Chyron

PRIME

Broadcast-Grade, Live Video Production Platform

C **SINCE DAY ONE.**

Bridging Legacy Workflows with the Future of Live Content

PRIME Platform is a dynamic, scalable, full-featured production engine that bridges legacy workflows with the future of live content creation and distribution. With a comprehensive suite of specialized software modules to address the full spectrum of today's live production needs, PRIME's modern architecture easily adapts to market demands for the latest technologies and emerging standards.

PRIME is an environment-agnostic software platform. You can deploy PRIME via the physical hardware, virtualized machines, or cloud-based infrastructures of your choosing. The most valuable element of the PRIME Platform is its ability to adapt to the content creation, storage, distribution strategy that best suits your organization.

This flexibility doesn't come at a cost to the broadcast-grade quality and interoperability you need to craft a stunning live show. PRIME provides all-inclusive connectivity to SDI, IP, NDI, and H264 stream video standards - as well as extensive support for SD, HD, UHD-4K, and HDR video formats. PRIME ensures compatibility with your existing workflow tools with support for virtually all industry-standard control protocols.

Ultimately, PRIME Platform is dynamically customizable and scalable to deliver the functionality and resource your productions demand today and in the future.

Chyron.

One Platform – Multiple Solutions

PRIME is the common foundation for a complete ecosystem of production modules you can use to assemble your ideal workflow. Drive live productions with an essential production toolset for switching and audio mixing, real-time graphics, and clip server capabilities, accessible from a single interface for the all-in-one PRIME studio experience. Or, implement specialized workflows for graphics, branding, VSAR, video walls, display processing, edge graphics, touchscreens, and venue control from a single platform - the choice is yours!

With software-defined architecture and floating I/O resources, you can layer your production modules of choice over any PRIME engine on the fly - each providing intuitive control interfaces, consistent design tools, and integrated file-based efficiency.

PRIME PLATFORM

| CG | SWITCHER | CLIPS | BRANDING | VIDEO WALLS | TOUCH SCREEN | CLICK EFFECTS |

PRIME CG

PRIME CG is the market's most flexible system for the creation, control, and playout of real-time 3D graphics. With a robust designer toolset, high-output channel density, and powerful data-binding - it's easy to craft a captivating look for your show.

PRIME SWITCHER

Cut, key, mix, and transition between all the sources you need to craft a compelling production. PRIME Switcher offers 2 full MEs - each with keyers, user-defined transitions, and DVEs - as well as a built-in multichannel audio mixer.

PRIME CLIPS

PRIME Clips is a flexible, robust, multichannel clip server for show opens, transitions, bumpers, station promos, and more. PRIME Clips handles the day-to-day recording, ingesting, and play-to-air needs of your live production with ease.
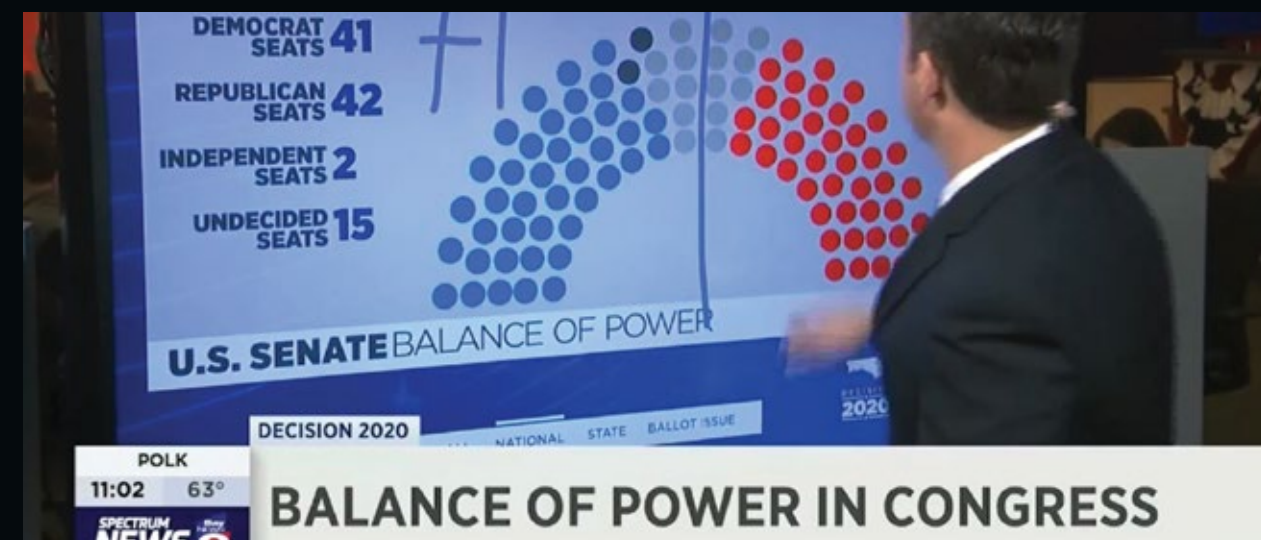

