



VIDEO MIXER / SWITCHER HD V1.0



Digital Video Mixer / Switcher HD v1.0 is a powerful, easy-to-use and cost-effective technical solution for any production requirements. Video Mixer / Switcher HD v1.0 is also suitable for portable and mobile applications. Rich functional capabilities allow to use our device for live broadcast, show, presentation, interviewing as well as for studio production. Great attention was paid to good visibility and intuitive control of Video Mixer / Switcher HD v1.0.

- Built-in MultiView

Ability to see all 14 video sources, Program and Preview at the same time on TV set, PC monitor or professional broadcast SDI monitor.

- Transitions

CUT, MIX, WIPE (16 patterns), FTB.

- Chroma Key

2 independent Chroma Key channels (with automatic preassigned settings). You do not have to do any extra adjustments, wasting your time!

- Titles

Titles are included into the video via HDMI inputs of mixer from PC and using Linear Key (Fill and Key) via SDI inputs.

- PiP (Picture-in-Picture)

It is possible to enable the PIP presets, which are combinations of up to 4 windows included in the background. 2 windows can have a full-screen size and 2 other windows can have a quarter screen size. The pictures can be moved, resized, repositioned, cropped and given color borders. It is possible to overlay the PiP presets and Titles simultaneously on the video output signal.

- Built-in Video Players

2 built-in video players with high quality VC-3 (DNxHD), which works like 2 independent sources.

- Built-in LOGOs

2 independent Logos. 1 Logo can be dynamic. Total 8th logos can be uploaded into the video mixer nonvolatile memory from the PC and then assigned to independent buttons "Logo 1" and "Logo 2".

- Built-in Clock

Clock can be switched on/off using independent button.

- Built-In Still Pictures (Slides)

2 Still Pictures can be assigned to 2 independent buttons ("Slide 1" and "Slide 2") and can work like 2 independent sources. Up to 32 slides can be uploaded from SD card.

- Pattern Generators

BLACK, Color BARS and audio signal source (1kHz, 0dB) are operated as independent sources and have buttons on the Preview and Program lines of the control panel.

- PC control

Special software allows to control video mixer and perform any necessary action directly from PC.

•Control Panel

Performs the following functions: direct access to every external and internal source of the video mixer forming a signal for the air (including Menu Control, multi-purpose buttons and T-Bar).

•Options

"TALLY" output (Wired via D-Sub15F or Wireless), Encoder H.264, 4K Multiview (4 windows), Reserve Power Supply, Camera Channel Unit and Wireless or wired via Ethernet Intercom system.

KEY FEATURES:

- Each input has its own frame synchronizer, which allows you to use cameras or other devices that do not have Genlock as well as input video from computer sources (audio input signals also pass through the synchronizers).
- 4 analog audio inputs (XLR connectors): either 2 stereo or 4 mono.
- 2 built-in video players with high quality VC3 on the SD card.
- Create video playlists and play video files from PC to Video mixer via HDMI.
- Built-in background color signal, "Black" and "Bars".
- 2 built-in Still Pictures, which are operated as independent sources (up to 32 still pictures in general can be stored in the vision mixer memory).
- Technological still pictures at all inputs (if there is no video signal or camera at any input it is possible to set the picture on it).
- Built-in 1 kHz audio source (with color BARS), which is intended for testing and adjustment the level of sound channels.
- Built-in MultiView.
- Additional DVI/HDMI output (5th output) which can be assigned as Multiview.
- 6th DVI/HDMI output is used for Multiview.
- Picture-in-Picture effects (PiP). Up to 4 pictures at once + 5th background video.
- 2 independent Chroma Key channels (with original automatic setting).
- 2 independent Logos can be applied at once.
- 1 Clock (it can be positioned on the screen in any area).
- "TALLY" signals output.
- F/W upgrade, upload Still pictures upload Logo and Clock, control panel via Ethernet connection.
- Transitions: 6 WIPE special effects with reverse mode and mix (with effect settings).

MAIN FUNCTIONS:

- Dynamic range adjustment for digital and analog audio.
Input and output audio signals can be selected by the user with nominal levels -6, -12, -18, -24 dBFs (from the OSD menu).
- Any input audio channel can be applied to any video source (for example - one audio channel for 4 switchable video inputs).
This mode is useful for working with an external analog audio mixer.
- Mix sound synchronously with video with special type of sound transition - V or Y.
- Assign the Multiview to any outputs.
- Overlay the PiP presets and Titles at once.
- Any input can be assign to any or to all outputs as well.
- Quick configuration.
- It is possible to select the speed of video/audio transition.
- Control the mixer directly or remotely.
- Additional connector for reserve +12B (9...15B) power supply.
- Wireless or wired via Ethernet Intercom system for 4 users - optional.
- Wireless "TALLY" - optional.
- Encoder H.265/H264 - optional.
- 4K Multiview (4 windows) - optional.

