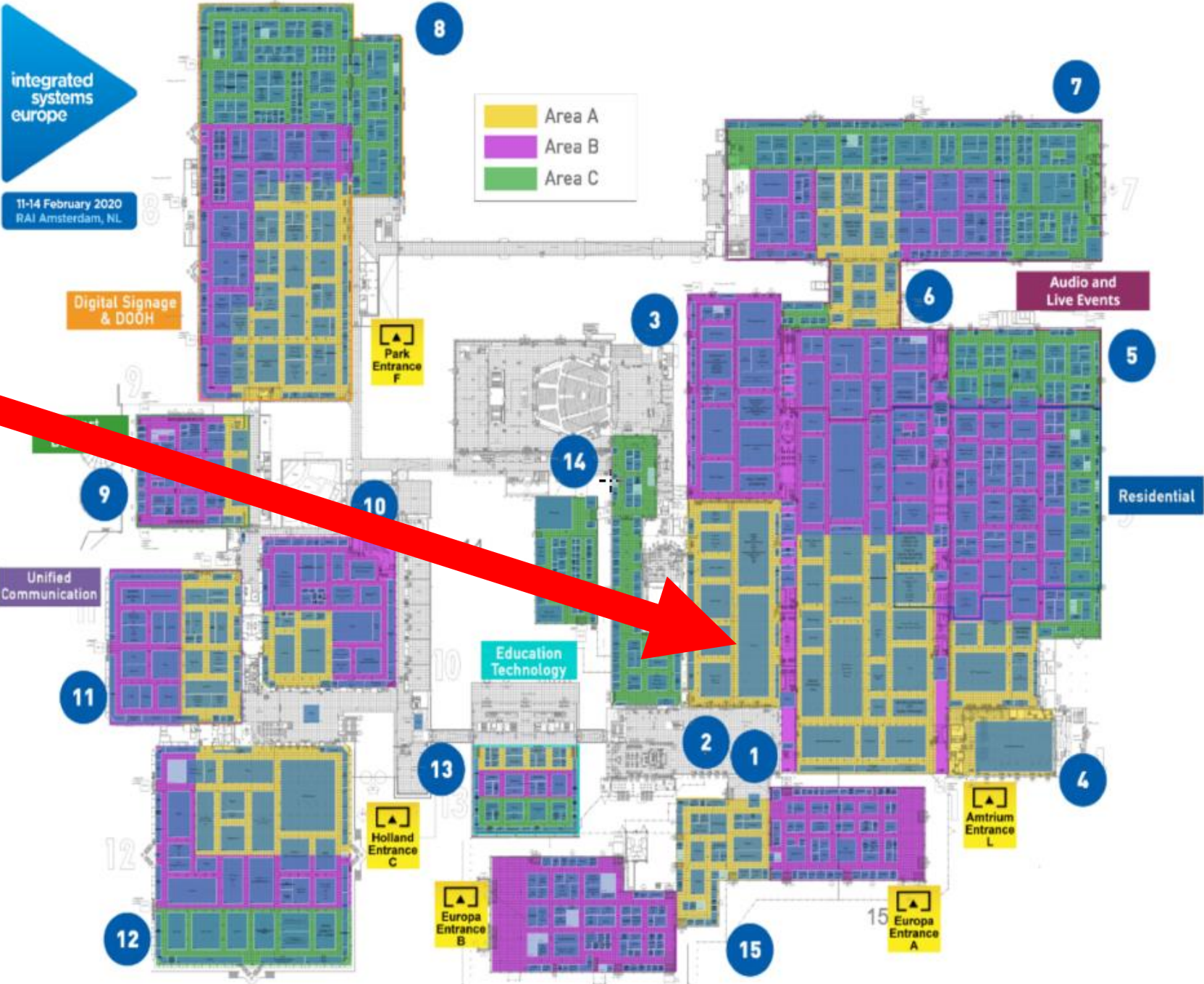


# Crestron New Technology Showcase

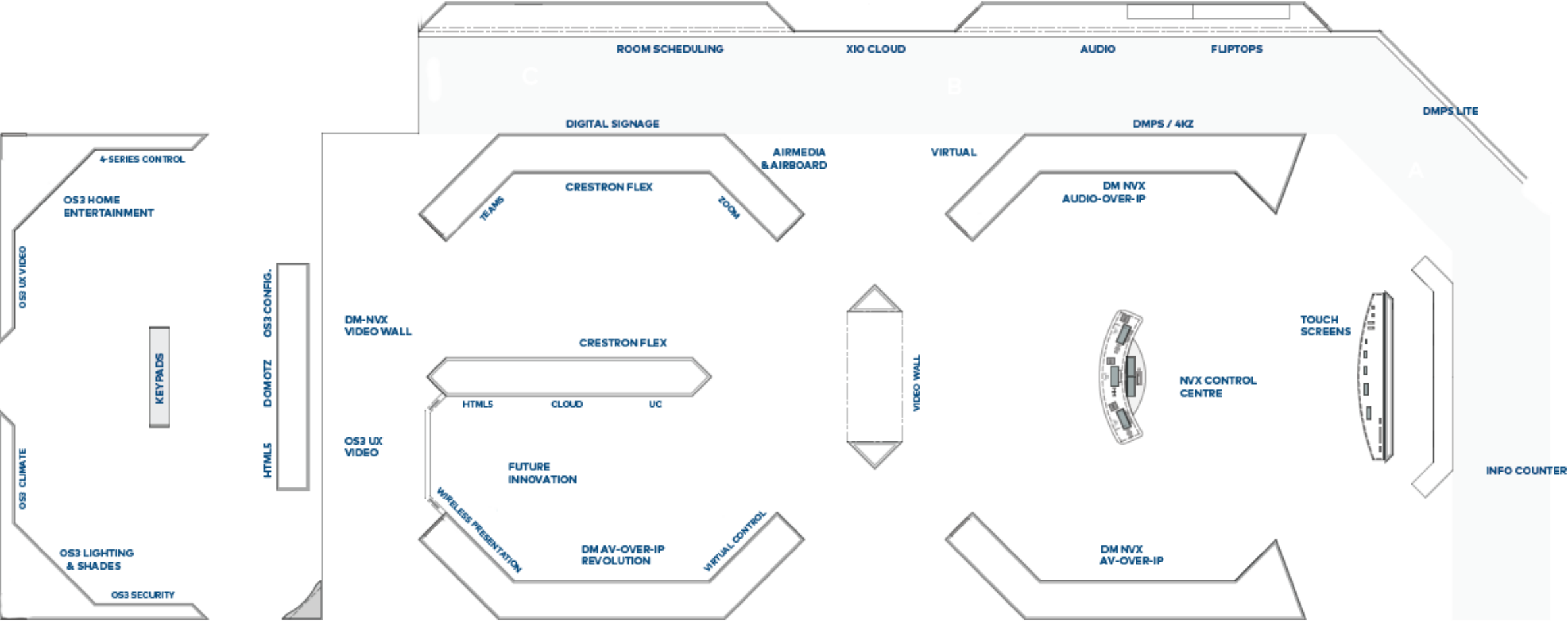
# Hall 2 Stand C20



# Hall 2 Stand C20



# Hall 2 Stand C20



# Hall 2 Stand C20



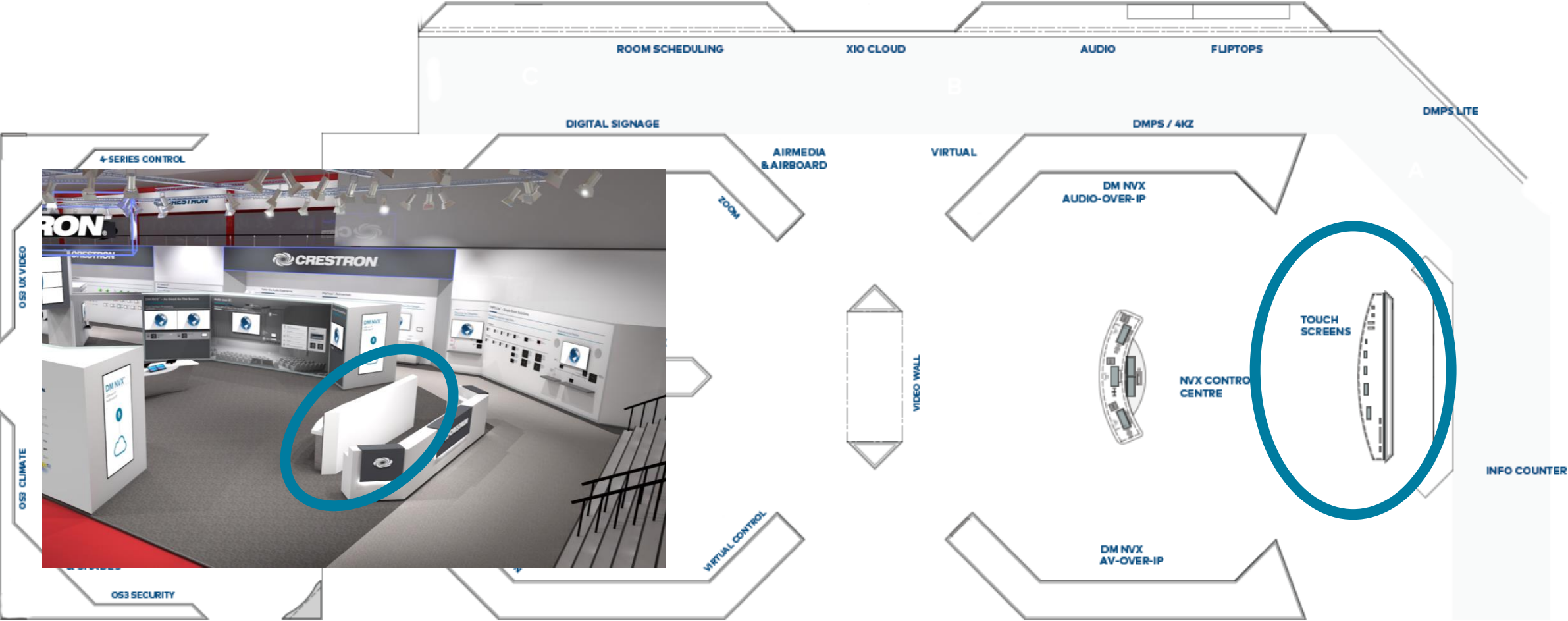
---

# The future of Touch Screens



Touch Screens

# Hall 2 Stand C20



---

# TSW Touch Screens with CSS / HTML 5

---

- Create rich, dynamic user interfaces
- Faster and easier to deliver custom experiences using standard programming languages
- Programmers can focus on their specialties: front end or back end
- Available Spring 2020

**CSS**



**HTML**





---

Flexible. Scalable. Secure.



DM NVX<sup>®</sup> – Award Winning AV over IP



---

# New DM NVX® Firmware

---

## AES67 Firmware

- Every DM NVX® model
- AES-67 is an interoperability standard for Audio over IP
- Provides both 2CH transmit and receive capabilities to allow for routing flexibility
- Available Summer 2020 as a free firmware update

DM NVX®

AES67

---

# The New Alliance.

---

## DM-NVX-D80-IoAV

Designed to fit into an OPS slot, makes any compatible display into an DM NVX<sup>®</sup> receiver.



