BARS & RESTAURANTS

Eatertainment Venue with AMX Networked AV, Samsung MagicINFO Displays and Audio by AKG, JBL and dbx

OPPORTUNITY

Restaurants and bars that offer entertainment alongside dining options, known as "eatertainment," represent a growing sector of the industry. When it comes to AV technology, eateries offering arcade games, karaoke, bowling and other activities have a unique set of needs that call for custom solutions. While typical restaurants can get by with fairly simple AV systems for background music and television, eatertainment venues require advanced networked AV solutions incorporating multiple audio and video sources, digital signage, zoned audio systems and remote control.

SOLUTION

AMX SVSI N2300 Series networked AV equipment provides a powerful, flexible and scalable solution for streaming high-quality audio and video with comprehensive control features. This sample application demonstrates how AMX encoders, decoders and control units can integrate with Samsung MagicINFO-equipped displays, dbx digital zone controllers, and JBL amplifiers and loudspeakers to form a state-of-the art networked AV system for a modern eatertainment venue.

The heart of the system is a managed gigabit Ethernet switch; a standard piece of network equipment which many establishments already have. Devices on the network connect to the switch via standard Ethernet cables, allowing information to be streamed to and from any point with near-zero latency. NMX-ENC-N2312 encoder units act as entry points to the network, capable of receiving analog and digital audio and video signals up to class-leading 4K UHD resolution. In an eatertainment setting, possible sources include television from digital cable boxes, live video feeds of on-site entertainment or even video outputs from game consoles at an arcade.

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AKG   AMX   BSS   crown   dbx   JBL PROFESSIONAL   lexicon   Martin   Soundcraft   STUDER
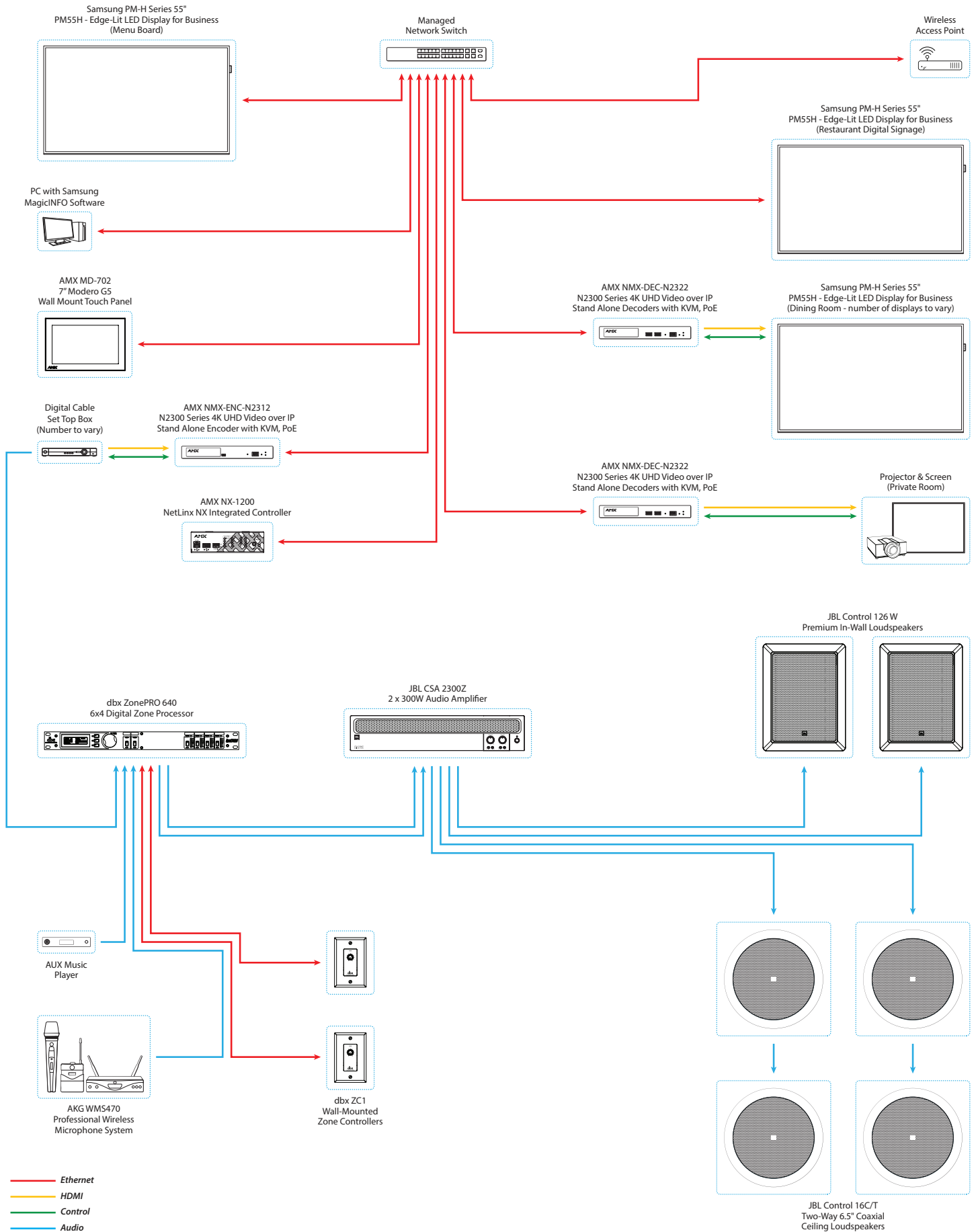
At the other end of the network, NMX-DEC-N2322 decoders receive these signals and convert them to an HDMI output, which is sent to Samsung PM-H Series LED displays throughout the venue or digital projectors in private VIP rooms. For digital signage applications such as menu boards or information screens, Samsung PM-H displays can be connected directly to the network (without an encoder) to receive images, slideshows and more from a PC running Samsung MagicINFO software.

