

CARY ACADEMY

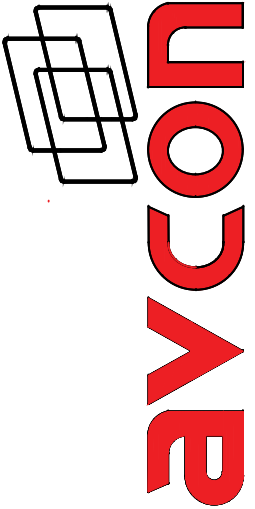


CAS-0017

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CARY ACADEMY
ZOOM & DISPLAY SOLUTIONS
CAS-0017

REVISIONS:

Δ	DATE	DESCRIPTION

PROJECT NAME:
CAS-0017

DRAWN BY:	DESIGNER:	APPROVER:
JM	--	--

PAGE NAME:
AV COVER
PAGE

PAGE NUMBER:
AV-00.00.01

SCALE:
NTS

AUDIO

<p>A1</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>UNBALANCED 3.5mm MONO to UNBALANCED INPUT</p>	<p>A9</p> <p>NEUTRIK SPEAKER CONNECTOR</p> <p>TYPICAL SINGLE CHANNEL SPEAKER CONNECTION</p>	<p>A17</p> <p>1/4" (TS) UNBALANCED to XLRM UNBALANCED</p>	<p>A25</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>5-PIN PHOENIX TO 3.5mm TRS</p>	<p>A33</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>3.5 mm TRS to RCA STEREO</p>
<p>A2</p> <p>CHECK: NO STANDARD ON PHOENIX BLOCKS</p> <p>3 PIN PHOENIX TO STEREO 3.5mm MINI</p>	<p>A10</p> <p>NEUTRIK SPEAKER CONNECTOR</p> <p>TYPICAL DUAL CHANNEL SPEAKER CONNECTION</p>	<p>A18</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>RCA MONO to 5-PIN PHOENIX</p>	<p>A26</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>3.5 mm TRS to 5-PIN PHOENIX</p>	<p>A34</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>5-PIN PHOENIX TO (2) 3-PIN PHOENIX</p>
<p>A3</p> <p>STEREO 3.5mm MINI to UNBALANCED STEREO RCA</p>	<p>A11</p> <p>1/4" (TRS) BALANCED to 1/4" (TRS) BALANCED</p>	<p>A19</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>5-PIN PHOENIX TO DUAL RCA DETAIL</p>	<p>A27</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>RCA TO 3-PIN PHOENIX</p>	<p>A35</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>(2) 3-PIN PHOENIX TO 5-PIN PHOENIX</p>
<p>A4</p> <p>BALANCED 1/4" OUTPUT to BALANCED 3-PIN PHOENIX</p>	<p>A12</p> <p>1/4" (TS) UNBALANCED to 1/4" (TRS) BALANCED</p>	<p>A20</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>DUAL RCA TO 5-PIN PHOENIX</p>	<p>A28</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>XLRf TO 3-PIN PHOENIX</p>	<p>A36</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>3-PIN PHOENIX TO 5-PIN PHOENIX</p>
<p>A5</p> <p>3-PIN PHOENIX TO BALANCED 1/4"</p>	<p>A13</p> <p>1/4" (TS) UNBALANCED to 1/4" (TS) UNBALANCED</p>	<p>A21</p> <p>RCA TO RCA</p>	<p>A29</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>RCA TO 3-PIN PHOENIX</p>	<p>A37</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>3-PIN PHOENIX TO 5-PIN PHOENIX</p>
<p>A6</p> <p>UNBALANCED 1/4" OUTPUT to UNBALANCED INPUT</p>	<p>A14</p> <p>1/4" (TRS) BALANCED to 1/4" (TS) UNBALANCED</p>	<p>A22</p> <p>RCA TO DUAL RCA</p>	<p>A30</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>5-PIN PHOENIX TO RCA</p>	<p>A38</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>3-PIN PHOENIX TO 5-PIN PHOENIX</p>
<p>A7</p> <p>UNBALANCED 3-PIN PHOENIX TO UNBALANCED 1/4"</p>	<p>A15</p> <p>3 PIN XLRM BALANCED to 1/4" (TRS) BALANCED</p>	<p>A23</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCKS</p> <p>5-PIN PHOENIX TO 5-PIN PHOENIX SINGLE WIRE</p>	<p>A31</p> <p>CHECK POLARITY: NO STANDARD ON PHOENIX BLOCK</p>	

