

# ***VIDEO DISTRIBUTION & DISPLAY CONTROL***

## *SOLUTIONS GUIDE*



**Contemporary  
Research**

[www.contemporaryresearch.com](http://www.contemporaryresearch.com)

## AV OVER IP IN ONE EASY-TO-USE SYSTEM

Evolved from decades of experience in video distribution, CR offers a wide range of products for customers who intend to integrate an AV over IP system. CR has developed encoders and decoders that make it easy to broadcast video across a range of displays, including televisions and computer screens. The QIP IPTV Encoders and QIP IPTV Decoders provide a budget-friendly, scalable solution for sharing sharp image quality video delivered over IP.

### QIP IPTV ENCODERS



### QIP IPTV DECODERS



### FEATURES

- Industry standard MPEG-TS MPEG-2/ H.264 encoding
- Models with HDMI, SDI, and NTSC inputs
- Output as SPST Multicast or Unicast IPTV streams
- Compatible with unicast or multicast UDP and RTP IPTV streams
- Accept MPEG-2 or H.264 single program or multiple program transport streams
- Selectable video output resolutions up to 4K
- Channel selection, volume control, power, and display source selection available through front panel, IR, RS-232, or iCC-Net control system

### USE CASES

- Facility wide broadcast over Ethernet
- Digital Signage
- Facility wide broadcast over Ethernet
- Display Control over Ethernet
- Video Walls
- Digital Signage

### CR TOOLBOX

CR Toolbox software, a free PC application designed to connect and update CR products, can be used to add individual channels or upload a list created using a text editor. CR Toolbox is available for download at: [www.contemporaryresearch.com](http://www.contemporaryresearch.com)



## CONTROLLING YOUR AV OVER IP DISTRIBUTION SYSTEM

Distributing video across your system is step one; the next step is controlling the displayed content. While some solutions use a complicated and expensive system of cabling and proprietary products that run to all the displays, CR has developed a simple and intelligent solution for integrated control, Display Express and Display Express Lite (DX Lite). Display Express and DX Lite is an online platform utilizing iCC-Net protocols that provides display control for IPTV video distribution systems without the need for cumbersome and expensive training or additional cabling. It provides power, volume, and channel selection for any number of displays. Equipped with any device with a web browser like a smartphone or tablet, users can tap their finger to set up and control an entire video distribution network. In addition, the CR display control system uses the same cable infrastructure as the video channels, there is no complicated programming, or expensive equipment and/or licensing and maintenance fees to pay, allowing our users to appreciate a faster return on investment.

Alternatively, many Contemporary Research products integrate with third-party control systems such as:



### MANAGED SWITCH COMPATIBILITY

Contemporary Research AV over IP products have been successfully deployed using the most common L2/L3 managed switches from brands like; Cisco, NETGEAR, and others that support multicast. Contemporary Research is happy to confirm if the switch you are using is compatible.

### PRECONFIGURED SWITCHES

To help AV integrators utilize AV over IP distribution products and procure Ethernet switching equipment, Contemporary Research, is an authorized reseller of Luxul's AV line of switches. Luxul's AV over IP switches are available preconfigured for AV distribution which allows integrator to forget about network programming and get to the installation.



## AV OVER RF AN END-TO-END SOLUTION

For AV integrators with the option to use coaxial cable for AV distribution, Contemporary Research offers RF modulation, tuning, and display control products. Contemporary Research has created a legacy of not only the most affordable, reliable, and longest lasting products, but also the most extensively known and used solution for video distribution of multiple HD and SD sources to any number of displays with control.

### QMOD HDTV MODULATORS-IPTV ENCODERS



Professional dual-channel frequency-agile RF Modulator / Encoders for distributing SD & HD video content over CATV systems to an unlimited number of televisions or standalone HDTV Tuners. These units are ideal for distributing live video from satellite receivers, cable boxes, camera feeds and video production switchers, or digital signage content from media players or PCs. Dual-channel operation is standard, creating two virtual programs on one physical RF channel. Encoding can be MPEG-2 or H.264. The latest generation now has an adjustable RF output level up to 45 dBmV. Dual unit rack mounting offers up to four programs per rack unit, with the ability to mix models to handle HDMI, SDI, Component, RGBHV and NTSC video sources. Simultaneous MPEG-TS IPTV stream output available for hybrid content delivery systems.