Audio from cable boxes, standalone music players or streaming services is sent to dbx ZonePRO 640 Digital Zone Processors, which provide maximum flexibility for routing different sources to individual zones throughout the venue. Each ZonePRO 640 unit can accept four stereo sources plus two line- or microphone-level sources, such as the AKG WMS470 wireless microphone system. Sources can be sent to any of four zones, such as such as a dining room, bar, outdoor patio or back-of-house area. Wall-mounted dbx ZC1 Zone Controllers provide an easily-accessible master volume control for each zone.

Outputs from the ZonePRO system are sent to JBL CSA 2300Z amplifiers, which provide a streamlined, cost-effective solution for powering a large amount of speakers throughout a venue. Based around advanced Crown DriveCore™ and HARMAN GreenEdge™ technology, JBL CS Series amplifiers quickly pay for themselves in energy savings. CS Series amplifiers pair perfectly with JBL Control Contractor Series loudspeakers, which distribute crystal-clear audio with excellent coverage anywhere it needs to go. Control 16C/T in-ceiling models and Control 126 W in-wall models are easy to install, with flush-mounted paintable baffles that can blend in with any decor.

System control is provided by the AMX NX-1200 NetLinx Integrated Controller, which allows source switching, volume adjustments, display management and control over utilities like HVAC, lights and security, all from a central location. Control macros can be set up to perform common functions like switching from background music to display audio at the touch of a button. Additional user interfaces such as touch panels and keypads can be added in key locations, and a wireless access point connected to the network allows staff to control devices remotely from a laptop, tablet or smartphone.

NETWORKED AV EATERTAINMENT VENUE - SYSTEM DIAGRAM

Samsung PM-H Series 55"
PM55H - Edge-Lit LED Display for Business
(Menu Board)

Managed
Network Switch

Wireless
Access Point

Samsung PM-H Series 55"
PM55H - Edge-Lit LED Display for Business
(Restaurant Digital Signage)

PC with Samsung
MagicINFO Software

AMX MD-702
7" Modero G5
Wall Mount Touch Panel

AMX NMX-DEC-N2322
N2300 Series 4K UHD Video over IP
Stand Alone Decoders with KVM, PoE

Samsung PM-H Series 55"
PM55H - Edge-Lit LED Display for Business
(Dining Room - number of displays to vary)

Digital Cable
Set Top Box
(Number to vary)

AMX NMX-ENC-N2312
N2300 Series 4K UHD Video over IP
Stand Alone Encoder with KVM, PoE

AMX NMX-DEC-N2322
N2300 Series 4K UHD Video over IP
Stand Alone Decoders with KVM, PoE

Projector & Screen
(Private Room)

AMX NX-1200
NetLinx NX Integrated Controller

JBL Control 126 W
Premium In-Wall Loudspeakers

dbx ZonePRO 640
6x4 Digital Zone Processor

JBL CSA 2300Z
2 x 300W Audio Amplifier

AUX Music
Player

dbx ZC1
Wall-Mounted
Zone Controllers

AKG WMS470
Professional Wireless
Microphone System

JBL Control 16C/T
Two-Way 6.5" Coaxial
Ceiling Loudspeakers

--- **Ethernet**
--- **HDMI**
--- **Control**
--- **Audio**

AMX N2300 Series 4K
4K30 4:2:0

Don't miss a single moment watching the big game or reviewing video at the big meeting with the 4K over IP solution that is fast enough for live action even price sensitive markets will appreciate. The new AMX SVSI N2300 Series Encoders and Decoders are designed to distribute beautiful 4K video with less latency, and consuming less power - all at an extremely competitive price.

JBL Control Contractor
Series Loudspeakers

Spanning a complete range of surface-mount (on-wall), in-ceiling and in-wall models, the variety of solutions offered by the Control Contractor Series give you complete mastery of any architectural, aesthetic or system performance requirement. All with sound from JBL, simply select the loudspeaker for the architectural, form factor and sonic requirement and the resulting sound system will always deliver superior performance, reliability and value.

JBL CSA 2300Z Audio Amplifier

Featuring Crown DriveCore™ technology, JBL CS Series amplifiers deliver legendary sound quality and class-leading headroom in a compact and cost-effective package that can be deployed at scale. Designed for maximum efficiency, the CS Series features HARMAN GreenEdge™ technology for increased output and decreased power consumption, meaning they'll quickly pay for themselves in energy savings.

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.

dbx ZonePro 640
Digital Zone Processor

With 6 inputs and 4 outputs the dbx ZonePRO 640 provides flexible signal routing, powerful DSP processing and multiple control interfaces for Commercial Audio applications. The 640 provides input processing like gain control and EQ, highly sophisticated and specific functions such as selectable paging microphone processing including Gating, De-Essing, Auto Gain Control, Compression and Feedback Suppression, and a routing module that provides of course Primary Source Selection but also Source Ducking for Paging and Priority Override.

AKG WMS470 Professional
Wireless Microphone System

The WMS470 professional analog wireless microphone system is the best choice for a cost-efficient, high-performance multichannel system. Up to 16 channels can be used simultaneously within the same frequency band. The pilot tone prevents the user from unexpected startup noise and it continuously sends transmitter data including low battery information to the receiver. A revolutionary power management allow up to 14 hours of operation with one AA-size lithium battery.

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