VADDIO.

WIREMOLD

# ANAZINGOUR GOVERNMENT & COMMUNITIES

#### TAA COMPLIANCE PG 10 WHY AV DESIGN MATTERS PG 12

Bringing Communties Together with Digital Signage PG 16

Virtual Courtroom Considerations and Solutions PG 26

SECURE CONFERENCING & CLASSIFIED COLLABORATION PG 42

MISSION CRITICAL COMMAND & CONTROL PG 44

FALL 2021 EDITION

La legrand<sup>®</sup> AV

MIDDLE ATLANTIC C2G. CHIEF DA-LITE.

VADDIO

WIREMOLD

## **DEPENDABLE** SOLUTIONS

#### WITH LEGRAND | AV

When the duty is demanding to your community, city, state, or nation, your AV solutions have to perfectly perform.

All areas of government need exceptionally reliable AV solutions that keep services running, communities informed, and justice alive.

We understand the importance of proper design to guarantee dependable AV operation. The foundation for reliable AV performance starts with Legrand | AV.



#### **MOVING OUR** GOVERNMENT AND COMMUNITIES FORWARD

Steve Durkee President of Legrand | AV

AMAZING AV EXPERIENCES | legrandav.com

#### La legrand<sup>®</sup> AV

for citizens. And every day, AV technology supports those efforts in countless ways. Our communications and and are deployed over our networks and infrastructure. Together, these systems, agencies and people constantly maintain operations -

Flexibility is key to any operation today, and the government is no delivered. That's where digital signage truly shines, and we're seeing an increase in use. Portable or permanently mounted displays can information are needed. That's perfect for adjusting to any sudden

Also trending is hybrid communications. More courtrooms are going PTZ cameras are being installed into meeting rooms, collaboration spaces and civic venues that are opening up to remote audiences through live streaming. Not only are people ready to improve

AV technology provides a crucial bridge between citizens and means that AV technology solves the problem. Our technologies are essential to keeping the channels of communication open.

as together we continue to

We're here to support the people "Flexibility is key to any operation today, and government Atur Dulee is no exception."







#### **AMERICAN RESCUE PLAN**

How Does AV Benefit



10



#### **TAA COMPLIANCE**

Secure AV Solutions that Meet **Federal Regulations** 



#### **AV FURNITURE**

Why AV Furniture Design Matters	12
Frame To Furniture Basics	14



#### **DIGITAL SIGNAGE**

Mobile Cart Single Display	16
Floor Stand Dual Display	18
Floor Kiosk Back-To-Back Displays	20
Outdoor Pedestal Single Display	22
dvLED Video Wall	24





#### **COURTROOMS**

Virtual Courtroom Considerations	26
Virtual Courtroom - Mobile Cart	28
Courtroom / Council Chamber	30



#### **MEETING SPACES**

Multi-Camera Conferencing	32
Large Conferencing Room	34
Motion-Based Auto-Tracking Small / Medium Conference Room	36
Mobile Hybrid Conferencing Cart + Camera	38
Professional Home Office	40



#### **MISSION CRITICAL**

Secure Conferencing Room





42

Explore all Federal Government Solutions





#### **COMMAND & CONTROL**

Mission Critical Command Center with Video Wall	44
Rack Storage	46

#### **POWER & REMOTE** MANAGEMENT

Intelligent Power

48





#### THE AMERICAN RESCUE PLANACT

#### HOW CAN AV BENEFIT?

# TIPS & TECHNIQUES

Ô

Many state and local AV projects that were cancelled in 2020 due to Covid-19 may be starting again. Reimbursements might be available through ARPA if budgets were reallocated due to the pandemic. We'll see an uptick in AV installations for city council chambers, conference rooms and other AV applications.

> Brian Retzlaf -Legrand | AV Solutions Engineering Manager

The American Rescue Plan Act (**ARPA**) was signed into law on March 11, 2021. It includes \$350 billion for eligible state, local, territorial and Tribal governments to respond to COVID-19 and bring back jobs. The aid will be distributed in two tranches – 50% started going out in May 2021. The other 50% will start going out in May 2022.

That's an impressive amount of funding heading to your local governments. Integrators who helped schools get up to speed with distance learning with CARES Act funding may be wondering if they can similarly leverage this new source of funding to help state and local governments. The answer? Not as directly. BUT DON'T GIVE UP!

We spoke with our resident Solutions Team expert, Brian Retzlaff, for some creative ways to start opening discussions with state and local government officials who spent the last 18 months dramatically tightening budgets to get through the pandemic. Luckily, that very budget cutting is how Retzlaff gets his foot in the door for new opportunities.



Brian Retzlaff Legrand | AV Solutions Engineering Manager

\$350 BILLION FOR ELIGIBLE STATE, LOCAL, TERRITORIAL AND TRIBAL GOVERNMENTS TO:





#### **REVIVE CANCELLED PROJECTS**

Lots of local governments had to cancel AV projects as it became apparent that we were looking at a drawn-out period of belt-tightening. It makes total sense to cut what you can to keep from having to lay off workers and decrease service quality.

"What's interesting is in my opinion, we're seeing a resurgence of projects that had been delayed," Retzlaff said. "Projects are coming back again that disappeared."

According to the Treasury Department, one objective of the funding is to "Replace lost revenue for eligible state, local, territorial and Tribal governments to strengthen support for vital public services and help retain jobs."

While not directly useable for AV purposes, that replaced revenue will ideally allow previously reallocated budgets to be back on the table. As these budgets open up, Brian says now's the time to go back and see if those cancelled projects can be brought back to life. Perhaps you can even update the design to account for new health protocols. Dig up those abandoned government project bids from late 2019/early 2020 and see what you might be able to revive.

#### UNPRECEDENTED INFRASTRUCTURE INVESTMENTS

The Coronavirus State and Local Fiscal Recovery Funds can be used to make "necessary investments to improve access to clean drinking water, support vital wastewater and stormwater infrastructure, and to expand access to broadband internet."

AV may not have a strong place in the broadband internet, but the water and wastewater investments should get integrators thinking about control rooms. Most municipalities will be looking to upgrade their water control systems, especially as we see droughts continue through large swaths of the country. For residents, consideration of water systems will quickly go from "I just turn on the tap and it's there" to "what is my local government doing to solve the water crisis?" Get ahead of the issue with some **ready-to-go systems** that solve problems before they hit critical.

**Command and control console systems** are not just for big operations like NASA anymore, and they don't have to be complex. A simple **monitoring and command desk** with a few displays on the wall should help any municipality keep their water and sewer infrastructure running smoothly.

Retzlaff recommends **Connexsys** mounts or **Fusion wall mounts** with the **connecting adapter** to position the displays precisely.

#### **DIGITAL SIGNAGE FOR PUBLIC HEALTH**

ARPA funds can be used to "support public health expenditures, by, for example, funding COVID-19 mitigation efforts, medical expenses, behavioral healthcare, and certain public health and safety staff," according to the Treasury Department.

Mitigation and prevention efforts include a wide range of services needed to combat COVID-19. Public communication efforts, capital investment in public facilities to meet pandemic operational needs, and improvements in technology infrastructure are noted as acceptable expenses in the Secretary of the Treasury's interim final rule.

The case could be made for digital signage improvements to help meet pandemic operational needs and public communication efforts.



"Even though the stimulus doesn't directly support it, the need for digital signage in the support of public health is very high. We need to create wayfinding and other ways to direct traffic to get people where they need to be while maintaining safe distances," Retzlaff said.

Legrand | AV recently published a handy guide to digital signage solutions in government, complete with eight diagrams to get you started.

#### **BEYOND THE AMERICAN RESCUE PLAN ACT**

While not related to ARPA directly, it's important to note that with new houses popping up everywhere and with housing prices on the rise, additional revenue in property taxes will start making new government projects more feasible in a couple years.

"Now is a good time to meet with your government contacts to plan for future projects that can take advantage of increased revenues," Retzlaff said. "So, start pitching AV infrastructure projects such as improvements to boardrooms, conference rooms, digital signage, council chambers and a host of smaller projects that weren't previously financially feasible."





#### **DON'T FORGET - WE CAN HELP**

territory sales manager, or fill out this simple form.