---

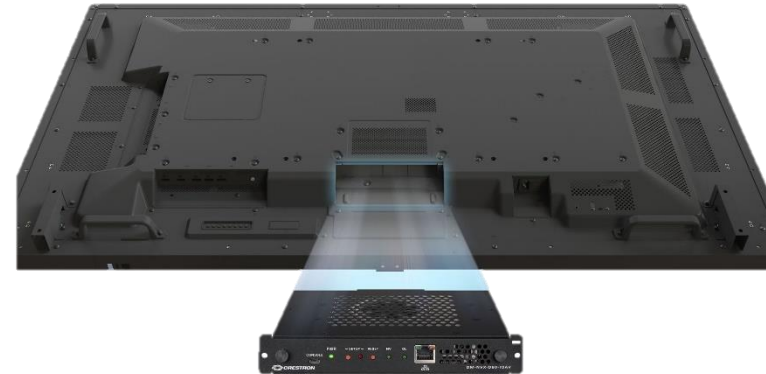
# DM NVX®

---

## DM-NVX-D80-IOAV

4K60 4:4:4

- Compatible with the Intel® Open Pluggable Specification (OPS)
- Seamless integration with OPS-supported displays.
- Supports HDR10 and HDCP 2.2
- 7.1 surround sound audio
- USB 2.0 and KVM signal extension and routing
- Device controller via RS-232, CEC, Ethernet



# Ethernet USB Extenders

## USB-NX2-LOCAL-1G

- Extends and routes any USB 1.1 or 2.0 device across an Ethernet network or point-to-point over one CAT5e
- Provide reliable, high-speed USB signal extension for most USB 1.1 or 2.0 devices
- Enable USB signal routing under the control of a Crestron control system or DigitalMedia™ system
- Compatible with the USB over Ethernet Extenders with Routing (USB-EXT-DM-LOCAL and USB-EXT-DM-REMOTE) and DM NVX®
- No drivers required with Windows®, macOS®, or Linux® operating systems



# Ethernet USB Extenders

## USB-NX2-REMOTE-1G

- Expandable using up to 4 USB hubs (not included)
- Provide 4 USB Type A ports for USB devices
- 100-240 VAC power supply (included) or Power over Ethernet (PoE)
- Expand upon the USB-HID routing capabilities of a DigitalMedia™ system without additional wiring
- Add USB host or device ports to any DM® transmitter, receiver, or switcher
- USB local (host) or remote (device) endpoint sold individually for maximum flexibility



---

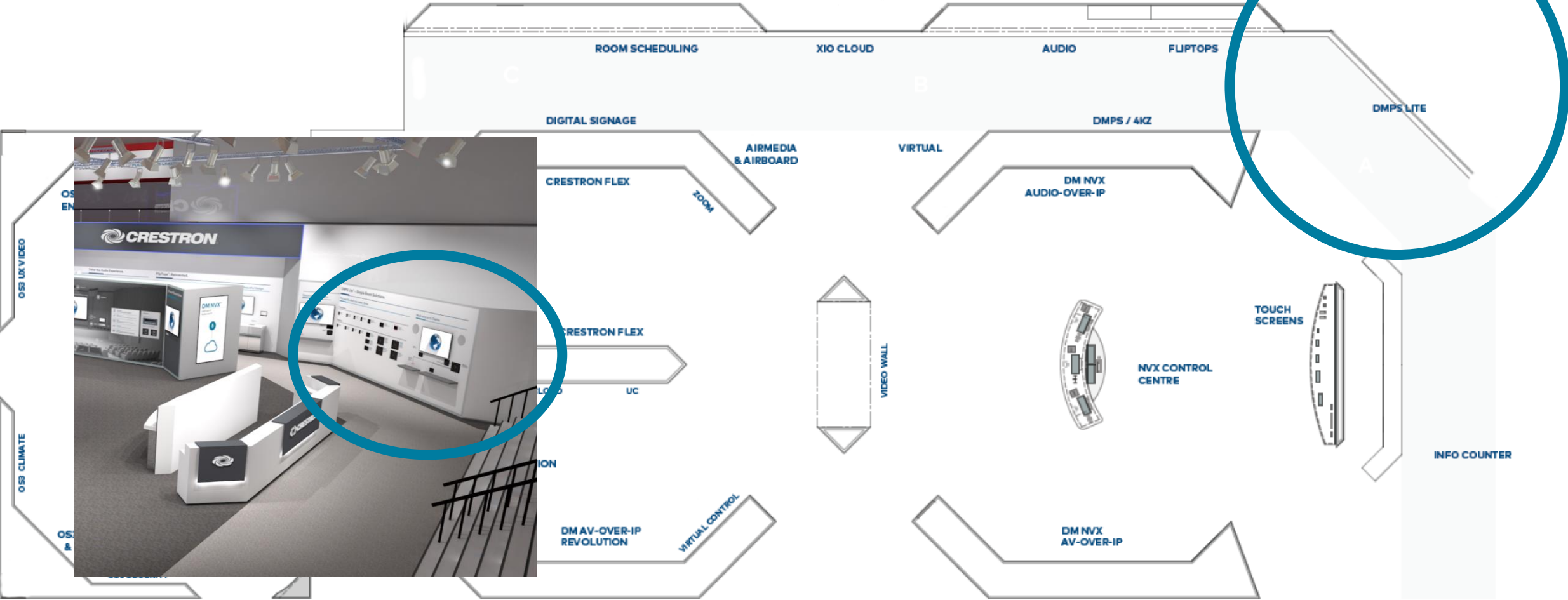
Mix. Match. Build.



DMPS Lite™ Solutions



# Hall 2 Stand C20



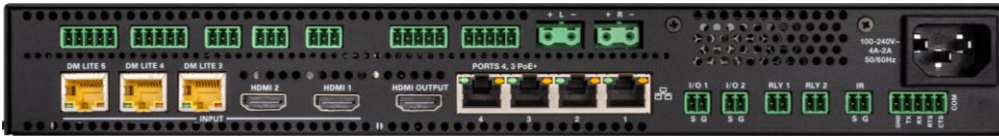
# Multi-format DMPS Lite™ Switching Receivers

## New 4K Multi-format DMPS Lite Switching Receiver Options

HD-RX-510-C-E-4K



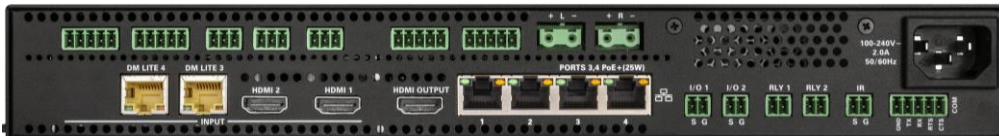
HD-RX-510-C-E-SW4-4K



HD-RX-410-C-E-4K



HD-RX-410-C-E-SW4-4K



- 2 or 3 DM Lite™ Inputs
  - Provides power to transmitter
- 2x HDMI® Inputs
- HDMI® output with 4K Scaler
- SW4 Option adds 4-Port Ethernet Switch with POE+ Ports (2)
- Various control ports – COM, IR, Relay, I/O
- 2x Line Inputs
- 1x Mic Input
- Built-In 25W Amplifier

# HD-RX-4K-210-C-E



## 4K-scaling DM Lite receiver with 4K60 4:2:0 support

- Improved network connectivity
- Crestron XiO Cloud™ support
- Full CIP integration
- Interoperable with current and future DM Lite products

1 HDMI® and 1 DM Lite Inputs

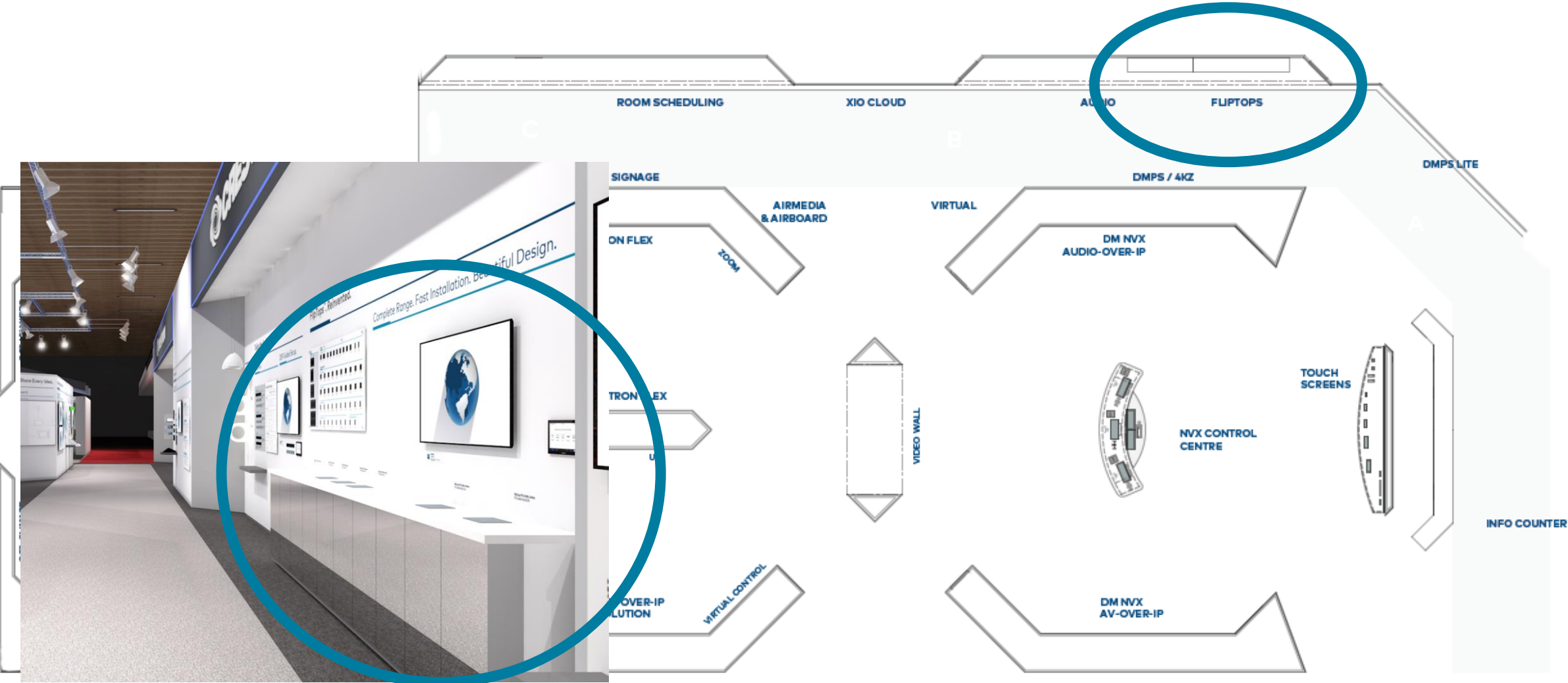
Various control ports – COM, IR, Relay, I/O

Built-in scaler with ability to bypass when necessary

# FlipTops™ Reinvented.

Total Connectivity Solutions

# Hall 2 Stand C20



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## Two versions: Active or Passive

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### Active FlipTop™

Supports USB-C™ charging modules, one-touch or vertical gravity retractors, and all active 4K connector plates. All labels are backlit.

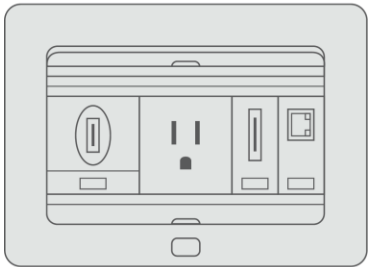


### Passive FlipTop™

Supports AC power, basic pass-through cables, flush-mount connectors in keystone plates, and vertical gravity retractors.