### ATSC HDTV TUNERS

The industry standard 232-ATSC series HDTV tuners are an integrator-friendly option for tuning both analog and digital MPEG-2/H.264 channels, in ATSC, NTSC, and clear QAM formats. The ATSC tuners are controllable with 2-way RS-232, IP Telnet and UDP, as well as wireless and wired IR commands. An onboard Web page enables remote configuration, control, and monitoring.



### DISPLAY EXPRESS TV/DISPLAY CONTROL

Contemporary Research offers a simple and intelligent solution for integrated TV/display control, Display Express and Display Express Lite (DX Lite). Display Express and DX Lite is an online platform utilizing iCC-Net protocols that provides display control for video distribution systems without the need for cumbersome and expensive training or additional cabling. Equipped with any device with a web browser like a smartphone or tablet, users can tap their finger to set up and control power, volume, and channel selection for any number of TVs/displays. In addition, the CR display control system uses the same coaxial cable as the video channels, there is no complicated programming, or expensive equipment and/or licensing and maintenance fees to pay.

## WHICH SOLUTION IS RIGHT FOR YOU?

In today's advancing world, it is easy to be swept up in the excitement of new products and technologies. In Pro AV, one misconception is that radio frequency (RF) video distribution systems would be completely replaced by Internet protocol (IP) video distribution. In reality, both IP and RF have benefits and drawbacks. The argument shouldn't be that AV over IP is better than AV over RF or vice versa, but about which technology best fits your application needs.

### COMPARISON GUIDE

	RF	IP
PERCEPTION	Analog, The past, antiquated	Digital, New, Shiny
PROGRAMMING	Channels	Streams
CAPACITY	268 HD programs	Bandwidth limited
ENCODING	MPEG2 and/or H.264	MPEG2 and/or H.264
OUTPUT	Fully agile QAM 64/256 digital cable channels 2-135.	SPST Multicast or Unicast IPTV streams.
DECODING NEEDS	RF operates using national standards for encoding and decoding - any HD TV or tuner can receive any standard digital channel.	There isn't a set standard for IPTV. While H.264 is common standard, some manufacturers find ways to create proprietary streaming systems. Hardware or software decoders are required for viewing.
CABLING	RF Coax, often already in existing buildings	Ethernet often used in newer builds. Can be less expensive to install than traditional methods

Still unsure about which solution is the best fit for your installation? Contact a CR Solutions Expert for assistance.  
[www.contemporaryresearch.com](http://www.contemporaryresearch.com)





## POINT-TO-POINT OVER ETHERNET

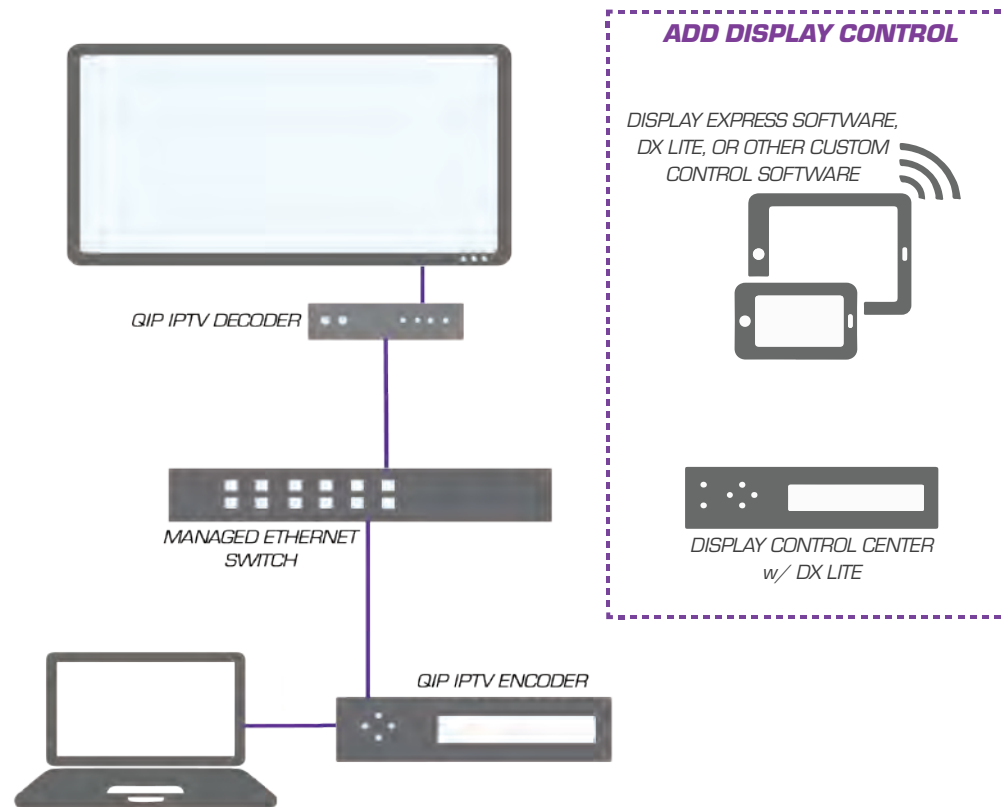
Contemporary Research AV over IP products allow users to easily deploy video from a single source to a single end point in minutes. Simply add an encoder at the source, a decoder at the end point, and connect them with a L2/L3 managed switch. You can even use Display Express for centralized control.

