

VME1000/16

Video Input Card for the Video Matrix System VM1000

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Manual for Installation and Start of Operation





1 Safety

Before starting, read the safety advices for this accessory and for the main device, as well as the entire instruction

Pay attention to the warning notices in the succeeding chapters

- Keep this document for later use or for handing it over together with the product
- In addition, regard the local safety standards or laws for planning, installation, operation, and proper disposal of the product

1.1 Symbol Meaning

\triangle	Dangerous situation
i	Useful information

1.2 Meaning of Precautionary Statements

The seriousness of a hazard is expressed by the chosen signal word. Following signal words will be used in case of an appropriate hazard:

Signal word	Meaning					
Danger	Indicates a hazardous situation which, if not avoided, will re- sult in death or serious injury.					
Warning	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.					
Caution	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.					

1.3 Authorized Persons

Danger of life for persons without necessary qualification



- Only skilled personnel are allowed to work on the device!
- Disregarding this can cause death, serious injury, or considerable property damage.

This document does exclusively address the following target audience:

- installer
- maintainer



Qualification	Function		
Has expert knowledge in the field of	Set-up the product		
electric installations and knows elec- trical hazards of any kind.	Maintain the product		
	Dismantle the product		

Comply with the appropriate safety regulations for low voltage systems, especially general safety and installation regulations.

1.4 Hazards



Danger of life

- Unconditionally respect the safety instructions for the main device!

- Only use this accessory for the designated main device
- Comply with the installation instructions given by the manufacturer



Danger of life by electric shock

- Before any work on the main device, disconnect the plug from mains!
- Improper handling of the device can cause death, serious injury, or considerable property damage.

Electrostatic Discharge

Electrostatic discharge can damage or destroy components

- Do not touch parts at risk (e.g. contacts of plugs)
- Before touching a device, discharge your body electrostatically (e.g. by touching a grounded metallic object)



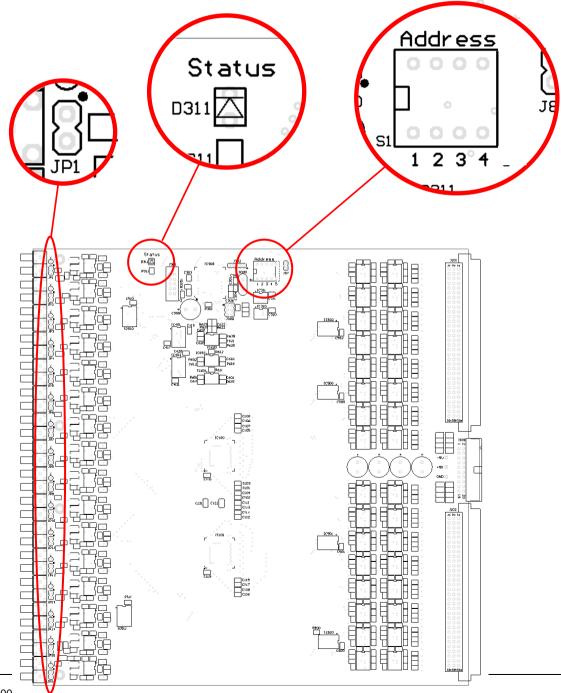
2 Overview

The video input card VMA1000/16 for the video racks of the VM1000 and SIMATRIX SYS video matrix systems provides 16 inputs which can be arbitrarily connected to 32 outputs.

This card is an equivalent to the SIMATRIX SYS input card VME816 with backed-up slave card. The VME1000/16 can directly substitute the VME816.

The VME1000/16 provides 16 video inputs, with each pair of sockets being assigned to one input (feed-through inputs). One video rack can hold up to 16 VME1000/16, totalling 256 video inputs.

Illustration: Card VME1000/16 with jumpers for 75 Ohm terminators (left), Diagnosis LED (centre) and configuration DIP switch (right).



UM_VME100



3 Advises for Installation



Danger of life by electric shock

Before opening the main device, disconnect the plug from mains!

Prior to installing the VMA1000/16, assign it an address (refer to the following section "Configuration").

Plug-in the card into the intended slot of the video rack:

There are 16 card slots, starting from the left of the video rack. At the right-hand edge of the video rack, power supplies and output cards are located.

Be sure to insert the card completely; the final millimetres afford more effort for overcoming the resilience of the multipoint socket connectors of the backplane. If in doubt, impose counter-pressure upon the backplane. If the card is inserted correctly, the distance between front plate of the card and fixing rails will be less than 1 mm. Fasten the cards at the cover plate with fixing 2 screws.

The inputs of the VME1000/16 are equipped with SMB sockets, to allow for the packing density of 32 sockets on 6 Us. For connecting conventional BNC cables, BNC-to-SMB adapters are required. They can be ordered as accessories.

For using the feed-through inputs of the VME1000/16, remove the jumpers from the card to deactivate the 75 Ohm terminators.

4 Configuration

Each VME1000/16 installed in a video rack as part of a video matrix system VM1000 must be assigned a unique address. This can be done with the fourfold DIP switch on the card (see illustration).

The video rack can hold up to 16 input cards. Normally, the leftmost card is assigned the address "0", with addresses increased by 1 for each neighbouring card.

4.1 Configuration DIP Switch

Card addresses must be set on the DIP switch according to the table below. The card address specifies the range of video-input addresses under which the video inputs can be reached within the system. – Card addresses must be unique within a single video rack.

	DIP switch	1	2	3	4	Video input address range
Card address						
0		0	0	0	0	1 – 16
1		1	0	0	0	17 – 32
2		0	1	0	0	33 – 48
3		1	1	0	0	49 – 64
4		0	0	1	0	65 – 80

Table: Card address with switch positions and resulting video input address ranges:

1	0	1	0	81 – 96
0	1	1	0	97 – 112
1	1	1	0	113 – 128
0	0	0	1	129 – 144
1	0	0	1	145 – 160
0	1	0	1	161 – 176
1	1	0	1	177 – 192
0	0	1	1	193 – 208
1	0	1	1	209 – 224
0	1	1	1	225 – 240
1	1	1	1	241 – 256
	0 1 0 1 0 1 0 1 0 1 0	0 1 1 1 0 0 1 0 0 1 1 1 0 0 1 1 0 0 1 0 0 1 0 1 0 1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

4.2 Configuration Sample

Example: A video rack with eight **VME1000/16** installed, shall be expanded by 8 further **VME1000/16** (expansion by 128 inputs, totalling to 258 inputs).

The first eight cards already installed had been set-up for ever ascending addresses from 0 to 7, thus allocating the input addresses from 1 to 128.

For the new VME1000/16 cards to be installed, card addresses from 8 to 15 have to be set up, thus allocating the input addresses from 129 to 256.

5 Start of Operation and Functional Check

For diagnostic purposes the card provides a LED signalling the operational state. The LED is most easily looked at from top or bottom, through the punched plate of the video rack.

After powering-on the video rack the LED shines yellow. As soon as the communication between the controlling VM1000 CPU and the VM1000 video rack has been established, the LED shines green.

NOTICE

Before calling the service line, please note card type, positions of configuration switches, as well as operational state as shown by the LED (yellow or green).

For detailed information refer to the extensive Operation Manual

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