

Mediavate Converged Production Switcher



Unlimited M/E Cascading Powerful M/E Processing

Native SDI/IP/NVI/NDI Convergence Simplified system workflow

AI-in-One Production: Effects, DDR, Graphics, Audio & Multiview

FPGA + Embedded Architecture Reliable and secure

RenderFlow Multi-Bus Architecture Breaks single-unit processing limits

MediaVate Converged Production Switcher

☆ Product Overview

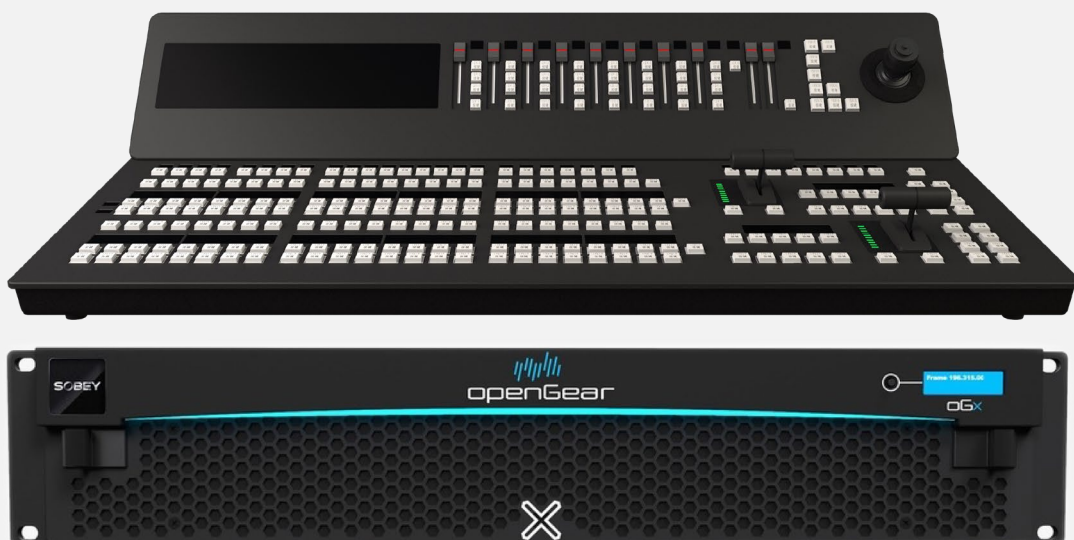
The Mediavate converged production switcher is a new-generation hardware production switcher independently developed by Sobey, based on an embedded system + FPGA architecture.

Scalable switching capacity: Powered by the RenderFlow distributed video rendering architecture, breaks through traditional performance bottlenecks and enables unlimited expansion of input capacity and rendering capability.

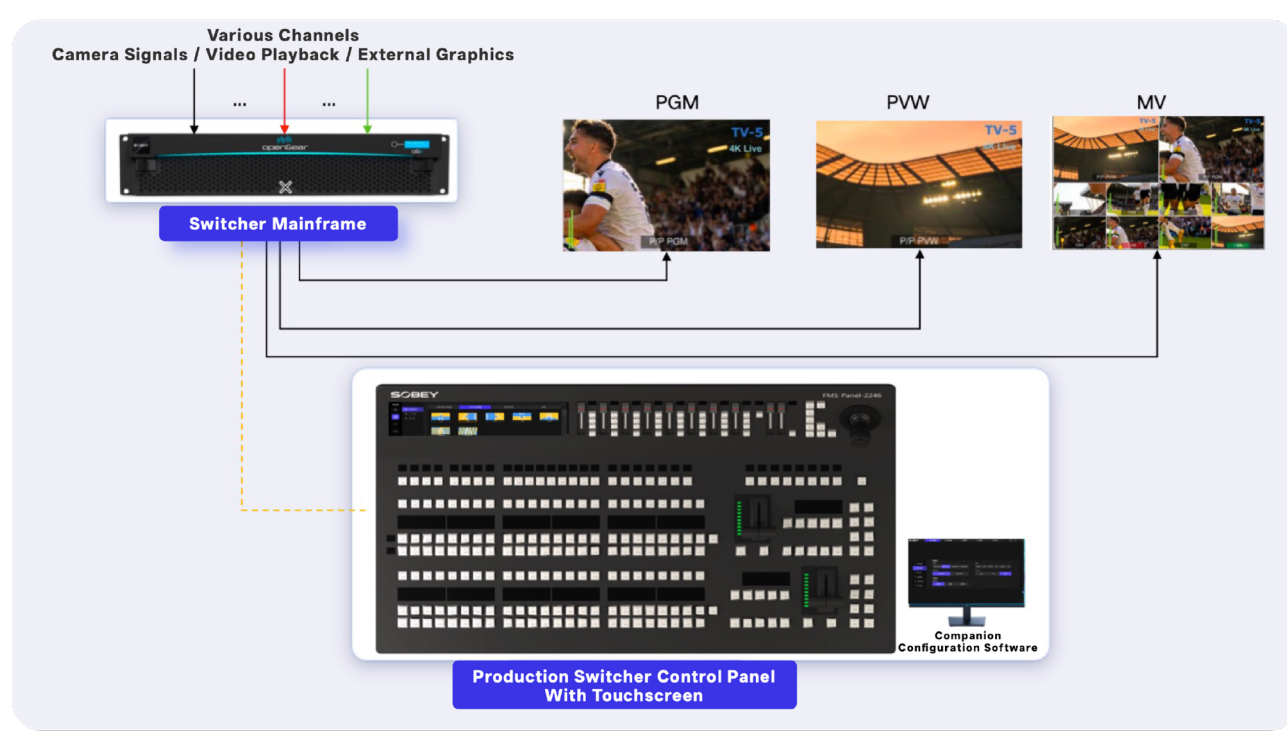
Unlimited M/E cascading: Unlimited-layer video compositing, with layers scalable according to the number of inputs, enabling simultaneous presentation of background images, video, multiple graphics layers, and key signals.