#### **HELPFUL LINKS:**

- More on Coronavirus State and Local Fiscal **Recovery Funds**
- Local Allocations in the American Rescue Plan Act
- ARPA frequently asked questions for Local Relief



SCHEDULE A CHAT WITH THE TEAM



SECURE AV SOLUTIONS THAT MEET FEDERAL REGULATIONS

TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581), which is intended to promote fair and open international trade. TAA requires that the U.S. Government may purchase only products made in the United States or a "designated country." Legrand | AV's TAA compliant products are approved to be used in United States government projects and facilities.

#### COUNT ON LEGRAND | AV

Legrand | AV is the most comprehensive AV partner for common applications in the federal government such as mission critical command and control centers, secure conference rooms and digital signage communication. We deliver on what matters most to federal government agencies including:

- Extreme reliability
- Strong warranties

Security

- Range of products
- One-stop shopping
- Equipment monitoring
- Stocking and availability
- and protection

US Facility Locations	Capabilities	Certifications
Eden Prairie, MN	Design	ISO 9001:2015, LEED-CI Silver
Shakopee, MN	Assembly, Shipping	ISO 9001:2015, UL Client Test Data Program
Minnetonka, MN	Design, R&D, Manufacturing, Shipping	-
Fairfield, NJ	Design, Manufacturing, Shipping	ISO 9001:2015, ISO 14001:2015
Warsaw, IN	Design, Manufacturing, Shipping	ISO 9001:2015, ISO 14001:2015
Blue Ash, OH	R&D, Manufacturing, Shipping	ISO 9001:2015, ISO 14001:2015
Dayton, OH	Shipping	_

#### See TAA PDF

The brands of Legrand | AV have proudly been designing, manufacturing and assembling products in the United States for decades.

EACH OF THESE PRODUCT LINES FROM LEGRAND | AV OFFER TAA COMPLIANT SKUS.



- Camera Mounts
- Professional Camera Extension Systems

#### L'ilegrand<sup>®</sup> AV

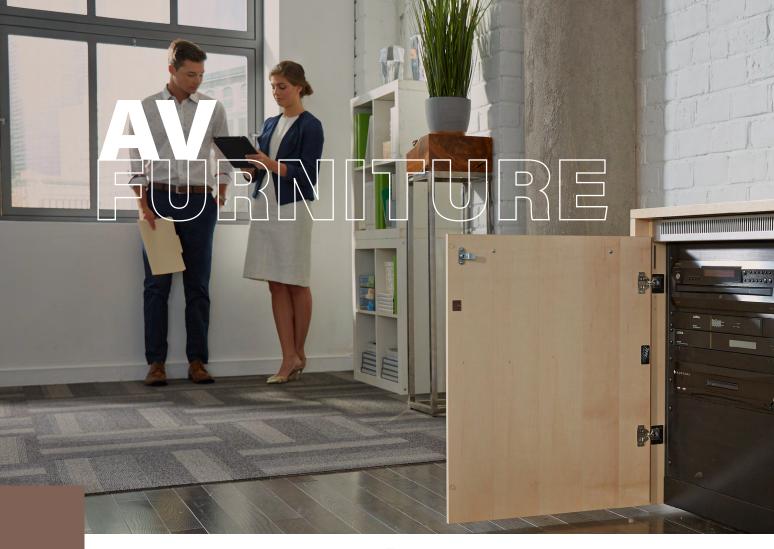
For more information on TAA compliant products from Legrand | AV, please contact:



Brandon Ivey National Solutions Manager, Fed Govt/DoD M: 757.651.1213 O: 973.839.1011 brandon.ivey@legrand.com







TECHNIQUES d TIPS

Í



Custom furniture is a big part of a lot of government projects. Middle Atlantic has extensive experience designing and building pieces to fit specific purposes and protocols. The cool thing about our team is that with all that engineering knowledge,



- Brandon Ive Legrand | AV National Solutions Manager - Fed Govt / DoD

See article online

#### REASONS WHY AV FURNITURE **DESIGN MATTERS**

There's a lot on the line when it comes to secure communication between government agencies. You rely on furniture to safeguard sensitive equipment while providing the necessary features for uninterrupted uptime.

AV solutions must be dependable every day – even more so during critical situations affecting public health and safety.

Most furniture is designed purely for aesthetics, but AV furniture is engineered to support the distinct needs of AV equipment and provide the right ecosystem to keep it safe. Legrand | AV understands the importance of thoughtful furniture design to guarantee unfailing AV performance.

#### **1. ERGONOMICS FOR OPTIMIZED** PERFORMANCE

Ergonomics are critical for maintaining the health, safety and performance of your teamsespecially operators in a mission critical setting. Good ergonomics keep your teams alert and on top of their game.

#### 2. PORTABILITY FOR RAPID DEPLOYMENT

Crises can happen anywhere, and a quick response on the ground needs AV solutions that can be easily deployed. Get your teams to the source with solutions that minimize setup and can easily be reconfigured to evolving needs of the team and situation.

#### **3. SECURITY FOR SENSITIVE INTEL**

Intel and information must be quickly and easily accessible to those with clearance and completely secure from those without it. Beyond safeguarding equipment with mechanical or electronic locks, we provide discrete storage locations and equipment segregation. This lets you physically separate equipment based on classification and eliminates the possibility of spillage from one system to another.

#### 4. HEAT AND HUMIDITY CONTROL

AV equipment is critical but incredibly sensitive. It has specific power and temperature requirements. Signals must maintain integrity between points.

Furniture designed for AV applications includes passive or active ventilation that keeps equipment safe from overheating. In fact, for every 10°F (6°C) degrees the temperature rises over 85°F (29°C) in a rack, the equipment life is reduced by 40%. With environmental monitoring in your remote power management system, alerts can be triggered when the temperature gets too high or can automatically trigger a fan to operate.

Humidity is also challenging to AV equipment. When humidity is generally 65% or higher, dust mixes with the moisture and lands on sensitive circuit boards. AV furniture can be loaded with filter kits and sensors to detect humidity levels.

#### 5. MONITORING POWER TO KEEP **EVERYTHING UP AND RUNNING**

Surges, over voltage, under voltage, spikes and a host of other power problems can wreak devastation on AV equipment. One of the surprising primary causes of power supply failure is under voltage, and few power products properly protect against this anomaly. AV furniture can be equipped with surge protection, UPS systems and other power solutions for safeguarding and keeping vital equipment running through power events.

#### 6. STORAGE, ORGANIZATION AND NEAT CABLE MANAGEMENT

One of the biggest advantages of furniture designed for AV is the solid rackmount capability that accepts components of varying depth, and neatly stacks and spaces them for ease of use and servicing. AV racks can use traditional accessories like shelves for smaller equipment storage and brush grommet panels for cable pass through while deterring dust. Cable management allows integrators to run cabling from one bay to the next, properly tie off and route cables internally, and get power to the rack and the unit surface—all these enhance the performance of the system.

#### Download the Government AV Furniture Brochure

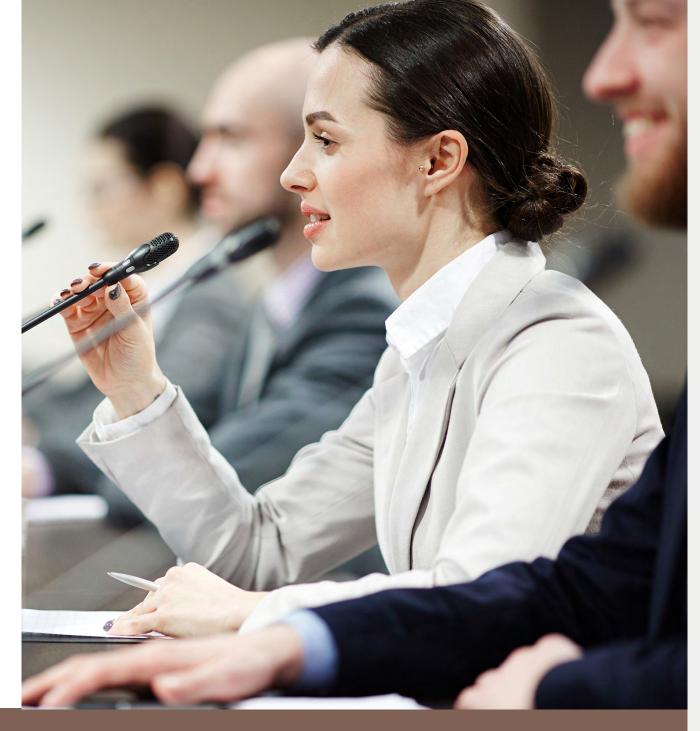
to discover room-specific solutions from Legrand | AV you should consider in your next install.