Video formats	
HD input	1080 × 50i
	1080 × 25p
SD input	576 × 50i
HD output	1080 × 50i
SD output	576 × 50i

Input format conversion	all inputs can be resized from HD signals to SD, HD/p to HD/i in any supported formats of Video Mixer / Switcher HD Note! All inputs cannot be resized from SD signals to HD
Connectivity Video inputs	
Sources	Total 14 sources: <ul style="list-style-type: none"> • 10 external (8 × HD/SD SDI (or 4 × HD/SD SDI + 4 × CVBS), 1 × HDMI (DVI-D), 1 × HDMI (DVI-D)/Title) • 4 external (2 media players and 2 still pictures)
Inputs	Total 10: <ul style="list-style-type: none"> • 8 × SDI (BNC) • 2 × HDMI (DVI-D) (In1-In6, In9, In10: HD/SD SDI (BNC); In7, In8: HDMI (DVI-D))
CVBS	In3-In6 may be CVBS (BNC)
HDMI	2 × HDMI (DVI-D)
Video outputs	
Outputs	Total 6: <ul style="list-style-type: none"> • 4 × SDI: HD/SD (BNC) outputs assignable to Program; Preview; Program Logo Free; Program Logo + Titles Free; Multi-View; • 2 × HDMI (DVI-D): 1 × HDMI (DVI-D) assignable to Multi-View Output; Program; Preview; Program Logo Free; Program Logo + Titles Free; 1 × HDMI (DVI-D) Multi-View
Audio	
Inputs	4 channels XLR balanced (works with external audio mixer) and can be setup as 2 Stereo pairs or 4 Mono inputs 10×Embedded audio (2 ch) vis SDI or HDMI
Outputs	2 channels XLR balanced. Output SDI Embedded Audio-One Stereo-Pair (Group and Pair can be selected). HDMI Out Embedded Audio.
Audio level adjustment	Each audio source, including embedded and analog, can be associated with any or several video sources. "Audio follows Video" switching mode. Audio level control of the all inputs and master audio level output via On Screen Display Menu and PC Switcher Utilities.
General	
Signal processing	10-bit, 4:2:2 Digital component
Multi-View Monitoring	Built-in multiview monitoring (1920×1080i resolution); with embedded audio
Frame synchronizer	Built-in frame synchronizer for each input
Audio processing	20 and 24 bit
Effect / Keyers	WIPE, MIX, CUT
T-Bar	1
Chroma Key	2 works like independent source
Titels	1

	HDMI titles via PC from Title Manager program
PIP	4
Built-in Video Player	Dual player (VC3) on SD card, 2 players work like 2 independent sources. Up to 256 Gb SD Card. Clip capacity up to 4 hours of a video content. 1 Player (HD Playout) from PC
Built-in Still-image	2 Still-images can be assigned on 2 independent buttons. Up to 32 slides can be uploaded from SD card (Slide 1/2), it works like 2 independent sources. Also technological slides can be assigned instead of the each inputs: technological slides upload on In1-In8 from PC and on In9-In10 from SD card
Built-in Logo insertions and Clock	8 Logos (1 Logo is dinamic) and 1 Clock, up to 8 Logos can be uploaded from PC in the Video Mixer/Switcher memory and then asigned on independent buttons "Logo 1" and "Logo 2". Clock can be switched on/off with independent button. Location of Logos and Clock can be set up from PC
Internal Frame Memory	Up to 256 Gb SD card. Clip capacity up to 4 hours of a video content
Pattern Generator	Color BARS and audio signal source (1kHz, 0dB), Black
PC control	Simultaneous operation from console and PC
Options	H.265 encoder, camera channel unit, intercom
Interfaces	
Ethernet 100 (1×RJ-45)	F/W ugrade; Upload Still Image; Logo Insert; Keyboard Controller
Tally Output	D-Sub 15 pin (F)
RS-232	1 × RS-232 on 9-pin D-sub female controls and power supply for Keyboard Controller up to 20 m
Power Supply	
Consumption	+12 V, 7A (consumption of video mixer 2.75A)
Size and Weight	
Main Unit	440×220×88mm (2U), ~3.9kg
Control Panel	440×220×44mm, ~2.4kg

Taking into consideration that we (UMT LLC) are developer and system integrator, also do not stop on our technical growth and improvement, know that view of all our devices and equipment including their technical parameters may be different from pictures presented on website and parameters listed on each device webpage.

Note! All details customer has to confirm in advance during ordering and before payment. Those parameters that were not specified and / or were not agreed while ordering will be implemented as basic at the discretion of the manufacturer. Each our customer has 1.5 year warranty and 7 year aftersales support for whole range of our products.