



Just Add
ePower
AV over IP Solutions

transforming spaces into experiences

Product Guide
2025 Issue

MAXCOLOR™ Series

MC-QX

4K60 Video Tiling and Warping Encoder (Transmitter)



View 4 Sources on 1 Display

The MaxColor MC-QX Encoder (Transmitter) combines two iconic Just Add Power features into one device:

- TILING**
- Tiling** mixes four video sources and combines them into a new, unique, compiled video source that can be viewed by any MaxColor Decoder (Receiver) in the system.
 - Tile four HDMI sources on a single display in a variety of viewing modes: Quad, Picture-in-Picture, Primary and Secondaries, or any custom layout you can imagine.
 - Like any standalone Decoder (Receiver), the four inputs to the MaxColor 4K60 Video Tiling Encoder (Transmitter) can watch any source in the system and the compiled video can be shown on any display in the system.
 - Multiple video tilers can be combined to add even more sources to a single display.
- WARPING**
- Warping** rotates any source in the MaxColor system in 0.1-degree increments in real time and can be viewed by any number of Decoders (Receivers) in the system, allowing for the creation of massive artistic video walls.



Features

Combine Video	Show up to four unique sources on any Decoder (Receiver) in the system	mJPEG Stream	Preview video from any source or display, in any web browser or control system, at up to 30 fps
Combine Tilers	Combine two or more Tilers together to surpass the four-tile limit. There is no limit to the number of Tilers that can combine; two Tilers can show up to 7 sources. Continue this pattern to add 3 video sources for each tiler.	Scalability	Fully compatible with all MaxColor products
Custom Layouts	Create and build custom layout sizing and placement	KVM Control	Manage layouts through USB mouse or API
HDMI	Local HDMI Out	Audio	Supports All Audio Formats Analog Extraction Option Analog Adjustable Volume and Delay

MaxColor Encoder (Transmitter) Series Features

- Encodes Computer and Video Resolution up to and including 4K60 @ 4:4:4
- Supports Deep Color up to 36-bit
- HDCP 2.2
- HDR Support: HDR10, HDR10+, HLG, & Dolby Vision
- Endpoint Control: CEC, RS232, or IR
- EDID Management
- Image Pull
- mJPEG Stream
- Zero Detectable Latency
- Power over Ethernet (POE)
- Plug-Play-Present
- Seamless Switching

MC-TX1

4K60 Standard Encoder (Transmitter)



- MaxColor Series Encoder Features
- All Audio Formats Supported
- Analog Extraction Option

MC-TX3

4K60 Encoder (Transmitter) w/ AES67 & USB-C



- MaxColor Series Encoder Features
- AES67 RTP Enabled
- 8-Channel LPCM Audio
- Analog Extraction Option
- HDMI Loopout
- KVM Support

MC-TX2

4K60 Encoder (Transmitter) USB-C w/ optional SFP, ARC & HDMI Out



- MaxColor Series Encoder Features
- All Audio Formats Supported
- Analog Extraction Option
- Fiber Port Option
- KVM Support
- Audio Return Channel (ARC)

MC-TXWP1

4K60 Wallplate Encoder (Transmitter)



- MaxColor Series Encoder Features
- Control Endpoints - *only CEC*
- All Audio Formats Supported

MaxColor Decoder (Receiver) Series Features

- Decodes Computer and Video Resolution up to and including 4K60 @ 4:4:4
- All Audio Formats Supported
- HDCP 2.2
- Supports Deep Color up to 36-bit
- HDR Support: HDR10, HDR10+, HLG, & Dolby Vision
- Endpoint Control: CEC, RS232, or IR
- Analog Extraction Option
- On Screen Display (OSD)
- Video Wall with Rotation
- Image Pull, Push, and Pop
- Supports Video Output Scalers
- mJPEG Stream
- Zero Detectable Latency
- Power over Ethernet (POE)
- Seamless Switching
- Supports Standard Video Wall

MC-RX1

4K60 Standard Decoder (Receiver)



- MaxColor Series Decoder Features

MC-RX2

4K60 Decoder (Receiver) USB-C w/ optional SFP



- MaxColor Series Decoder Features
- Fiber Port Option
- KVM Support
- Audio Return Channel (ARC)

MC-USB

USB 2.0 over IP Encoder/Decoder



- 1Gb Gigabit Ethernet LAN
- Client/Host Mode Switch
 - USB-A 2.0 Host (Encoder)
 - 2 x USB-C 2.0 Client (Decoder)
 - 2 x USB-A 2.0 Client (Decoder)
- Provides a local keyboard, mouse, touchscreen, gaming controller, joystick, or webcam with remote access any computer on the system.



- KVM supports both Bulk and Isochronous type USB 2.0 devices:
 - Keyboard
 - Mouse
 - Touchscreen
 - Gaming Controller or Joystick
 - Flash drive
 - PTZ camera control
 - Webcam video
 - Microphones

ULTRA Series

UL-737POE

Warp Engine Encoder (Transmitter) w/ 360° Video Rotation



- Encodes 4K or Lower Resolutions
- HDCP 2.2
- HDR Support
- Seamless Switching
- Real Time Rotation of Video
- Image Push & Pull
- API or OSD Control of Sources
- Add-on to Any Ultra System



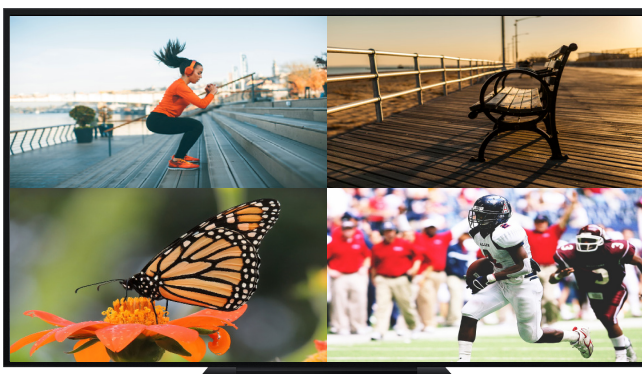
The Warp Engine sends live rotated video to an **unlimited** number of Just Add Power Decoders (Receivers). Rotate any HDMI source in a Just Add Power matrix in **0.1 degree increments**.

UL-759A

Video Tiler Combines 4 Sources to Single Output



- Encodes 4K or Lower Resolutions
- HDCP 2.2
- HDR Support
- Seamless Switching
- Display 4 Sources on 1 Display
- View on Any Screen
- Custom Sizing, Placement, and Transparency
- Mix Any Resolution Source
- Local HDMI Out
- Stackable for Unlimited Tiles
- Stereo Audio - Analog
- Adjustable Volume and Delay



The Video Tiler allows any integrated screen with a Just Add Power Decoder (Receiver) attached to do multiview.

