Operating manual



SDI-MS16 Compact 1 RU 16x16 3G-SDI Seamless Matrix Switcher Article-No.: 07.3786





Introduction and connections

This device is the perfect solution for seamlessly switching multiple PTZ cameras to get the best picture of the current speaker. The compact SDI routing switcher features 16 inputs and 16 outputs, redundant power connections with a 2.2 inch LCD for routing label display. Routing can be performed by direct button selection and the spin knob controller. The 3G-SDI seamless matrix switcher supports standard 3G/HD/SD SDI rates, automatic bypass of non-standard rates between 270Mbit/s and 3Gbit/s. Built-in frame synchronizer support simultaneous input of signal of different resolution frame rates, which can realize seamless switching without black screen. It can conveniently be controlled by front panel button and brählerOS software via LAN.



Front Panel Control

Connectors



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Sample connection diagram



Connections

Make sure you have a suitable power supply. Connect the video switcher to a power source. Connect the desired number of cameras to the video switcher (IN) using the 75 Ohm SDI cable - camera 1 to input 1, camera 2 to input 2, and so on. Connect your monitor to one of the OUT outputs (e.g. OUT8) and connect the video switcher to a computer using the brählerOS or CamControl2 software via a network cable.

The brählerOS software typically expects the video output on OUT8 port.

The CamControl2 software can be configured to any of the outputs, e.g. OUT16.



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By default the video switcher receives an IP address from the DHCP server within your network. Both brählerOS and CamControl2 will then be able to detect the video switcher automatically and identifies its IP address. If you have trouble in identifying the video switcher in the software, please make sure, that the IP address and subnet mask of the switcher is properly configured and matches with the control PC settings.

The video switcher is now ready for use and switches the video inputs according to the currently active microphone. If you want to use additional outputs for e.g. preview monitoring, please configure the outputs manually.



Optionally, you can connect a camera controller to the video switcher to adjust the cameras during live operation. (Please refer to the corresponding manufacturer's manual for information on operation.)

Operation

Set the video switch on/off switch to "on" to turn on the unit. The front panel display will light. Now set which input is to be switched to which output. First press the "IN" button of the video switch and then the desired input (1-16). Now press the "OUT" button and select the output channel (1-16) by pressing the corresponding button. The camera image can now be viewed on the connected screens. The display shows to which output the respective input is connected.

25 °	C	Swit	cher	-	
	1	2	3	4	
	5	3	7	1	
	1	1	1	1	
	1	1	1	1	
2019	17	7:00	5:23		

Switching an input to multiple outputs: press buttons "IN; 1" an buttons "OUT; 1; 2; 3; 4" (for example).



The OUT button indicator will automatically close after 8s. When it is off, you only need to press the OUT button again to continue the unperformed switch.

The CamControl 2 software determines which camera image is actively placed on the main output and thus displayed.

By turning and pressing the control wheel on the front of the video switch you can set the basic settings of the device. By pressing the wheel you reach the main menu. Here you have the following options:

- System Setting
- Network setting
- Output setting
- Device Info
- Exit

By turning the knob you go to the corresponding menu point - by pressing you select it and change it.

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Menu Control

Main Menu	Sub Menu	Options	Description
System Setting	Language	Chinese/English	Change the Language between Chinese and English
	LCD brightness	10-100	Set the brightness backlight between 10-100
	LCD ON/OFF	15s Off/60s Off/Always/15s Dim/60s Dim	Set the state of backlight,there are five mode for option: 15s Off/60s Off/Always/15s Dim/60s Dim
	Lock	On/Off	Set the button to Lock or unlock front panel buttons
	Reset		Reset to default configuration
	Return		Back to the main menu
Network Setting	Network	Dynamic/Static	Two ways to acquire the IP: Static(set IP freely by yourself) and Dynamic(IP configured by router)
	IP		Set the IP address
	NetMask		Default setting is 255.255.255.0
	Save		Save network setting
	Return		Back to the main menu
Output Setting	Format	1080P60/1080P59.94/1080P50/1 080P30/1080P29.97/1080P25/10 80P24/1080P23.98/1080I60/1080 I59.84/1080I50/720P60/720P59.9 4/720P50/720P30/720P29.97/720 P25/720P24/625I50/480I60/480I5 9.94	Set the output formats
	One to One	Enable	Set all input and output channels correspond one by one
	One to all	Enable	Set switching an input to all outputs
	Return		Back to the main menu
Device	SN		Current serial number information
Info	Return		Back to the main menu
Exit			Exit main menu

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Technical Data

Connections

SDI Video Input 16×SD/HD/3G-SDI(75Ω BNC)

SDI Video Output 16×SD/HD/3G-SDI(75Ω BNC)

Standards

SDI Input Format Support

1080p 60/59.94/50/30/29.97/25/24/23.98 1080PsF 30/29.97/25/24/23.98 1080i 60/59.94/50 720p 60/59.94/50 720p 30/29.97/25/24/23.98 625i 50 525i 59.94

SDI Output Format Support

1080P60/59.94/50/30/29.97/25/24/23.98 1080160/59.84/50 720P60/59.94/50/30/29.97/25/24 625150 480160/59.94

Power

Power Supply: PS-1, PS-2, power redundancy Voltage Range: DC 12-24 V Power Consumption: 14 W

Physical Specification

Size: Standard 19" 1 rack unit Net Weight: 2,0 kg

Enviromental Specifications

Operating Temperature: 0°C~60°C Storage Temperature: -30°C~70°C Relative Humidity: 0%~90% non-condensing

Control Front panel button, PC software via LAN/RS-422

Updates and Configuration LAN(RJ45)

SDI Auto Switching Automatically detects SD, HD and 3G-SDI

SDI Compliance SMPTE 372M, SMPTE 259M, SMPTE 292M, SMPTE 296M, SMPTE 424M, SMPTE 425M

SDI Color Space and Precision

YUV 4:2:2 10bit/12bit



Warnings



The connections of the video switch are exclusively designed and suitable for the intended cables and devices. Do not connect any other devices!



In case of malfunctions, contact a technician, do not attempt to repair, unscrew or similar the video switcher yourself.



Further information about our products can be found on the Internet under:

www.braehler-systems.com

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