## Just Add BPower

## 4K60 from Source to Screen

36 Bit Color

4:4:4 Chroma

On 1G Copper LAN

All with our new MaxColor Product Line

Gigabit POE Receiver

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MaxColor<sup>™</sup>MC

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Product Guide 2022 Issue STEREO OUT IR OUT



MaxColor GIGABIT POE TRANSMITTER MC-TX1

#### **Easy Installation**

Just Add Power systems require just a few easy steps to install, and our setup software guides you through the process. Our industry renowned technical support team provides installers with the tools and information they need to include our products as part of a reliable installation.

#### **Unmatched Scalability**

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Just Add Power systems continue to evolve after they've been installed. Free firmware updates provide new functionality as technologies evolve. Sources and displays can be added and new devices integrated as system needs grow and change.

3G 508POE RECEI

#### **Outstanding Performance**

DC 1000BT LAN HOMI OU

36 51 20

Just Add Power systems are long-lasting and maintain a consistent, high-quality user experience. Our five-year warranty protects your investment, while our robust feature set outperforms every other system on the market, giving you the power to wow your customer every time.

# from Source to Screen

## MaxColor<sup>™</sup> Series

This new series natively supports 4K@60Hz in and out, allowing end users to play High Dynamic Range video, including Dolby Vision and HDR10+ formats, using the growing number of Ultra 4K sources and devices. With MaxColor™, 4K60/4:4:4/36-bit color video can be distributed over a 1Gb managed network using existing CatX (Cat5e minimum) cable, eliminating the expense of upgrading to fiber and buying more costly network switches.

Use MaxColor 4K60 Transmitters and Receivers to create your new system, or bridge them to 3G Ultra models to support a variety of source and screen formats.

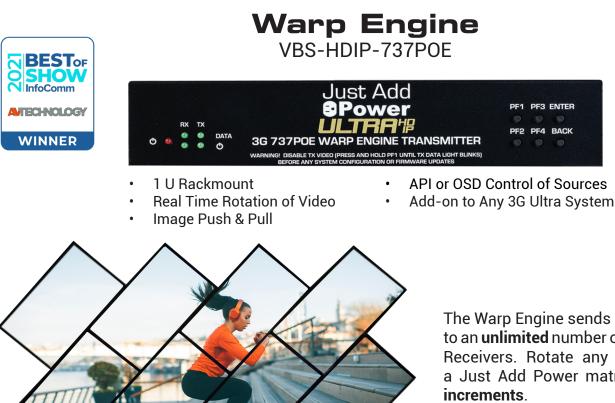
MaxColor and 3G Ultra are independent systems that can run on the same switch and be integrated with additional hardware.





SCAN ME  Information on  MaxColor and  3G Ultra  integration	DC 1000BT LAN HDMI IN STEREO OUT IR OUT R5232	DC 1000BT LAN HDMI OUT STEREO OUT IR OUT R5232	
Device	MC-TX1	MC-RX1	
Supported Resolution	Computer and video resolution up to and including 4K60 @ 4:4:4	Computer and video resolution up to and including 4K60 @ 4:4:4	
Audio	Supports all lossless audio formats	Supports all lossless audio formats	
Color Depth	Supports deep color up to 36-bit	Supports deep color up to 36-bit	
HDR Support	HDR10, HDR10+, HLG, Dolby Vision, and SDR	HDR10, HDR10+, HLG, Dolby Vision, and SDR	
Endpoint Control	Control endpoints with CEC, IR, and RS232	Control endpoints with CEC, IR, and RS232	
Image Push	Load a custom default image or logo for when no source is displayed onscreen.	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, at up to 10 fps.	Preview an image from any source or display, in any web browser or control system, at up to 10 fps.	
Latency	Zero detectable latency	Zero detectable latency	
POE	POE powered	POE powered	
Seamless Switching	Eliminate black screen downtime when switching sources at the same resolution	Eliminate black screen downtime when switching sources at the same resolution	
Video Wall May require firmware update		Supports standard video wall displays	