Converged multi-format production: Converged switching of SDI/ ST2110/ NVI/ NDI signals to meet wide scenarios.

Multi-function integration: Integrates DDR playback, internal/external keying, multiview monitoring, audio mixing, and production switching.



Product Architecture



Use Cases

Integrated Production for Large and Small Screens

- As TV stations expand new media distribution, integrated production for both broadcast and online platforms has become a key workflow. The Converged Production Switcher supports unified SDI / ST 2110 / NDI / NDI signal input, switching, and output, reducing format-conversion loss and meeting the needs of large & small-screen production.



Live Field Production

- In field production, the Converged Production Switcher reduces equipment and cabling complexity with an all-in-one hardware architecture integrating video switching, audio mixing, DDR playback, graphics rendering, and multiview monitoring. Sobey's NVI protocol enables simple network-cable access for faster, more reliable setup.



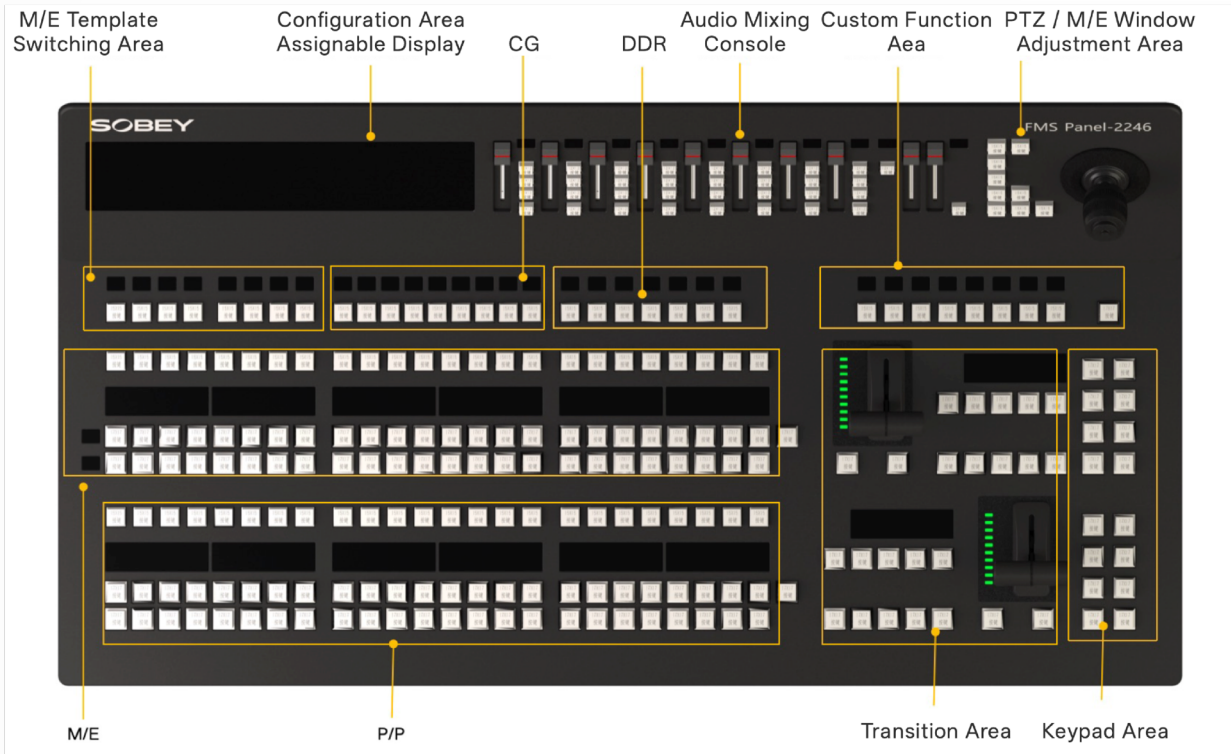
Product Models

Model	Format	Video Input SDI	Video Input NVI	Video Input ST2110	Video Output	Audio Input	Chassis
Base	4K	24CH	8CH	--	PGM/MV/PVM/CLNPGM Output	8 xAES 16Channel	2U
ST2110	4K	12CH	8CH	10CH	PGM/MV/PVM/CLNPGM Output	4 xAES 8Channel	2U
Pro	4K	24CH	18CH	20CH	PGM/MV/PVM/CLNPGM Output	8 xAES 16Channel	4U