Tile **four (or more) HDMI sources** on a **single display** in a variety of viewing modes.

Supports Chroma Key. Get creative with your own special effects using blue/green screen overlay feature.

Ultra Encoder (Transmitter) Series Features

- Encodes 4K or Lower Resolutions
- HDCP 2.2
- 4K/60 Compatible at 4K/30
- HDR Support: HDR10 & HLG
- Seamless Switching
- Endpoint Control: CEC, RS232, or IR
- Zero Detectable Latency
- EDID Management
- Plug-Play-Present
- Image Pull
- All 3D Formats Supported

UL-707POE

4K30 Standard Encoder (Transmitter)



- Ultra Series Encoder Features
- Power over Ethernet (POE)
- All Audio Formats Supported

UL-708POE

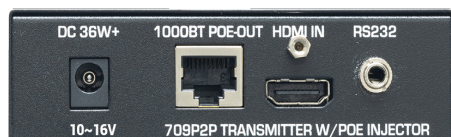
4K30 Encoder (Transmitter) w/ Stereo Audio Extraction



- Ultra Series Encoder Features
- Power over Ethernet (POE)
- All Audio Formats Supported
- Analog Audio Extraction

UL-709P2P

4K30 Point-To-Point Encoder (Transmitter) w/ POE injector



- Ultra Series Encoder Features
- DC Powered
- All Audio Formats Supported
- Built-in POE Injector up to 30W
- Specifically Built for Point-to-Point

UL-718AVP

4K30 Encoder (Transmitter) w/ Dolby DSP, USB & Stereo out, Mic- & Line-in



- Ultra Series Encoder Features
- Power over Ethernet (POE)
- Dolby 5.1 DSP for Audio Downmixing
- Analog Audio Extraction
- Analog Adjustable Volume and Delay
- Mic-in and Line-in Inputs Mixable with HDMI Audio
- KVM Support

UL-767AES

4K30 Encoder (Transmitter) w/ AES67 Audio (LPCM up to 8CH)



- Ultra Series Encoder Features
- Power over Ethernet (POE)
- AES67 RTP Enabled
- 8-Channel LPCM Audio
- Analog Audio Extraction
- HDMI Loopout

Ultra Encoder (Transmitter) Series Features

- Encodes 4K or Lower Resolutions
- HDCP 2.2
- 4K/60 Compatible at 4K/30
- HDR Support: HDR10 & HLG
- Seamless Switching
- Endpoint Control: CEC, RS232, or IR
- Zero Detectable Latency
- EDID Management
- Plug-Play-Present
- Image Pull
- All 3D Formats Supported

UL-707WP2

4K30 Wallplate Encoder (Transmitter)



- Ultra Series Encoder Features
- Power over Ethernet (POE)
- 1.5" Total Depth
- All Audio Formats Supported
- Integrated Endpoint Control - *CEC Control*
- Colors: Black, White or Custom

UL-717WP2

4K30 Wallplate Encoder (Transmitter) w/ USB & VGA



- Ultra Series Encoder Features
- Power over Ethernet (POE)
- HDMI and VGA Input
- All Audio Formats Supported
- Stereo Audio Input
- KVM Support
- Integrated Endpoint Control - *CEC Control*
- Colors: Black, White or Custom

UL-718WP4

4K30 Wallplate Encoder (Transmitter) w/ Dolby DSP & HDMI Out



- Ultra Series Encoder Features
- Power over Ethernet (POE)
- HDMI and VGA Input
- Serial Port
- Dolby 5.1 DSP Audio Downmixing
- Mic-in and Line-in Inputs Mixable with HDMI Audio
- Analog Audio Extraction
- Analog Adjustable Volume and Delay
- KVM Support
- Colors: Black, White or Custom

UL-747POE

4K30 Rackmount Encoder (Transmitter) 4-in-1 707POE



- Ultra Series Encoder Features
- 4-in-1 Rackmount of 707POE
- All Audio Formats Supported
- POE or AC Powered

UL-749AVP

4K Rackmount Encoder (Transmitter) 3-in-1 718AVP



- Ultra Series Encoder Features
- 3-in-1 Rackmount of 718AVP
- AC Power
- Dolby 5.1 DSP for Audio Downmixing
- Analog Audio Extraction
- Analog Adjustable Volume and Delay
- Mic-in and Line-in Inputs Mixable with HDMI Audio
- KVM Support

Ultra Decoder (Receiver) Series Features

- Decodes 4K or Lower Resolutions
- HDR Support: HDR10 & HLG
- HDCP 2.2
- Supports Video Output Scalers
- All Audio Formats Supported
- Seamless Switching
- Endpoint Control: CEC, RS232, or IR
- Video Wall with Rotation
- Power over Ethernet (POE)
- Plug-Play-Present Built-in
- Image Push, Pull, and Pop
- On Screen Display (OSD)
- All 3D Formats Supported

UL-508POE

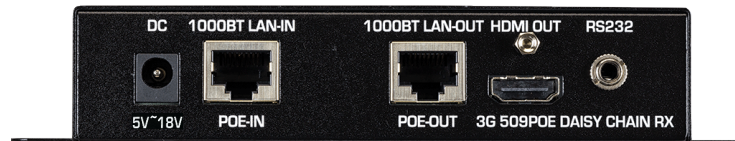
4K30 Standard Decoder (Receiver)



- Ultra Series Decoder Features

UL-509POE

**4K30 Daisy-Chain Decoder (Receiver) w/
added POE Network Out**



- Ultra Series Decoder Features
- Power over Ethernet Out (POE-Out)
- DHCP Integration
- Use with 709P2P for Video Walls
- Supports Multiple Encoders on Single LAN Port

UL-518AVP

**4K30 Decoder (Receiver) w/
USB and Stereo Audio Out**



- Ultra Series Decoder Features
- Analog Audio Extraction
- Analog Adjustable Volume and Delay
- KVM Support

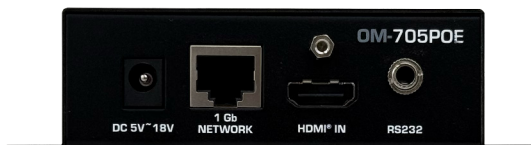
OMEGA Series

Omega Encoder (Transmitter) Series Features

- Encodes 1080p or Lower Resolutions
- HDCP 1.4
- HDR Support
- Seamless Switching
- Zero Detectable Latency
- EDID Management
- Power over Ethernet (POE)
- Plug-Play-Present
- Image Pull
- All 3D Formats Supported

