

# Digital Video Signal Switch

in top-hat rail case for use in building surveillance-, theater technics and industrial plants

## Characteristics

- 4-channel Video signal switch
- Channel selection auto / manually / digitally
- Top-hat rail mounting
- Switch-over time of the 4 channels in auto-mode adjustable
- BNC-jacks for inputs and output
- Supply voltage 115/230 V AC or 24 V AC/DC, galvanic separation

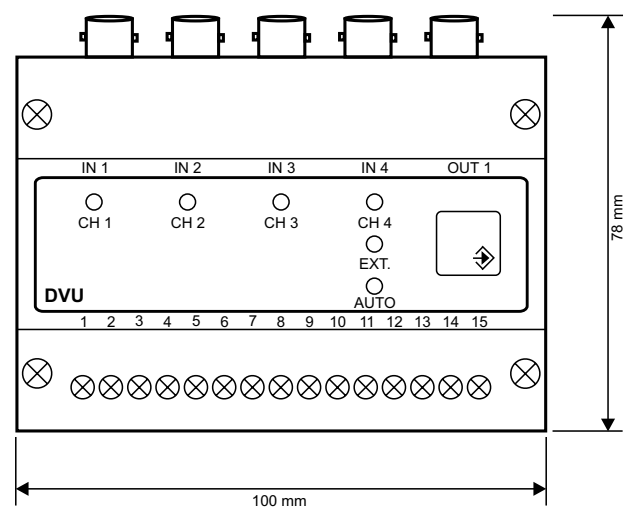


## Description

Up to 4 cameras with video signal output or other video signal sources can be connected to the digital video signal switch,. The selection of the input channel can be done manually by a key, by control inputs in the external mode, automatically in the automatic mode or by a serial interface. The switch-over time in the auto-mode can be adjusted continuously between one second and sixty seconds. After passing this time, the device switches over to the next video input.

This device is independent form the used TV-standard (PAL, NTSC, S E C A M ) .

Thanks to the top-hat rail case, the device is easy to integrate into switching circuits.



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## Technical data

### Inputs

|                 |  |
|-----------------|--|
| Signal inputs:  | up to 4 video inputs,<br>bipolar, 1 Vss    |
| Control inputs: | 4 control inputs<br>5 - 30 V DC            |
| Interface:      | serial interface (RS 232)<br>9600, 8, N, 1 |

### Outputs

|                    |   |
|--------------------|---|
| Output:            | 1 video output,<br>bipolar, 1 Vss           |
| Auxiliary voltage: | approx. 20 V DC ( $R_i = 10 \text{ kOhm}$ ) |

### Power supply

|                    |  |
|--------------------|--|
| Supply voltage:    | 115/230 V AC, 24 V AC/DC, opt. 24 V DC,<br>electrically isolated |
| Power consumption: | approx. 1 VA   |

### Ambient conditions

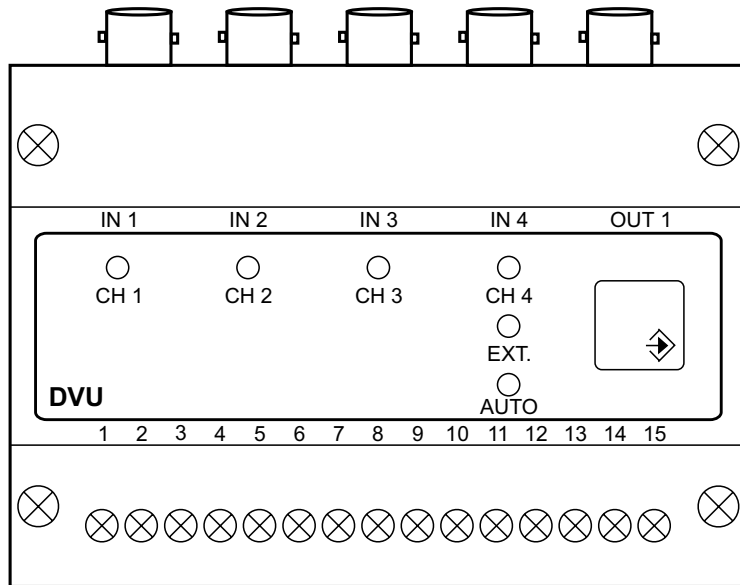
|                        |                 |
|------------------------|-----------------|
| Operating temperature: | -10°C ... +60°C |
| Storing temperature:   | -20°C ... +70°C |

### Dimensions

|                   |   |
|-------------------|---|
| Case:             | 15 - terminal top-hat rail case including terminal<br>cover plate according to DIN  |
| Dimensions:       | 100 x 78 x 120 mm (including BNC-jack)  |
| Fixing:           | snap-in fixing on top-hat rail  |
| Material of case: | Polycarbonat / V-0  |
| Colour:           | front plate grey<br>bottom part black   |
| Weight:           | approx. 0,5 kg  |
| Connection:       | 15 flat terminals with terminal screws and self-lifting<br>terminal plates M 3,5 up to 2,5 mm <sup>2</sup><br>5 x BNC built-in jack |

# Operating, Adjustment instructions

## Connection plan



| Terminals | Assignment                       |           |
|-----------|----------------------------------|-----------|
| IN 1      | Signal input                     | Channel 1 |
| IN 2      | Signal input                     | Channel 2 |
| IN 3      | Signal input                     | Channel 3 |
| IN 4      | Signal input                     | Channel 4 |
| OUT 1     | Signal output                    |           |
| 1         | + U <sub>B</sub> (Mains phase)   |           |
| 2         | - U <sub>B</sub> (Mains neutral) |           |
| 3         | nc                               |           |
| 4         | + Control input                  | Channel 1 |
| 5         | - Control input                  | Channel 1 |
| 6         | + Control input                  | Channel 2 |
| 7         | - Control input                  | Channel 2 |
| 8         | + Control input                  | Channel 3 |
| 9         | - Control input                  | Channel 3 |
| 10        | + Control input                  | Channel 4 |
| 11        | - Control input                  | Channel 4 |
| 12        | Auxiliary voltage                |           |
| 13        | Output RS 232                    |           |
| 14        | Input RS 232                     |           |
| 15        | GND RS 232                       |           |

## Adjustment

After connecting the supply voltage, the device is in the external mode. By connection of a voltage to the control inputs, a corresponding video source can be selected. With the aid of the free auxiliary voltage, it is possible to use potential-free contacts as switches. Pressing the selection key once, the device switches to the auto-mode. Now the signal sources are cycled to the output. By a trimmer potentiometer which is accessible after removing the front plate, the cycle time can be adjusted continuously. Continued pressing of the selection key activates the channels 1 to 4. In this mode, a single channel is permanently switched to the output.

## Ordering key

**V U X X X X X X XXX**

| No. | Interface | Supply                      |  |  |  |  | Measuring |
|-----|-----------|-----------------------------|--|--|--|--|-----------|
| 0   | without   | 230 V AC                    |  |  |  |  | without   |
| 1   | RS 232    | 115 V AC                    |  |  |  |  |           |
| 2   |           | 24 V AC/DC                  |  |  |  |  |           |
| 3   |           | 24 V DC<br>electr. isolated |  |  |  |  |           |