Installation 2: Setup and Verification

Project Communications

Project Communications
Importance of Documents
Project Management Tools
Project Management Lessons Learned

Networked AV Systems

Networked AV Systems
Network Device Inventory
Networking Components
The OSI Model
Network Connections
Ethernet
AV Data Link Protocols
Internet Protocol (IP)
Address Assignment
Transport Protocol
The Host Layers
Security Technologies
Networking Tools

Control Systems

Control Systems
Types of Control Systems
Control System Installation
Control System Verification

Power and Grounding

Power and Grounding
Electrical Safety
Circuit Theory
Audio Systems

Principles of Sound
- Audio Testing Tools
- Audio Systems Background
- Types of Waveforms
- Phase
- The Decibel

Setting System Gain
- Methods for Setting System Gain
- Gain Equipment
- Setting Unity Gain
- System Optimization Method
- Setting Gain Structure with Audio DSPs
- Mixer Input Adjustments
- Microphone Input Adjustments
- Line Input Adjustments
- Power Amplifier Adjustments
  - Audio Gain Simulation

Elements of Acoustics
- Acoustic Terminology
- Conservation of Energy
- Reflection
- Reverberation
- Absorption
- Transmission
- Room Modes
- Background Noise
- Intelligibility

Audio Equalization
- Equalizers
- Measuring Loudspeaker Performance
- Testing Methods
- The RTA Method
- Using Dual-Channel FFT
- Finishing the Equalization Process
Equalization Simulation

Audio Processors
Compressors
Limiters
Setting Compressors and Limiters
Expanders
Other Audio Processors
DSP Architecture Types
Signal Processors Simulation

Audio Troubleshooting
Audio Troubleshooting
Audio System Quality
PAG-NAG
How to Troubleshoot Audio Problems
Electrical Audio Problems
Acoustical Audio Problems
Audio Design Problems

RF Systems

RF Systems
Background on RF Systems
Wireless Microphones
Wi-Fi and 802.11 Issues

Video Systems

Digital Video Signal Properties
Video Signals
Digital Content Bandwidth
Video Signal Types
Cable Types
HDMI Installation Issues

Video System Installation
Video Cameras
Video Signal Processors
Display Setup
Projector Setup
Projector Simulation
Contrast Ratio
Hue and Saturation
PISCR
Projector Simulation II
Colorimetry

**Video System Verification**
- Video System Troubleshooting
- Introduction to DisplayID/EDID
- EDID Troubleshooting
- Digital Rights Management
- HDCP Device Limits
- BYOD
- Audio/Video Sync

**System Closeout**

**System Closeout**
- Site Clean Up
- Closeout Documentation
- Troubleshooting
- Customer Training
- Maintaining AV Systems