### APPLICATIONS:

- Corporate
- Healthcare
- Education
- Government

### USES:

- Screen Sharing
- Announcements
- Digital Signage



### AV OVER IP PRODUCTS:

- QIP IPTV Encoders
- QIP IPTV Decoders

### ADD DISPLAY CONTROL:

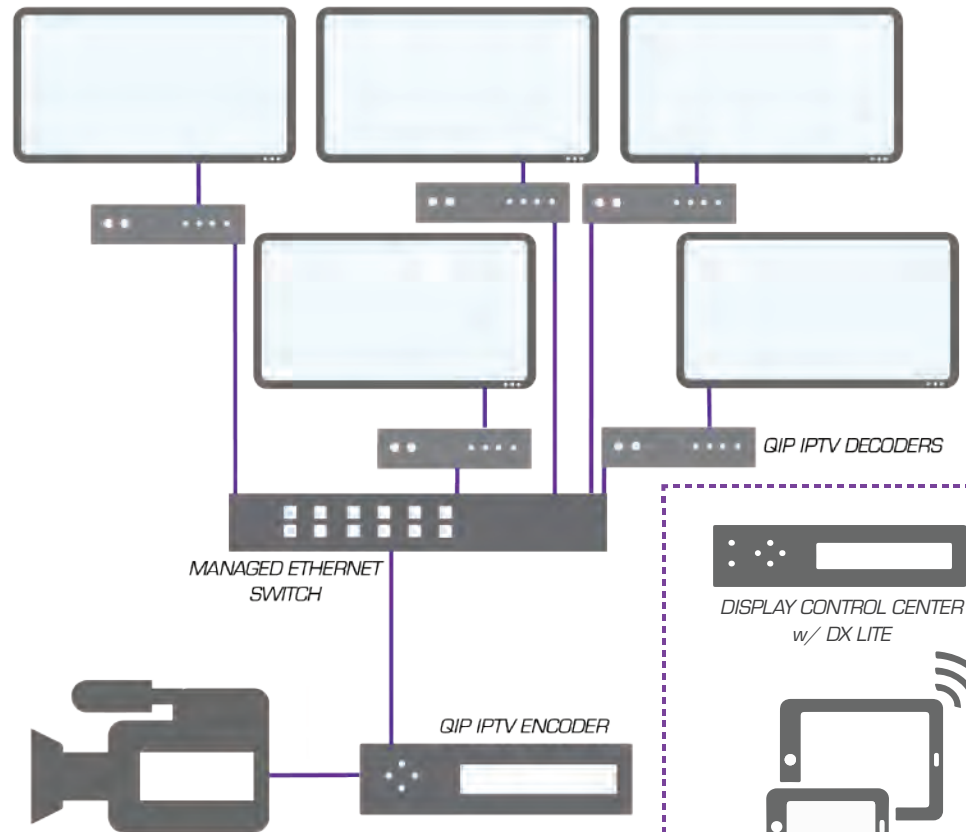
- IP-DXL Display Control Center w/ DX LITE





## ONE TO MANY OVER ETHERNET

Delivering a single source of video to a virtually unlimited number of displays is easy with Cotemporary Research. With a QIP IPTV Encoder at the source with QIP IPTV Decoders at the displays, connected with a L2/L3 managed switch users distribute video throughout a facility.