## Featured Devices



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

### Video Tiler VBS-HDIP-759A



- Display 4 Sources on 1 Display
- View on Any Screen
- Adjustable Transparency
- **Custom Sizing & Placement**



- Mix Any Resolution Source
- Local HDMI Out
- Stackable for Unlimited Tiles
- Smooth Transitions for Live Events

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

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

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

## Audio Specific

## ST-1 Sound Transceiver

VBS-HDIP-ST1





#### Operates as either a Transmitter or a Receiver.

Use the ST1 Sound Transceiver to add a stereo audio source to a Just Add Power system, or to extract stereo audio from an existing Transmitter. Supports up to 192kHz 24-bit 2-Channel LPCM Audio.



See product listing on page 5 for more information.

## Send and receive up to 8-Channels.

The Dante Enabled Transmitter allows any Just Add Power system to exchange 2-way audio with any Dante or AES67 sound system. Including all of the 4K system wide features found within the 3G Ultra Transmitters, this device has the richest feature set in the industry.

#### 3G POE TX With Stereo Extraction VBS-HDIP-708POF



See product listing on page 4 for more information.

#### Supports all lossless audio formats - including Dolby Atmos.

The 708POE Transmitter with Stereo Audio Extraction can distribute 4K video, stereo audio, and breakout analog audio on a single device. Input stereo audio to enable the stereo audio extraction port to feed into a stereo distribution matrix.

## 4K Transmitters System Wide Features

- Encodes 4K or Lower Resolutions
- HDCP 2.2
- 4K/60 Compatible at 4K/30
- HDR Support
- Seamless Switching
- Integrated Endpoint Control

- Zero Detectable Latency
- EDID Management
- POE Powered (unless otherwise noted)
- Plug-Play-Present
- Image Pull
- All 3D Formats Supported



**3G POE TRANSMITTER** 

• 4K System Wide Features

4.7~23V

All Lossless Audio Supported

#### 3G POE Plus Stereo Extraction VBS-HDIP-708POE



- 4K System Wide Features
- All Lossless Audio Supported
- Stereo Audio Output 3.5mm





- 4K System Wide Features
- All Lossless Audio Supported
- Built-in POE Injector up to 40W
- Specifically Built for Point-to-Point

**3G+ HIFI** VBS-HDIP-717HIFI



- 4K System Wide Features
- All Lossless Audio Supported
- HDMI Loopout

## 

VBS-HDIP-718KVM

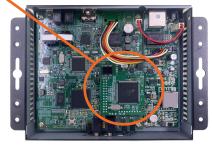


- 4K System Wide Features
- Stereo Audio Output 3.5mm
- KVM Support
- Field-Modifiable Dolby Chip Upgrade to Audio/Video Professional (AVP) Model



#### **Dolby Chip**

- Dolby Digital 5.1 & Stereo Analog
- Dolby Downmixing
- Dolby Chip Upgrades KVM Model to AVP Model





## 3G 2-Gang Thin WP2

VBS-HDIP-707WP2



- 4K System Wide Features
- HDMI and VGA Input
- All Lossless Audio Supported
- Stereo Audio Input
- KVM Support
- Colors: Black, White or Custom

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- 4K System Wide Features
- 1.5' Total Depth
- Integrated Endpoint Control -CEC Control
- Colors: Black, White or Custom

### 3G+ WP4

VBS-HDIP-718WP4



- 4K System Wide Features
- HDMI and VGA Input
- Dolby 5.1 Downmixing
- Audio Mixing
- Stereo Audio Input
- Stereo Audio Output 3.5mm
- KVM Support
- Colors: Black, White or Custom

#### **3G POE Rackmount** VBS-HDIP-747POE



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- 4K System Wide Features
- 4-in-1 Rackmount of 3G POE TX
- All Lossless Audio Supported
- POE or AC Powered

