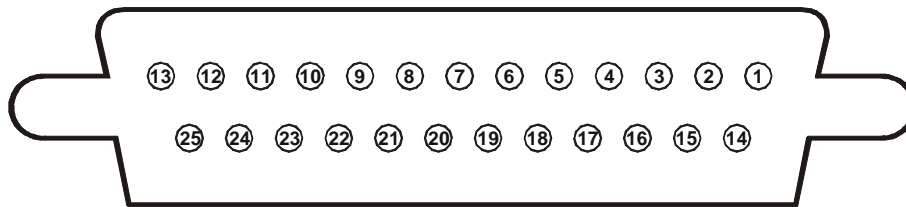
Press the switch POWER to start the video switchers.

9. 12V

Connector for connecting power supply.

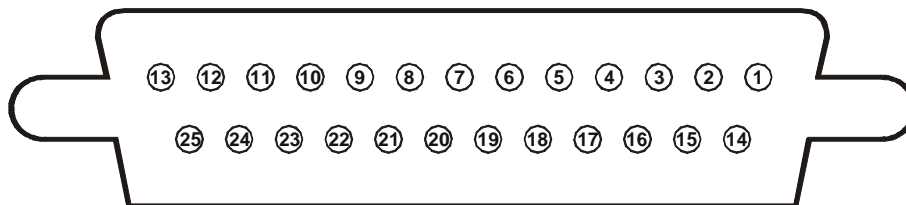
OPERATING ELEMENTS AND FUNCTIONS (continuation)

Pict. 5: Alarm connector CANNON 25 for VPA404



- | | |
|---|--|
| (1) Alarm output – normally open contact 1 | (14) Alarm output – normally open contact 2 |
| (2) Reserve | (15) Reserve |
| (3) Alarm input 1 | (16) Alarm input 2 |
| (4) Alarm input 3 | (17) Alarm input 4 |
| (5) Reserve | (18) Reserve |
| (6) Reserve | (19) Reserve |
| (7) Common conductor – ground (GND) | (20) Common conductor – ground (GND) |
| (8) Reserve | (21) Reserve |
| (9) Reserve | (22) Reserve |
| (10) Reserve | (23) Reserve |
| (11) Reserve | (24) Reserve |
| (12) Common conductor – ground (GND) | (25) Common conductor – ground (GND) |
| (13) Common conductor – ground (GND) | |

Pict. 6: Alarm connector CANNON 25 for VPA408



- | | |
|---|--|
| (1) Alarm output – normally open contact 1 | (14) Alarm output – normally open contact 2 |
| (2) Reserve | (15) Reserve |
| (3) Alarm input 1 | (16) Alarm input 2 |
| (4) Alarm input 3 | (17) Alarm input 4 |
| (5) Alarm input 5 | (18) Alarm input 6 |
| (6) Alarm input 7 | (19) Alarm input 8 |
| (7) Common conductor – ground (GND) | (20) Common conductor – ground (GND) |
| (8) Reserve | (21) Reserve |
| (9) Reserve | (22) Reserve |
| (10) Reserve | (23) Reserve |
| (11) Reserve | (24) Reserve |
| (12) Common conductor – ground (GND) | (25) Common conductor – ground (GND) |
| (13) Common conductor – ground (GND) | |

INSTALLATION

MONITOR OUTPUTS

Outputs VIDEO SWITCHERS and MAIN are individual video outputs for connecting monitor. For the correct function of the connected apparatus the signal cables must have the impedance load of 75Ω .

ALARM INPUTS

One alarm input is suitable for one video input. Alarm loops are connected between alarm input and common conductor - ground (GND).

ALARM OUTPUT

Video switchers has its own potentialless alarm output made of the normally open contacts of the relay.

ALARM CONNECTOR

Alarm connector is used for connecting alarm inputs and outputs. The connection of 25 outlet connector CANNON is illustrated on the pictures 5 and 6 (page 4).

POWER SUPPLY INPUT

The video switchers VPP404, VPA404 and VPA408 are supplied from a uniflow supply of 12 V. Energy input is 4 W maximum. For connecting supply voltage is used a concentric connector 5,5 x 2,1 mm. The positive supply pole is on the inside contact of the concentric connector, the connector jacket is the negative pole.

SWITCHERS CONTROLLING

BASIC MODE

After turning on, the video switchers cyclically switches among active cameras according to the sequence, which has been set up. The automatic switching is signaled by the SEQ light-emitting diode (LED), the camera displayed on the main video output (MAIN) is signaled by the diode of the buttons 1 – 8.

MANUAL SWITCHING

Press the corresponding button to display cameras 1 – 8.

AUTOMATIC SWITCHING

The automatic switching starts by pressing the button SEQ.

If the video switchers does not start to switch automatically, check the camera settings in the menu SEQUENCE and TIME (page 6).

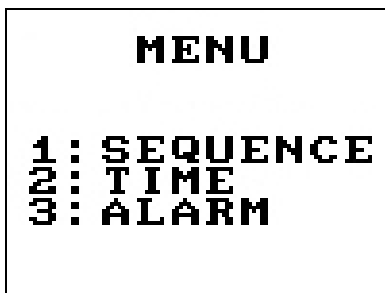
VIDEO SWITCHERS CONTROLLING (continuation)

Video switchers contain a graphical menu, which enables the setting of the following functions.