#### FRAME TO FURNITURE... WHAT IS IT?

AV equipment used to live in a big rack room, away from the area where business was conducted. It didn't matter what the equipment was stored in or how it looked because you could just shut the door. Today, there are different options. We are looking to put AV equipment at the point of use.

Fully self-sufficient AV technology is being implemented into furniture to give the customer access exactly where they need it. All in all, furniture is infrastructure that is visible and needs to look "pretty" in a room.

When a customer is looking to deploy a new training center space where various AV technologies need to be housed, that's where technical furniture comes in! A lot of times, the equipment can live in a credenza, a lectern, or table. This furniture will house all the equipment necessary to record a training session or collaborate through technology.



#### THE MIDDLE ATLANTIC FRAME TO FURNITURE PROCESS



The customer orders the size needed for their gear.



STEP 2

The frame is sent to the integrator for integration of AV gear, cable management, etc.



STEP 3

The wood kit is sent to the final site location to avoid any damage during equipment installation.



STEP 4

The customer can easily service the equipment, replace panels, and change the design later.











#### FURNITURE SOLUTIONS AT A GLANCE



The credenza series from Middle Atlantic is the perfect all-in-one AV storage solution. Middle Atlantic credenzas are available in a range of sizes and styles, built around the rack you trust.

#### LECTERNS

Middle Atlantic's lectern offering delivers a symmetry of technology support and design that meets the needs of any space. A full suite of lecterns is now available to fit any budget, system size, height requirement and aesthetic.

Choose from preconfigured models for a simplified ordering experience or configure a custom lectern for specific applications.



#### TABLES

Middle Atlantic T5 Series Conference Tables are the industry's only conference table designed to properly support AV technology for ultimate system reliability, 24/7/365.



#### CONSOLES

Middle Atlantic's monitoring and control console systems are unique because we've built in our racks and mounting expertise to support installation reliability.

Each system is designed and crafted to maintain Middle Atlantic's high quality standards and end user ergonomics.



#### MOBILE AV CARTS

Sometimes you just need more displays to fully cover the situation. Carts allow you to move displays between rooms when livestreaming or videoconferencing is needed in other spaces.

# Δ

#### MOBILE CART SINGLE DISPLAY

Ď

S





- Michelle Montazeri, Digital Signage Serving as digital guideposts, mobile AV carts can support rapid changes in wayfinding and information on the fly. These easyto-move digital signage setups roll right into place and deliver location-specific messaging in real-time.

Investment in a fleet of roving display stands will continue to pay dividends with every change in facility layout or traffic flow. Any time a multi-purpose area adds another function, these signs can help explain what's happening.

Make it easier to control and manage messaging anywhere these portable signs are planted. Add intelligent power accessories to enable remote management.

Available in a range of sizes and configurations to support larger displays and additional equipment, mobile AV carts are ready for service anywhere they're needed.











Thunderbolt



#### WHY WE LOVE IT

USB-C to

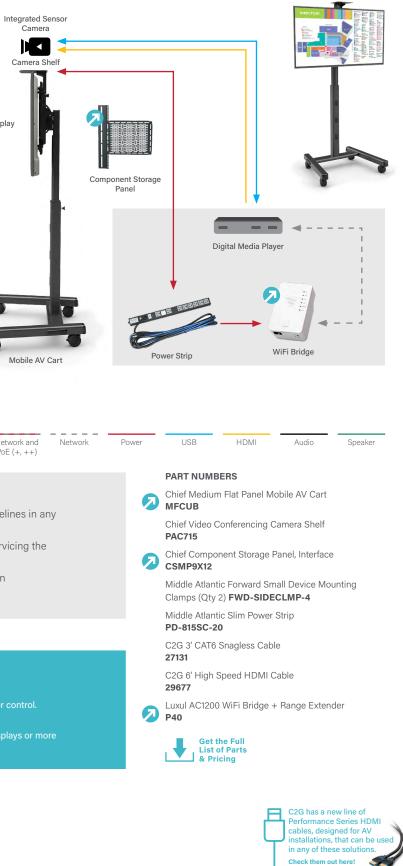
HDMI

- Convenient way to meet health protocol guidelines in any location
- Accessories allow for ease in locating and servicing the equipment
- Place messages where they're sure to be seen

#### **KICK IT UP A NOTCH**

ADD INTELLIGENT POWER

**BIGGER IS BETTER** 



#### DOUBLEDUTY ERR Δ 5

#### FLOOR-STAND DUAL DISPLAY

#### TECHNIQUE 2 TIPS Ó

S



*II* Whether you need to share

with guests or employees,

important information

floor-stands are a

solution to add

cost-effective, simple

communication options where you need them.

> - Michelle Montazeri, Legrand | AV Nationa Solutions Manager

Things change every day - with back-to-back updates happening non-stop. That's where the dual-display stand shines. It's ready to provide information on both sides of an entry and exit, display specific instructions for different purposes on two sides of a room, or simply deliver information across a wide area.

This sleek stand is robust enough to remain a permanent fixture, but it's also easy to move. A built-in component storage panel between the displays offers a secure mounting solution for digital media players, Wi-Fi and power equipment.

Add a camera shelf to support additional hardware for conferencing, livestreaming or sensors. Then connect easily across distance, with networked devices that allow for computers and other devices to be installed hundreds of feet from displays. Take advantage of intelligent power components to conveniently manage and control the system remotely.









Thunderbolt

P 🖸 🛨			7
ODUCTS Integrated Sensor			
Camera			
Camera Shelf			
	]	r – Digital Media Player	
Dual Display Floor AV Stand	age	WiFi Bridge	Power Strip
USB-C to Cat6 HDBT Cat6 Network and Network P	Power	USB HDMI Auc	lio Speaker
HDMI PoE (+, ++)			
	P	PART NUMBERS	
FOVE IT		Chief Medium Flat Panel Dual Disp MF2UB	lay Floor AV Stand
next in line for traffic court		Chief Video Conferencing Camera S PAC715	Shelf
to-back design allows for different information on each side stand		Chief Component Storage Panel, In CSMP9X12	terface
rely manage equipment on a storage panel between the ays		Middle Atlantic Forward Small Devi Qty 2) <b>FWD-SIDECLMP-4</b>	ce Mounting Clamps
this portable solution just about anywhere	N	Middle Atlantic Slim Power Strip	
		C2G 3' CAT6 Snagless Cable 27131	
UP A NOTCH		C2G 6' High Speed HDMI Cable (Q	ty 2)
ELLIGENT POWER		29677	
vides remote management for ultimate power control. CONTENT QUICKLY		Luxul AC1200 WiFi Bridge + Range <b>240</b>	Extender
incoders/Decoders allow for content updates on-the-fly.			
lated HDBaseT systems allow computers and other devices to be of feet from the displays.	L	Get the Full List of Parts & Pricing	

#### WHY WE

- Ideal for who's i
- Back-t of the s
- Secure display
- Bring t

#### KICK IT U

ADD INTE CHANGE ADD REM

Digital Signage



#### Deliver dynamic content and be assured of safe interactivity with lockable kiosks that store and protect equipment. Designed to look

#### FLOOR KIOSK BACK-TO-BACK DISPLAYS

When paired with a TAA-compliant display, we can support a fully compliant digital signage solution with equipment tested and designed to work together. 11

S

TECHNIQUE

3

TIPS

Ó

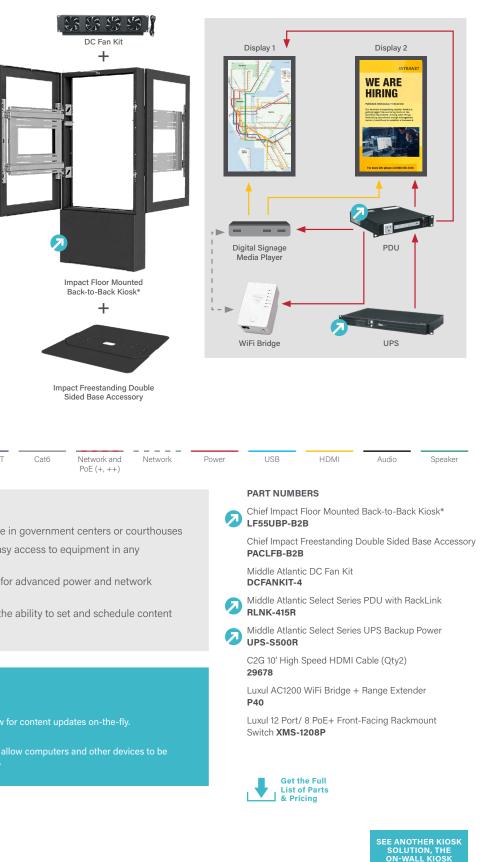


Michelle Montazeri Legrand | AV National Digital Signage great on a wall or in free-standing configurations, Impact Series Kiosks support single or dual displays. Plus they have plenty of room inside for all the essentials, like media players, power and network gear. These kiosks are ideal for interaction in high-traffic areas. They're

tamper-proof, yet designed for convenient service access. There are no exposed hinges or fasteners on the outside, but the inside is built for easy maintenance — the display stays mounted to the frame when the kiosk is opened. When it's locked back up again, the heavy-duty construction protects hardware, with integrated passive cooling or an optional fan kit.