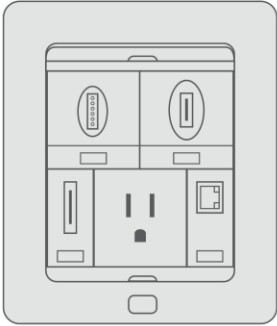


# FT2 FlipTops™ come in a variety of sizes for any installation



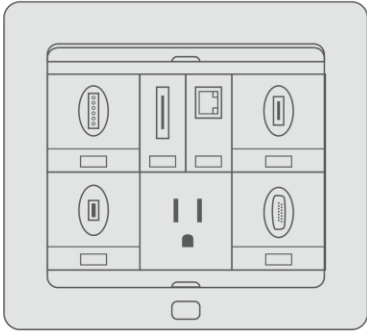
FT2-202

**FT-202**  
(7" W x 3.25" D)



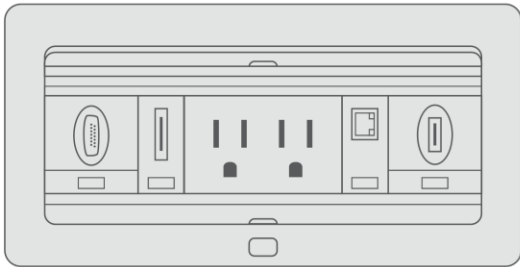
FT2-500

**FT-500**  
(5.75" W x 5.75" D)



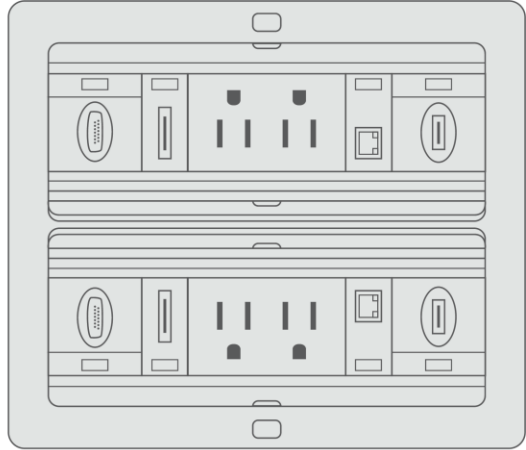
FT2-700

**FT-700**  
(7.125" W x 5.75" D)



FT2-1200

**FT-1200**  
(10" W x 4" D)



FT2-1400

**FT-1400**  
(10" W x 6.75" D)

# International Power Modules

## Provides one or two power outlets at the surface of the FlipTop™

- Active and Passive
- Requires two, three, or four slots
- **Available for:** Australia /NZ/China, European Schuko, France/Belgium, Israel, Italy, Switzerland, UK, Universal

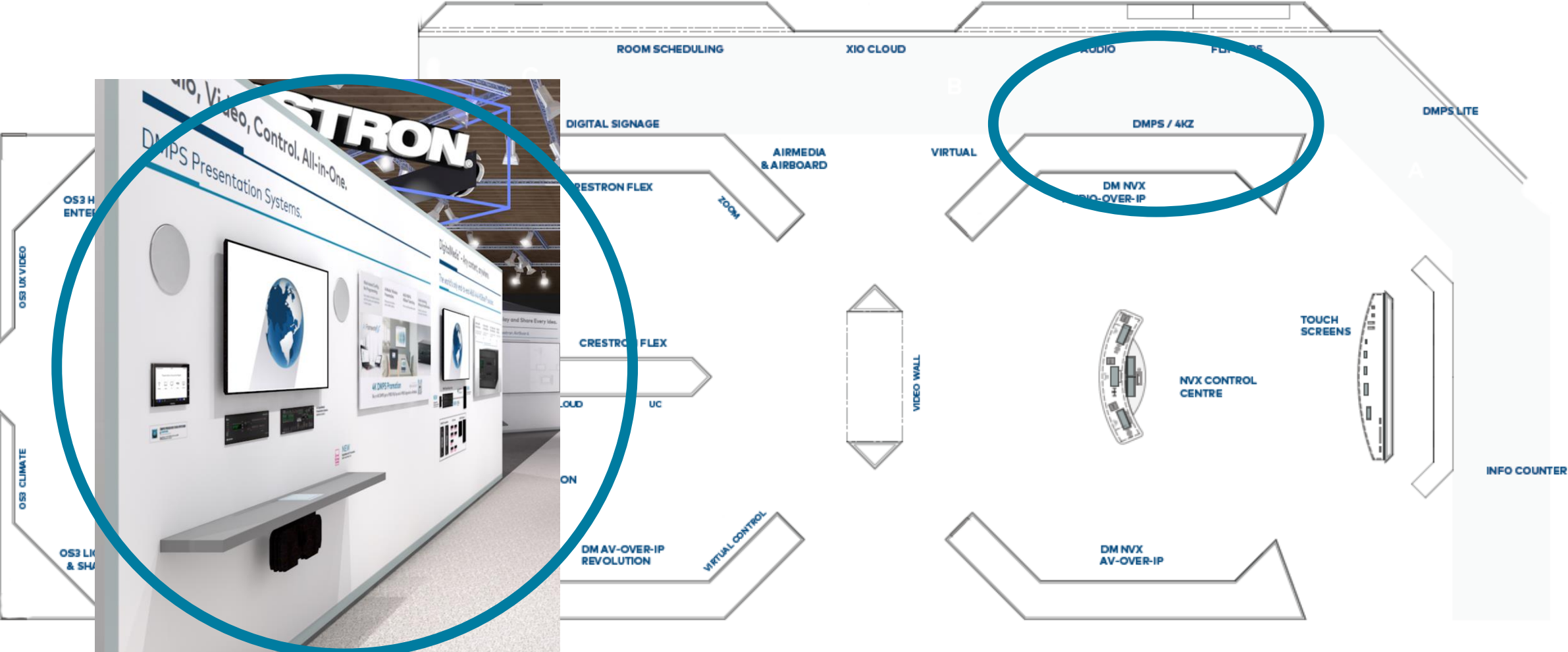




# Upgrade and Evolve

DigitalMedia™ 4KZ

# Hall 2 Stand C20

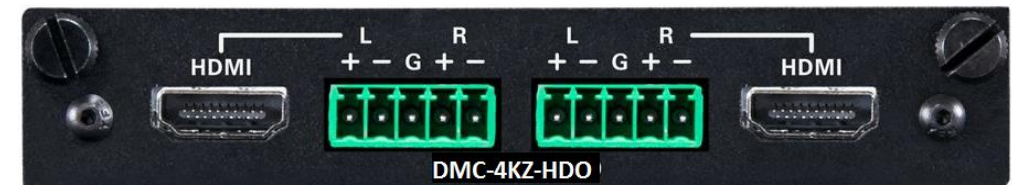




# DigitalMedia™

## What's new to DM?

- DMC-CPU3
  - Crestron XiO Cloud™ service provisioning
  - Enhanced 3-series® security protocol support
- 4KZ
  - DM-RMC-4KZ-SCALER-C
  - DMC-4KZ-HDO
- Employs VESA Display Stream Compression to support resolutions beyond 4K60 4:2:0 and HDR
- Fully compatible with existing chassis and cabling
- Same price as existing product!



# DigitalMedia™

## What's new to DM®?

- DigitalMedia™ 4KZ Single Gang Transmitters
  - DM-TX-4KZ-100-C-1G-W-T
    - 4KZ Single-Gang Transmitter, White
  - DM-TX-4KZ-100-C-1G-B-T
    - 4KZ Single-Gang Transmitter, Black
- Features :
  - HDCP 2.2 compliance
  - Device control via CEC, IR, and RS-232
  - Powered via the DM® connection or local power pack (included)
  - USA backbox
  - Decorator-style faceplate and surface-mount bracket included



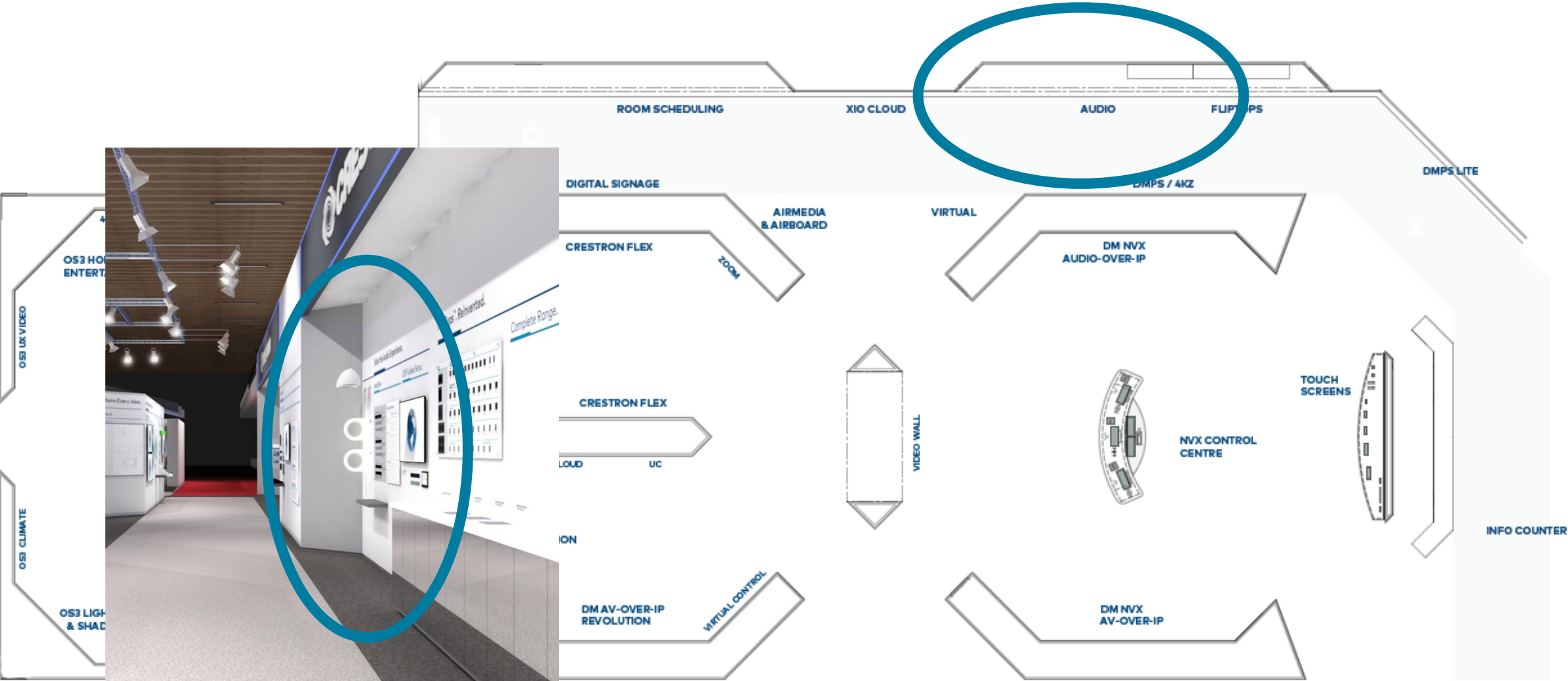
---

# Tailor The Audio Experience



Complete Audio Solutions

# Hall 2 Stand C20



# Commitment to commercial audio



Saros® Ceiling Speakers



Saros® Surface Mount



Saros® Pendant



Saros® Powered Soundbar



Modular Amps



Digital Signal Processors



Networked Install Amplifiers



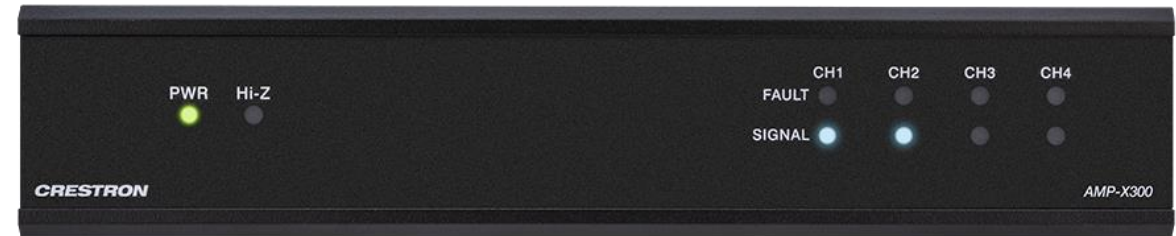
Vector™ Performance Loudspeakers



# AMP-X Series Media Presentation Amplifiers

## AMP-X300

- ENERGY STAR<sup>®</sup> certified power amplifier
- 1 RU high design is surface or rack mountable
- Half-rack width form factor, gangable with other next generation half-rack width form factor products
- LoZ (4/8  $\Omega$ ) and Hi-Z (70 V or 100 V) operation
- Configurable for 4 x 75 W output, 2 x 150 W output, and 2 x 75 W + 1 x 150 W (bridged) output



# AMP-X Series Media Presentation Amplifiers

## AMP-X50MP

- 2 x 25 W per channel (1 x 50 W) into 4 or 8 Ohm speakers
- 1 x 50 W output for Hi-Z (70 V and 100 V) speakers
- Balanced, unbalanced, and stereo 3.5 mm inputs with auto summing
- Stereo or mono-summed operation
- Remote power control
- Highly sensitive audio-sensing circuitry with high-speed wake time



---

# Crestron Avia™ 2.0 Software

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- New guided experience – simplify installation
- Input and output device definitions
  - Microphone libraries
  - VC / UC Codec connections
  - Speaker libraries
  - Output connections
- No longer need an expert to achieve great sound
- Crestron is committed to pro audio