VIDEO	V1	<p>E1A/T1A 568-B</p>			
	V2				
	V3				

	CONTROL							
C1	<p>REAR VIEW OF FEMALE CONNECTOR</p> <p>DE-9 RS-232 FEMALE TO MALE</p> <p>REAR VIEW OF MALE CONNECTOR</p>	C7	<p>CHECK POLARITY; NO STANDARD ON PHOENIX BLOCKS</p> <p>3-PIN PHOENIX TO 3-PIN PHOENIX</p> <p>CHECK POLARITY; NO STANDARD ON PHOENIX BLOCKS</p>	C13		C16	<p>EIA/TIA 568-A</p>	
C2	<p>REAR VIEW OF FEMALE CONNECTOR</p> <p>DE--9 RS-232 FEMALE TO FEMALE OR MALE TO MALE</p> <p>REAR VIEW OF FEMALE CONNECTOR</p>	C8	<p>MALE DE9 TO MINI T/R/S</p>	C14		C17	<p>EIA/TIA 568-B</p>	
C3	<p>REAR VIEW OF FEMALE CONNECTOR</p> <p>DE-9 RS-422/RS-485 FEMALE TO MALE</p> <p>REAR VIEW OF FEMALE CONNECTOR</p>	C9	<p>FEMALE DE9 TO MINI T/R/S</p>		C18	<p>ETHERNET CROSSOVER</p>		
C4	<p>REAR VIEW OF FEMALE CONNECTOR</p> <p>DE-9 RS-422/RS-485 FEMALE TO FEMALE OR MALE TO MALE</p> <p>REAR VIEW OF FEMALE CONNECTOR</p>	C10	<p>CHECK: NO STANDARD ON PHOENIX BLOCKS</p> <p>3-PIN PHOENIX TO MINI T/R/S</p>	C15		C19		
C5	<p>CHECK: NO STANDARD ON PHOENIX BLOCKS</p> <p>3-PIN PHOENIX TO MALE DE-9</p> <p>REAR VIEW OF MALE CONNECTOR</p>	C11				C20	<p>CLOCK AUDIO PUSH BUTTONS</p>	
C6	<p>CHECK: NO STANDARD ON PHOENIX BLOCKS</p> <p>3-PIN PHOENIX TO FEMALE DE-9</p> <p>REAR VIEW OF FEMALE CONNECTOR</p>	C12						
				<p>TO CONTROL SYSTEM</p> <p>TO NETWORK DEVICE</p> <p>CRESNET NETWORK INTERCONNECT</p>				

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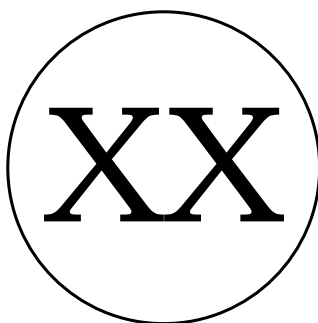
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SCHEMATICS LEGEND