Thunderbolt USB-C to Cat6 HDBT HDMI

#### WHY WE LOVE IT

- Ideal for wayfinding signage in government centers or courthouses
- Modern design provides easy access to equipment in any environment
- Rack space of 2 RU allows for advanced power and network functions
- Intelligent power provides the ability to set and schedule content

#### **KICK IT UP A NOTCH**

CHANGE CONTENT QUICKLY

#### ADD REMOTE DEVICES

WHY: Updated HDBaseT systems allow computers and other devices to be hundreds of feet from the displays.

#### D

#### TOP PRODUCTS











Ceiling and Pedestal Plate High Power Wireless Outdoor Access Point



Cat6 HDBT Cat6 Network and PoE (+, ++)

#### WHY WE LOVE IT

HDMI

- Robust design protects equipment from the elements
- Nearby charging station encourages longer dwell times the display
- Outdoor-rated paint means premium appearance is reta for years

#### **KICK IT UP A NOTCH**

PERFECT VIEWING ANGLE CHANGE CONTENT QUICKLY WHY: IP Encoders/Decoders allow for content updates on-the-fl

#### OUTDOOR PEDESTAL SINGLE DISPLAY

impact to internal

signage can ensure

guests are aware of

and help set

spaces? Outdoor digital

protocols in your space,

updates to processes,

expectations. In doing

S TECHNIQUE *II* Why limit your digital 3 TIPS Ó



- Michelle Montazeri, Legrand | AV Nationa Solutions Manager Digital Signage Outdoor messaging is a great way to welcome and inform both, the public and employees, and even communicate messages in emergency situations. Set expectations with highly visible information outside entrances or across large areas. Once they're indoors, more information can be provided at check-in points with tablet stands and other strategically-placed displays.

This outdoor single-display pedestal is designed to withstand the elements. The pedestal equipment is protected from harsh conditions, and the mount itself is also shielded from damage by outdoor-rated paint that will retain a polished appearance for years to come.

Connect the outdoor pedestal display with a high-power wireless access point and HDBaseT-networked receivers and transmitters to deliver content from a digital signage player. Add an accessory charging station to keep visitors charged up while they stay informed. This total solution provides visitors with the information and security they need for a superior experience.

TABLET STAND SOLUTION

#### L'Ilegrand<sup>®</sup> AV

Outdoor Flat Panel Ceiling and Pedestal Mount

and Pedestal Mount	
ELCOME /isitors Please Sign-In at the t Desk Located in the Lobby	HDBaseT HDMI Receiver
Outdoor Ceiling a Pedestal Colum	n HDBaseT HDMI Transmitter
Outdoor Plate Cover	Digital Signage Media Player
Network Power	USB HDMI Audio Speaker PART NUMBERS
Ø	Chief Outdoor Flat Panel Single Ceiling/Pedestal Mount <b>OLCM1U</b>
at	Chief 5-6' Outdoor Ceiling and Pedestal Column ODAC0506B
ained	Chief Outdoor Concrete Ceiling and Pedestal Plate ODA330B
	Chief Outdoor Plate Cover ODAPCVRB
2	Middle Atlantic Charging Station with Accent Light, 2-Gang <b>XCSAL2GRU-BZ</b>
	C2G HDMI HDBaseT + USB over Cat Extender 29510
	C2G 3' High Speed HDMI Cable (Qty 2) 50181
	C2G 100' Cat6 Snagless Cable 10322
	Luxul High Power AC1200 Dual-Band Outdoor Bridging Access Point <b>XWO-BAP1</b>
	Get the Full List of Parts & Pricing
	FOR SAFE SPACE ENTRY, SEE OUR TABLE STAND

#### dvLED VIDEO WALL

S

Ш

TECHNIQU

2

5

Ă

Ď

*II* The implementation of dvLED can initially feel overwhelming. With our TAA-certified **TiLED product, our** solutions engineers offer help with design, installation, alignment and project management to realize a complete design that exceeds your expectations. 11



- Michelle Montazer Digital Signage

Video walls are the backbone of a mission critical environment. LED video walls provide pristine viewing quality for data and graphics - critical in helping visualize information needed to make serious decisions.

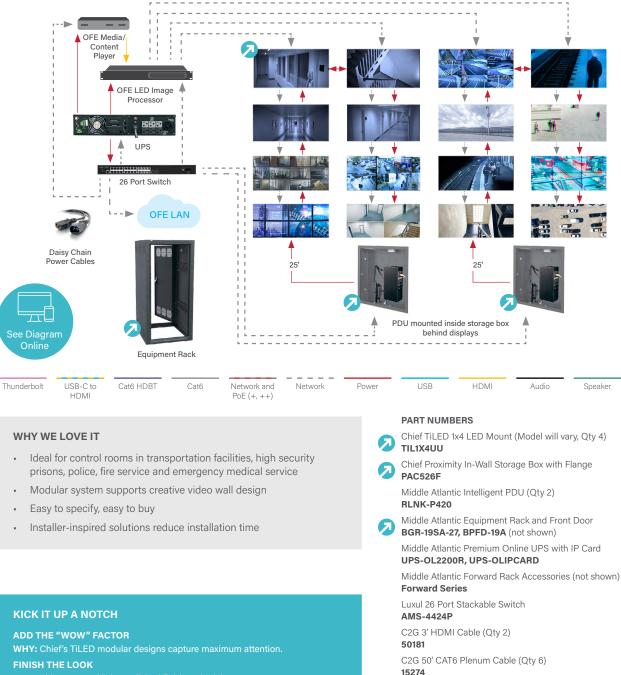
In 24/7 mission critical control rooms, visual acuity and carefully calibrated line-of-sight are essential for optimal data sharing. A properly designed and scaled video wall can help prevent eyestrain and address other ergonomic concerns.

The TiLED<sup>™</sup> Series is a modular system designed to support creative video wall configurations. Chief's mounting solutions connect together to scale endless video wall arrangements. Standard, off-the-shelf solution set means the product is stockable and ready to ship - no custom lead times.

With Chief's TAA-certified TiLED modular systems, video wall designs of all types are fully supported by a team of specialists who can help to configure and install a complete solution. Contact the TiLED Solutions Services team for insight and expertise on how to realize a full-scale dvLED application.

Completely customizable and heavily reliant on precision hardware, video walls also require advanced equipment for power, cooling and storage. Count on Legrand | AV for expert advice and recommendations for your next video wall project.





**FINISH THE LOOK** 

Need Help with Video Wall Installs? Contact our TiLED **Solutions Services Here** 

#### Lilegrand<sup>®</sup> AV

C2G 3' CAT6 Non-Plenum Cable (Qty 17)

27131

C2G 25' IEC Power Cable (Qty 2) 14719

C2G 3' IEC Daisy Chain C14 to C13 Power Cord (Qty 14) 10359

Get the Full List of Parts 



#### VIRTUAL COURTROOM CONSIDERATIONS AND SOLUTIONS



Courts have been forced to severely prioritize their time since the pandemic onset, causing an impact on the community at all levels. Lawmakers are seeking ways to get back to business as usual through the integration of AV technology to connect legal professionals and conduct virtual hearings.

Explore these basic considerations for establishing a virtual courtroom AV setup:

#### CONSIDER WHO WILL BE USING THE EQUIPMENT

The ultimate goal of going virtual is to mimic the experience of a physical courtroom as closely as possible. To do so, it's logical to start with who is participating. Consider participation at a few different levels: Who is on camera? Who is speaking? Who is setting up the equipment?

