

The Digital eXperience Guardian (DXG) is a networked, semi-automated, and affordable, audio and colorimetry monitoring system.

The DXG features an internet accessible user interface and common database outputs. It is therefore suited for integration as the reality-based component of every A/V Network Management/Quality Control System.

To meet security concerns, the results of the audio and color sensors always leave the system as data, never picture or sound. It is specifically designed to not function as a substitute for a calibration tool. Instead, a baseline sample is captured by the DXG after an auditorium is calibrated. Then the 'delta', that is, changes from the sound and picture baseline, are sent to the technical and quality control personnel.

The components are suspended just above the light path of the projector. The color/luminance sensors are placed up to 3 meters from the screen. They are connected by RS-485 cables, to the main case which is suspended 2/3rds distance from the screen, a typical place to measure sound from.

There are 5 microphones in the main microprocessor case, to monitor audio level and phase. One (or several) remote DXG colorimetry sensors monitor R, G, B and luminance changes over time at one or several places on the screen – or at several screens in a multi-screen auditorium.

The DXG system is powered by PoE (Power over Ethernet), or by USB if connected with a portable computer and used with a tripod.

The system takes readings using DCPs full of colors and sounds. Future software will include the capacity to monitor other input devices such as satellite and cable feeds, and blu ray players.

The roadmap also includes:

- Option 1 – A low quality camera feed (to monitor what is on the screen via the network).
- Option 2 – A card that monitors the signal from the HI / VI equipment.
- Option 3 – Phone Blocking system (where legal.)

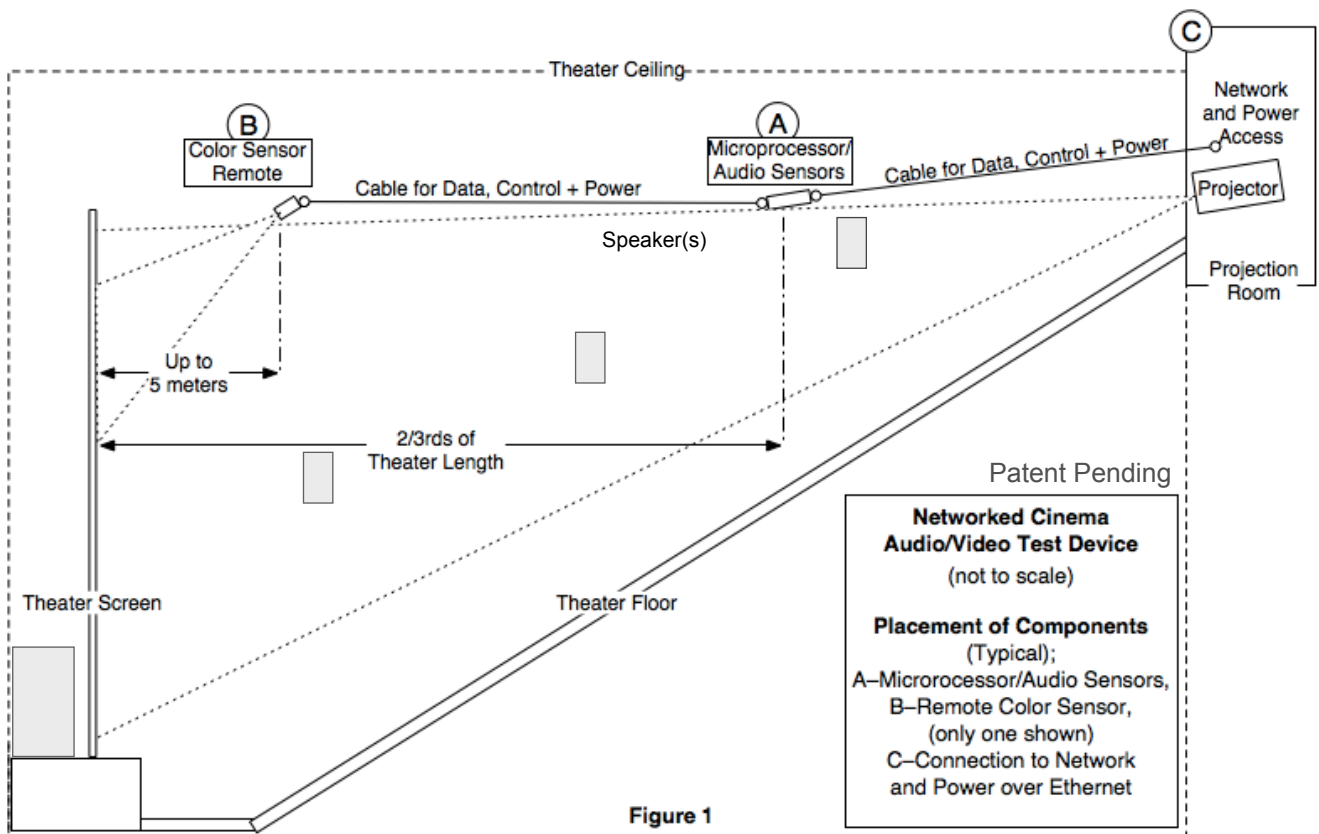


Figure 1