## 3G+ KVM Rackmount

VBS-HDIP-749KVM



- 4K System Wide Features
- 3-in-1 Rackmount of 3G+ KVM TX
- Supports 110V to 240V AC Power
- Audio Mixing
- Field-Modifiable Dolby Chip Upgrade to Audio/ Video Professional (AVP) Model
- **3G+ Dante Enabled** VBS-HDIP-767DSS



- 4K System Wide Features
- Dante & AES67 RTP Enabled
- 8-Channel PCM Audio
- HDMI Loopout



- Resolution Output Scaling
- HDR Support
- HDCP 2.2
- All Lossless Audio Supported
- Integrated Video Scaler
- Seamless Switching
- Integrated Endpoint Control

- Video Wall with Rotation
- EDID Management
- POE Powered (unless otherwise noted)
- Plug-Play-Present Built-in
- Image Push, Pull, Pop
- On Screen Display
- All 3D Formats Supported



4K System Wide Features



- 4K System Wide Features
- Analog Audio Out
- KVM Support

## **3G POE Daisy-Chain**

VBS-HDIP-509POE



- 4K System Wide Features
- Network Out Port
- Can use with 709P2P for Video Walls
- DHCP Integration
- Supports Multiple Receivers on Single
  LAN Port

## 1080p Transmitters System Wide Features

- Encodes 1080p or Lower Resolutions
- HDCP 1.x
- HDR Support
- Seamless Switching
- Zero Detectable Latency

- EDID Management
- POE Powered (unless otherwise noted)
- Plug-Play-Present
- Image Pull
- All 3D Formats Supported



 $2G\Omega/3G+$ 

VBS-HDIP-715POE

1080p System Wide Features All Lossless Audio Supported

Analog Audio Output

1000BT LAN HOMI IN HOMI OUT STEREO RS232 USB

2GΩ/3G+ POE TRANSMITTER

- 1080p System Wide Features
- All Lossless Audio Supported
- Integrated Endpoint Control



 $2G\Omega/3G$  SDI

- 1080p System Wide Features
- Supports 48kHz Audio Sample Rate, 8 Channels, 16~24 Bits
- HDMI Loopout
- Analog Audio Output
- Integrated Endpoint Control RS232 & IR

2GΩ/3G TVI VBS-HDIP-726TVI



- 1080p System Wide Features
- TVI Input
- Analog Audio Input
- HDMI Loopout
- KVM Support

Integrated Endpoint Control
 KV/M Support

**HDMI** Loopout

KVM Support

DC

4.7~23V

## 1080p Receivers System Wide Features

- 1080p & Lower Resolution Support
- HDCP 1.x
- Integrated Video Scaler
- Video Wall with Rotation
- Seamless Switching
- Integrated Endpoint Control

- All Lossless Audio Supported
- POE Powered (unless otherwise noted)
- Plug-Play-Present
- Image Push, Pull, Pop
- On Screen Display
- All 3D Formats Supported



2GΩ/3G POE RECEIVER

1080p System Wide Features

4.7~23V



- 1080p System Wide Features
- Analog Audio Output
- KVM Support

## IR Control & Rackmount Shelf

#### IR Control VBS-HDIP-IRD2



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

Rackmount Shelf VBS-HDIP-RS1U



- Compatible with 2G Omega, 3G Ultra, and Maxcolor Devices
- Holds up to 13 Devices
- Max 5U High
- 19' Rackmount Shelf



#### **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 and Dante 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 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, at 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**

Provide local and remote access to all computers on the system with a builtin keyboard, mouse and touchscreen interface at both ends of a connection.

#### **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.

#### **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.

## Designing A System

Use the guide below to help you choose the type of system that's right for your next project.

#### **Determine Product Series**

#### MaxColor™ 4K60

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

#### **3G ULTRA**

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

#### 2G OMEGA

- Supports up to 1080p Resolution
- Supports HDR format

### VLAN vs Multicast System

Just Add Power built its reputation for outstanding performance on its design using VLAN switching on a closed network to distribute audio and video with zero detectable latency. For most installs, a VLAN system is still the **best performing option for a Just Add Power AV system**.