Avia



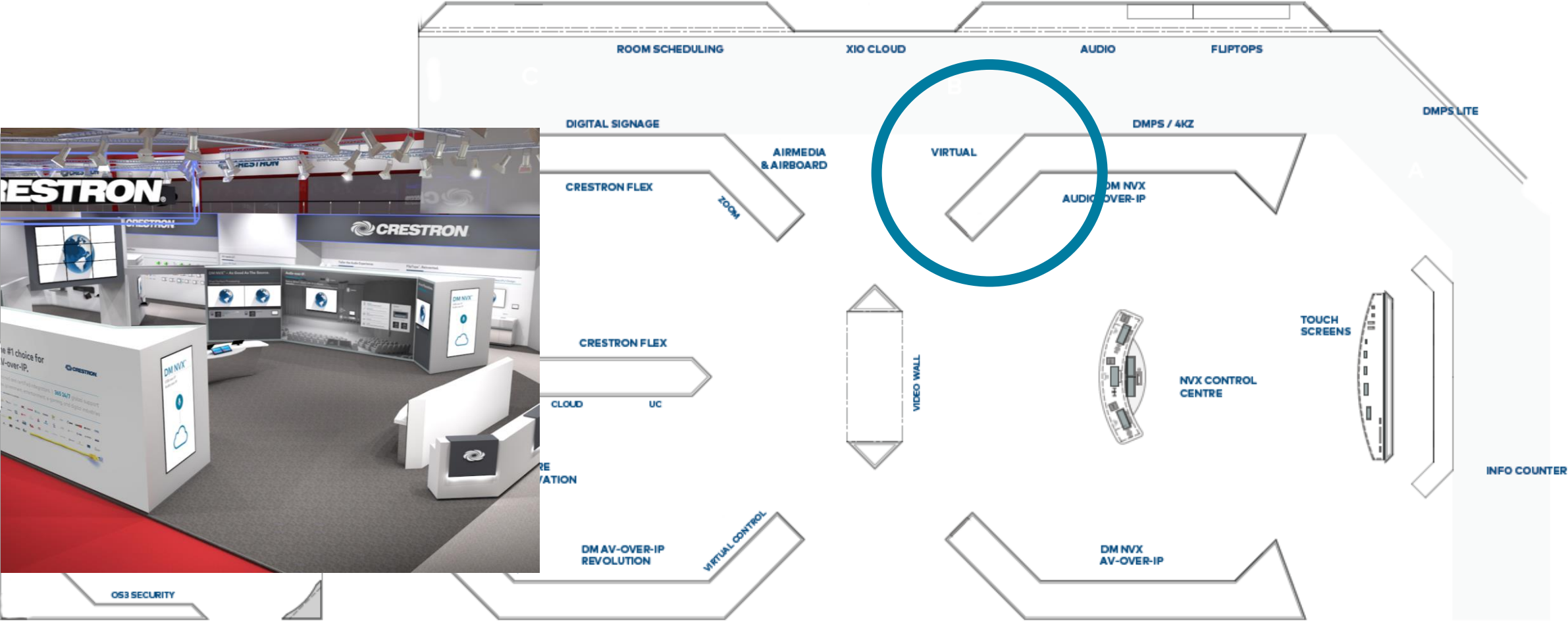
---

Deploy. Configure. Repeat.



Simple Connectivity Solutions

# Hall 2 Stand C20



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# Crestron Virtual Control: Next Generation Systems

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## Crestron **VIRTUAL CONTROL**



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# Crestron Virtual Control: Control System on a Server Specs

---

## **Runs on Linux® operating system via virtual or physical machine**

- Deployed as a Linux server application into the customer's IT infrastructure (no different from installing any other web server)
- Automatically configure and update all rooms running single code base
- Inbound device connections, rather than outbound
- More scalable: less network traffic and overhead

## **Fully managed from Crestron XiO Cloud™ service**

# Setup Options

**Supports .AV Framework configuration-based systems (no programming)**

Displays as switchers

Crestron Certified Drivers

**Custom programming available**

Native C# (SIMPL#)

- Works with any version of Microsoft® Visual Studio® integrated development environment

RESTful-API for open development/integration with other applications

The screenshot displays the Crestron Virtual Control web interface. At the top, the header reads "CRESTRON VIRTUAL CONTROL" with a search icon and a help icon. Below the header, the server name "Server: VirtualControl" is shown, along with an "Actions" dropdown menu. The main content area is divided into two tabs: "Status" (selected) and "Settings". Under the "Status" tab, there is a "Rooms" section with a "Global Filter" input field and an "Add Room" button. A table lists five rooms with columns for Room, Room ID, Status, Program, and Actions. The table data is as follows:

Room	Room ID	Status	Program	Actions
Building C, Room 134	CR134	▶ Running	AV Framework	i   edit   delete
Building D, Room 245	DR245	▶ Running	AV Framework	i   edit   delete
Building E, Room 198	BER198	▶ Running	Presentation v1.3	i   edit   delete
Marketing - Turing Room	MTURING	▶ Running	Videoconferencing v2.9	i   edit   delete
Marketing - Einstein Room	MEINSTEIN	▶ Running	Videoconferencing v2.9	i   edit   delete

Below the table is a pagination bar showing "1" of "10" items. At the bottom of the interface, there are sections for "Devices", "Device Info", and "Network". The footer contains the copyright notice "© 2018 Crestron Electronics, Inc." and links to "Privacy Statement" and "Crestron Unified Communication Software License Agreement".



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# .AV Framework

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## Deploy simple, scalable room solutions

- Web-based configuration and deployment
- Add a TSW-X60 Series touch screen and automatically generate the GUI for single or multiple display systems
- UI guide explains how easy touch screen pages are to use



---

# CEN-IO Wireless Ethernet Devices

---

## New Wi-Fi™ models

- CEN-IO-COM-202: 2 x RS-232/485
- CEN-IO-RY-204: 4 x Relays
- CEN-IO-IR-204: 4 x IR
- CEN-IO-DIGIN-204: 4 x Digital Input

## Place IO ports anywhere

- 5v PSU supplied

## Great combination with VC-4

- Provides security for non-secure devices!

**Supports multiple control system connections – shareable across rooms**

---



---

# CEN-IO Wired Ethernet Devices

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## Available models

- CEN-IO-COM-102: 2 x RS-232/485
- CEN-IO-RY-104: 4 x Relays
- CEN-IO-IR-104: 4 x IR
- CEN-IO-DIGIN-104: 4 x Digital Input

## Place IO ports all over the LAN

- PoE

## Great combination with VC-4

- Provides security for non-secure devices!