OM-705POE

1080p Standard Encoder (Transmitter)



- Omega Series Encoder Features
- All Audio Formats Supported
- Endpoint Control: CEC, RS232, or IR

OM-726TVI

1080p Encoder (Transmitter) w/
TVI in, USB & HDMI Out



- Omega Series Encoder Features
- TVI Input
- Line-in Input Mixable with HDMI Audio
- USB-B
- HDMI Loopout
- KVM Support

OM-715POE

1080p Encoder (Transmitter) w/
USB, Stereo Port & HDMI Out



- Omega Series Encoder Features
- All Audio Formats Supported
- Analog Audio Extraction
- HDMI Loopout
- Endpoint Control: CEC, RS232, or IR
- KVM Support

Omega Decoder (Receiver) Series Features

- Decodes 1080p or Lower Resolutions
- HDCP 1.4
- Supports Video Output Scalers
- Video Wall with Rotation
- Seamless Switching
- Endpoint Control: CEC, RS232, or IR
- All Lossless Audio Supported
- Power over Ethernet (POE)
- Plug-Play-Present
- Image Push, Pull, Pop
- On Screen Display
- All 3D Formats Supported

OM-505POE 1080p Standard Decoder (Receiver)



- Omega Series Decoder Features

OM-515POE 1080p Decoder (Receiver) w/ USB and Stereo Audio Out



- Omega Series Decoder Features
- Analog Audio Extraction
- Analog Adjustable Volume and Delay
- KVM Support

ST1 Stereo Encoder/Decoder (Transceiver) Injects or Extracts Stereo Audio



- Stereo audio; 192kHz and 24-bit Supported
- Volume Control
- Power Over Ethernet (POE)
- Integrated Endpoint Control - *only RS232 or IR*
- Compatible with MaxColor, Ultra and Omega Series
- Encoder/Decoder Audio Only Device
- As an Encoder (Transmitter), input stereo audio to play on any Decoder (Receiver)
- As a Decoder (Receiver), output stereo audio from any Encoder (Transmitter) to a speaker or amp

IR Control & Rackmount Shelf

IRD2

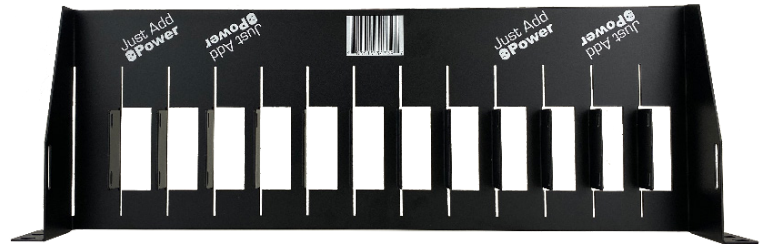
Converts RS232 Port to IR Emitter



- Serial to IR
- Compatible with All Devices
- Adds IP to IR Control

RS1U

Razor Shelf



- Compatible with Omega, Ultra, and Maxcolor Devices
- Holds up to 13 Devices
- Max 5U High
- 19' Rackmount Shelf

System Features

Any Size Matrix

Create a flexible matrix of sources and displays limited only by the switch(es) used.

Artistic Video Wall Capability

Send image-rotated video content to a set of displays of any size, mounted at any angle, and pressed edge to edge or spaced apart, to provide a cohesive artistic image with video content chosen or designed exclusively for the layout.

Audio Mixing

Mix analog audio inputs and outputs with digital audio inputs and outputs, including HDMI, AES67 8-channel, with adjustable volume, mute and delay.

Chroma Key

Get creative with your own special effects using blue/green screen overlay feature.

DHCP Integration

Provide internet connectivity to a smart device through the same CATx cable that connects the Just Add Power matrix to that device using a DHCP server integrated decoder (receiver).

Dolby 5.1 Downmixing

Convert a source's Dolby 5.1 audio to Dolby ProLogic II audio for stereo-only speaker zones and allow both audio formats to be used simultaneously in multiple speaker zones.

Easily Accessible API

Write custom drivers and programs to interact with Just Add Power devices.

EDID Management

Display High Dynamic Range (HDR) content on HDR displays, permit the same content to display on standard screens, and allow content to be displayed simultaneously on both types of screens.

HDCP Support

Display content with HDCP copy/content protection on any HDMI screen in your system.

HDR Support

Support High Dynamic Range (HDR) formats including HDR10, HDR10+, HLG, and Dolby Vision.

Integrated Endpoint Control

Control source and screen devices using built-in Consumer Electronic Control (CEC), Transmission Control Protocol (TCP/IP), Infrared control (IR) or Serial control (RS232).

Image Pop

Display a custom logo or message as an overlay on any active screen.

Image Push

Load a custom default image or logo for when no source is displayed onscreen.

Image Pull

Preview an image from any source or display in any web browser or control system - up to 10 fps.

Image Rotation

Rotate video input in 0.1 degree increments to create artistic video walls with screens at any angle and in any configuration.

KVM Support

Provides a local keyboard, mouse, touchscreen, gaming controller, joystick, or webcam with remote access to any computer on the system.

Mosaic Video Wall Capability

Send video content to a set of displays mounted in a combination of equal or differently sized screens, mixed in portrait and landscape orientations, and pressed edge to edge or spaced apart, to provide a cohesive image with video content chosen or designed exclusively for the layout.

mJPEG Stream

Preview video from any source or display, in any web browser or control system, at up to 30 fps

Plug-Play-Present

Capture and maintain a preset protocol that is initiated when a source is connected to a designated transmitter to power on desired display(s) and switch to the newly connected source for quick and easy presentation setup, and an ending protocol for when the source is disconnected from the transmitter, with no additional control system necessary. Available only in VLAN systems.

Resolution Scaling

Downscale a source's 4K signal for viewing on a lower resolution screen and upscale a source's lower resolution signal for viewing on a 4K display.

Seamless Switching

Eliminate black screen downtime when switching sources at the same resolution and minimize black screen downtime when switching sources with different resolutions.

Security

Feel confident that any Just Add Power AV over IP system is secure from outside intrusion, since the system is isolated from all data networks and devices are secure and never connected to or accessed via the internet (firmware updates are done locally by system maintenance staff).

Standard Video Wall Capability.

Send video content to a set of 2 to 256 displays of equal sizes, mounted in a grid in either portrait or landscape orientation and pressed edge to edge, to provide a single wall image or a set of smaller video images with the ability to dynamically change the layout as desired.

Video Rotation

Rotate your video by 90 degrees for portrait or landscape display.

Video Tiling

Combine video input from four sources to create a tiled source that can be displayed on a single screen.