"There is a dramatically different set of needs with a virtual courtroom where the only participants are employees of the court system versus when there will be potential litigants or other support staff involved in the virtual courtroom," said Legrand | AV Solutions Engineering Manager Brian Retzlaff.

Also consider how many people need to be in the room at one time. How many people will be using the equipment? Will it be by employees only, or will legal professionals also be using the courtroom equipment?

Mapping out the basics of how many people and the functionality requirements for each person is critical to selecting microphones, video cameras, displays, speakers and furniture.

#### AN IMMEDIATE FIX VS. A PERMANENT SOLUTION

Some of the first virtual court solutions relied on a laptop and web conferencing. Since then, many have discovered the technical limitations of such a setup, all while coming to the harsh realization that how we gathered before will be forever changed. It's time to consider hybrid solutions, with courtrooms that are prepped with the technology to provide an amazing inperson or virtual experience.

The effects of the pandemic continue to change courtrooms, and Legrand | AV is here to help you through the process. If you have additional questions, Retzlaff advises communicating with another court facility with an existing AV setup, a consultant or a local integrator who can sort through the details. Of course, our experts at Legrand | AV are always ready and willing to help you get started. "Seeking advice from experts and then trusting that advice is a great place to start," Retzlaff said.

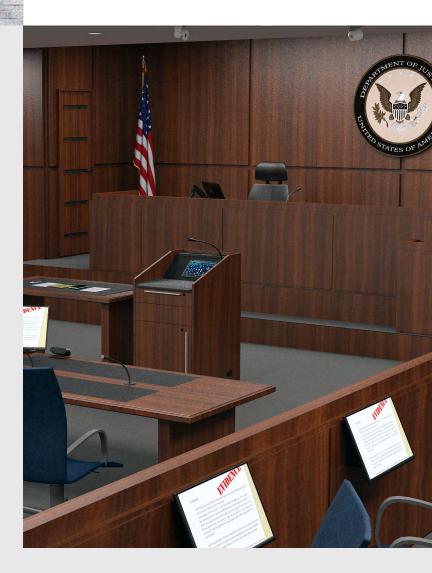
Why are Virtual Courtrooms so Important? Learn More.

#### La legrand<sup>®</sup> AV

#### CONSIDER THE PHYSICAL SPACE

The physical space can have a direct impact on the acoustics, and clarity of sound is absolutely essential for courtrooms. Large, open courtrooms repurposed for a virtual solution will require the audio system (sometimes preexisting) to support echo cancellation.

As far as providing quality video, professional PTZ (Pan-Tilt-Zoom) cameras provide an optimal experience for all parties.



#### MOBILE CART SOLUTION

*II* This mobile cart adds

full videoconferencing

capability to courtrooms,

and can also be used in

judge's chambers or for

consults with attorneys

TECHNIQUE ઍ TIPS

Í

S



- Brian Retzlaff Legrand | AV Solutions Engineering Manager

Courts are expanding into more virtual video solutions. It just makes sense to use videoconferencing platforms for two-way livestreaming of proceedings and remote arraignments. New investments can go even further with the use of a mobile cart. Ready to roll in and link up with minimal fuss, the cart can be used over a closed network for remote arraignments, reducing the cost of transporting prisoners.

With a mobile livestreaming cart, all parties involved can clearly hear and see the proceedings, whether they're in the room or in a remote location. Selecting a PTZ camera is the first step toward clearer communication. Then, make sure everyone is heard with standalone microphones. This cost-effective portable solution can also easily be connected with an existing in-room audio system to transmit sound into the virtual courtroom.

TOP PRODUCTS 





Thunderbolt USB-C to Cat6 HDBT Cat6 HDMI

#### WHY WE LOVE IT

- Connect courtrooms and legal professionals through two-way video and audio for livestreaming
- Use existing audio systems and/or new microphones
- Easy to deploy and duplicate through multiple facilities and share with the staff

#### **KICK IT UP A NOTCH**

ALL-IN-ONE CONFERENCING WHY: Upgrade to an all-in-one conferencing cart system with camera and audio built in.

#### AUDIO WITH EASE

WHY: Use the existing audio system with your portable conferencing cart.

28 AMAZING AV EXPERIENCES | GOVERNMENT | FALL 2021



999-99950-500B
Chief Mobile Cart LPAUB
Chief Above/Below Accessory Shelf FCA800
Chief Accessory Shelf FCA613B
Middle Atlantic Power Strip PD-815SC-20
C2G Docking Station 28844
C2G 10' High Speed HDMI Cable (qty 2) 56784
C2G 10' Cat6 Cable (qty 2) 27153

#### OPTIONAL

7

\*Vaddio EasyUSB PRO MIC I/O 999-8520-000



#### ROOM/ $\square$ D $\square$

#### COURTROOM / COUNCIL CHAMBER SOLUTION

#### TECHNIQUE 8 TIPS Ď

S



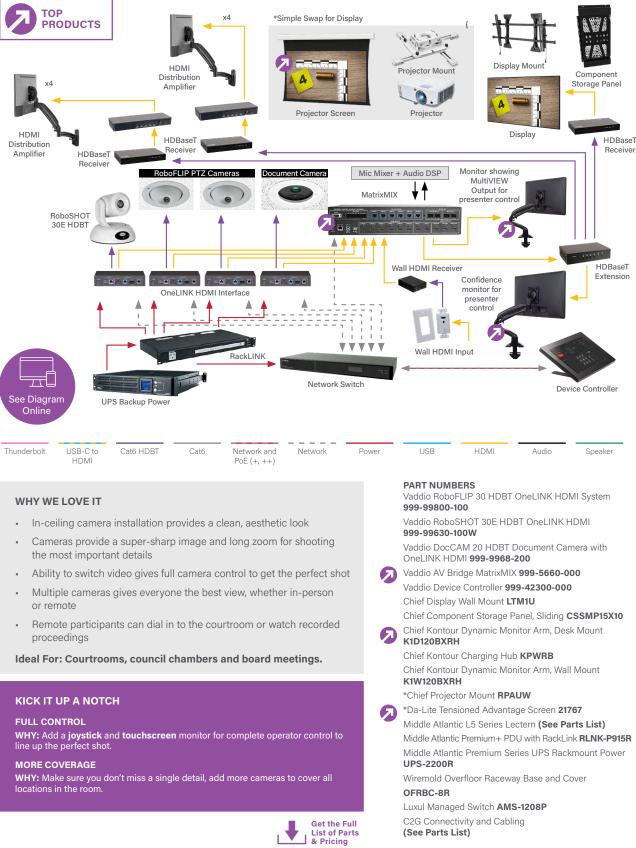


Legrand | AV Solutions Engineering Manager

Courtroom technology provides a laser focus on the details, thanks to advanced imaging and audio options that capture all the crucial elements of a case. The increase in virtual court proceedings has pushed AV capabilities further, both remotely and in the room. Multi-camera setups make sure a clearer image goes on the record. An unobtrusive camera mounted on the back wall of a courtroom will capture the main room image. In-ceiling cameras can zoom in on the evidence and display the details to the jury.

Programmable camera presets can be configured to capture images of attorneys, witnesses or pieces of evidence. A long zoom will focus on the most important details. Some tech-savvy judges are also asking for their own joystick controller to select cameras or send video to different displays.

Key to these media-centric courtroom designs is adaptability, with efficient video switching and the ability to absolutely shut down all cameras when no recording is allowed. The RoboFLIP in-ceiling PTZ camera fully rotates into its ceiling enclosure when it's in standby mode, providing full assurance it's off and video feeds are not active.





#### AV OVER **IP SYSTEMS**

Recording or live

conferencing studios

cost-effectively with

can be built flexibly and

Ŭ TECHNIOU d TIPS

Ď

S





Legrand | AV Regional Solutions and

Create a superior collaboration experience by adding more cameras to your conferencing setup. With up to four different PTZ cameras, presenters can be more natural and can easily switch between close-ups of other participants, white boards or demo equipment. All content and even device power can be managed over the network with tools from the EasyIP ecosystem.

Set camera presets to switch easily between areas of focus. Ceiling microphones ensure that everyone in the room can be heard. Presenter tools like a step mat and sensor kit can automatically change camera angles without interrupting the flow of a meeting.

