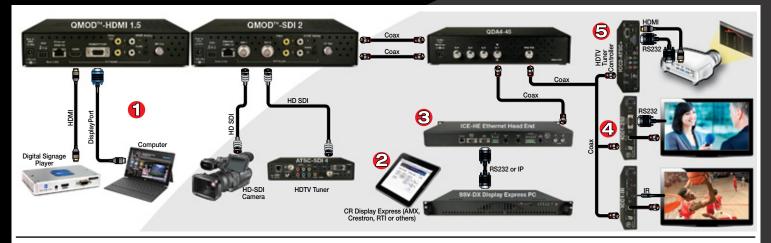


Display Express Systems

Modulators - Encoders - Tuners - Control



Contemporary Research display control installations include:

Sports Facilities

AT&T Centers - Spurs and Heat Hershey Center Jacksonville Arena Louisiana Superdome Seattle Mariners Wachovia Center - 76ers

Corporations

Home Depot Hyundai USA Lockheed Martin Mercedes Benz

Worship Facilities

Willow Creek Church Criswell Center Prestonwood Baptist Church

Entertainment

Maryland Live Casino Delta Downs Casino Margaritaville, Las Vegas

Colleges

John Paul Jones Arena - UVA Wake Forest University At Contemporary Research, we look at RF systems through the lens of integration. For that reason, we created a facility-wide TV and media control system that operates over the same RF cable as the channels. In use for over 15 years, the system has proved to be extremely reliable and simplified site's transition from analog to digital channels.

The success of Display Express control rests in its simplicity. Start with a selection of in-house channels, add our DX software or a custom control processor, distribute control over RF, and then integrate controllers at each TV, monitor or projector.

Channel Origination

- QMOD HD Modulator/IPTV Encoders process media from SDI, HDMI, Component and RGBHV sources in to HD in-house channels
- RF outputs from the modulators are combined and amplified for site distribution

2 Display Express

- Operates from Windows Win 7/8 Pro, Windows Server
- · Available integrated in Display Express PC or software for site's PC
- Serves display control Web pages to PCs, tablets and smartphones
 - Setup pages create a database of controllers, groups, channels, and users
 - Preset pages create a database of commands linked to TVs
 - Schedule pages launch Presets by date, time, and cycle
 - Alert pages create buttons for video paging and alerts
- Web Control Panels can be created assigned to users
 - **Preset** panels trigger Presets from interactive buttons
 - TV Control panels select TVs and change channels, volume, and power
- Sends commands to the ICE-HE Head End

S ICE-HE Control Channel

- ICE-HE receives commands from Display Express PC
- · Creates a micro control channel between 4 and 5 that combines with other RF channels

4 TV Controllers

- Receive control channel, sends the rest of the channels to the TV
- Send RS-232 or IR commands to the TV for power, channel, inputs and volume

5 Tuner Controllers

- Tunes channels for use with video projectors and monitors
- Receive the control channel and manages projector via RS-232



Display Express Systems

Modulators - Encoders - Tuners - Control

	Display Ex Software	Express Control Software Serves Web pages for system setup, control, and scheduling Installed in site's Win 7/8 Pro PC, Windows Server, or Display Express PC		
	Display Express PC	Rack-mount Windows 7 Pro PC with pre-insrtalled Display Express software		
	Physical	19″W x 1.7″ H (1RU) x 14″ D, 10 lbs		
	Software	Windows 7 Pro, Display Express control/scheduling software		
Display Express Software	Drives	250 GB HDD IDE		
antiilline ^{teen} tittee C	Processing	Intel Dual-Core Celeron 1620, 1G DDR3 SRAM 4USB 2.0 Ports, VGA and DVI outputs RJ-45 10/100 Mbps Ethernet port		
Rack-Mount PC	Includes	RS-232 cable for ICE-HE	E Head End, USB/RS-232 ac	lapter
	Control Ch	annel ICE-HE Ethernet Head End		
ICE-HE	Control	RJ-45 Ethernet, RS-232 data inputs Use with Server-based applications or PC located remotely from Head End unit		
	General	Communicates with SignStream control software Sends control commands through RF to iC-Net controllers Sends control data via RF, 74.7 MHz, narrow-band signal between channels 4 and 5 Receives status data at 5.6MHz, below sub-channels from 2-way iC-Net controllers		
	Physical	19″W x 1.75″H (1RU) x 9″D, 3 lbs		
	Includes	Rack mounting hardware 12 VDC Power Supply, 500 mA		
<image/> <section-header></section-header>	TV Contro	llers ICC1-IRX	ICC1-232	ICC2-ATSC 4
	Туре	IR TV Control	RS-232 TV Control	RS-232 Controller ATSC/QAM Tuner
	Control	Discrete IR control Power, Channels, Inputs	RS-232 commands Power, Channels, Inputs, Control Lockout	RS-232 Power, Channels, Inputs, Control Lockout
	Physical	5.5″W x 1.1″H x 3.4″D 8 oz	5.5″W x 1.1″H x 3.4″D 8 oz	8.5"W x 2.0"H x 8.0"D 2 lbs
	Tuning	ByTV	By Display	ATSC, NTSC, QAM
	Sense	CSM1: Xantech power current Sensor Tip+: CC-HSD for tube TVs		
	Outputs	RF: In and Out	RF: In and Out	RF: In and Out Tuner RF: In HDMI, RGB/YPbPr, NTSC Video HDMI, Coax, Optical, Stereo Audio All outputs Simultaneous
	Includes	PS12-500 power supply IC-IRE IR Emitter	PS12-500 power supply	PS12-15 1.5A power supply
	Optional	Xantech CSM1 CC-HSD Sensor	CC-COM cable	CC-COM cable HD2-RC IR Remote (1 per system needed for setup)
CR products feature a full two-year warranty, six months for Display Express PC				



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