Visually Lossless Video

Send original source signals to multiple and various screens with the same outstanding performance at each display.

Zero Detectable Latency

Minimize encode/decode latency over the network so that it is visually undetectable.

Create

A System

1 Control Options

We work with most major control systems so that you can easily integrate the one that will work best for your project.

Supported Control Systems

An AV over IP network of HDMI devices from Just Add Power can be integrated with any third party control system capable of IP control.



2 Product Options

Three product lines with different levels of resolution and HDR support let you choose anything from an economical solution for a sports bar project to a high frame rate, deep color solution for an art museum or luxury home.

Choose the product line that best fits your project's requirements for HDR support and video resolution.

MaxColor™ 4K60

- Supports up to 4K Resolution at 60fps
- Supports HDR, HDR10, HDR10+, HLG and Dolby Vision formats

ULTRA 4K30

- Supports up to 4K60 Resolution at 4K30 output
- Supports HDR & HDR10 formats
- Most extensive feature set with image rotation and tiling

OMEGA 1080p

- Supports up to 1080p Resolution
- Supports HDR format

3 Network Options

Our tech support team certifies switches from the highest quality manufacturers so that you can be certain that integration will be effective and performance will be outstanding.

Compatible Switches

A Layer 3 Gigabit Managed Ethernet Switch is best for video matrixing. We have tested and certified a variety of models from different manufacturers, so you have options to match the size and requirements of your system. Our configuration software will set up your switch, or, if necessary, you can configure your own.



Tested & Certified Switches





Building A System

Building a System is simple

1 Connect the Encoders (Transmitters)

One **Encoder (Transmitter)** per source.

Each source in your system will be connected by HDMI cable to a encoder (transmitter). The encoder (transmitter) will encode the source content and send it through your network to the layer three ethernet switch.

2 Connect the Decoders (Receivers)

One **Decoder (Receiver)** per display.

Next, decoders (receivers) are connected to each display using HDMI cable. The decoders (receivers) accept the encoded content routed to them from the switch and decode it for the display to play at the correct resolution and HDR settings.

3 Gigabit Switch

A gigabit switch is used to direct the source content to the intended displays. Just Add Power works with high quality switch manufacturers to ensure interoperability.

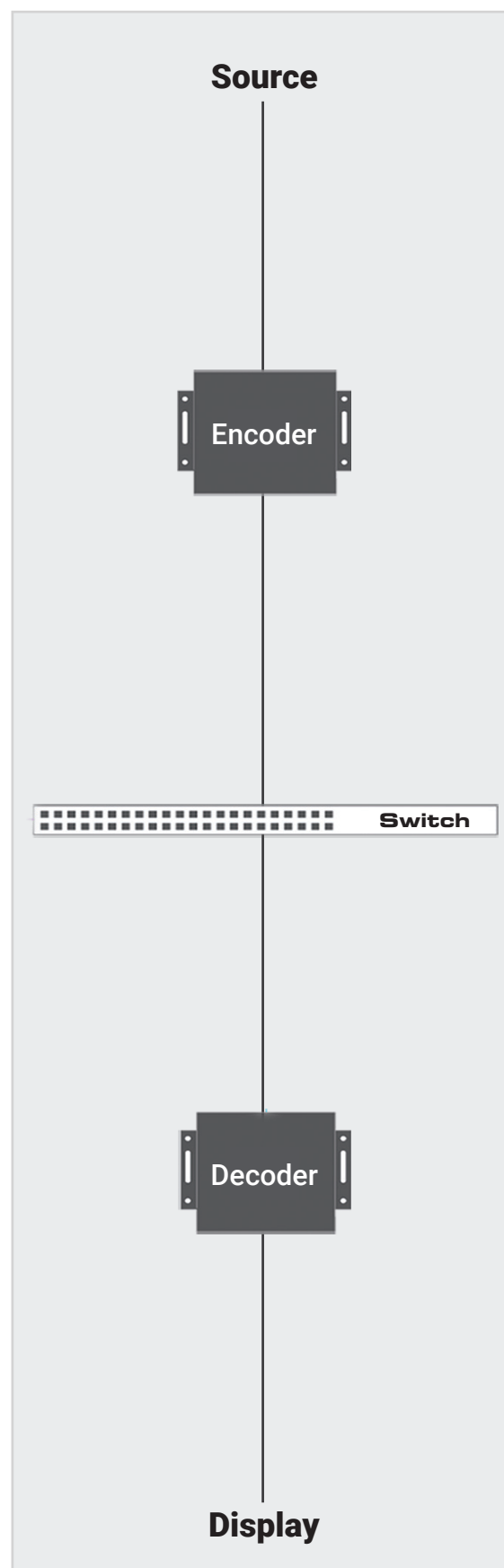
Multiple switches may be used to expand the number of sources and displays in your system. Just Add Power devices are connected to the switch using Cat5e/Cat6 cable. Fiber cable is supported in the MaxColor product line.

4 Control System

With our supported control systems, you can trust that you are getting the best possible technology and support for your AV over IP needs. We provide free drivers for popular control systems and an easily accessible API.

5 Configuration

Our configuration software, Advanced Matrix Programmer (AMP) takes you step by step through the process of configuring your Just Add Power devices.