PRIME BRANDING

Capture audience attention and build brand equity with a channel branding and playout solution developed to help broadcasters produce up to the minute branding elements such as headlines, sports scores, and much more.

Chyron

PRIME VIDEO WALLS

Heighten audience engagement and viewership with spectacular graphics and video content across multiple high-resolution, non-standard studio displays with native support for HDR and UHD/4K.

PRIME TOUCHSCREEN

Extending PRIME's familiar real-time graphics workflow to advanced multi-touch responsive screen design, PRIME Touchscreen enriches your visual narrative with touch-graphics you can trigger with any gesture.

PRIME CLICK EFFECTS

PRIME Click Effects offers a single point of control for all displays in a stadium network. With a simple point-and-click interface, users can trigger exciting fan-engagement events that leverage the stunning visuals of the PRIME Platform's powerful CG.

Chyron

ENVIRONMENT-AGNOSTIC DEPLOYMENT

PRIME Platform's flexible software-based architecture is 100% hardware-independent, empowering you to leverage the infrastructure or hybrid environments that suit your production needs best.

ON-PREM HARDWARE
Sometimes you just want to improve on what you already have, and PRIME Platform is the ideal choice for expanding the capability of your hardware-based control rooms. PRIME Platform and any of its production modules are deployable via off-the-shelf Chyron hardware or your own custom IT equipment.

IN THE CLOUD
Cloud technology presents exciting opportunities for broadcasters to spin-up new programming and leverage cutting-edge production tools without upfront capital expenditures. PRIME Platform plays well with public cloud services – such as Amazon Web Service – or your private cloud infrastructure.
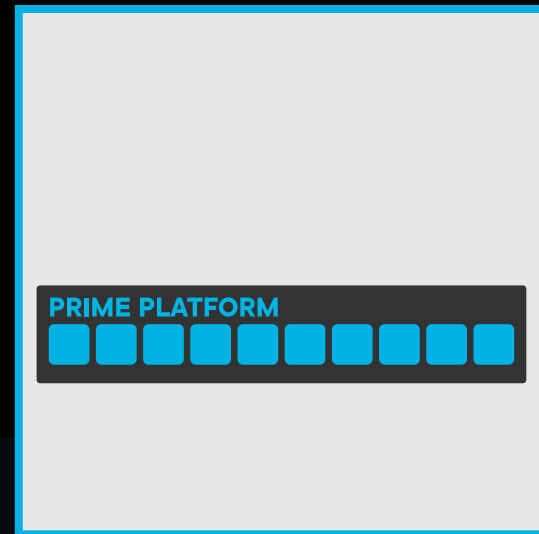

VIRTUALIZATION
PRIME's software-based production modules run smoothly in a virtual machine environment, making it easy to take advantage of data centers and generic, powerful IT hardware platforms. Generate a fully-virtualized control room, route it where you need it, and start producing stunning live content.
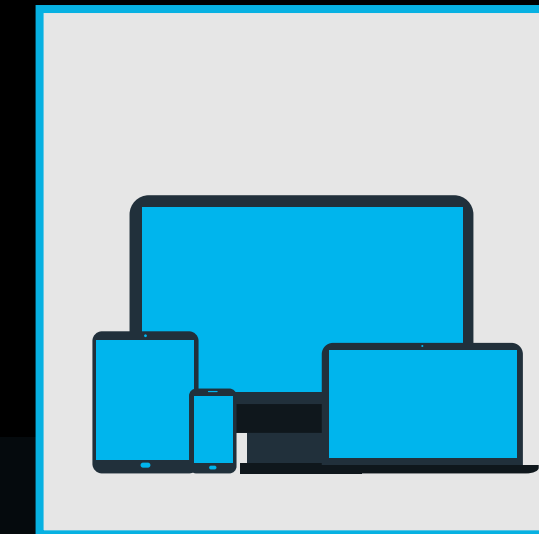
Chyron