### APPLICATIONS:

- Corporate
- Education
- House of Worship
- Healthcare
- Government
- Sports Venue

### USES:

- Executive Offices
- Overflow Rooms
- Lobbies/ Waiting areas
- Digital Signage

### AV OVER IP PRODUCTS:

- QIP IPTV Encoders
- QIP IPTV Decoders

### ADD DISPLAY CONTROL:

- IP-DXL Display Control Center w/ DX LITE

### ADD DISPLAY CONTROL





## **BULK VIDEO DISTRIBUTION AND MANY TO MANY OVER ETHERNET**

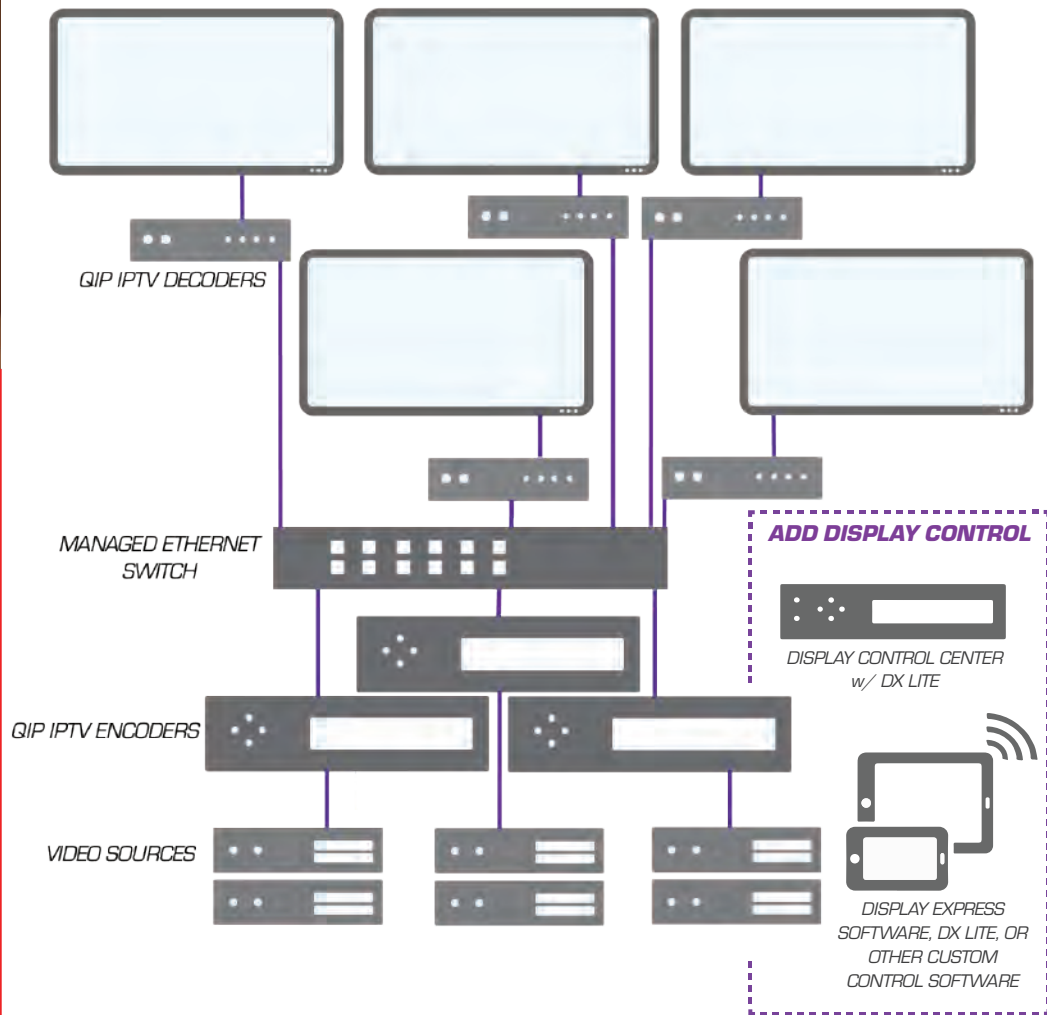
Whether the need is to distribute user generated content or create a cost-effective television head-end, Contemporary Research has the tools to allow for any number of sources to be distributed to any number of endpoints over Ethernet.

