Corporate Lobby with AMX Control and Video Distribution, JBL Speakers, and Samsung MagicINFO Digital Signage

## OPPORTUNITY

Corporate lobby areas deliver the very critical first impression when visitors arrive. Background music and digital signage can work to set the mood, make a visitors wait more pleasant, deliver important information, reinforce branding and more. Effective solutions take into consideration the communication requirements of the business combined with the customer’s point of view.

## SOLUTION

HARMAN Professional Solutions legendary audio, video and control technology used together with Samsung MagicINFO digital signage delivers clear audio and pristine video with a control layer sophisticated enough to provide extremely flexible use cases that have a very simple user interface anyone can manage.

In this sample diagram, video content along with the accompanying audio, from a variety of sources is streamed directly to the network for access anyplace on or off campus. This is accomplished with AMX SVSI N3000 encoders. Those H.264 streams are then available as direct inputs into the Samsung MagicINFO equipped displays without the requirement for a stand-alone decoder unit. MagicINFO provides template based configuration for impressive signage displays that can include this streamed video, RSS feeds, still images and more. Since MagicINFO has the concept of channels the user interface can be programmed to select between streamed video and still images by simple changing the “channel”. For example, if an important client is visiting the streamed video can be changed to a still image welcoming the client by name.

There is no need to differentiate between content types (for example without MagicINFO switching from a live stream to a still image would likely include switching the input on the display). This also allows the system to be designed in such a way that does not allow for users to switch outside of the selected, approved corporate channels and content.
The audio from the streamed video sources are broken away from the video with the NMX-ATC-4321 networked audio over IP transceiver. This audio, along with additional audio choices such as announcements made via the AKG C6N521-STS paging microphone, AUX music player and more are then delivered to the BSS BLU-100 Soundweb London signal processor. The BLU-100 signal processor is expertly designed to provide a comprehensive suite of processing to ensure all audio perfectly fits the attributes of the zone it is being delivered to. This way, no matter the source, the sound is processed for delivery in a consistent way is intelligible, and avoids complications such as perceived audio jumps when switching between sources. This includes mixing/gain, crossovers and filters, delay, primitives, graphic and parametric EQ and more. Crown amplifiers provide amplification and delivery to JBL Control 16C/T speakers. All of this comes together so that no matter the audio source, whether it’s a page from reception, audio to accompany an important announcement from the streamed cable channel, or background music to soothe or excite the visitors, everyone can hear clearly regardless of their location.

The AMX NX-2200 provides the central control for all of this AV in addition to lighting and HVAC. This includes powering displays and sources, changing channels, controlling lighting, adjusting temperature and more. The NX-2200 can be programmed to control any piece of electronic equipment that can accept control via Ethernet, IR, or RS-232. The Modero touch panel provides a beautiful and simple touch interface for the user to manage this environment without even realizing the sophistication and power of the system behind it. While it’s possible to program the touch panel interface with specific selections for each device, such as display on/off, it is much more user friendly to program the interface for combined actions. For example, when reception arrives in the morning a simple selection such as “opening setup” can power up all sources and displays, adjust the lights to the perfect desired brightness, adjust the background music volume to a pre-defined level, and select the “channels” or pre-defined MagicINFO signage orientations to be shown on the displays. Then, if the user needs to quickly switch the audio from background music to the cable channel source coming in on the signage a simple selection such as “switch audio to match video stream” can be included. The preferences can be custom defined to suit the requirements of the facility.

This example system is just the beginning. With AMX SVSI N3000 networked AV video streams can also be sent campus-wide to populate displays in hallways and common areas while streams can be accepted from anyplace on campus to show corporate executive all-hands meetings. Networked AV breaks down the barriers by not confining sources to the room they are in, or even the building they are in.
AMX N3000 Series H.264 Video over IP
The AMX SVSI N3000 Series extends the reach of AMX SVSI Networked AV to the WAN for streaming, video to desktop, digital signage, set-top boxes, or mobile device applications. Utilizing H.264 compression technology, the N3000 Series delivers the highest quality HD video content at the lowest bandwidth for the most demanding application. Moving video to or from the cloud just became a lot easier.

Samsung DB55E Slim Direct Lit LED Display with Samsung MagicINFO
Samsung’s DB55E displays offer advanced display technology in an affordable fashion. Enabled with Samsung MagicINFO, a comprehensive platform that offers seamless remote digital signage software and hardware management, enabling content to update message designs and schedules from any location at any time. The platform is compatible with a variety of Samsung commercial displays.

JBL Control 16C/T Two-Way 6.5” Coaxial Ceiling Loudspeaker
Control 16C/T is a full-range ceiling speaker consisting of a 165 mm (6.5 inch) high tech cone driver and a 19mm soft-dome liquid cooled tweeter mounted in a vented, paintable baffle made of UV resistant UL94-V0 and UL94-SHB material, with a pre-attached blindmount backcan for quick and easy installation.

AMX NetLinx NX Integrated Controllers
The NetLinx NX Integrated Controllers are programmable network appliances specifically designed to control AV and building technology using multiple analog and digital formats. The controllers are enterprise ready with advanced features including IPv6, IEEE 802.1X, X.509 certificate services, full LDAP integration, TLS/SSH communications, and multiple program including RPM, AMX NetLinx and Java. Available in four stand-alone models, NX technology is also integrated into AMX Enova DVX and Enova DGX models.

BSS Soundweb London Digital Signal Processors
Used in install sound applications, Soundweb London provides three core functions for audio signals processing, control and distribution. Simplified programs allow designers to assign and define an extensive menu of audio processing choices (called objects) for each incoming channel. Processing capabilities include: mixing / gain (i.e., ambient noise compensator, compressor, ducker, expander, gate, leveler, limiter), crossovers and filters, delay, primitives, graphic and parametric EQ, and more. Those channels can then be connected using a drag-and-drop block diagram. This creates the signal flow that defines the processing, control and distribution of the audio.