**Supports multiple control system connections – shareable across rooms**

---

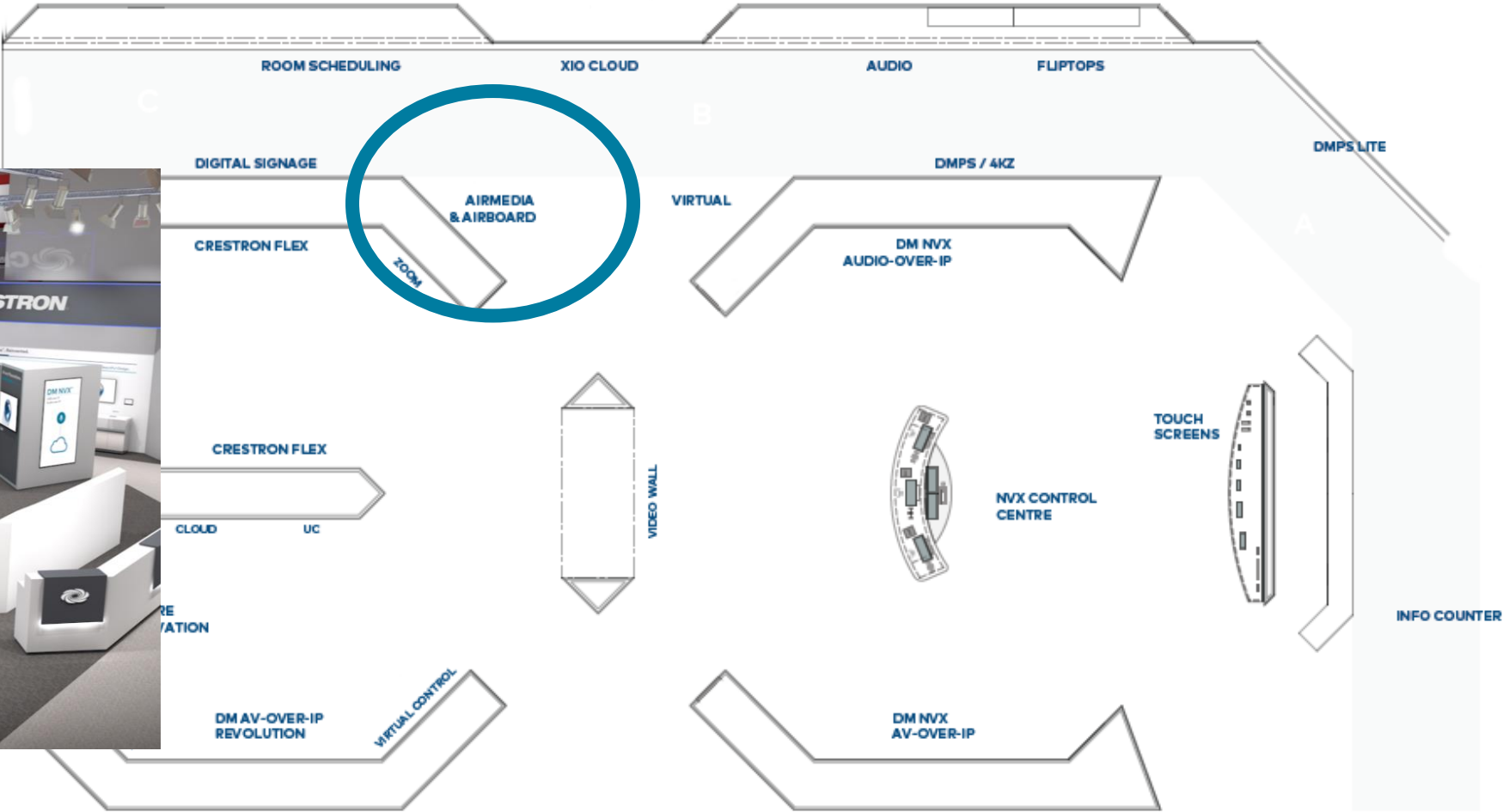


# Present, Capture, Display and Share Ideas - Wirelessly

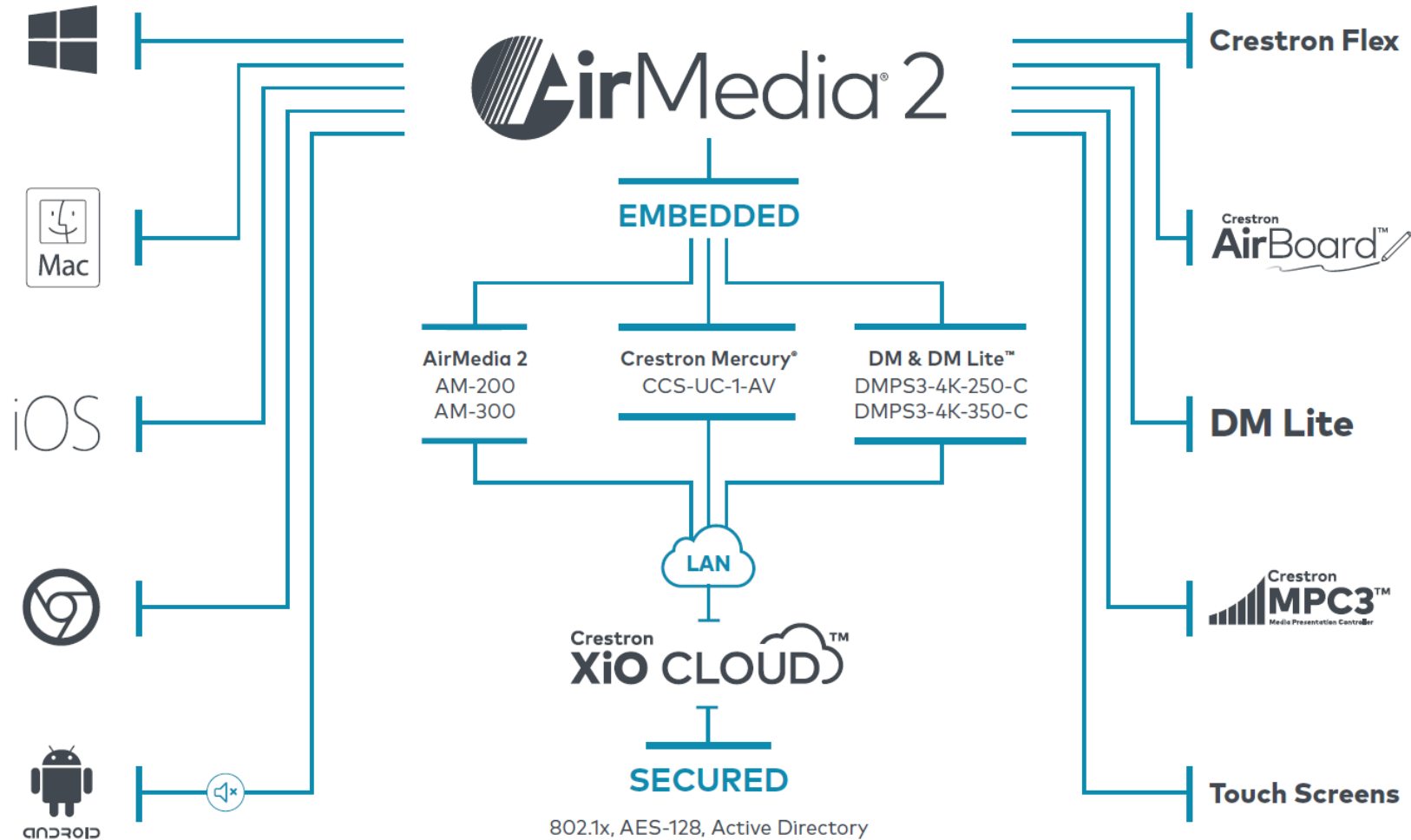
AirMedia® & Crestron AirBoard™

# Hall 2 Stand C20

Located here



# One Experience. One Platform. One Ecosystem



# AirMedia® Room Solutions



# AirMedia® Room Solutions – Add Crestron AirBoard™





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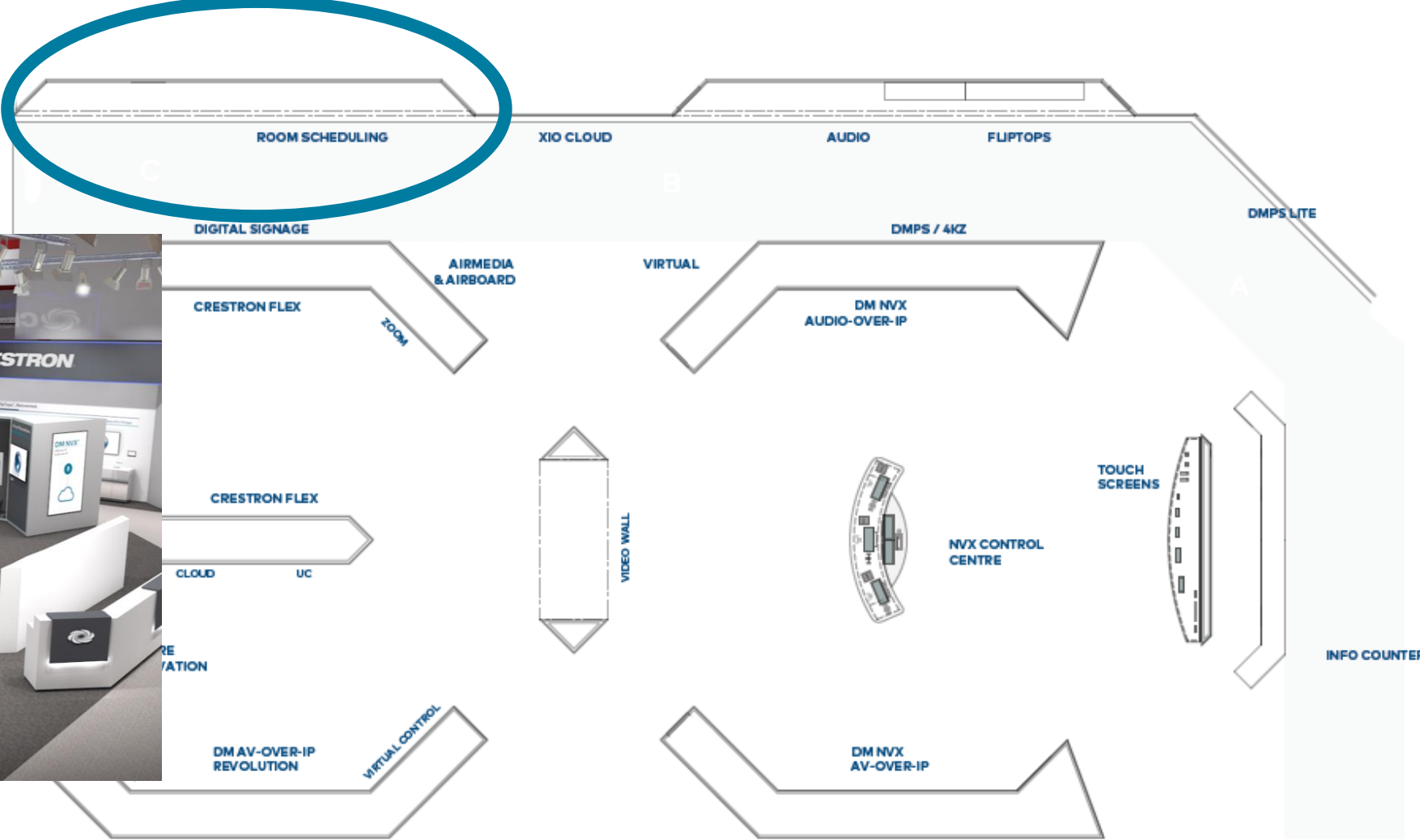
# Connecting People, Information and Places



Room Scheduling

# Hall 2 Stand C20

Located on this wall



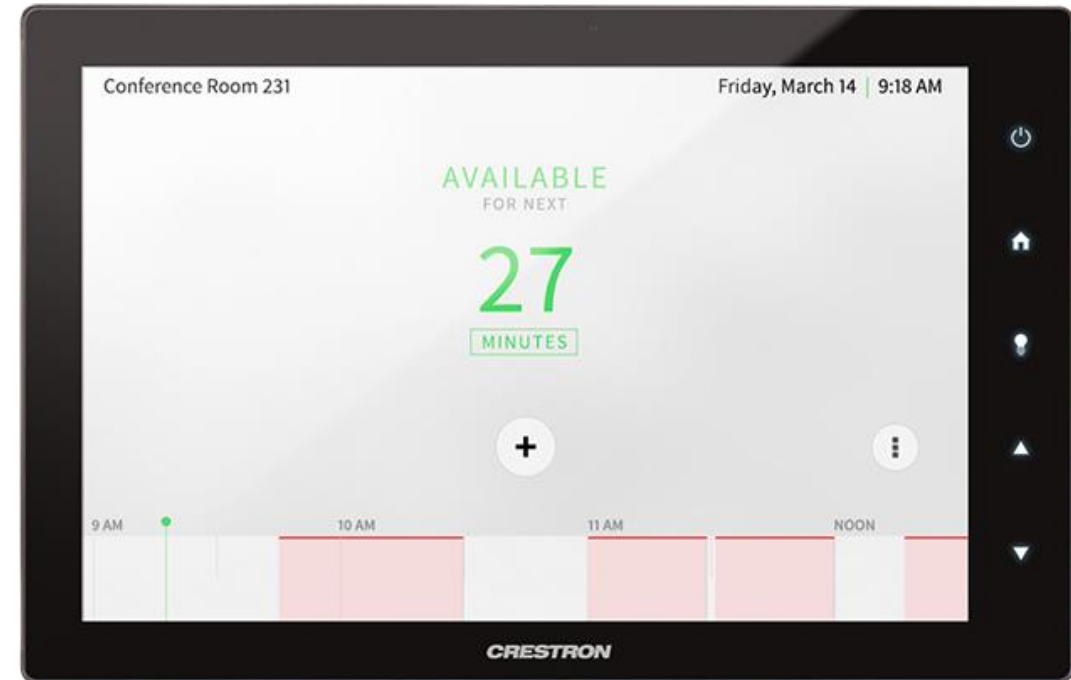
---

# Crestron Room Scheduling

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## Enterprise-grade hardware for any scheduling workflow

Crestron scheduling panels provide a full range of scheduling providers all from one unified hardware platform, including directly connecting to popular calendar providers, Crestron Fusion<sup>®</sup>, and a variety of partner applications



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## Direct Connect Calendars

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Simple scheduling without expensive, complicated software

Crestron scheduling panels connect directly to:

- Microsoft Exchange Server®
- Google® G Suite™ (Calendar)
- Microsoft® Office 365®
- AdAstra
- CollegeNET®



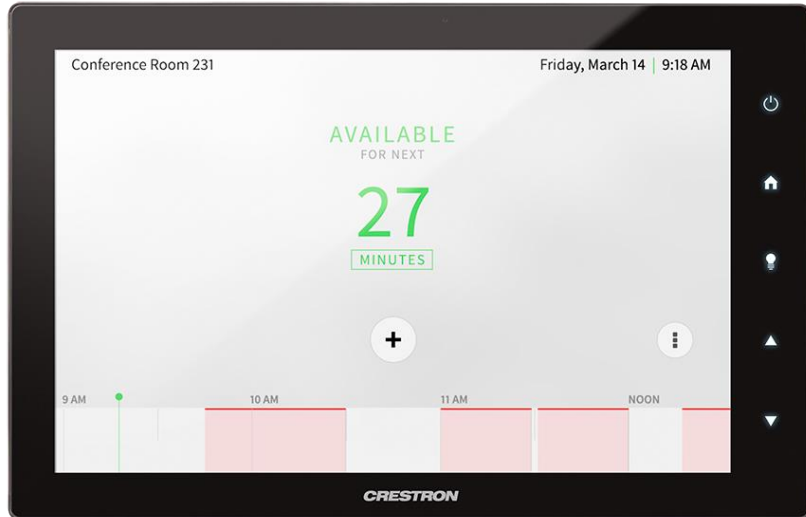
G Suite



Ad Astra



# Room Scheduling Screens



## Built on the TSW-x60 platform

Crestron scheduling runs on top of the existing TSW-560/760/1060, so it has all of the security and management applications you already expect from them, including:

- Active Directory® integration
- 802.1x authentication
- PoE+ for power and communication
- Secure management via web UI or cloud provisioning
- Secure mounting options for a variety of surfaces

---

# Room Scheduler Accessories

---

**Illuminated signage makes it easy to find meeting rooms**

Choose the form factor that fits your aesthetic

Direct connection via USB

No programming required!



