Chyron®

PRIME
Switcher

A PRIME LIVE PLATFORM
APPLICATION

Software-Based Production Switcher.

SINCE
DAY
ONE.

PRIME Production Power.

PRIME Switcher is a software-based 2ME production switcher built on the industry-leading PRIME Live Platform. To deliver a complete live production suite, PRIME Switcher leverages our legendary real-time graphics, versatile clip player, and brand-new multichannel audio mixer - all within a single engine.
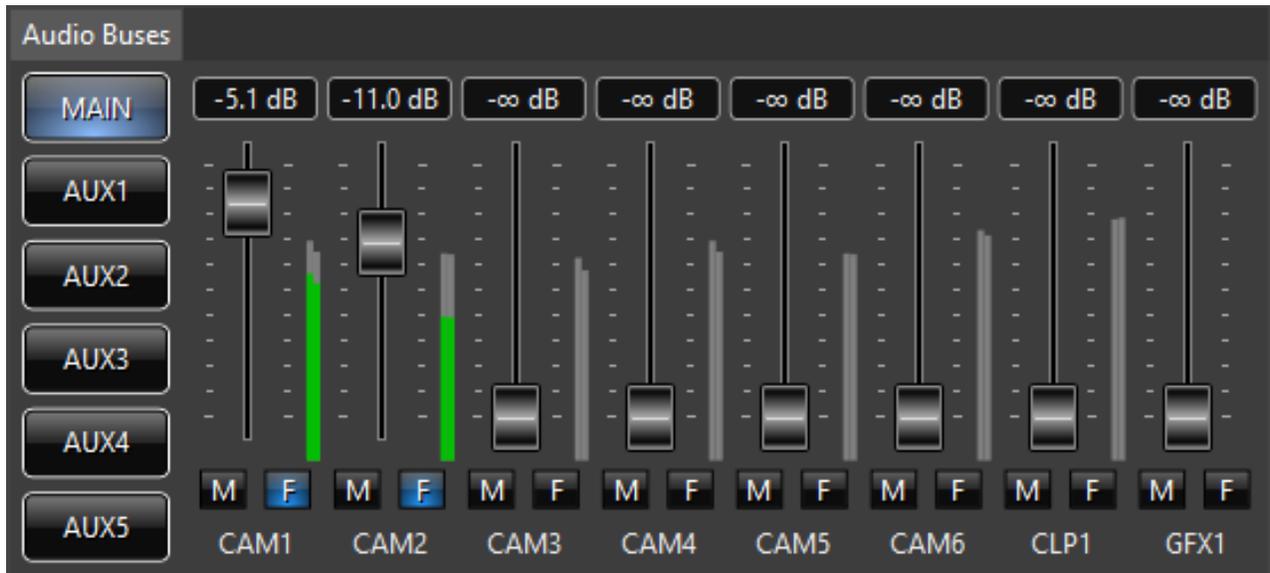
PRIME Live Platform is a dynamic, scalable, full featured production engine that bridges legacy workflows with the future of live content creation and distribution. This flexible, scalable platform supports a comprehensive suite of specialized software modules, including PRIME Switcher.

Built for the dynamic content creator, PRIME Switcher makes it easy to produce a broadcast-grade show and deliver it to all your channels - in the workflow that suits you best.

From PRIME Switcher's intuitive software interface, you can switch sources, key-in graphics, trigger dynamic transitions, and build the complex ME output you need

for a compelling show. For total production control, PRIME Switcher also combines graphics/clips playout controls, media file management, and audio mixer control - from its single user interface. For users with rigorous remote production needs, PRIME Panels can augment your workflow with multiple panels across multiple locations that stay in real-time sync across every instance.

Through PRIME's cloud-enabled software architecture, you can deploy and distribute resources how you see fit. Run this all-in-one production platform via Chyron hardware, your own custom-built IT equipment, or your cloud infrastructure of choice - be it Amazon Web Services (AWS) or private cloud.

PRIME Switcher combines this flexibility with seamless support for SDI, NDI, and H264 inputs and outputs. Whether you're broadcasting over-the-air, broadband internet, or within your venue space - PRIME switcher makes it easy to get the content you need and send it through to all your vital revenue-generating channels. And of course, you can deliver video in the SD, HD, UHD–4K, and HDR formats of your choice.