For some larger installs where equipment is already in place or must be consistent across the company's network, a multicast system is necessary to meet these requirements.

	VLAN Multicast		
Configuration Software	AMP	AMP	
System Setup	Software Does It All	Software Does Some Installer Does Some	
Software Sets Up	J+P Devices AND Switch	J+P Devices ONLY You Configure the Switch	
Network Switches	Specific Models Supported	Minimum Technical Specs	
Network Knowledge	Basic	Advanced	
Data Network Impact	<b>None</b> Standardized by J+P	Variable Varies by System Capabilities/Setup	
System Maintenance	Installer	Installer and/or IT Admin	
Typical Use	Residential or Commercial	Corporate or Institutional	



#### **Choose Network Switch**

Select from a variety of VLAN supported switch manufacturers and models.

Switches AN Supported

	Model	POE Ports	Maximum Devices	Multi-Switch Systen
	AMS-1208P	8	9	
	AMS-1816P	16	17	
	AMS-2624P	24	25	
	AMS-4424P	23	23	$\checkmark$
	XMS-1208P	8	9	
	XMS-2624P	24	25	
<u>–</u> [	XMS-5248P	48	49	
	XMS-7048P	47	47	
	SW-510-48P-F	47	47	•
	SW-610-48P-F	47	47	
	SW-610-24P-R	23	23	
	GSM4210PD	8	8	v
	(M4250-9G1F-PoE+) GSM4212P	8	9	
	(M4250-10G2F-PoE+) GSM4230P	24		
	(M4250-26G4F-PoE+) GSM4230UP	24	25	
	(M4250-26G4F-PoE++) GSM4248P		25	
Netgea	(M4250-40G8F-PoE+) GSM4210PX	39	39	
<u>ğ</u>	(M4250-8G2XF-PoE+) GSM4212PX	7	7	✓
<u>–</u>	(M4250-10G2XF-PoE+) GSM4212UX	8	9	✓
z∟	(M4250-10G2XF-PoE++) GSM4230PX	8	9	✓
	(M4250-26G4XF-PoE+)	24	25	∕
	GSM4248PX (M4250-40G8XF-PoE+)	39	39	✓
	GSM4248UX (M4250-40G8XF-PoE++)	39	39	✓
	XSM4216F (M4250-16XF)	0 (interlink)	0 (interlink)	Coming Soon
	CBS350-8P-2G	6	9	
	CBS350-8P-E-2G	6	9	
	CBS350-8FP-2G	8	9	
	CBS350-8FP-E-2G	8	9	
	CBS350-16P-2G	12	15	
	CBS350-16P-E-2G	12	15	
	CBS350-16FP-2G	15	15	
0	CBS350-24P-4G	19	23	
Cisco	CBS350-24FP-4G	23	23	
ΰΓ	CBS350-48P-4G	37	47	
	CBS350-48FP-4G	47	47	
	CBS350-24P-4X	19	23	$\checkmark$
	CBS350-24FP-4X	23	23	$\checkmark$
	CBS350-48P-4X	37	47	$\checkmark$
	CBS350-48FP-4X	47	47	$\checkmark$
	SG350 SERIES	47	51	
	SG550X SERIES	47	47	$\checkmark$
¥	TL-SG3428MP	23	23	
TP-Link	TL-SG3452P	47	47	
	TL-SG3428XMP	23	23	Coming Soon
	TL-SG3452XP	47	47	Coming Soon

\* For Multi-Switch Systems, please see the Multi-Switch Considerations article for cable recommendations and bandwidth guidelines. https://support.justaddpower.com/kb/article/430-multiswitch-considerations-for-amp-vlan/

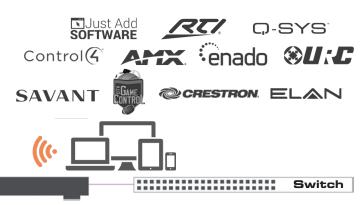
> Control System

#### **Control System**

#### **Control System Integration:**

We provide free drivers for popular control systems and an easily accessible API.