Smart infrastructure choices like intelligent power for remote system management, and in-wall storage boxes for hiding away hardware will further simplify and enhance the conferencing experience.





#### WHY WE LOVE IT

- All video, power and control runs through a single switch
- IP-enabled system (PoE powered) allows up to four cam
- Flexible to be used for multiple spaces including divisible meeting rooms
- Hybrid configuration with flexible furniture, flexible came flexible audio
- For two-way video collaboration, training solutions, reco demonstrations or any other flexible camera and audio s

#### **KICK IT UP A NOTCH**

ADD INTELLIGENT POWER

WHY: Provides remote management for ultimate power control CONSIDER IN-WALL STORAGE

'NO-TOUCH' CAMERA ANGLE CHANGES

WHY: Presenters focus on the meeting not the tech with solutions like a step mat and sensor kit that automatically change the camera angle.

#### PART NUMBERS

Vaddio EasyIP 10 Camera (up to qty 4) 999-30200-000W (White)

neras	
e	
era angles	
ording product solution	2

Vaddio EasyIP Mixer 999-60320-000 Vaddio EasyIP CeilingMIC D (up to qty 4) 999-85810-000 Vaddio Device Controller 999-42300-000 \*Chief Ceiling Projector Mount (qty 2) SYS474UW \*Da-Lite Tensioned Contour Screen (qty 2) 29929LS Middle Atlantic Lectern L7 Series (See Parts List) Middle Atlantic C5 Credenza (See Parts List) Middle Atlantic Premium Series UPS Backup Power UPS-1000R-8 Middle Atlantic UPS Network Interface Card UPS-IPCARD Middle Atlantic Slim Power Strip PD-815SC-20 Luxul Network Switch AMS-2624P C2G 50' Cat6 Plenum (qty 8) 15274 C2G 15' Cat6 (qty 2) 22016 C2G 23' HDMI Plenum Cable (qty 2) 41378 C2G 15' HDMI Cable 50612 C2G 10' USB 3.0 Cable 54175 C2G Universal 4K HDMI Adapter Ring with Color Coded Adapters 29878



#### Re NEERENCINCES $\Delta$

#### FLEXIBLE HYBRID CONFERENCING

Government agencies

Ď

S





Legrand | AV National Fed Govt / DoD In spaces where large groups gather for training, lectures or all-hands meetings, a multi-functional AV system is a must. An automated setup allows everyone in the room to focus on the discussion, not the technology.

Multiple cameras provide coverage throughout the space. Camera presets make it easy to switch between the most frequently used shots. Presenter tracking allows speakers to move freely through the space, and extra accessories like a step mat and sensor kit enable automatic camera-angle changes. For lecture capture, livestreaming or large-scale presentations, graphics mixing adds polish to visual content.



- Multi-functional solutions combines switching, advanced camera control and graphics mixing
- Multiple cameras provide ability to set presets in several locations
- Creates automation for audience engagement with video overlays and triggers

#### **KICK IT UP A NOTCH**

#### 'NO-TOUCH' CAMERA ANGLE CHANGES

WHY: Presenters focus on the meeting not the tech with solutions like a step mat and sensor kit that automatically change the camera angle. PRESENTER TRACKING

you automaticall





Take a quicl

#### Lilegrand<sup>®</sup> AV





Vaddio TeleTouch 27" USB Touch-Screen 999-80000-027 Chief Projector Mount (qty 2) VCTUW Chief Vibration Isolating Coupler (qty 2) (Not Shown) CMA348W Da-Lite Tensioned Advantage Screen (qty 2) 14112L Middle Atlantic L5 Series Lectern (See Parts List) Middle Atlantic C5 Credenza Dual Display Mount (See Parts List) Middle Atlantic Premium+ PDU with RackLink RLNK-P915R Middle Atlantic Premium Series UPS Backup Power UPS-1000R-IP Luxul Network Switch AMS-2624P C2G HDMI Splitter (qty2) 41057 C2G 100' Cat 6 Plenum Cable (qty 3) 15276 C2G 50' Cat6 Plenum Cable (qty 3) 15274 C2G 15' Cat6 Cable (qty 8) 22016 C2G 35' HDMI Cable (qty 4) 41414 C2G 10' HDMI Cable (qty 10) 56784 C2G 10' USB 3.0 Cable 54175 C2G Retractable Table Box Mount 4K HDMI Adapter Ring 29880

#### FOR SMALL/MEDIUM **CONFERENCE ROOMS**

Ŭ TECHNIQU 8

TIPS

Ď

S





- Brian Retzlafi Legrand | AV Solutions Engineering Manage

This highly automated setup makes it easier for teams to connect. It offers a significant upgrade for videoconferencing - without a big investment. Add this compact option to small meeting rooms, larger offices, or anywhere that might host hybrid collaboration between a few people in the room and others working remotely.

Designed around the Vaddio IntelliSHOT Motion-Tracking Camera, this solution is economical and aesthetically pleasing. With most of the hardware tucked away inside an in-wall storage box, a built-in microphone, and speakers installed in the ceiling, this system is as seamless as users have come to expect in the everyday web conferencing world.

The IntelliSHOT camera automatically reframes the image as people enter and exit the room, allowing for a perfectly zoomed in experience of all meeting attendees. The conversation between individuals feels more natural, as the camera automatically shifts the viewpoint to follow participant movement. Use wired network devices to make sure the connection is clear and secure, and add an AV Bridge to link a second camera and Dante® microphones for larger rooms.









mana





Thunderbolt USB-C to Cat6 HDBT номі

#### WHY WE LOVE IT

- Clean install with all the parts and pieces stored behind the articulating display for serviceability
- Professional camera automatically re-frames the shot as people enter and exit the conference room
- Recreates the one-to-one video experience for hybrid workplaces
- In ceiling speakers and built-in microphones ensure clear audio
- Wired network devices provide robust connectivity to ensure your video calls are reliable

#### **KICK IT UP A NOTCH**

ENHANCE THE ROOM SYSTEM WHY: Add an AV Bridge 2x1 to allow for a second camera and Dante microphone for larger spaces.

UPGRADE DISPLAYS TO SCREENS

WHY: For better viewing quality, add a projection screen and projector mount



Get the Full List of Parts & Pricing

# ALL-IN-ONIE MOBILE CONFERENCING

#### MOBILE HYBRID CONFERENCING CART + CAMERA

Ŭ TECHNIOU 8 TIPS

Ď

S





Brian Retzlafi Engineering Manager

With the number of daily livestreaming and videoconferencing sessions continuing to rise, a mobile conferencing cart enables more teams to connect. Because this all-in-one solution includes a built-in camera and speakers, all you have to do is add a display and a laptop, and you're ready to collaborate anywhere.

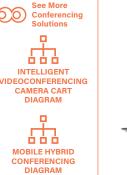
From a human factors perspective, the cart's dynamic height adjust allows people of all abilities to access the screen. In terms of hardware, it's a platform that can easily be customized. For example, add an optional front-mounted controller shelf to your cart. For larger rooms, add a table mic to make sure everyone can be heard.

Then for even more flexibility, consider an upgrade with cable retractors. Why? A power cord retractor will give your cart more freedom to move – up to 15 feet from the outlet. A network cable retractor gives you an extension option that still keeps you directly connected to an ethernet jack. Now it's easier to get that higher-quality bandwidth no matter where your cart is parked.