**Touch Screen Light Bar**  
7" (TSS-7-LB) or  
10" (TSS-10-LB)



**Room Availability Status Indicator – Wall Mount**  
SIW-100



**Room Availability Hallway Sign – Wall Mount**  
SSW-100-EL or SSW-102-EL



**Room Availability Hallway Sign – Ceiling Mount**  
SSC-100-EL - SSC-102-EL

102 models include custom engraving

# Native Partner Scheduling Applications

APPSPACE

AskCody®

EMS  
an accruent company

GINGCO.NET™

matrix  
booking

new wave  
SCHEDULER

nfs  
technology group

Robin



SharingCloud

SPACE CONNECT



Space IQ

tesm

zoom

22MILES  
DIGITAL SIGNAGE & WAYFINDING

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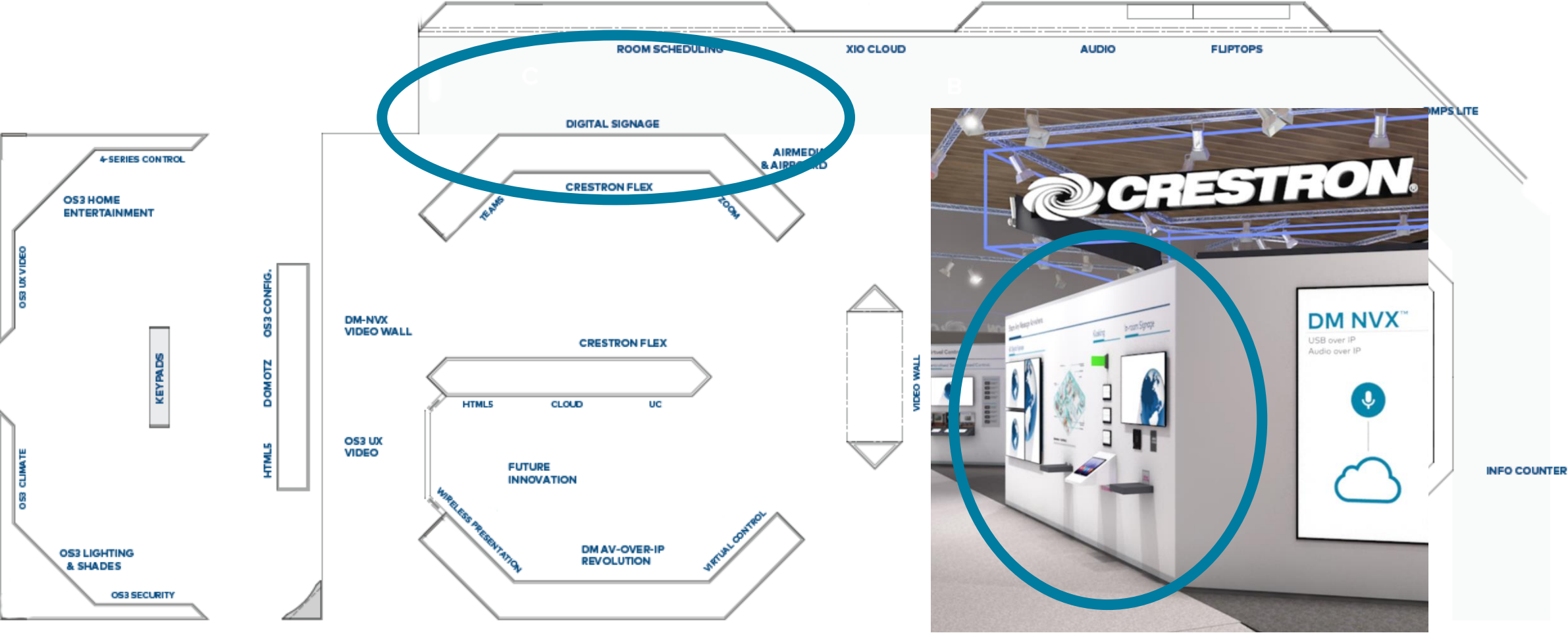
# Share Every Message Anywhere



Digital Signage



# Hall 2 Stand C20





# Digital Signage – NME-100 Network Media Endpoint



## New Enterprise Digital Signage Player

- Designed to be placed behind a display and run 24/7
- Simple plug 'n play connectivity
- Works within Crestron's XiO Cloud™ for deployment and zero touch deployment
- Integration with Appspace® to create stunning presentations with full motion content
- 1080p, built-in 16GB storage, and expandable with microSD card

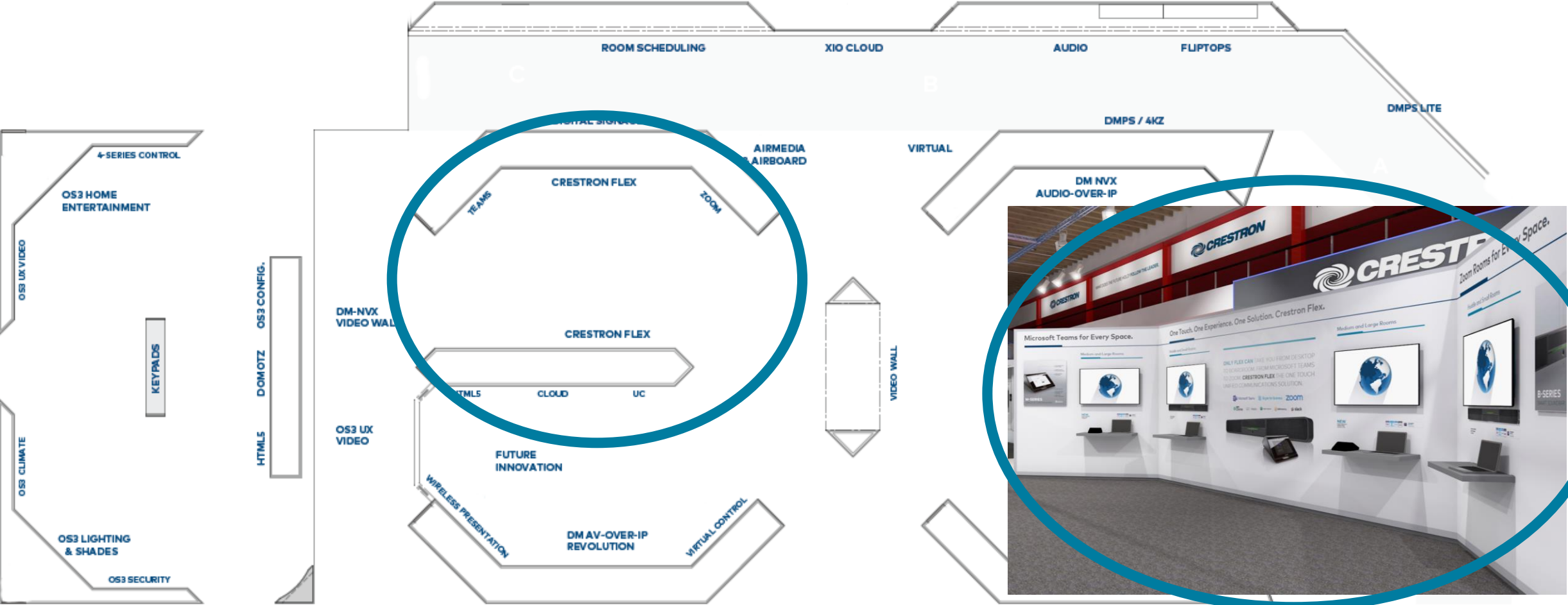
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# Unified Communications. Unlocked



Flexibility for any UC application

# Hall 2 Stand C20



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# Crestron Mercury® for Open UC

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Provides a complete video conference room solution for open-platform UC applications.



Enables exceptional full-duplex wideband audio conferencing, speakerphone, video conferencing, BYOD multimedia presentation, content sharing, and web collaboration capabilities — all through one amazing tabletop touch screen console.

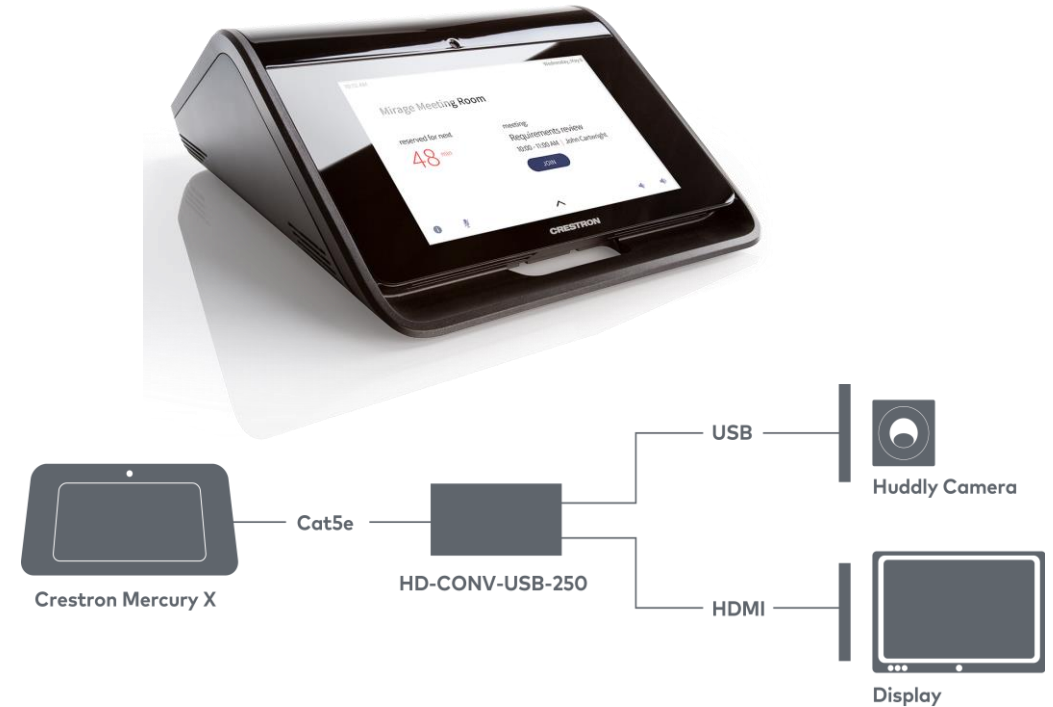
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# Crestron Mercury® X

## Next-generation Mercury® device

- Latest evolution of tabletop meeting and collaboration solutions
- Single-cable connectivity facilitates installation
- Allows the use of native platforms like Microsoft Teams or Zoom Rooms – but also supports BYOD on same device
- The complete kit contains the Crestron Mercury® X Tabletop Console, CCS-CAM-USB-F-400 camera, HD-RX-USB-2000-C, cables, and power supply



---

# Crestron Flex UC Engine

---

- Mounts behind the display for simple installation
- Runs Skype for Business, Microsoft Teams, and Zoom natively
- One touch meeting join
- Appliance Grade PC Running Windows 10 Embedded
- Provisioned through Crestron XiO Cloud



Microsoft Teams



Skype for Business

zoom



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# Crestron MX-150 Tabletop Solution

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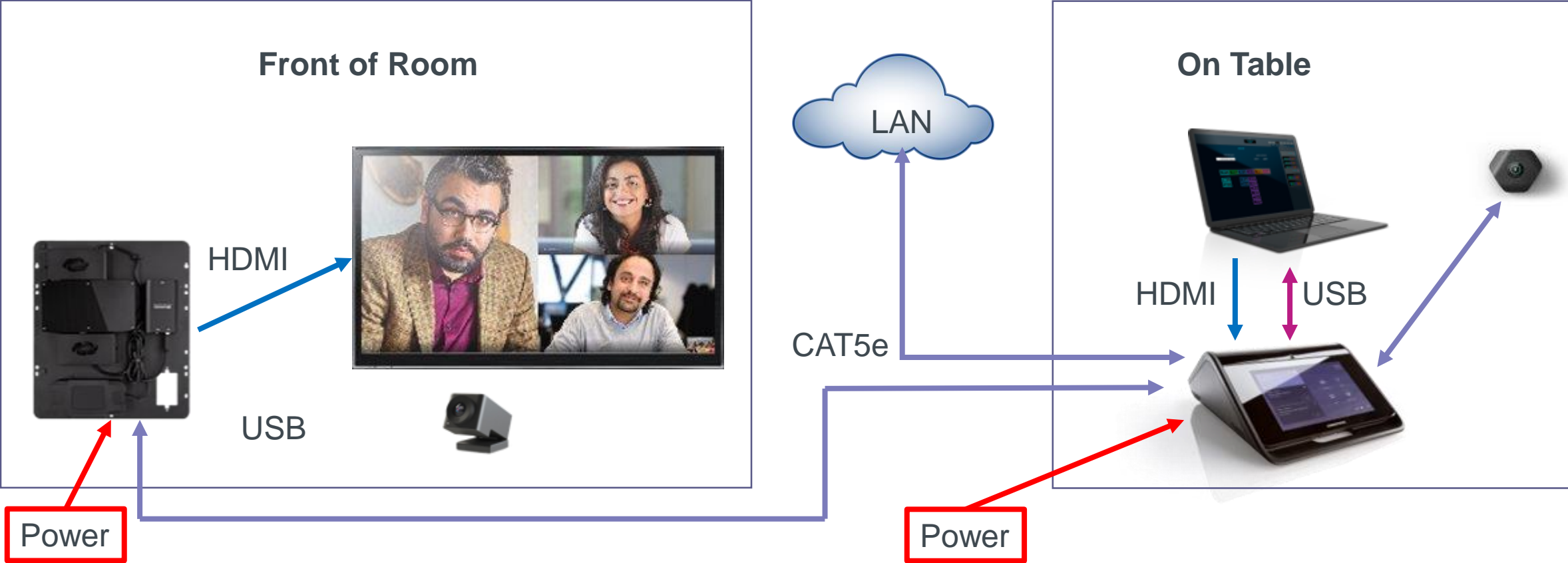
## Bring BYOD conferencing to native Microsoft Teams or Zoom Rooms