## Building A System

## How to Build Any Size AV over IP Matrix:

### Source Transmitters

One Transmitter (TX) per source.

### Gigabit Switch

A suitable **Gigabit Switch** with the right number of ports. One port for each Just Add Power device plus one additional port connected to the data network.

**Multiple switches** may be used to create any size matrix - allowing a flexible matrix of sources and displays.

#### **Display Receivers**

One Receiver (RX) per display.

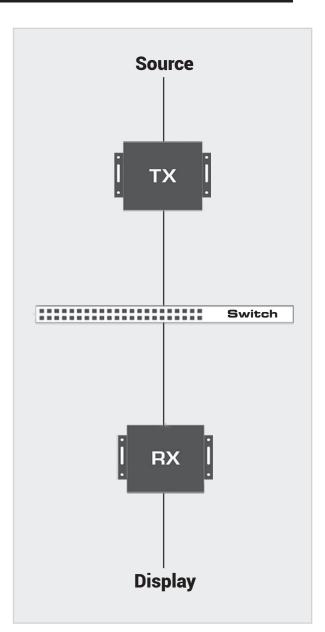
**Cabling:** Use Cat 5e/Cat 6/Cat 7 for distances up to 100m or fiber optic cabling for distances up to 10km.



#### Advanced Matrix Programmer - AMP - configures all Just Add Power devices into an HDMI matrix switching system.

New systems should be built with AMP. AMP supports a wider range of switches, configures 2G Omega, 3G Ultra, and MaxColor systems, and is continuously updated and improved.

AMP is the successor to JADConfig. If you were previously using JADConfig to configure systems, you should continue to use it for maintaining those systems. However, we recommend that new systems should be configured with AMP software.

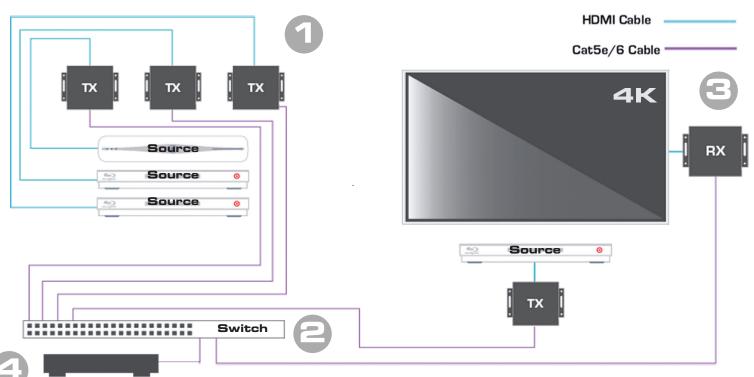


## Expanding **A System**

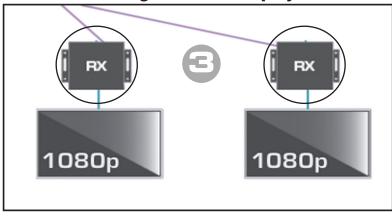
## Need to Expand?

Thanks to our **unmatched scalability,** expanding a current system is easy.

If you are adding a new source to your system, simply connect a Transmitter to the source. If adding another display, attach it to an additional Receiver. Some items require a bridging component for integration into an existing system.



