# INSTALLATION/OPERATION



# VS5104/VS5108 Sequential Switcher



## **Important Safety Instructions**

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the points where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 13. Apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases shall be placed on the apparatus.
- 14. WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- 15. Installation should be done only by qualified personnel and conform to all local codes.
- 16. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.
- 17. Only use replacement parts recommended by Pelco.
- 18. After replacement/repair of this unit's electrical components, conduct a resistance measurement between the line and exposed parts to verify the exposed parts have not been connected to the line circuitry.

The product and/or manual may bear the following marks:

This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.

This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

**CAUTION:** 

RISK OF ELECTRIC SHOCK.
DO NOT OPEN.

# **Description**

The VS5104 and VS5108 are sequential switchers designed to switch four cameras (VS5104) or eight cameras (VS5108) to one monitor.

### **MODELS**

VS5104 Desktop, 4-position, single output sequential switcher without alarm inputs

VS5104/220 Same as VS5104 except 230 VAC operation

VS5108 Desktop, 8-position, single output sequential switcher without alarm inputs

VS5108/220 Same as VS5108 except 230 VAC operation

### Installation

The VS5104/VS5108 switcher is designed for either looping or terminating operation. The unit is shipped ready for terminating operation, but it can be modified for looping operation. Looping and terminating inputs may be mixed.

- 1. To install the VS5104/VS5108, do the following:
  - a. Terminating Operation Proceed to step 2.
  - b. Looping Operation To convert to looping operation, remove the cover. Locate the 75-ohm resistors at the rear of the BNC jacks. Use wire cutters to clip one of the resistor leads for each input that you want to loop. Refer to Figure 1. Replace the cover.

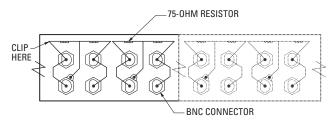


Figure 1. Rear Panel Internal View

- 2. Make all equipment connections for your system configuration. Refer to Figure 2.
- 3. Connect the AC adapter to the 12 VAC input socket on the switcher. Connect the transformer to a 120 or 230 VAC power supply.
- 4. Set all channel switches to the AUTO (center). If a video input is not connected, set the corresponding channel switch to the BYPASS (down) position.
- 5. Adjust the DWELL interval control with a screwdriver to the desired switching interval, 1 to 70 seconds nominal. Rotate the control clockwise for longer intervals and counter-clockwise for shorter intervals. This control is a 15-turn precision potentiometer. The approximate ratio is one full turn per 4–5 seconds of delay.

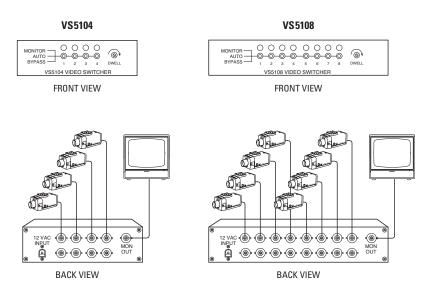


Figure 2. VS5104/VS5108 System Configuration

# **Operation**

**Automatic Sequence Viewing -** To automatically sequence all the cameras through the monitor, set all channel switches to the AUTO (center) position.

Bypass Operation - To bypass a camera in the automatic sequence, set the camera's channel switch to the BYPASS (down) position.

Single Camera Viewing - To continuously view from a single camera, set the channel switch for the camera to the MONITOR (up) position.

### **MAINTENANCE**

Under normal operating conditions and usage, maintenance of this equipment is not necessary. The VS5104/VS5108 has no operator serviceable components and should be serviced by a trained technician or returned to the factory for repair.

## **Specifications**

### **VIDEO**

Inputs Terminating (75 ohms) or looping

Output 75 ohms
Gain Unity

Dwell Adjustable from 1-70 seconds nominal

Frequency Response Flat within ±1 dB to 10 MHz

Maximum

Signal Level 2 Vp-p

Tilt Less than 2%

Crosstalk Better than -40 dB at 5.5 MHz

#### **ELECTRICAL**

Input Voltage 120 VAC, 50/60 Hz or 230 VAC, 50 Hz to dedicated wall transformer

**Power Requirements** 

for Transformer 1.5 VA (.125 amp) at 12 volts RMS ±15%, 50/60 Hz from a dedicated isolated power source. (Wall transformer provided

with unit.) These units are also capable of operating on 12 VDC for use in mobile applications.

### **GENERAL**

Construction

Chassis Steel, zinc plated

Cover Steel, black polyester powder coat

Panel Aluminum, black polyester powder coat, white silkscreen

Environment 32° to 120°F (0° to 49°C)

Dimensions

VS5104 1.77 (H) x 5.51 (W) x 8.81 (D) inches (4.50 x 14.00 x 22.38 cm) VS5108 1.77 (H) x 8.61 (W) x 9.25 (D) inches (4.50 x 21.87 x 23.50 cm)

Weight

VS5104 2.53 lb (1.15 kg) VS5108 3.82 lb (1.73 kg)

Ratings Meets NEMA Type 1 standards

(Design and product specifications subject to change without notice.)

### PRODUCT WARRANTY AND RETURN INFORMATION

#### WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship **for a period of one year** after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years on FT/FR8000 Series fiber optic products and the following fixed camera models: CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and CC3651H-2X.
- Three years on all other fixed camera models (including Camclosure® Integrated Camera Systems) and Genex® Series (multiplexers, server, and keyboard).
- Two years on all standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM8500/CM9500/CM9700 Series Matrix, DF5 and DF8 Series Fixed Dome products.
- Two years on Spectra®, Esprit®, and PS20 Scanners, including when used in continuous motion applications.
- Two years on Esprit® and WW5700 series window wiper (excluding wiper blades).
- Eighteen months on DX Series digital video recorders and NVR300 series network video recorders.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, preset scan, tour and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

- 1. Model and serial number
- 2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
- 3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

#### RETURNS

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair).

All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid. Ship to the appropriate address below.

If you are located within the continental U.S., Alaska, Hawaii or Puerto Rico, send goods to:

Service Department Pelco 3500 Pelco Way Clovis, CA 93612-5699

If you are located outside the continental U.S., Alaska, Hawaii or Puerto Rico and are instructed to return goods to the USA, you may do one of the following:

If the goods are to be sent by a COURIER SERVICE, send the goods to:

Pelco 3500 Pelco Way Clovis, CA 93612-5699 USA

If the goods are to be sent by a FREIGHT FORWARDER, send the goods to:

Pelco c/o Expeditors 473 Eccles Avenue South San Francisco, CA 94080 USA

Phone: 650-737-1700 Fax: 650-737-0933

### **REVISION HISTORY**

Manual #	Date	Comments
C831M-E	11/99	Updated manual to new format. Combined C831M-D (VS5104) and C832M-D (VS5108) into one manual.
C831M-F	10/04	Updated manual to new format. Revised Important Safety Instructions.



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