CABLE FLAG



PINOUT CALLOUT



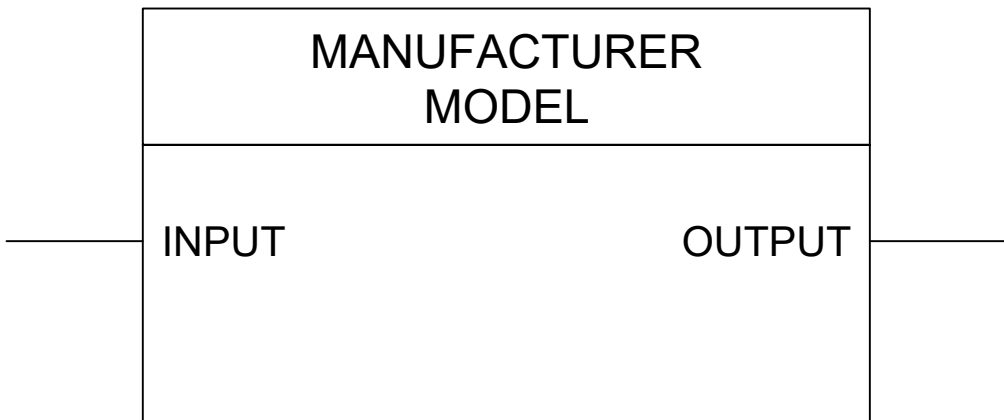
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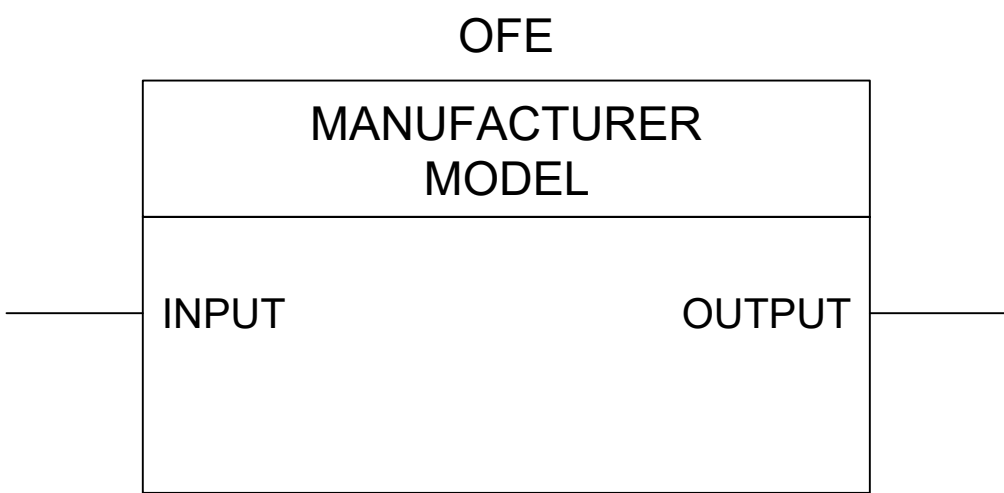
CONTINUED DEVICE