With PRIME Switcher, you can get more production value out of a smaller hardware footprint than ever before.

Key Features

2ME Production Switcher

Cut, key, compose, and transition between all the sources you need to craft a compelling production. PRIME Switcher provides 2 full MEs, each with 4 standard keyers, user-defined transitions, and ME1 preset functionality.

Real-Time Graphics

Nail your production look with up to two-channels of PRIME CG, the market's most flexible system for creation, control, and playout of 3D graphics, text, and images. The intuitive PRIME CG Designer interface makes it easy to produce dynamic lower thirds, over-the-shoulders, and data-driven scene elements. With unlimited layers on output, you'll always have the resources you need to make stunning graphics.

Versatile Clip Player

Playout a combination of pre-rendered clips and dynamic assets - such as text and graphics - with up to two channels of PRIME Clips. To meet your demanding production environment, PRIME Clips is compatible with all major resolutions, formats, and codecs - and offers built-in conversion capabilities on all ingest and playout channels.

Multi-Channel Audio Mixer

Ensure a seamless listening experience for your audience with the new PRIME Audio Mixer, which integrates with the entirety of this all-in-one production suite to monitor and mix embedded audio sources from the switcher, graphics, and clip server. Manage fader volume manually or keep it hands-free with Audio Follow Video (AFV) functionality - and build out all the unique mix/minus and monitor mixes you need with customizable AUX outputs. PRIME Switcher also includes Audio Director control for audio-driven production automation.

Flexible PRIME Architecture

The PRIME Platform provides an incredibly versatile foundation for your live production needs. Input and output your sources in a combination of SDI, NDI, and H264 streams. Produce in the SD, HD, and 4K-UHD formats that accommodate your broadcast, streaming, and display requirements. Enjoy an end-to-end HDR workflow, including built-in SDR & HDR cross-conversion. Finally, PRIME's environment-agnostic design enables deployment via on-prem hardware, virtualization, or public (AWS) and private cloud infrastructure.

Transition and DVE Evolution

Tight integration between PRIME Switcher and CG improves production quality while offloading keyer resources. PRIME Switcher's basic dissolve, wipe, split, slide, and mask transitions are editable directly in the PRIME CG interface - or build out an energetic stinger transition with graphics and audio. Complex DVE scenes such as a multi-box or picture-in-picture are created by layering multiple video inputs and graphics on a single-channel. Get your scene ready and take it to air with a single keyer.

Technical Specifications

PRIME Switcher

HDR Support	End-to-end HDR support from canvas design to output (HLG, Slog 3)
Video Standards	• SD: 525i NTSC, 625i PAL • HD: 720p (50/59.94/60), 1080i (50/59.94/60) • 3G: 1080p (25/29.97/30/50/59.94/60) • UHD-4K: 2160p (25/29.97/30/50/59.94/60) – NDI, Quad-split and 2SI SDI
Supported Video Inputs / Outputs	Up to 15 total video channels (input or output) via SDI, NDI, or network streams.
Mix Effect Buses (MEs)	2 Mix Effect Rows each with 4 linear keyers + user-defined transition key. Save and recall ME1 presets that preserve the state of PGM/PVW, sources, keyers, and transitions on the ME1 bank.
Transitions	Contains dissolve, wipe, mask, split, slide and mask transition effects. Fine-tune the look of basic transitions or build compelling media transitions with audio from PRIME CG's Designer Interface.
DVEs	Create compelling DVE scenes directly from the included PRIME CG, by layering multiple video inputs and graphics on a single-channel.
Monitoring	Atlas H264 Stream for Remote MultiView populates preview windows for every source in the switcher. The customizable window-based interface also includes save, load, and lock layout functionality.
Control	PRIME Switcher Software Control Interface with Switcher ME control, Graphics/Clip file management + playout, and audio mixer controls.
Genlock	Internal: Free Run | Reference in: Bi-Level, Tri-Level from external reference | SDI In: Detects the SDI video input signal Timecode.