- Call, collaborate, present and video conference with one touch, or connect your laptop via USB and meet with your preferred collaboration software
- Bring the flexibility to standardize on Microsoft Teams or Zoom, while still supporting other platforms when needed
- Simplify installation with one CAT5e cable from the tabletop to the front of room
- Includes 1-year of Crestron XiO Cloud™



# Crestron Flex Large Meeting Room Deployment

## MX150 – native Teams or Zoom Rooms with BYOD



# Brand New User Experience



# Hall 2 Stand C20



# CRESTRON HOME™

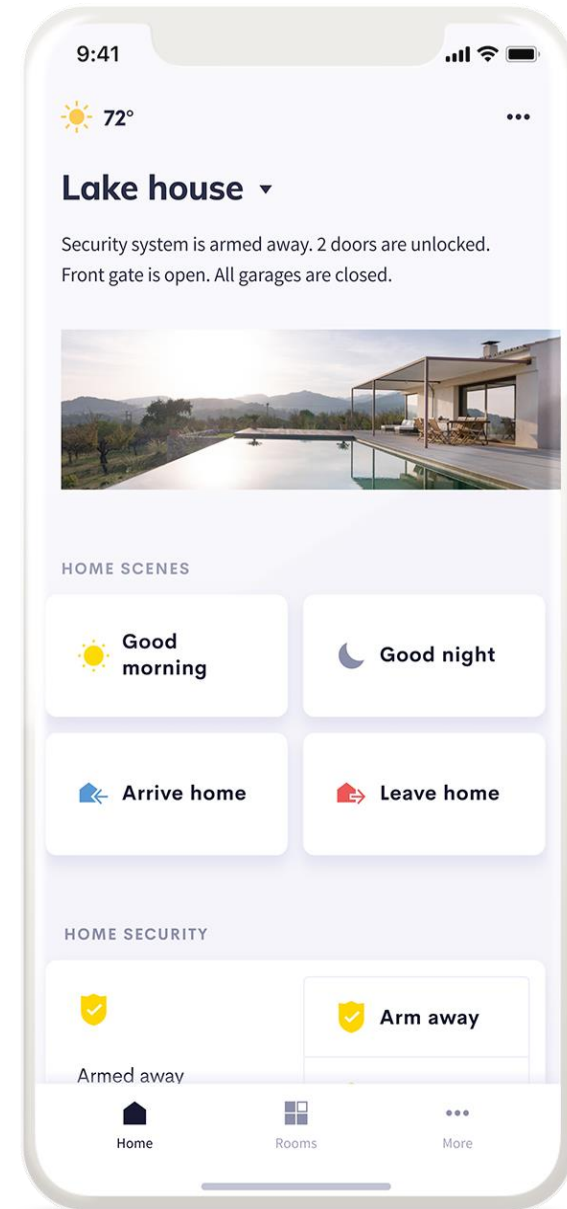
## What is Crestron Home

Crestron Home unlocks the full potential of a smart home. It provides dealers with the ability to deliver a simple and clean user interface that includes sophisticated page designs; fluid dynamic room controls and icons, including support for multiple homes, favorites, custom access, room image customizations, and more.

The user experience redesigned from the ground up

Easy to configure and deploy.

Simplified Easy-to-use User Interface that customers love.



# Introducing the MC4-R-I

## MC4-R – Media Room Controller

- Great price and small form factor
- Built in gateway and Plenty of I/O
- Powerful processor, running Full OS3 Operating System
- Application: Small to Medium size home, MDU Single-Room “Starter” systems.
- Upgrade via myCrestron Cloud



# MC4-R-TSR-I

Crestron Home 4-Series Media Room Controller with TSR-310,  
International

- Provides a MC4-R-I control processor and interface for use with Crestron Home™.
- A TSR-310 handheld touch screen remote is also provided for system control.



# MC4-R-HR-I

## Crestron Home™ 4-Series Media Room Controller with HR-310, International

- Provides a MC4-R-I control processor and interface for use with Crestron Home™.
- A HR-310 handheld remote is also provided for system control.





# Crestron Home™

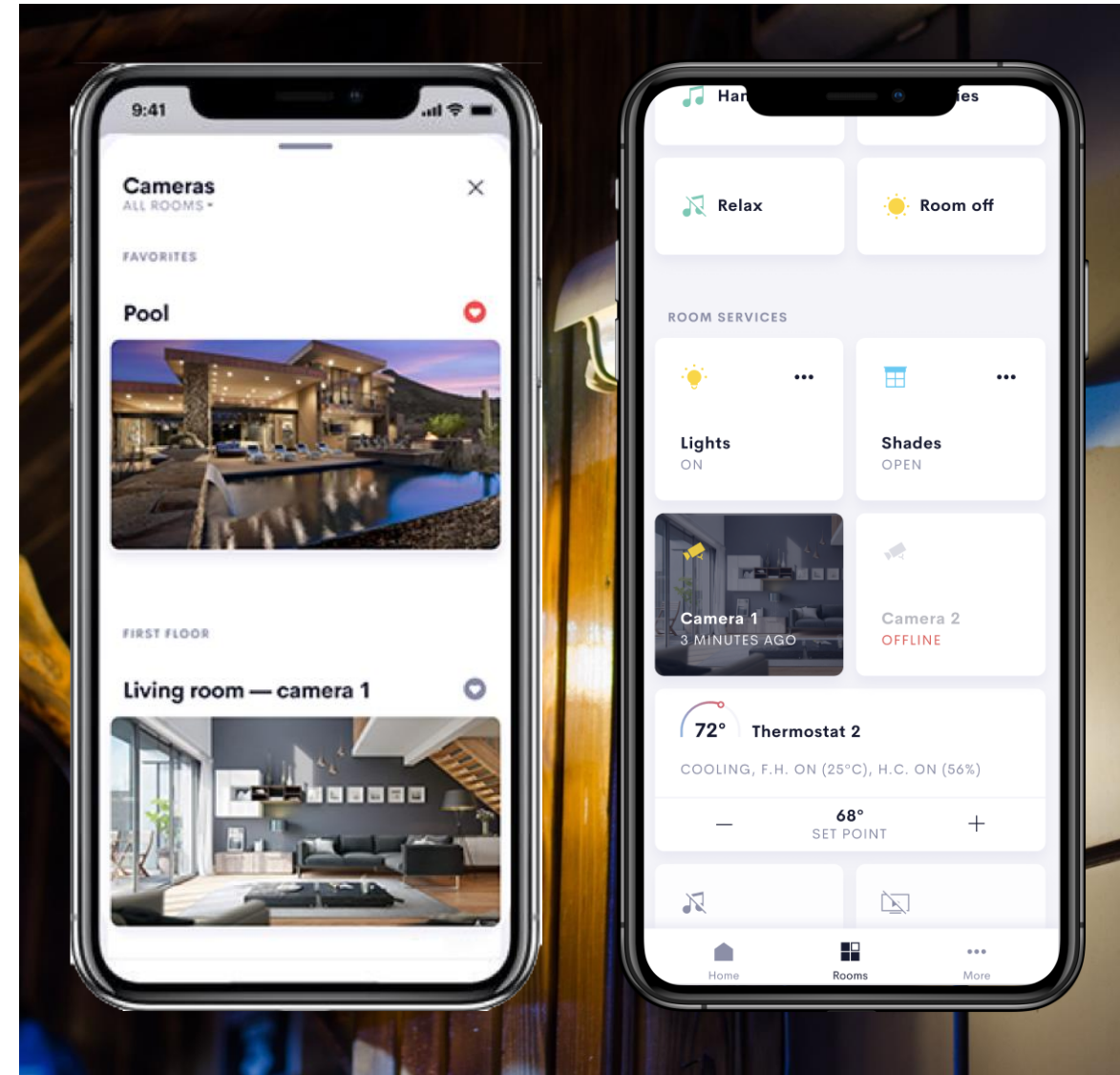
Added support to Media Routing to support DM® Transmitters

- Added support for DMC-4KZ-C
- Added support for DMC-4KZ-C-DSP
- Added support for DMC-C
- Added support for DM-TX-4KZ-100-C-1G
- Added support for DM-TX-4K-100-C-1G
- Added support for DM-TX-4KZ-202-C
- Added support for DM-TX-4KZ-302-C
- Added support for DM-TX-4KZ-202-C
- Added support for DM-TX-201-C
- Added support for DM-TX-401-C
- Added support for CLX-2DIMFLV8-277
- Added support for CLX-2DIMU8-277



## Security Camera Support

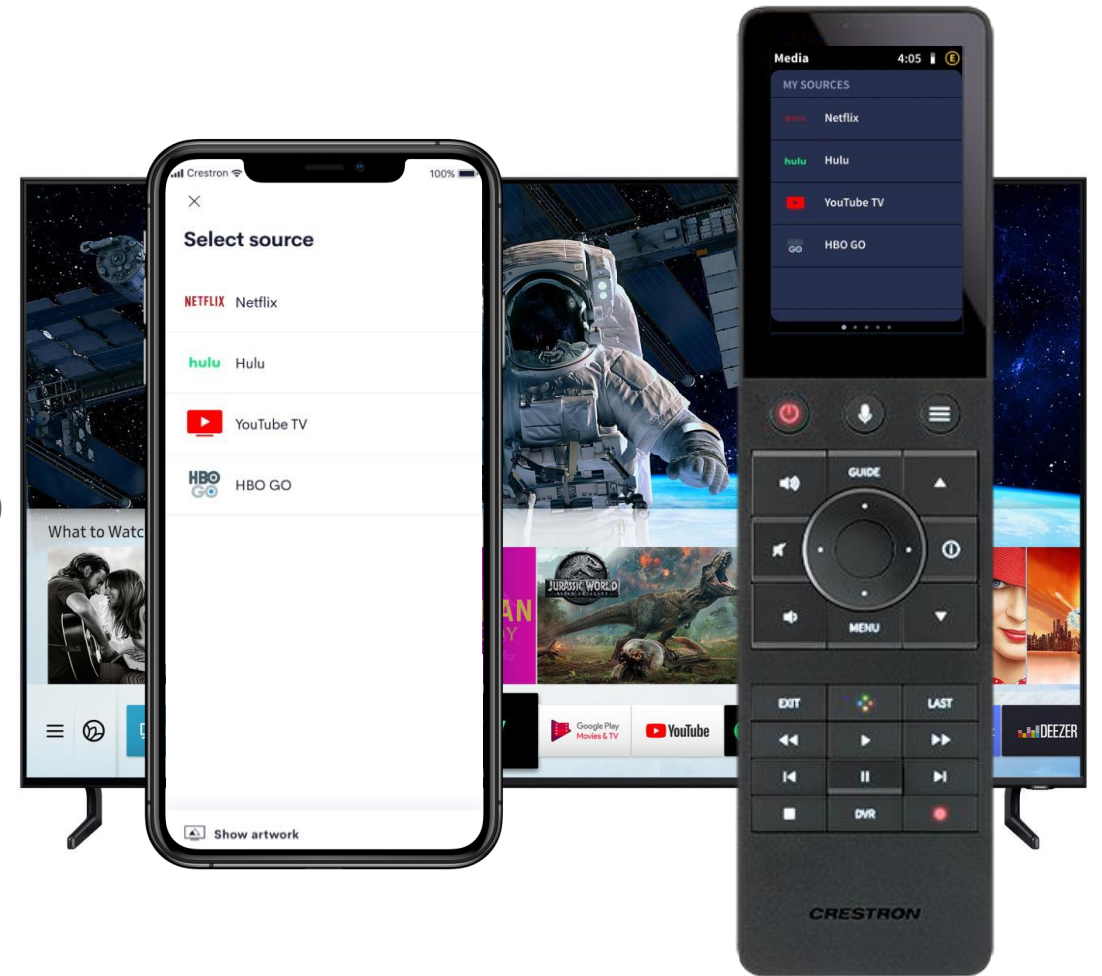
- Easy access to all ONVIF-compliant security cameras
  - Also, a custom URL camera can be added for cameras are not 100% ONVIF compliant
- Access all cameras in a convenient list with a consistent User Experience
  - Similar to rooms, they can mark most used cameras as favorites



