

## **Columbus Consolidated Government Streaming Solution SOW**

This streaming solution will have 11 media streamers to provide IPTV throughout the 3 Columbus Consolidated Government(owner) locations. This system will provide eleven channels of cable TV throughout the network, via TCP/IP. Channels will be accessed via a Graphical User Interface(GUI) created By Extron Electronics. One streamer(channel) will have the capability of changing channels with the GUI, and executed by control processor. The rest of the channels will be fixed.

Streams will be accessible in the networks WAN via a web Page. If the WAN is connected via an ISP, a network transcoder must be added to view the streams at the different locations. Multicasting must be enabled on the network switches to allow multiple users to see streams simultaneously. A network assessment must be completed in order to assure all network requirements are met prior to setting the installation date.

The owner will provide 11 cable boxes with component video outputs. The streaming encoder will be connected to the cable boxes via component to BNC cables. A 48 unit floor standing rack with a 24 plug power strip must be provided to house the control processor, streamers, cable boxes, network switch and battery backup. The network switch must have at least 12 ports open to connect the streamers and control processor. The owner will be required to provide 12 static IP addresses for the streamers and control processor. All stream viewing PC's must have VLC streaming media decoder installed to play the streams via the web page. If a display needs a media stream and has no PC, a decoder can be added.

Extron Commissioning will include creation of virtual machine to host WEB GUI ( Virtual Machine provided by CCG). Collaborate with Integrator to make sure IP addresses are set with encoders and SMP 351 presets are correct. GUI is created to customer satisfaction and all buttons work properly. Extron will come on site on day one to commission system and answer any technical questions CCG may have.

Installation of the streaming solution will take three days:

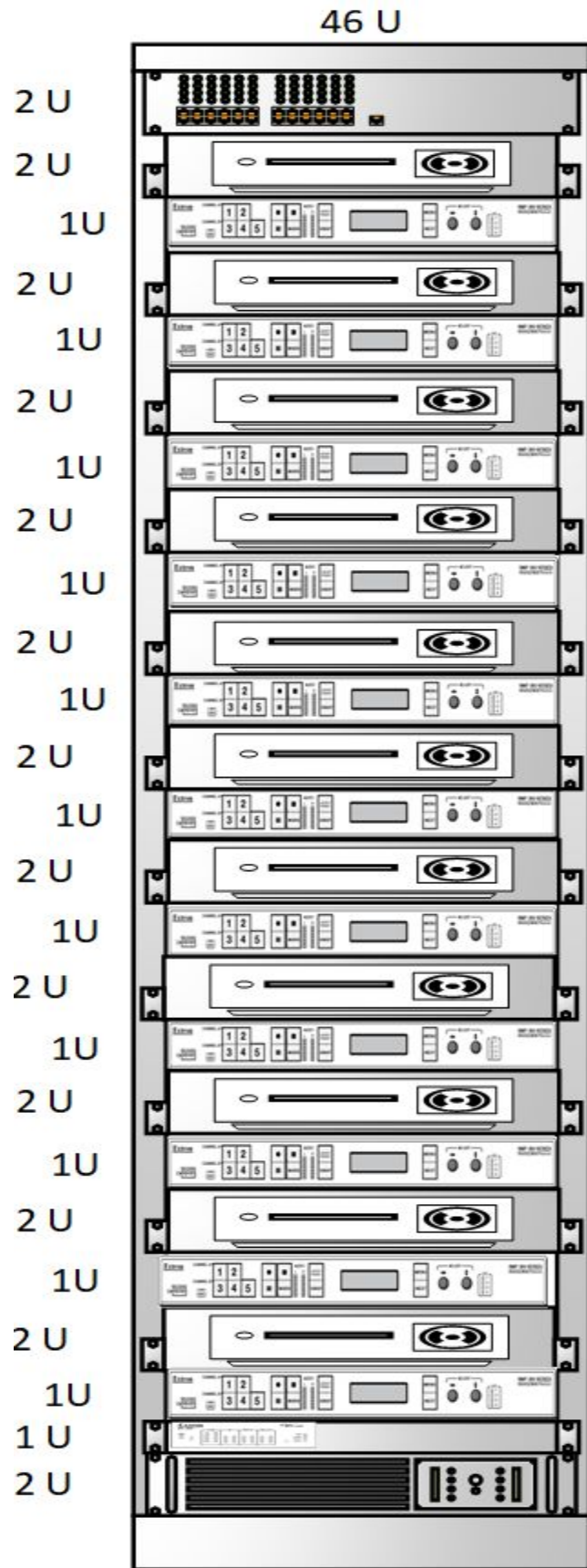
Day 1 - Installing streamers, control processor and Cable boxes. Site stream testing.

Day 2 - Technical training and End-user training. 5 hours of technical training (equipment, troubleshooting, loading VLC, streaming encoders and questions) and 3 hours of end-user training (loading web page, installing VLC player and questions).

Day 3 - Walk the sites to ensure that all 11 streams working properly, and systems are running to satisfaction.

Below(page 2 &3) you will find sample diagrams, and drawings of the proposed solutions:

Rack Layout & Elevation



### Streaming Control and Video Routing/Wiring Diagram