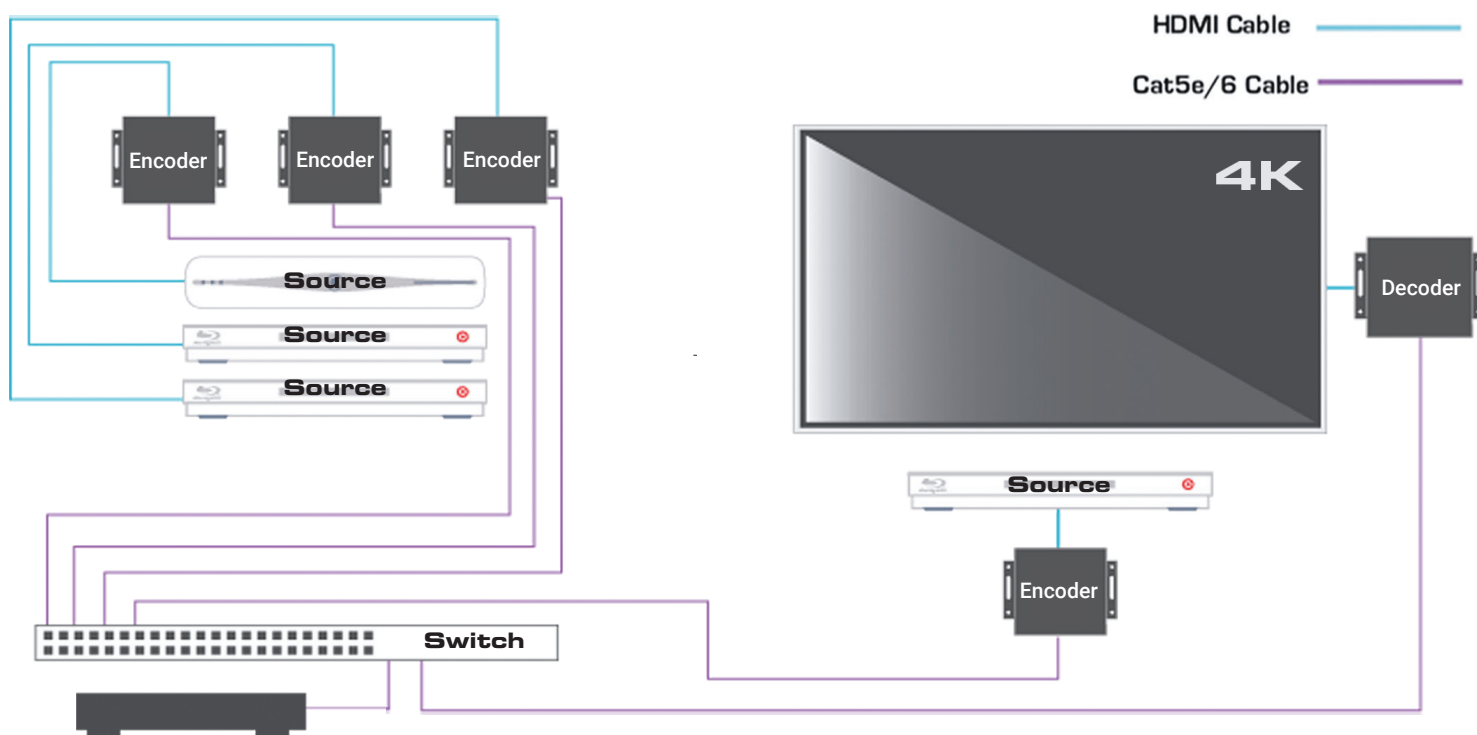
Expanding A System

Compatibility

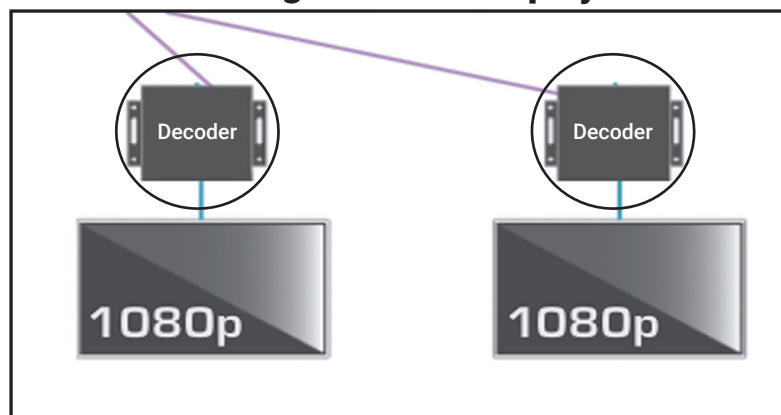
Just Add Power's Omega and Ultra product lines are compatible and can be integrated interchangeably into your AV distribution system. MaxColor products are not directly compatible, but can be integrated into your system and on your switch using a closed loop or through bridging, which requires additional devices.

Firmware Updates

Just Add Power offers regular firmware updates to keep your devices running optimally and provide you with additional features when innovation breaks. These updates are only installed when you initiate them and are never pushed to the devices.



Adding Two New Displays



Adding Two New Displays

Expanding a system with two new displays would only require adding two new Decoders (Receivers).

System

Examples

Residential Install

3 Sources x 5 Displays

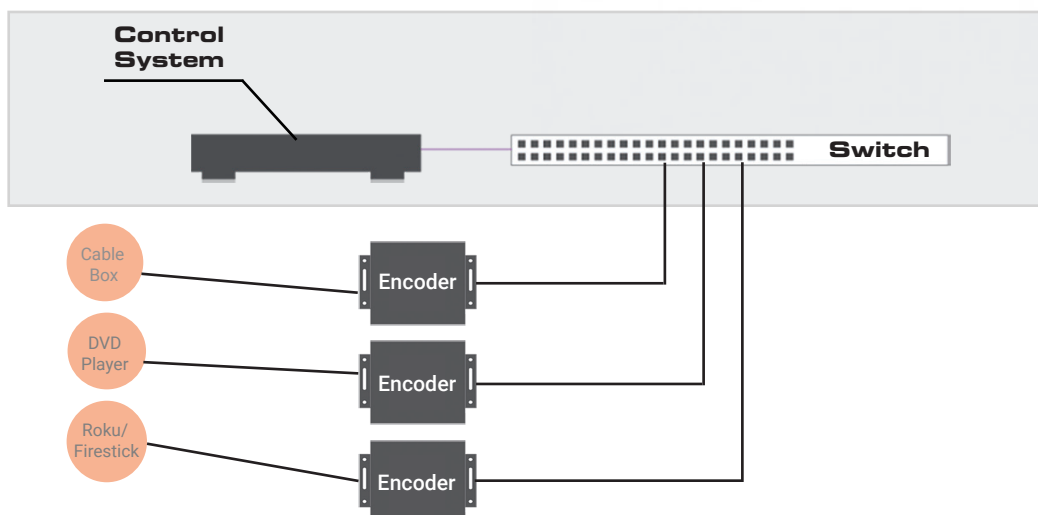
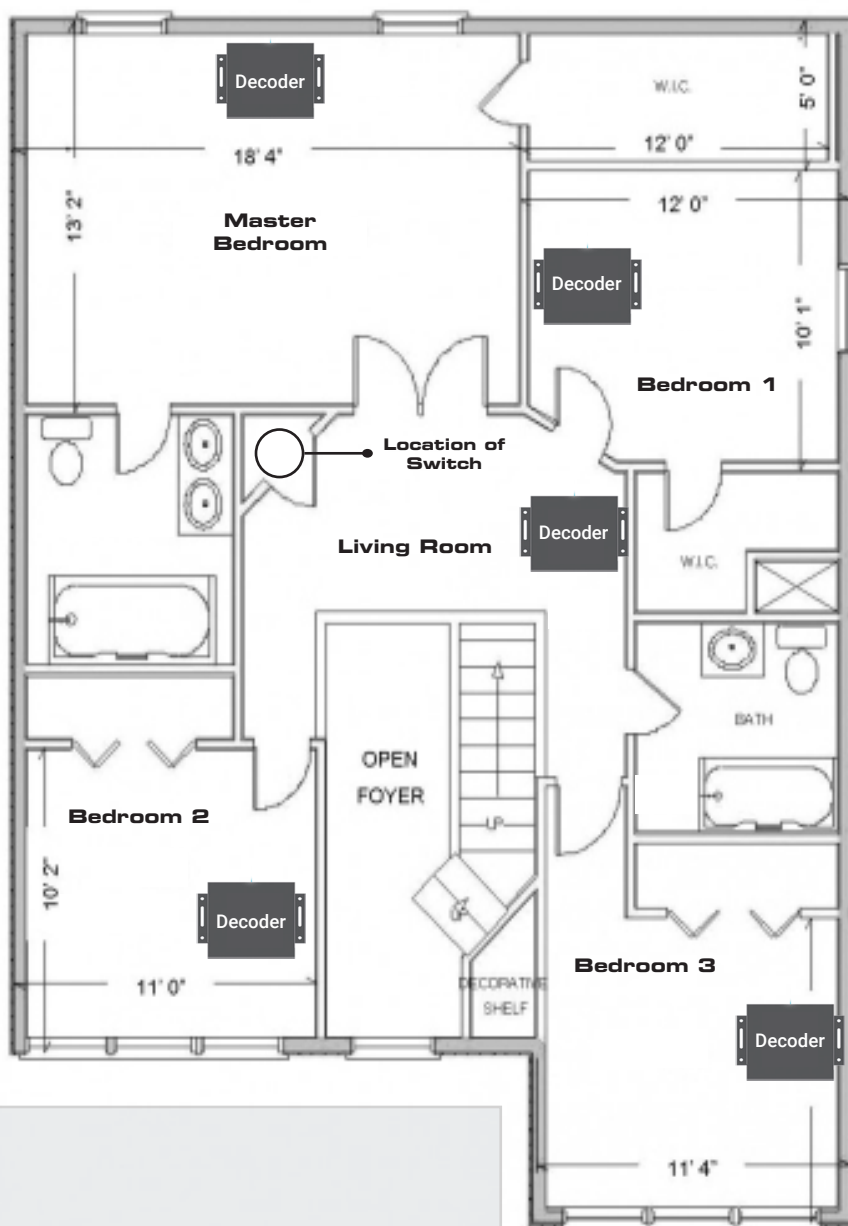
4 Bedroom Residential Install: Second Floor