# CRESTRON HOME™

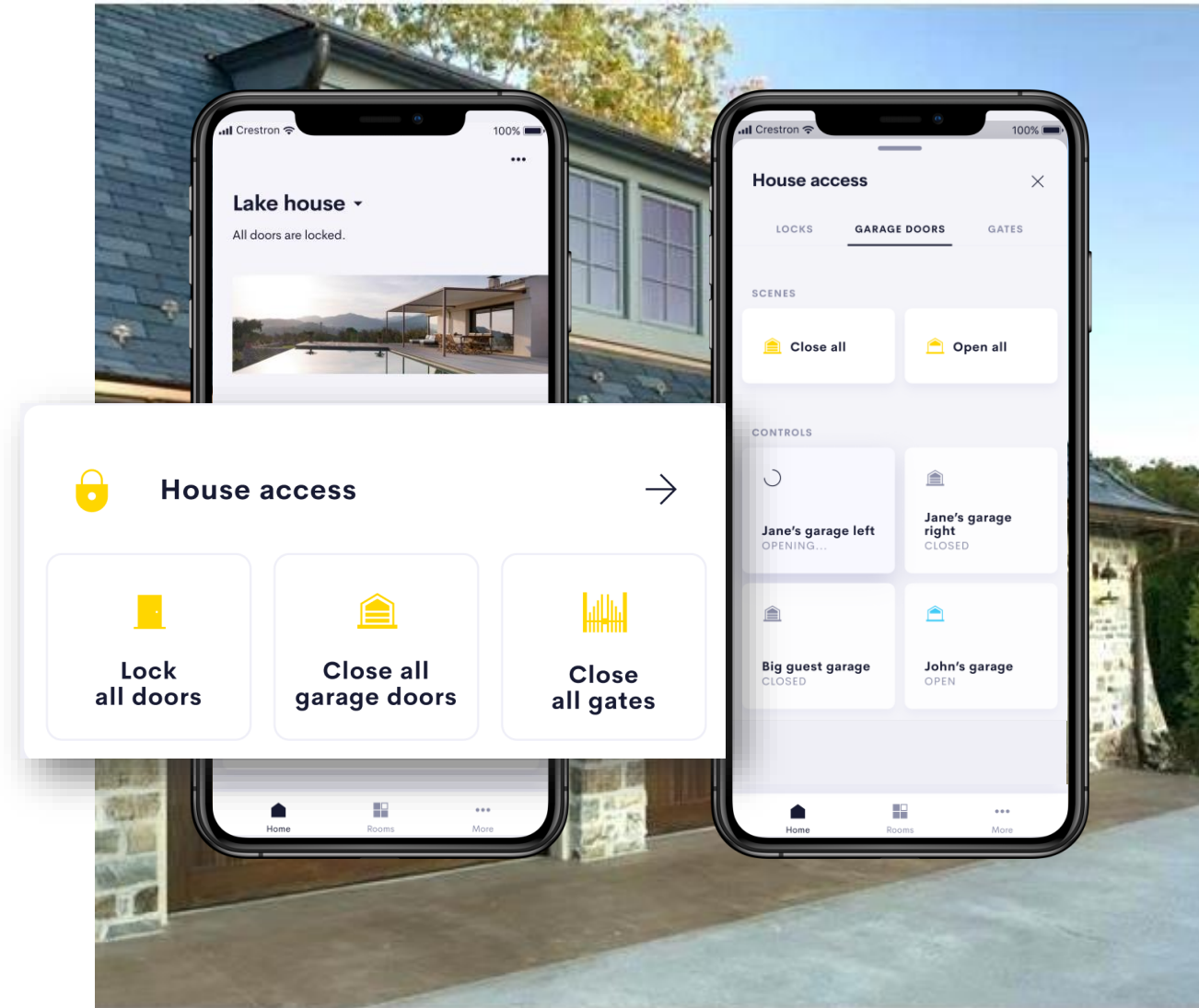
## Improved Smart TV Support

- We have added Smart TV functionality to our device drivers
- Includes direct access to streaming apps
  - Via source list on touchscreen, mobile, and TSR-310
  - Via custom buttons on HR-310 or HR-150
  - Via Quick Actions & Media Scenes



## Improved Door/Gate Access

- Improved UX for control of:
  - Garage Doors
  - Gates
  - Door Locks



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# Crestron Home Partners

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An Axis company

SONOS



kaleidescape



demotz

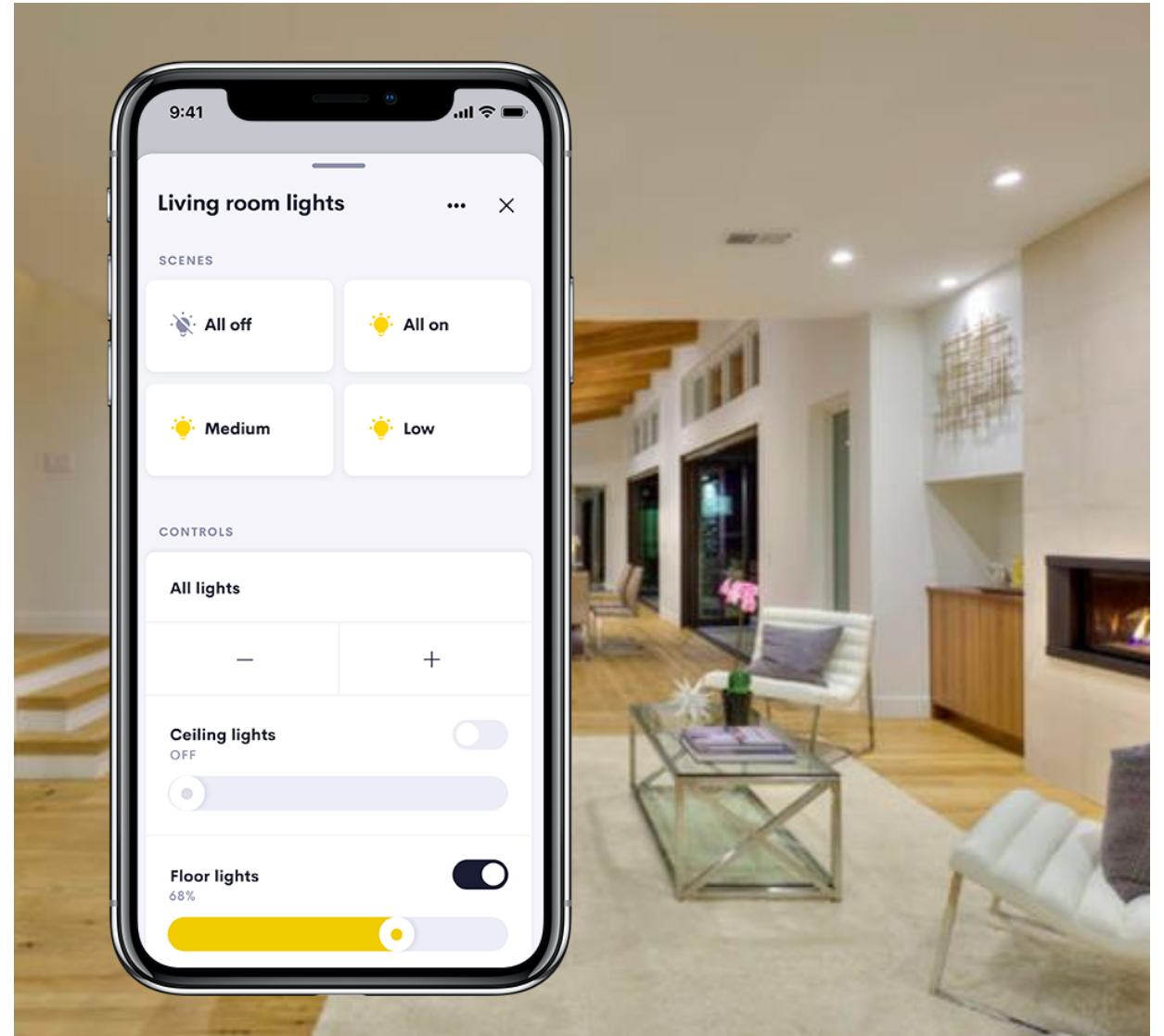




WORKS WITH

# CRESTRON HOME

- Auto-discovery of rooms, keypads, and lighting and shade loads
- Remote button presses from Crestron to Lutron®
- Remote button presses from Lutron® to Crestron
- Seamless integration into the Crestron Home™ user experience
  - Includes individual load control



What does the future hold?  
Follow the Leader

FUTURE INNOVATION

CRESTRON

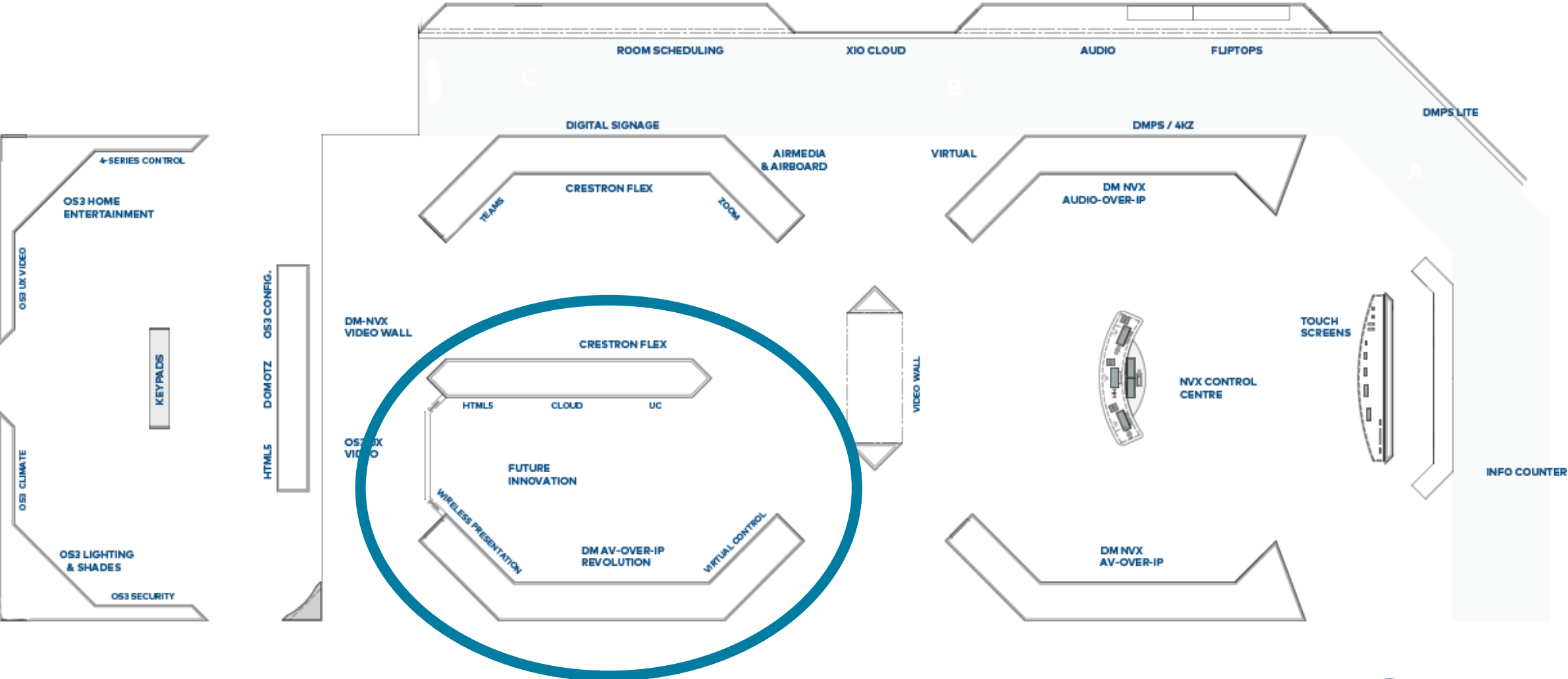
Next generation  
integration

// HTML5 and beyond

First class cloud management  
for 3rd party devices

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Thank you for Attending

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