

SHOP AND AS-BUILT DRAWING COMPONENTS CHECKLIST

A shop drawing should be a complete graphical description of the AV system. It is augmented and complemented by the equipment and operations manuals and other materials to create the final documentation set. The difference between the shop drawings and as-builts is that the as-builts are corrected to reflect the actual installation configuration which may have changed from the original shop drawings. The as-builts, in turn, become part of the record drawings for the project contractually.

Additional documentation is normally required for complete submittals and as-builts. See the Final AV System Record Documentation Package Checklist for the full list of typical record documentation package components.

Title and Legend

- Title page including sheet index
- Legend of symbols and conventions

Architectural Plans and Details

- AV device location and coordination floor and ceiling plans showing room-mounted device locations, rack layouts, seating layouts and critical dimensions
- Large scale plans of important, high-density areas such as equipment and control rooms.
- Millwork and furniture integration details for AV equipment

AV Electrical Floor, Wall and Ceiling Plans as Needed

- Conduit risers and plans
- Junction and backbox location plans including cable fills
- AV electrical requirements showing AV-related power outlets and junction boxes
- Voice/data, CATV, other requirements showing outlet locations and complete system if provided under the AV contract

Cabling Details

- Cable Run List (may be a separate document) including cable types, quantities, estimated length, wire ID, use
- Cable/connector termination details

AV Elevations and Mounting Details

- Direct view display device (flat panel and CRT) mounting and viewing angle details
- Video projector mounting details including plan, section, projection paths and viewing angles
- Loudspeaker mounting and aiming details

Equipment racks

- Front, rear and side elevations including device locations and wire management scheme
- Security/locks
- Ventilation
- Details

AV Signal Flow Diagrams

Full signal flow diagrams for audio, video, and control and AV power including:

- Complete equipment interconnection information
- Wire Cable types, manufacturers, model
- Cable number/label assignment for every cable
- Device manufacturer and model numbers
- Any device labeling used (such as DVD-1, VCR-2, etc.)
- Device and rack locations
- Full wire/connect fan-out and device connector details
- Any critical equipment settings that could cause damage or affect performance of the system at startup such as amplifier mode, control system IP addresses and video signal format settings

- One line flow diagrams for less cluttered and more easily navigable views of large or complicated systems.

AV Detail Drawings

- Connection plate details
- Device and signal grounding between devices and at patch bays
- Terminal blocks
- Custom circuitry
- Pinout schemes for all connectors
- Communications interface wiring
- Ventilation details
- Miscellaneous details of podiums, rack cavities, etc.

To learn more about the CTS® credential and to find a professional near you, visit www.ctsforav.com

© 2005 InfoComm International® excerpt from *Audiovisual Best Practices*