PRIME CG & Clips

PRIME CG Channels	Configurable with up to two PRIME CG channels.
PRIME Clips Channels	Configurable with up to two PRIME Clips playout channels.
Supported Media Formats	GTC, DNxHD / DNxHR, ProRes (4:2:2 / 4:4:4 / 4:4:4:4), QT Animation / PNG, H.264, SDCam / HDCam, MPEG 2 / MPEG 4, XDCam (**note: some wrappers not supported, please check with the sales team for details.).
Newsroom System Connections	Access to AP ENPS, Avid iNEWS and Media Central, Dalet, Octopus, Ross Video Inception and SCISYS Open Media via CAMIO integration.
Automation Support	Supported protocols include Chyron Intelligent Interface, AMP, EAS, PBus, VDCP, Ross Talk, XML, and Oxtel.
Clip Conversion	PRIME Clips detects incoming media and automatically transcodes them to Chyron's native GTC format for workflow efficiency.

Technical Specifications

PRIME Audio Mixer

Audio Director	Audio-driven automation of PRIME Switcher controls based on a rule-set that defines active audio inputs and volume thresholds to trigger sources, cuts, transitions, and media playout on the switcher.
Audio Channels	Access to all audio channels in the PRIME Switcher Playout Configuration: • SDI-embedded audio channel pairs (16-channel passthrough) • NDI stream audio • Network stream audio • PRIME CG Channels • PRIME Clips channels • System audio (compatible with third-party products such as Dante AV over IP)
Mixer Controls	• Fader db volume range: –∞db to 0.0 db • Audio VU Meters • Mute • Audio Follow Video • Duck Frame Count Adjustment • Customizable AUX Outputs • Pre-Fade Listen on AUX Mixes • Output via PRIME's embedded audio channels, Windows sound device, or Dante device

PRIME 3RU Chassis

Power Requirements	AC Input / 100-240V, 60-50Hz, 9 Amp Max / 3.2 Amps @ 120VAC Typical Total Output Power and Input: 800W with Input 100 - 127Vac 1000W with Input 200 - 240Vac 1000W with Input 200 - 240Vdc
Operating System	Windows 10 Enterprise 64bit
Dimensions	3RU Chassis - Height: 5.2" (132 mm), Width: 17.2" (437 mm), Depth: 25.5" (647 mm), Gross Weight: 75 lbs (34.02 kg)
Ethernet Ports	2X 10GbE
OS / Media Storage	OS Storage: 2x 240GB (RAID 1) | Usable Storage: 212.37GB Media Storage: 3X 3TB (RAID 5) | Usable Storage: 5960.61GB Optional Media Storage: 4X 3TB (RAID 5) | Usable Storage: 8490.92GB
Serial Connections	1X DB9 RS232 Serial Port
GPU	RTX5000
Memory	64GB DDR4-2933
CPU	Intel W-2265

Services

Chyron is known for its end-to-end customer service. We partner with our customers from the initial project design, to project management, training, on-air launch support and post-launch follow-up.

Project Management and Commissioning

Project Management and Commissioning are part of the turn-key services that we offer. This ensures your investment is properly installed from Day One by a certified Chyron representative.

Extended Warranties

Finally, all Chyron products come with a One (1) year factory-backed warranty (parts, labor & software upgrades). Extended Warranties on all your purchases can be added at any time for an annual fee. Please contact our sales professionals.

Design and Operation Training

We offer Design and Operation training, either in your facility or via our on-line web portal. Our expert trainers can teach your staff the most efficient way to create and deliver stunning content for your productions.

About Us

Chyron is ushering in the next generation of storytelling in the digital age. Founded in 1966, the company pioneered broadcast titling and graphics systems. With a strong foundation built on over 50 years of innovation and efficiency, the name Chyron is synonymous with broadcast graphics. Chyron continues that legacy as a global leader focused on customer-centric broadcast solutions. Today, the company offers production professionals the industry's most comprehensive software portfolio for designing, sharing, and playing live graphics to air with ease. Chyron products are increasingly deployed to empower OTA & OTT workflows and deliver richer, more immersive experiences for audiences and sports fans in the arena, at home, or on the go.

Contact sales

EMEA
North America
Latin America
Asia/Pacific

+1.631.845.2000
sales@chyron.com