3 Sources x 5 Displays

A simple two story install with a switch located upstairs in the living room closet with 3 sources and 1 display per room (5 total displays).

Residential AV over IP

With Just Add Power, residential installers benefit from having no fixed number of inputs/sources or outputs/displays to work around, have no difficulty distributing to distances over 100m in large luxury homes, and like the fact that they can easily return to a site in the future to expand the system when desired.



System

Examples

Commercial Install

20 Sources x 30 Displays

Nightclub & Sports Bar Install:

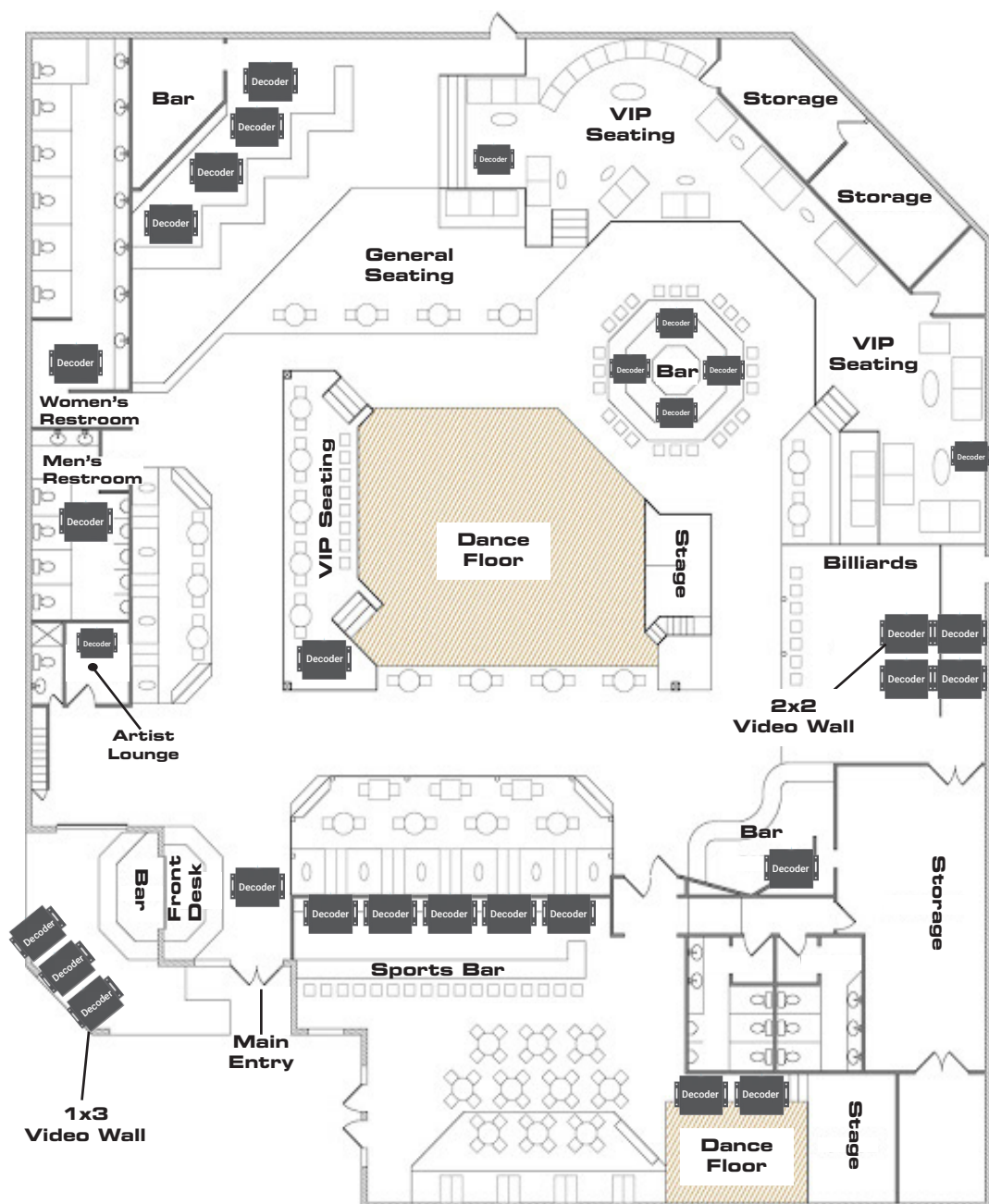
20 Sources x 30 Displays

This install is a perfect example where an installer has used stacked switches to distribute AV throughout this large commercial space.

