



Overview

The municipal court is a lower court that usually tries criminal misdemeanors and civil lawsuits. Municipal courts have city or county-wide jurisdiction and conduct preliminary hearings and try cases of up to \$25,000. Due to the quick turnaround of most of the cases tried in municipal courts, the environment is fast-paced, requiring control systems that are flexible and easy to set up and operate.

Room Needs Assessment

Staffing	The judge and clerk are responsible for managing the courtroom. They both need touchpanel displays for control and management of content displayed throughout the courtroom. The clerk displays and controls the recorded evidence from a workstation PC. Both the judge and the clerk enable and restrict the viewing of evidence to the jury and audience by muting the video signal to specific displays.
Displays	All jurors will require their own displays for evidence review. The prosecution and defense teams also need to monitor content being presented to the witness and jury. Two large displays are needed for the visual display of evidence to the courtroom gallery.
Sources and Connectivity	Laptops, PCs, paper documents, and video presentations are the primary content used to introduce and show evidence to the judge and jury. Electronic evidence is submitted through a central evidence center.
Control System	Two centralized, tabletop touchpanels are needed to control video sources, source selection, and video displays. The graphical user interface on the touchscreen must be simple to operate and intuitive.
Network	A 100BaseT Ethernet network is installed throughout the courthouse. Network access is available for all PCs, including laptop inputs.
Functional Requirements	Provide a content delivery system that is easy to set up, reliable, and easy to operate. The control system must accommodate the network backbone for future expansion, including integration of legacy equipment.

System Design Solution

Control System Configuration

This system requires the advanced capabilities of Global Configurator Professional, including: Conditional Logic, Local Variables, Macros and Monitors, Touchpanel Mirroring.

GUI Configurator will be used for all TouchLink Touchpanel Designs.

Control System

The AV system will be controlled by an **IPCP 505** IP Link® Control Processor and two **TLP 1000TV** TouchLink™ Touchpanels. The IPCP 505 will control the jury and gallery displays via IR. Extron **SW 4 DVI A Plus** DVI switchers, and an Extron **DXP 88 DVI Pro** HDCP-compliant DVI matrix switcher, as well as the witness and defense displays, will be controlled via RS-232. An Extron **DVS 304 DVI** scaler with DVI output and an Extron **Annotator** will be controlled via Ethernet.

Sources

The prosecution and defense tables will provide analog and digital source input connectivity to the content display system via an Extron **Cable Cubby® 600**. An Extron **DVS 304 DVI** video and RGB scaler is used to convert the analog signals to DVI while scaling them to the intended resolution and aspect ratio. DVI signals at these locations are pre-switched using a four-input Extron **SW4 DVI Plus** switcher.

The evidence station includes similar connectivity and is further enhanced with the addition of a DVD player, high resolution document camera, and a touch monitor. The heart of the evidence station is an Extron Annotator. The Annotator provides selection of multiple input formats and has integrated scaling that outputs the required resolution, aspect ratio, and appropriate signal format using the optional DVI output. The Annotator, with a third-party touch monitor provides all the tools required to highlight and emphasize any electronic evidence. The clerk's desk includes a PC workstation that may, on occasion, be used to provide content to the displays.

Digital Matrix Switching System

An Extron **DXP 88 DVI Pro** 8x8 matrix switcher will be used to route the digital signals and EDID information from sources to displays. The matrix switcher's EDID Minder will negotiate resolution information to set each source's output to match the native resolution of the displays in the system.