KEY FEATURES

FLEXIBLE SOFTWARE PLATFORM
The PRIME Platform can realize your production blueprint with ease. Load up an all-in-one studio combining production switcher, real-time graphics, and clip server channels - or implement specialized modules to drive greater production value in-studio or in-venue. Assign PRIME's floating I/O resources where and when you need.
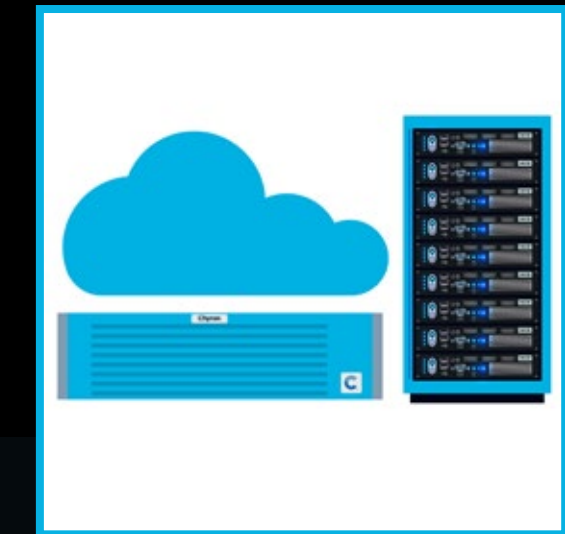

ALL-INCLUSIVE VIDEO STANDARDS
PRIME Platform supports the range of SDI, IP, NDI, and H264-stream signals your production demands and allows you to seamlessly combine them within your production module of choice for final output. Whether you're broadcasting over the air, broadband internet, or within a venue - PRIME makes it easy to capture and deliver content across all channels.

SD, HD, UHD-4K & HDR FORMATS
From input to output, PRIME supports the gamut of SD, HD, and UHD-4K formats. Additionally, PRIME maintains an end-to-end HDR workflow (HLG, SLog 3) with built-in SDR & HDR cross-conversion resources to ensure there's no need to recreate legacy content.
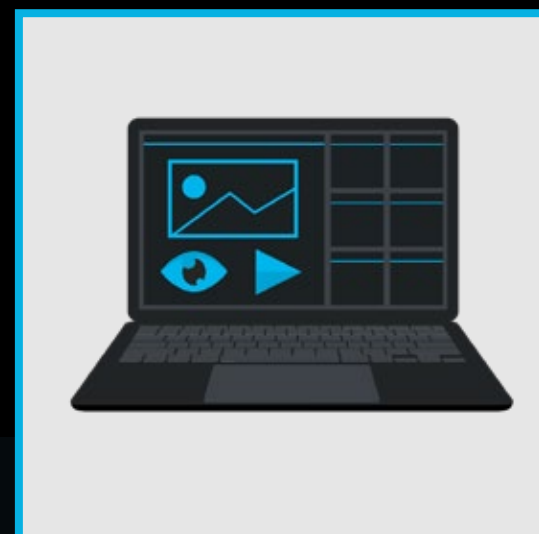

ENVIRONMENT AGNOSTIC
PRIME's cloud-enabled software architecture can deploy and distribute resources how you see fit. Realize the value of live production in the cloud, utilize virtual machine workflows in localized data centers, or expand your existing hardware control rooms with physical server chasses that use industry-standard protocols to communicate with the rest of your gear.

Chyron

BEST-OF-BREED INTEGRATION

PRIME's interoperability with devices from most industry vendors ensures compatibility with your existing workflows. Supported protocols include Chyron Intelligent Interface, AMP, EAS, PBus, VDCP, Ross Talk, XML, and Oxtel - for playout and operational automation.
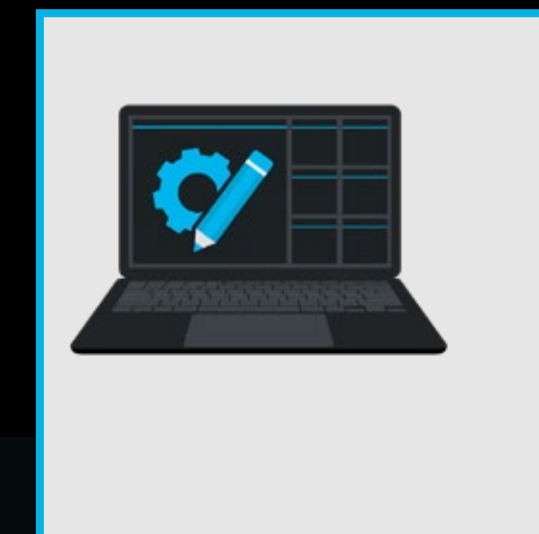