Technical Specification

Video Formats		
4K	3840 x 2160	60p/59.94p/50p/25p
HD	1920 x 1080	60P/59.94P/59.94i/50P/50i/29.97P/25P
Input / Output		
M/E	2-level M/E, with no fewer than 8 layers per M/E	
Multiview	16+ video windows, preset layouts, 4K/HD configurable output	
External Key	2	
Internal Key	4	
Graphics	No fewer than 6 overlay layers	
DDR	2 built-in DDR channels	
Control Panel	24-channel control panel	
Transport Protocols and Standards		
SMPTE	SMPTE ST 2110-10/20/21/30/40, SMPTE ST 2022-7	
NMOS	NMOS IS-04/05	

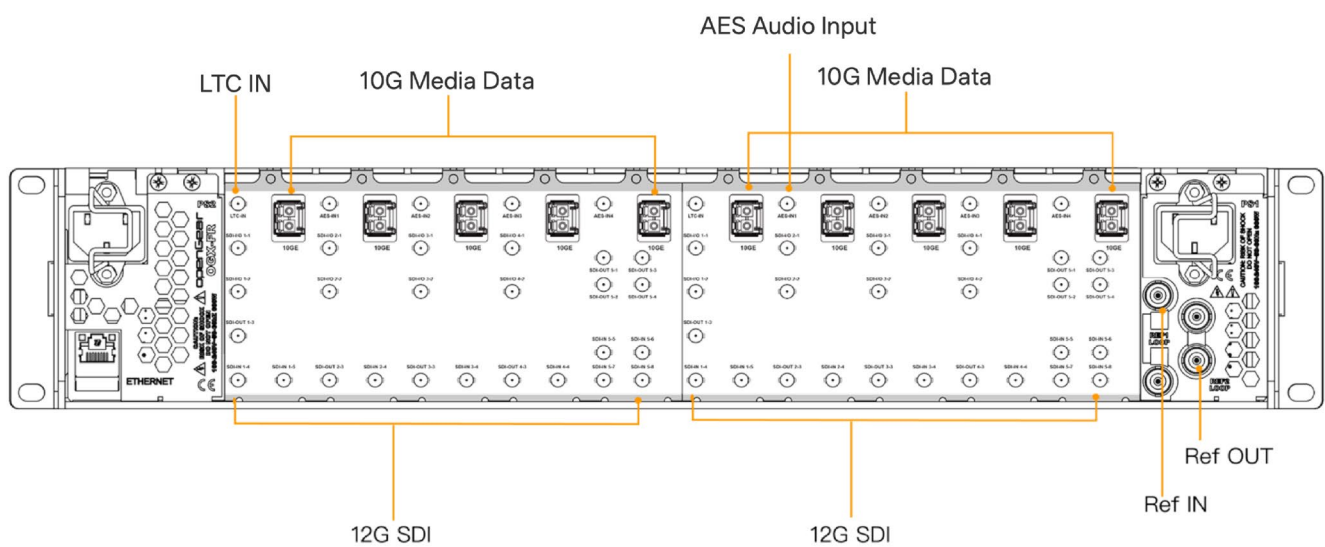
Control Panel



Panel Interface Description

USB		USB Type-A×1, USB2.0×1
Gigabit Ethernet Port		2 (for control and management)
TALLY	Tally1	RJ45×1 (TSL5.0) network tally
	Tally2	GPIO×2 (DB26) for camera Tally
	Tally3	RS232×1 (DB9) for intercom
USB		USB2.0×2, USB3.0×1
Headphone Jack		6.35mm

Device Interfaces



* Base-version interface diagram; configurable and expandable.

Mainframe Interfaces*

Media Data Interface	10GbE × 10
SDI	3G / 12G-SDI input and output, BNC
LAN	1GbE × 1, RJ45, for device management
LTC	2 x LTC In
REF	2 x REF In, 2 x REF Out

* Base-version interface diagram; configurable and expandable.

Key Features

Embedded hardware architecture for secure, stable, and efficient processing

Direct hardware switching with seamless, what you see is what you switch.

Built-in frame sync for smooth, stable video output

Dual 4K multiview outputs with flexible window assignment

TSL protocol support for third-party source-name servers

Built-in image, video, and audio file player

Rich 2D/3D effects, titles, graphics, transitions, and stickers

Integrated graphics engine for subtitles, logos, and graphic playout

Customizable macros and lock functions

Built-in audio mixer for audio control and mixing

Unlimited-layer compositing for backgrounds, video, graphics, and key signals

Chassis Specifications

Number of Slots	20
Power Supply	100V to 240V AC, 50/60 Hz
Power Consumption	600W
Operating Temp Range	0°C- 40°C
Dimensions, W × H × D mm	483 x 90 x 427
Redundant Power Supply	
Panel	
Dimensions, W × D mm	900 × 490
Type	Control Panel
Specification	24-channel Control Panel