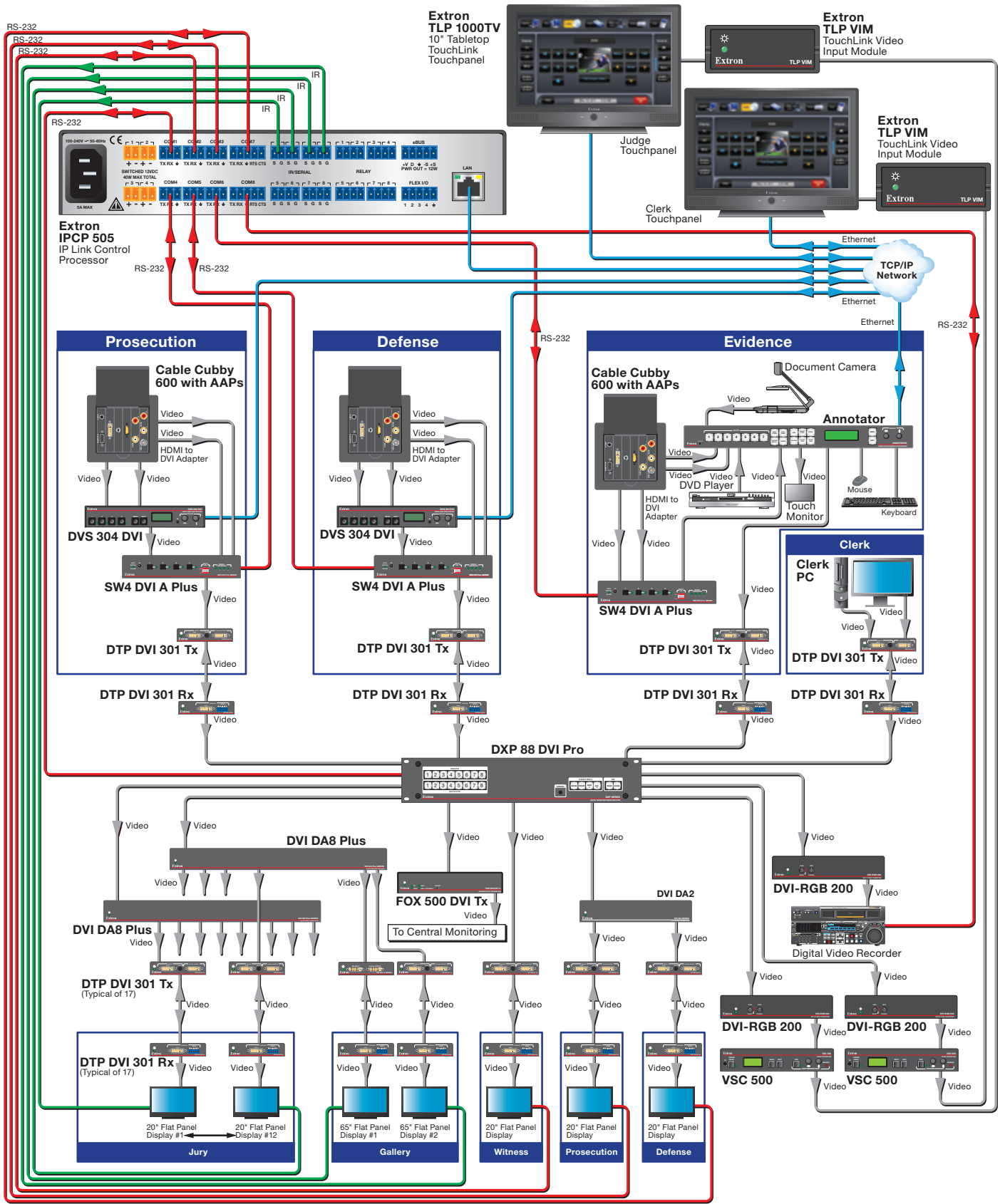
Signal Distribution

Extron **DVI DA8 Plus** distribution amplifiers attached to the **DXP 88 DVI Pro** outputs drive jury displays and information sent for gallery viewing.

Extron **DVI 201** twisted pair transmitters and receivers are used extensively to extend 1080p signals 75 feet and beyond. EDID communications and HDCP can be passed through the **DVI 201**.

Extron **FOX 500 DVI** fiber optic extender products are utilized to transport evidence to the central monitoring location. They address system requirements for distance and content security.

The Extron **DVI-RGB 200** is used for converting DVI signals to analog RGBHV for use with a digital recorder.



— Ethernet
 — RS-232
 — IR
 — Voltage Control
 — Video