UNIVERSAL DESIGNER

This is the central interface that all graphic design needs are fulfilled through, regardless of production module. PRIME Designer has features that top-tier graphics artists expect, including 2D and 3D text and objects, an array of effects, a timeline, with spline editor, and keyframing for any object property. Create scenes, effects, and animations natively or leverage your favorite third-party tools with import from Adobe After Effects and Photoshop - for use in any PRIME module.

INTUITIVE CONTROL & PLAYOUT

Each PRIME production modules utilizes a dedicated interface for live playout and operation. Manage branding feeds, control all the display and graphic elements of your venue, or load up an all-in-one studio combining production switching, graphics/clip playout, media file management, and audio mixing from a unified control interface. All of PRIME's production modules are easy to control in the heat of live production.

CUSTOM INTERFACE

Craft your custom web-based interfaces that unify control across your favorite PRIME modules and other Chyron systems such as Paint, Virtual Placement, and more - with PRIME Panels technology. An optional web server can augment your tailored UI with ultra-low latency video previews directly in the panel for a seamless remote production workflow.

Chyron

TECHNICAL SPECIFICATIONS

GENERAL

HDR Support PQ, HLG, S-Log3	PQ, HLG, S-Log3
Video Standards	SD: 525i NTSC, 625i PAL HD: 720p (50/59.94/60), 1080i (50/59.94/60), 3G: 1080p(23.87/24/25/29.97/30/50/59.94/60) UHD: 2160p (23.87/24/25/29.97/30/50/59.94/60)
Video Input & Output Connectivity	• SDI (12G-SDI, 6G-SDI, and 3G-SDI) • IP 2110 • NDI • Network Streams • GPU
Genlock	Internal: Free Run | Reference in: Bi-Level, Tri-Level from external reference | SDI In: Detects the SDI video input signal Timecode
Audio	4 AES3id for 8 mono tracks
Embedded Audio	SDI Input: 16 per channel – Up to 32 channels embedded SDI Outputs: 16 per channel – Up to 32 channels embedded
Supported Clip Formats	GTC, DNxHD / DNxHR, ProRes (4:2:2 / 4:4:4 / 4:4:4:4), QT Animation / PNG, H.264, H.265, SDCam / HDCam, MPEG 2 / MPEG 4, XDCam (**note: some wrappers not supported, please check with Sales team for details.)
Supported Data Connections	Text Files, XML with XPath and XSLT, RSS, Web XML, JSON, EXCEL Access, any ODBC compliant data source, Google Sheets
Newsroom System Connections	MOS connection to AP ENPS, Avid iNEWS, AVID Media Central, CGI Open Media, Dalet Galaxy, Octopus, Ross Video Inception, SNEWS Arion, and 7Mountains Dina, and other industry-standard NRCS via CAMIO integration
Automation Support	Supported protocols include gRPC, Chyron Intelligent Interface, AMP, EAS, PBus, VDCP, Ross Talk, XML, and Oxtel

Chyron

PRIME 3RU ENGINE HARDWARE

OS	Microsoft Windows 11 IoT Enterprise LTSC
CPU	Intel Xeon w5-3435X (16 Cores | 32 Threads | 3.10GHz)
GPU	NVIDIA RTX A5000
RAM	2 x 32GB DDR5
OS Storage	2 x 480GB SATA (RAID 1)
Media Storage	3 x 3.2TB (RAID 5)
RAID Controller	Broadcom
Ethernet Ports	1 x 1 GbE 1 x 10 GbE
Serial Connections	1 x DB9 RS232 Serial Port
GPI/O	Optional 16 I/O (8 IN | 8 OUT)
System 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)
Front Panel	Chyron front panel with front-accessible drive bays for enhanced usability and maintenance, along with an LED display for system status and product serial information.
Power Requirements	AC Input / 100-240V, 60-50Hz, 9 Amp Max / 3.2 Amps @ 120 AC Typical Total Output Power and Input: • 800W with Input 100 - 127 VAC • 1000W with Input 100 - 240 VAC • 1000W with Input 200 - 240 VAC

Chyron

OUR 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 postlaunch 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

Chyron