Paired with a compatible control system, the client and their employees easily manage the sources and screens from anywhere in the building.

Pro AV & Commercial AV over IP

Whether it's an airport, office building, a sports bar or a stadium, Just Add Power lets you build a video distribution system of networked AV devices that is scalable, reliable, economical, and easily controllable.



Our AV over IP products can also create stunning standard mosaic and artistic video walls and combine multiple video feeds onto a single screen. Read more about our Warp Engine Encoder (Transmitter) and the Video Tiling Processor on page 2.

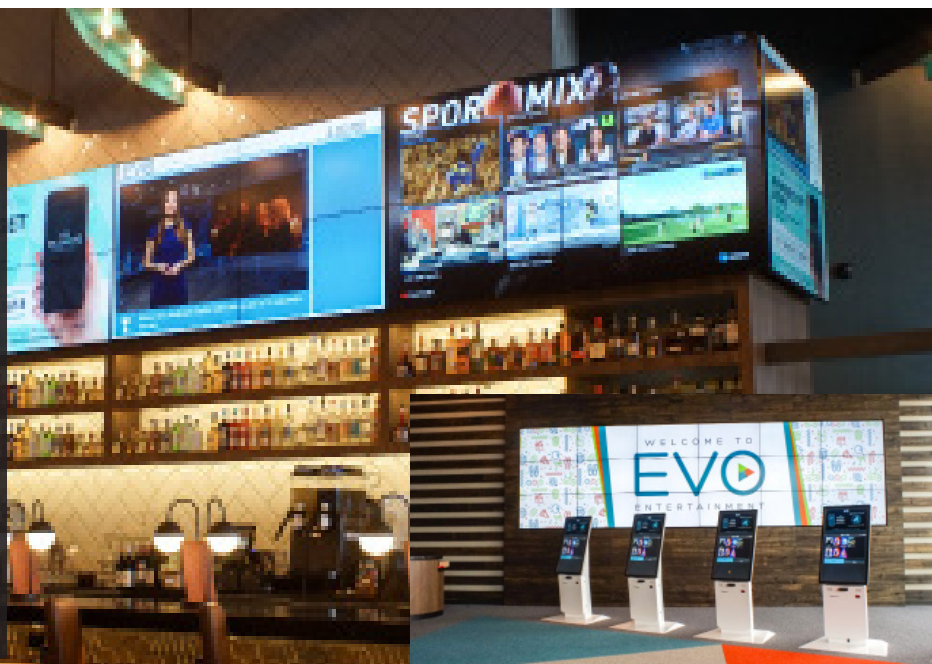
Commercial - Entertainment Center

EVO Entertainment Multiplex

Location: Schertz, Texas

Integrator: Mood Texas

EVO Entertainment had a vision to pack their 73,000-square-foot facility with nearly a 100 displays consisting of video walls, outdoor displays, signage and more. Integrator Mood Texas was called upon to complete their vision of a high-tech establishment with flawless audio and video distribution. Thanks to Just Add Power's easy installation, seamless switching, video wall functionality, and other features, EVO Entertainment's high-tech vision was turned into a reality.



Residential - Home Theater

The Holladay Cinema

Location: Salt Lake City, Utah

Integrator: Tym LLC

This ultimate entertainment space features a custom-built 16-foot wide-screen to display stunning images, a custom Tym signature star ceiling, a Just Add Power video distribution system, and more.