#### CONFERENCING SPACE

Ď

5

<sup>1</sup> Many state and local government agencies are moving toward the hybrid workplace model. For many departments, a professional home office setup will deliver the experience expected from these entities.<sup>11</sup>



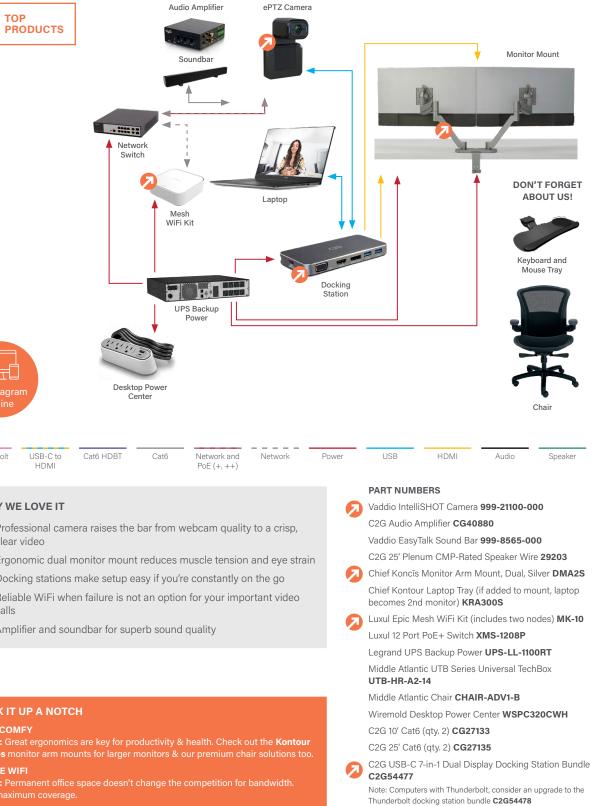
- Brian Retzlaff Legrand | AV Solutions Engineering Manager

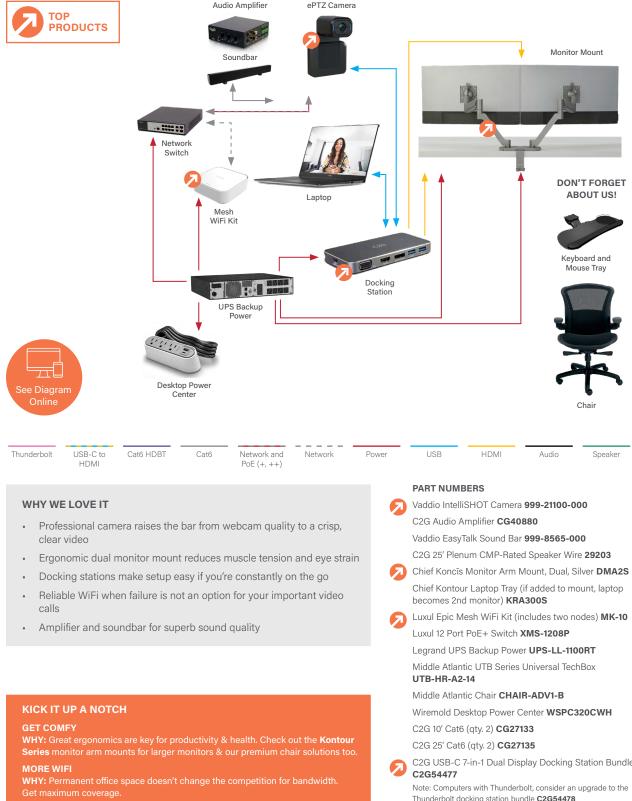
By now every home office user is well aware of the limitations in basic camera and audio equipment. Blurry video and poor audio are simply not acceptable any longer. Trainers must be able to keep students engaged by offering more than just a single headshot. A professional camera such as the Vaddio ConferenceSHOT AV with built-in speaker will raise the bar. Pan-tilt-zoom video allows for natural movement and easy capture of images on a white board or other in-room demonstration surface. Camera presets and a remote control make it easy to get the perfect shot every time.

Home office users can boost their comfort with ergonomic solutions such as a dual-monitor mount, which can reduce eye strain and muscle tension. Add-ons like docking stations and WiFi boosting equipment can help make connections more seamless. An audio amplifier and soundbar improve sound quality and reduce the stress of listening to remote conversations.













#### CLASSIFIED D D

#### SECURE CONFERENCING **ROOM SOLUTION**

### TECHNIQUE 3 TIPS

Í

S



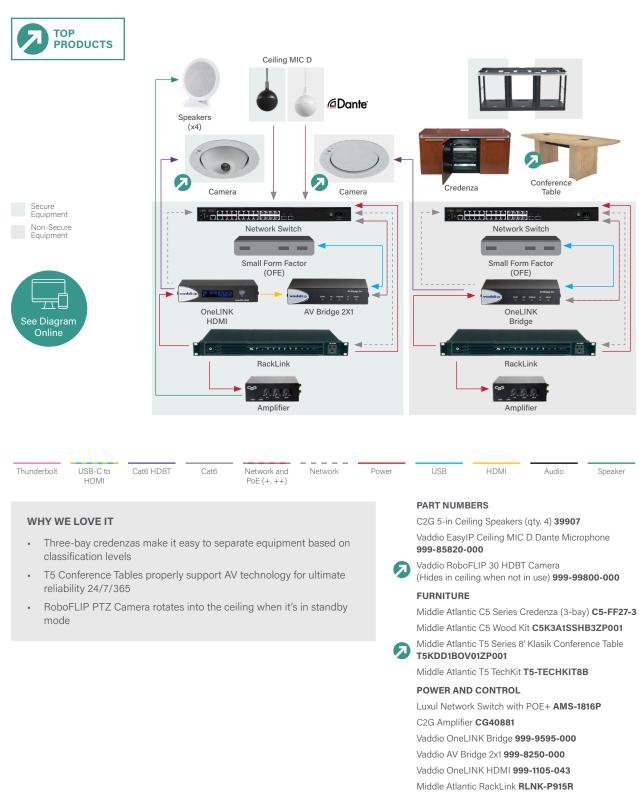


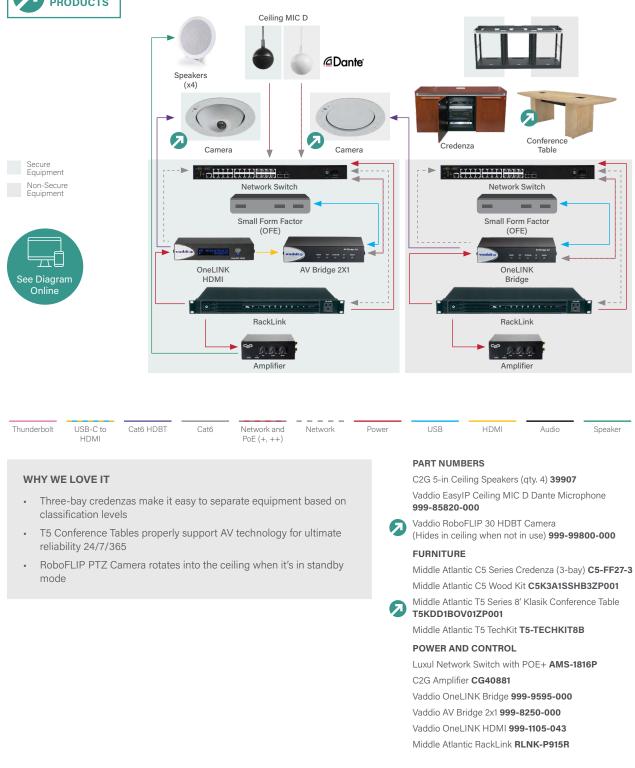
- Bob Hivner Legrand | AV Regional Solutions and Consultants Manager

An adjoining conference room with videoconferencing capabilities is vital to the success of any command and control center. When a simple conference space is transformed into a situation room, security becomes a much higher priority. From cabling and networks to furniture and secure equipment storage, proper AV design is vital – after all, lives may be on the line.

Credenzas with three or four bays make it easy to physically separate equipment based on classification levels. AV equipment can be configured to create a hard switch so classified content is protected.

High-quality conferencing is dependent on outstanding cameras, first-rate microphones and speakers, and connectivity to support them. For situations where it's critical to clearly know if the PTZ camera is on or off, the RoboFLIP PTZ Camera offers an innovative solution. How? RoboFLIP fully rotates into the ceiling when it's off and in standby mode, giving room occupants full assurance that video feeds are not active.