### **APPLICATIONS:**

- Bars and Restaurants
- Stadiums
- Education
- Fitness Centers
- Corporate
- Retail
- Healthcare
- Government

### **USES:**

- TV Distribution Head-end
- Command and Control Rooms
- Campus Wide Video Distribution



### **AV OVER IP PRODUCTS:**

- QIP IPTV Encoders
- QIP IPTV Decoders

### **ADD DISPLAY CONTROL:**

- IP-DXL Display Control Center w/ DX LITE

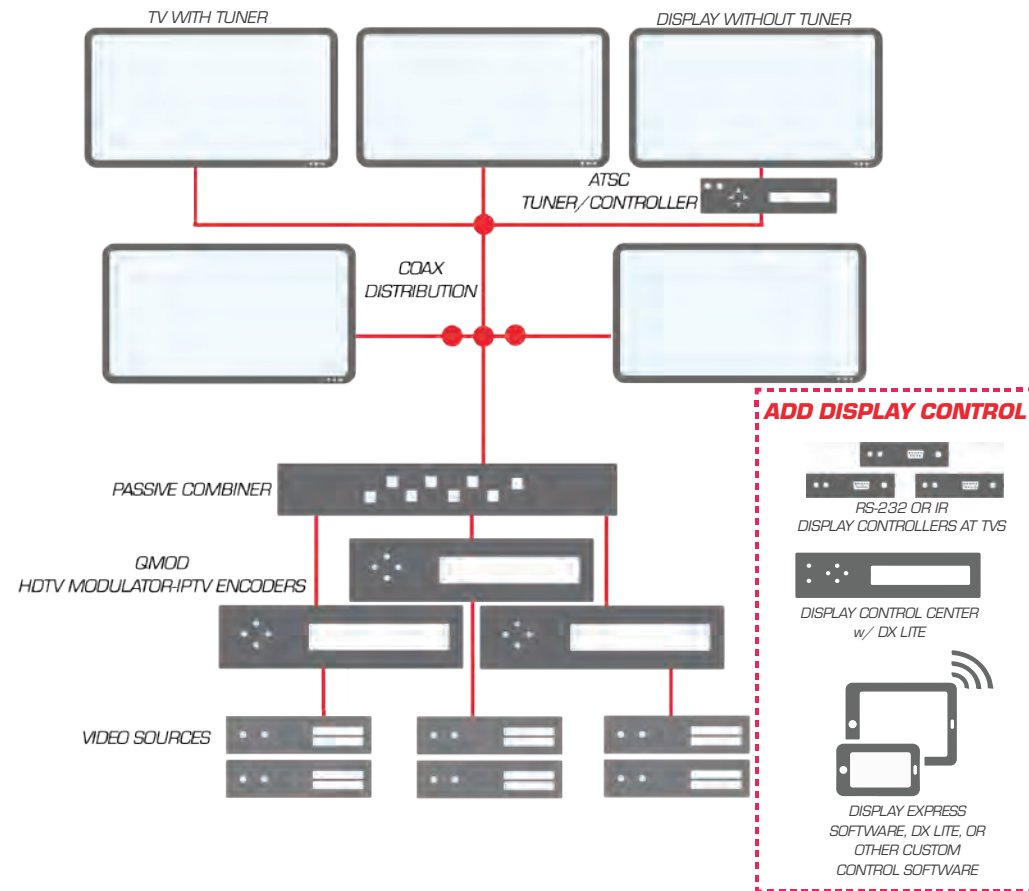






## **BULK VIDEO DISTRIBUTION AND MANY TO MANY OVER RF**

Contemporary Research has been helping integrators distribute video over coaxial cable simply and economically for decades. You can even use Display Express for delivering control commands on the same coaxial cable as the video channels.



### **APPLICATIONS:**

- Stadiums and Arena
- Bars and Restaurants
- Corporate
- Healthcare
- Education
- Government
- Retail
- Entertainment Venues

### **USES:**

- TV Distribution Head-end
- Command and Control Rooms
- Campus Wide Video Distribution
- Digital Signage
- User Generated Broadcasts

### **AV OVER RF PRODUCTS:**

- QMOD HDTV Modulators-IPTV Encoder
- QCP8 Passive Combiner

### **ADD DISPLAY CONTROL:**

- ICE-HE-DXL Display Control Center w/ DX LITE
- ICC1-232/ ICC1-IRX Display Controllers
- ICC1 TC Tuner/Controller
- DISPLAY EXPRESS SOFTWARE



## ***ABOUT CONTEMPORARY RESEARCH***

Contemporary Research has been a leading manufacturer of video distribution and display control solutions for over 25 years. Known for reliability and ease of use, CR products are designed, engineered, and manufactured in Texas with 24/7 product functionality in mind. CR has changed the AV marketplace by being the only manufacturer to bringing customers reliable and intelligent solutions for video distribution with control over RF, IP, and Hybrid systems.

To learn more visit [www.contemporaryresearch.com](http://www.contemporaryresearch.com)



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