#### **Adding Two New Displays**



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



## **Residential Install**

3 Sources x 5 Displays

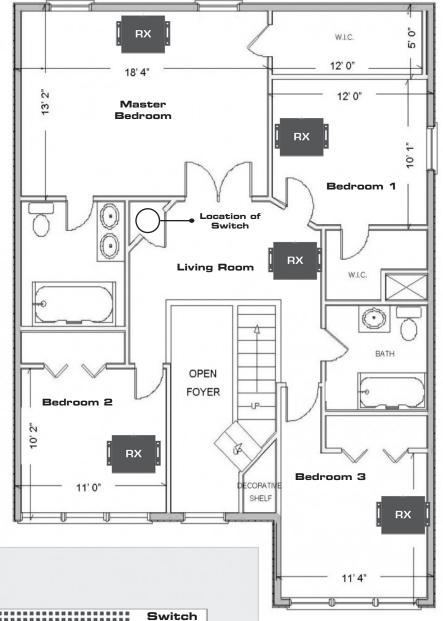
#### 4 Bedroom Residential Install: Second Floor

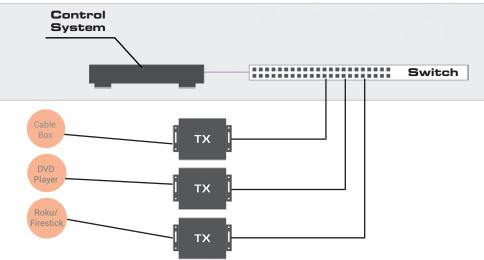
3 Sources x 5 Displays

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.







### **Commercial Install**

20 Sources x 30 Displays

#### Nightclub & Sports Bar Install:

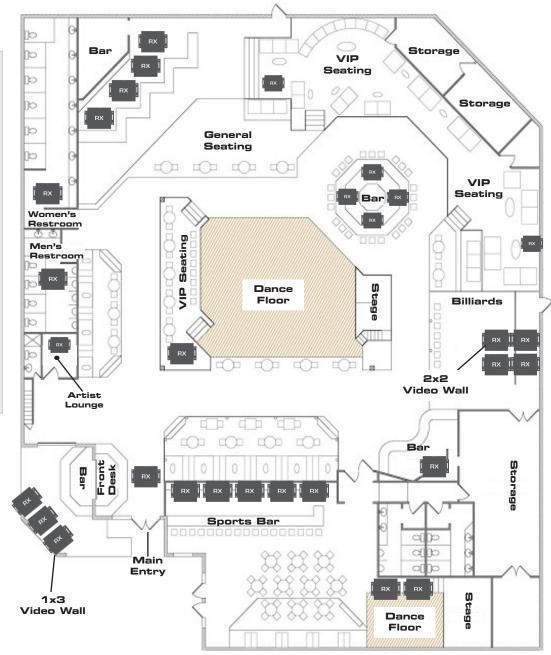
20 Sources x 30 Displays

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 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.



HOLLADAY CINEM

tym

## 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."

President of Central Coast Audio Visual

#### Commercial - Baseball Park

Great American Ball Park -The Cincinnati Reds Stadium Location: Cincinnati, OH Integrator: Nor-Com

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"The sports industry is currently faced with the challenge of how to affordably upgrade their technology to provide a seamless, cost-effective, and futureproof 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

## Installation TRAINING

The Just Add Power In-Person and Remote Installation Trainings are designed to instruct you on the planning, setup, configuration, control, and troubleshooting of common parts of a Just Add Power system.

## **In-Person Training**

Just Add Power HQ Seminole, FL

Qualifies for AVIXA & CEDIA education units

#### 2023 Dates

Class 1: January 17-20 Class 2: April 18-21 Class 3: July 18-21 Class 4: October 17-20

> **Tuesday** Arrival to hotel

#### Wednesday

Training Day 1 9-5PM

#### Thursday

Training Day 2 9-5PM

#### Friday

Training Day 3 9-1PM



#### 

Register for our In-Person Training

http://justaddpower.com/training-registration.html

## **Remote Training**

#### At Your Location

#### Participants within the US

Training videos

Same content covered in the In-Person Installation Training

Remote Training Kit for 6 weeks

One-on-one support with technician

#### Participants outside the US

Training videos

Same content covered in the In-Person Installation Training

Provided list of equipment required for hands on practice

One-on-one support with technician



SCAN ME Register for our Remote Training

http://justaddpower.com/remote-training-registration.html

www.justaddpower.com

Toll Free +1-800-615-0206