# COMMAND

#### MISSION CRITICAL COMMAND CENTER WITH VIDEO WALL

Ш́ CHNIQU Ш 8 ເກ Ĕ Ô

S

**I** Eyestrain and unnecessary fatigue a video wall design is properly calibrated for ine of sight. Our TiLED video wall configurator software factors in the ergonomics for all the operators in a space, whether they're seated , providing everyoi



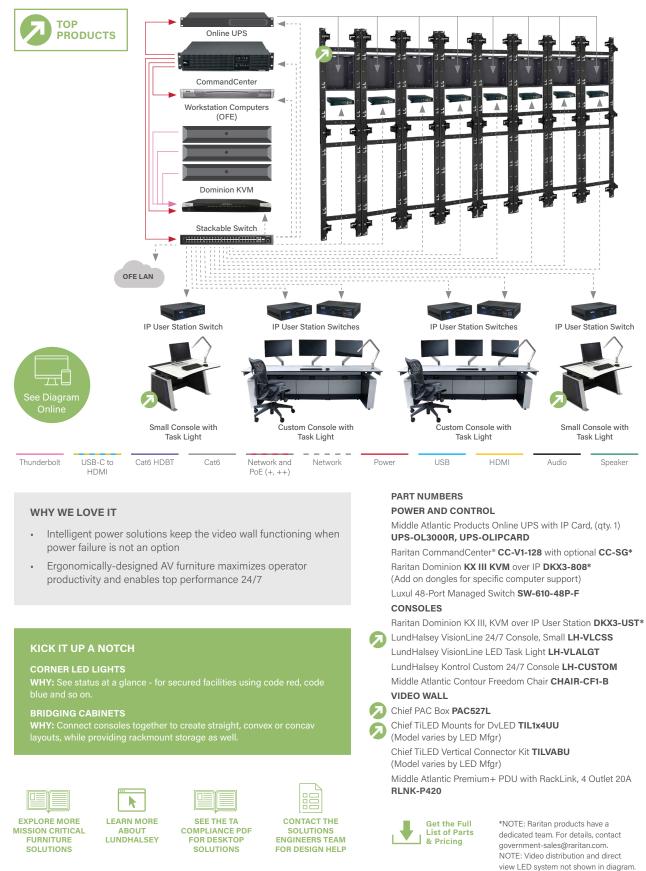
Fed Govt / DoD

Each piece of a command center supports a mission-critical operation. The control room video wall is the center of attention. But when operators are working long hours in what may be intense situations, their success also depends on control room console design and furniture choices. Ergonomically-designed AV systems and furniture can reduce operator fatigue and ensure optimal performance throughout 24/7 operations. Custom consoles can be designed to your specifications with help from the design teams and applications engineering teams at Legrand | AV and LundHalsey.

At the front of the room, deliver pristine viewing for data and graphics with a seamless video wall built on Chief's TAA-certified TiLED Series of modular mounts. Expanding outward to the operator stations, adjustable display mounts allow users to reposition multiple screens at once to their preferred viewing distance. Successful command centers also depend on details for optimal performance. For example, LED lighting strips on every console corner communicate security status clearly - at the touch of a button, change the color to indicate a change in protocol.

Throughout a command center, hardware choices ensure reliable operation. High-security server racks protect equipment. Intelligent power solutions keep the video wall functioning when power failure is not an option. Bridging cabinets connect consoles to create straight, convex or concave layouts, while providing additional rackmount storage.

A mission critical control room is the nerve center of your operation. Legrand | AV connects all the essential components of a command center you can depend on, every day, all day. Contact the Solutions Engineering team at Legrand | AV to get started on design services for customized large-scale video walls and operator stations.







#### ATION =0 $\square$ $\square$

#### RACK STORAGE

.

۰

۲

.

#### EQUIPMENT STORAGE WING

The equipment storage wing is the foundation of a command center. Robust equipment racks take into account not only the mounting of critical electronic components, but can also ensure long-term reliability when they are designed with proper heat and cable management.

#### **RACK CONSIDERATIONS**

Choosing the right racks will ensure stability and long life for the equipment that's installed inside. AV racks with a narrow form factor make for easier assembly and equipment maintenance. IT racks must hold longer server devices and have different thermal management requirements.







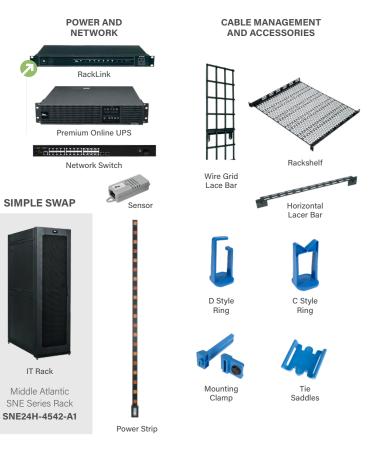
#### AV RACK KIT INCLUDES:





Thermal management





#### PART NUMBERS **RACKS FOR AV EQUIPMENT** Middle Atlantic Pre-Configured BGR for AV BGR-4532-AV MIDDLE ATLANTIC RACK ACCESSORIES Premium+ PDU with RackLINK 9 Outlet, 15A, 2-Stage Surge RLNK-P915R Remote Temperature Sensor RLNK-TEMP Compact Vertical PDU PDT-2X1020 D Style Ring Cable Management\* FWD-D-RING C Style Ring Cable Management\* FWD-C-RING Hook & Loop Tie Saddles\* FWD-TSW-15 Small Device Mounting Clamps\* FWD-SIDECLMP-4 Forward UPS Base for 32" Deep BGR (Includes UPS-2200R) FWD-BS-2KVA-BGR32 Wire Grid Lace bar FWD-LACE-WB3-44-45 Horizontal Lacer Bar- FWD-LB-1A-4PK Rackshelf UFA-14.5-4 SWITCHES Luxul Network Switches for AV Equipment (Ports on the Rear) Variety Luxul Network Switches for IT Equipment (Ports on the Front) Variety



\*NOTE: Forward accessories are not compatible with SNE Series Racks.

#### INTELLIGENT POWER

There are many product solutions in the market that give you the ability to remotely solve common issues with AV systems. This helps prevent situations that leave clients without access to their AV system for hours, potentially during a big meeting, conference, or class. Saving clients the frustration of having to reschedule a meeting pays off for your business relationship and provides the AV experience your client expects.



#### POWER PROBLEMS WITH AV EQUIPMENT

Beyond the occasional device reboot, proactive monitoring is key to preventing total system failures, so get proactive with your services. It's no secret that AV equipment can be severely damaged by undervoltage (a.k.a. the silent killer), which you can't spot by sight. Monitoring the quality of the power to the devices and sending you alerts when specified thresholds are reached can save and extend the life of the equipment.

Equipment can also be damaged by overheating, which you may not catch right away if a fan goes out and you don't happen to be there. Remember, every 10°F (6°C) rise over 85°F (29°C) in a rack reduces the life of digital equipment by 40%! With environmental monitoring in your remote power management system, alerts can be triggered when the temperature gets too high, or can automatically trigger a fan to turn on.



There is also a feature in some systems called AutoPing. AutoPing is designed to continuously check if the network is still connected, so if for some reason the network goes down you are alerted and you can bring the network and equipment back online.

#### HOW REMOTE POWER MANAGEMENT KEEPS YOU AHEAD OF THE GAME

Being able to catch these issues right away through proactive email or text alerts saves the client from having to replace equipment or call you for simple tasks. It also comes with the added benefit of strengthening your business relationship. Trust is built by fixing issues before they become problems.

A challenge you may run into when working toward implementing a remote power management system is working with the IT department. The IT department can be hesitant or combative about not wanting to put an "unknown" IP device on their network. The primary reason is network security. Any device on the network creates a potential vulnerability to a network hack. Middle Atlantic's Premium+ PDUs with RackLink offer the industry's most robust suite of features for these situations.

Middle Atlantic's **Premium+ PDUs with RackLink** have features like; individual outlet control, AutoPing, amperage/voltage/wattage monitoring, temperature/ humidity monitoring, sequencing, data logging, SNMP and **more**. From a connection standpoint, the PDUs with RackLink are flexible and can be connected in many ways to fit your unique situation. You can connect directly to the client's network, connect via a separate AV network, connect to any cloud platforms or control systems all through IP, RS-232, WiFi, APIs and/or contact closures. This flexibility allows for you to work with the client's preference on how to remotely manage and monitor the AV system power.

Hopefully this has provided you with valuable information to overcome some of the challenges or objections you might face when determining the best AV system for your clients. Remote power management, and remote management in general can keep AV systems up and running, give a longer life to the equipment, minimize system downtime, and build trust in your services. Our goal as AV providers should be to maximize the uptime of the AV experience.



AMAZING AV EXPERIENCES | legrandav.com

USA 866.977.3901 av.support@legrand.com CANADA 877.345.4329 av.support@legrand.com EMEA +31 495 580 840 av.emea.sales@legrand.com APAC +852 2145 4099 av.asia.sales@legrand.com

©2021 Legrand AV Inc. 210510 Rev A 9/21 C2G, Chief, Da-Lite, Luxul, Middle Atlantic, Projecta and Vaddio registered trademarks of Legrand AV Inc. All other brand names or marks are used for identification purposes and are trademarks of their respective owners. All patents are protected under existing designations. Other patents pending.