- Cameras activation for automatic switching
- Switching period set up
- Alarm functions set up

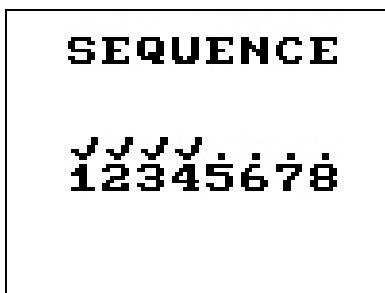
MENU - MAIN MENU

To display the main menu on the screen press the button MENU. Choose the required function by pressing the buttons 1, 2 and 3.



SEQUENCE – CAMERAS ACTIVATION

By pressing the button 1 is the menu for cameras activation and deactivation for automatic switching displayed.

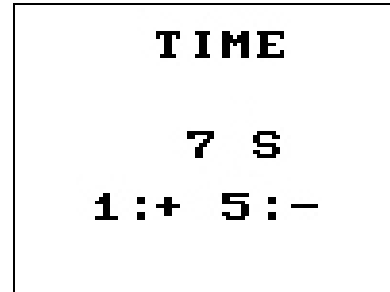


By pressing the buttons of individual cameras activate or deactivate automatic switching cameras. Activated cameras are marked by sign ✓.

If the cameras are set up, the video switchers will switch automatically among cameras 1, 2, 3, 4, ...

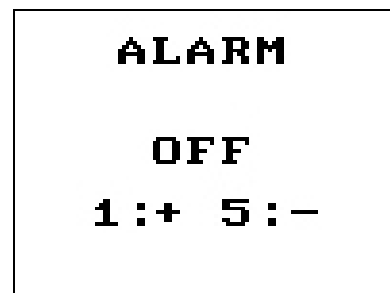
In case you make a mistake by sequence programming (none or only one camera is active) and you start the switching sequence by pressing the button SEQ on the front panel, notice „**INCORRECT SEQUENCE**“ will appear. In that case is necessary to set up cameras in the SEQUENCE menu properly.

TIME – SWITCHING PERIOD



By using the buttons 1 and 3 (1 and 5 by Q8M) is possible to prolong or slow down the switching time among individual cameras and video switchers pictures, at intervals 1 – 99 sec.

ALARM – ALARM SET UP



The video switchers detects an alarm, when the connection is provided between the alarm input 1 – 8 on the CANNON connector of the back panel and the common conductor – ground (GND). By the help of the buttons 1 and 3 (1 and 5 Q4M) set up video switchers reaction for an alarm. The reaction can be:

- OFF** - alarm is off - video switchers does not respond to the alarm.
- FOLLOW** - video switchers signalizes an alarm as long as any alarm input is active.
- 2-255 S** - video switchers signalizes an alarm for the set up time since the alarm event had occurred.

If an alarm occurs, the video switchers makes the following steps:

1. it switches the alarm output (relay) – signaled acoustically (beep).
2. it switches a camera corresponding to the alarm input for the set up time.

The alarm stops after the end of the set up time interval, after pressing any button or

INSTALLATION

after the end of the alarm event in the mode
FOLLOW.

SWITCHERS CONTROLLING

VIDEO SWITCHERS CONTROLLING (continuation)

YOUR TROUBLE	THE CAUSE AND ITS SOLUTION
After connecting the supply voltage device does not work.	The power supply is not connected. <i>Check the supply connector and the polarity of power supply. Switch on the power breaker.</i> The supply adapter is not dimensioned sufficiently. <i>Check if the adapter power output and voltage agree with the video switchers requirements.</i>
After connecting the supply voltage the LEDs are on, but the device does not work.	The supply adapter is not dimensioned sufficiently. <i>Check if the adapter power output and voltage agree with the video switchers requirements.</i>
Automatic switching sequence cannot be switched on.	Cameras listed in the switching sequence are off from the switching. <i>Correct the sequence and check the sequence period (page 6).</i>
Device does not react to alarm inputs.	The alarm processing is switched off in the main menu. <i>Set up the alarm with the function of ALARM (page 6).</i> The connection of the alarm signals is disconnected. <i>Check the connection of the alarm connector.</i>
There is no picture on the monitor.	The video switchers and monitor patchcord is defective. <i>Check the patchcord carefully.</i>

TECHNICAL SPECIFICATION

VIDEO INPUTS	
Number:	4 (8 by VPA408)
Amplitude:	0,75 - 1,5 V _{p-p}
Input impedance:	75 Ω
Connectors:	BNC
VIDEO OUTPUTS	
Number:	2 identical
Amplitude:	1 V _{p-p} load 75 Ω
Connector:	BNC
ALARM INPUTS	
Number:	4 (8 by VPA408)
Loop connection:	input – ground (GND)
Activity:	normally open
Maximum alarm loop impedance:	1 kΩ
Connector:	CANNON 25 pin socket
ALARM OUTPUT	
Output:	2 low voltage relay contacts
Maximum switching voltage:	40 V
Maximum switching current:	0,5 A
TEMPERATURE CONDITIONS	
Range of operating temperatures:	0 – 40 °C
Humidity:	max. 85 %
POWER SUPPLY	
Input voltage:	12 VDC
Power consumption:	max. 4 W
Connector:	Concentric 5,5 × 2,1 mm
MECHANICAL PARAMETERS	
Dimensions:	218(W) × 44,5(H) × 230(D) mm
Weight:	1,4 kg
ACCESSORIES	
Alarm connector mate + cover:	1 p for VPA404 and VPA408 only