Commercial - Golf Club

Montecito Club

Location: Santa Barbara, CA

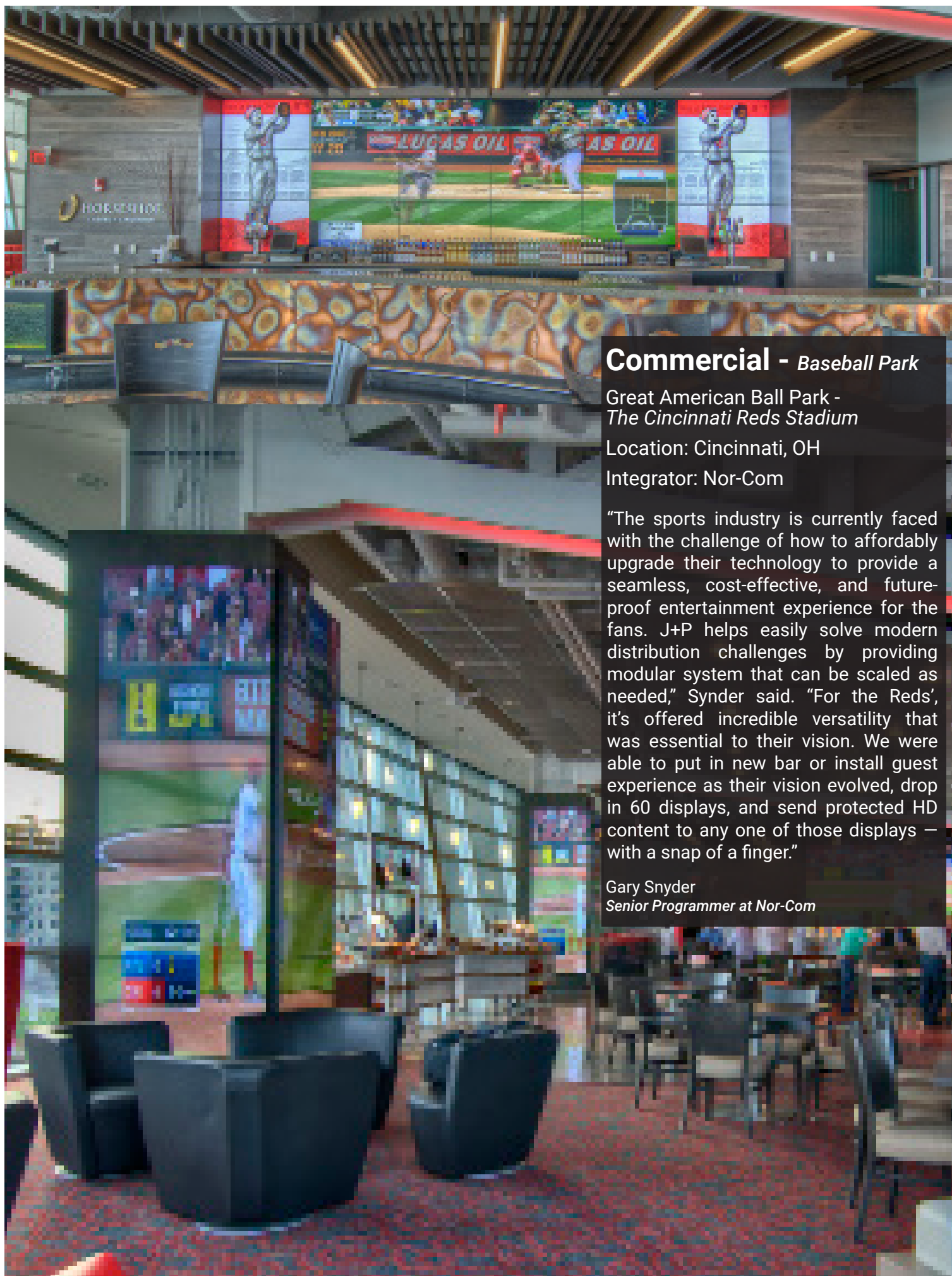
Integrator: Central Coast Audio Visual

"The owner and members of the Montecito Club have been very pleased with the clean look of the displays in the space, and how simple it is to control them... And it has delivered the performance and reliability the Club expects. The system has performed flawlessly since its deployment and its scalability will allow us to easily meet future growth, whether it's more displays or additional sources."

Chris Wilson

President of Central Coast Audio Visual





Commercial - *Baseball Park*

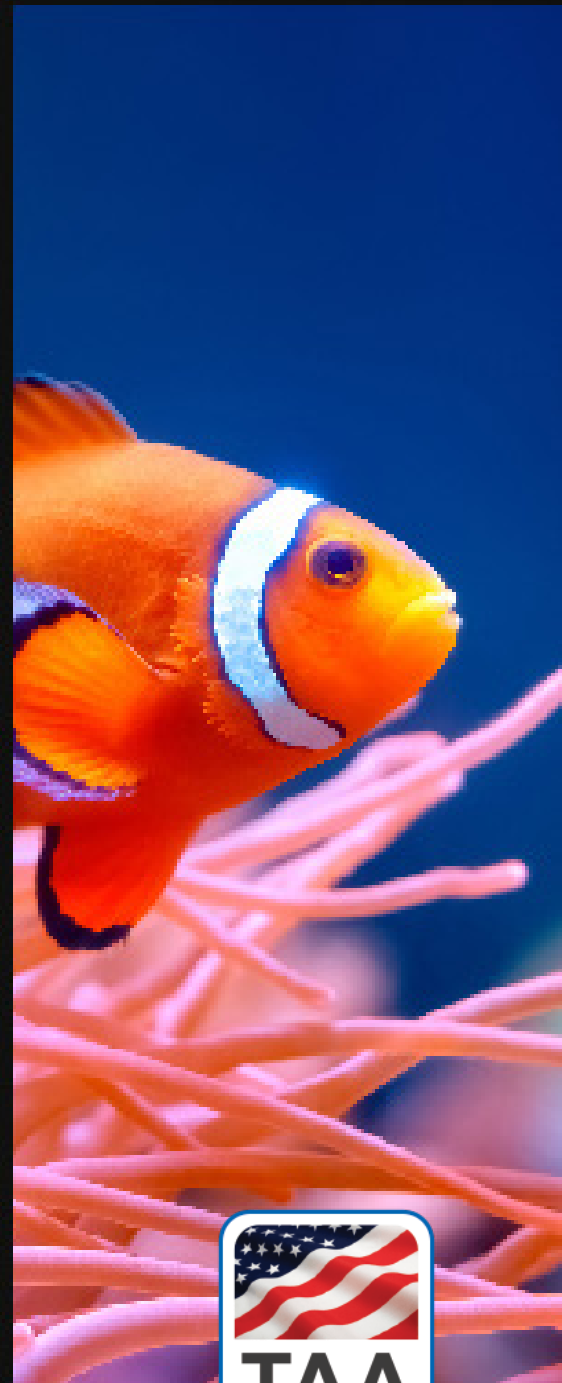
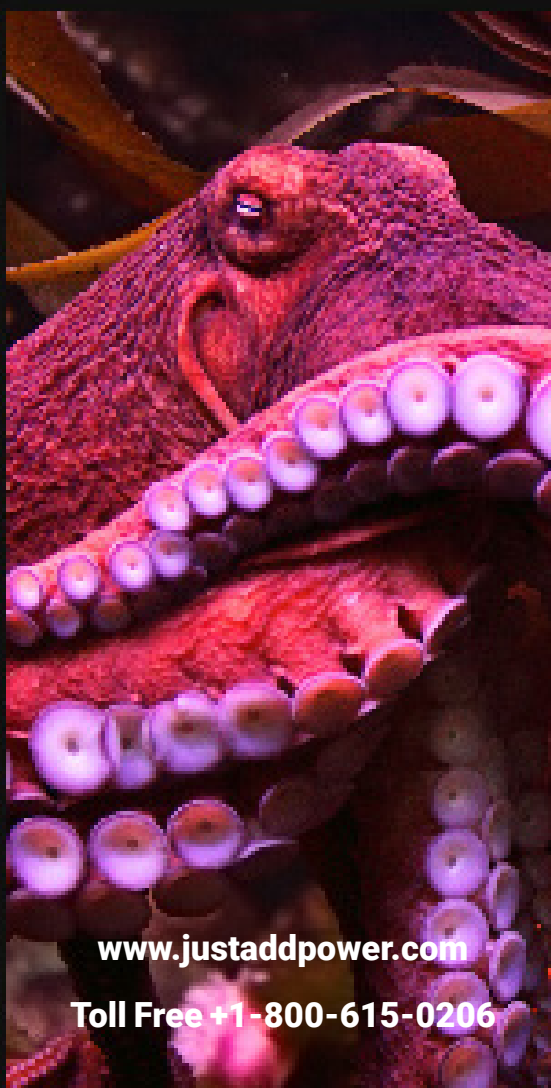
Great American Ball Park -
The Cincinnati Reds Stadium

Location: Cincinnati, OH

Integrator: Nor-Com

"The sports industry is currently faced with the challenge of how to affordably upgrade their technology to provide a seamless, cost-effective, and future-proof entertainment experience for the fans. J+P helps easily solve modern distribution challenges by providing modular system that can be scaled as needed," Synder said. "For the Reds', it's offered incredible versatility that was essential to their vision. We were able to put in new bar or install guest experience as their vision evolved, drop in 60 displays, and send protected HD content to any one of those displays — with a snap of a finger."

Gary Snyder
Senior Programmer at Nor-Com



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