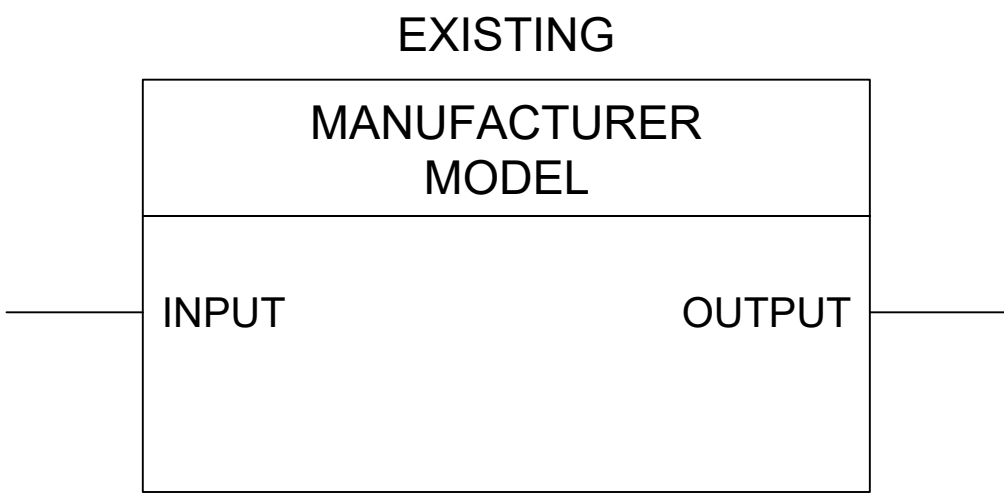
DEVICE ID



DEVICE DESCRIPTION / #
DEVICE LOCATION
*NOTES

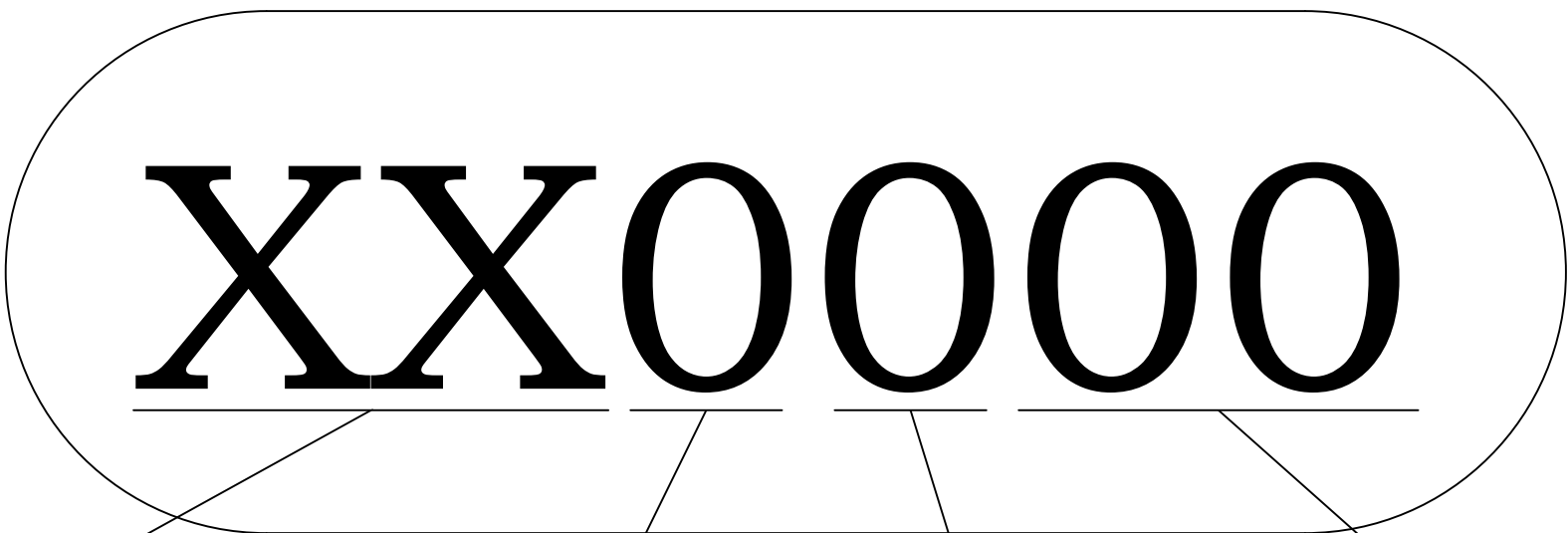


DEVICE DESCRIPTION / #
DEVICE LOCATION
*NOTES



DEVICE DESCRIPTION / #
DEVICE LOCATION
*NOTES

WIRE NUMBER LABELING GUIDE



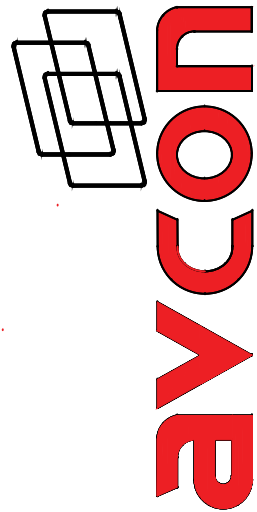
SIGNAL TYPE ROOM (IF MULTIPLE) & FIELD ADDED NUMBERS SIGNAL FLOW SEQUENTIAL NUMBERING

- CABLE NUMBERS SHALL BE 4 DIGITS IN LENGTH (0000-9999). THE NUMBERING SCHEME FLOWS FROM LEFT TO RIGHT. TYPICALLY, EACH CABLE NUMBER FOLLOWS THE INPUT/OUTPUT OF THE DEVICE IN A LOGICAL ORDER.
- THE THOUSAND DIGITS WILL BE USED FOR SYSTEMS WITH MULTIPLE ROOMS THAT SHARE A RACK LOCATION AND/OR EQUIPMENT.
- THE NINE-THOUSAND DIGIT WILL BE RESERVED FOR FIELD TECHNICIANS TO ADD NUMBERS ON SITE.

SIGNAL TYPE		
ABBREVIATION	TYPE	DESCRIPTION
AA	ANALOG AUDIO	REFERS TO LINE LEVEL AUDIO. EITHER LOW IMPEDANCE OR HIGH IMPEDANCE.
AV	ANALOG VIDEO	REFERS TO ANALOG VIDEO SUCH AS COMPOSITE, COMPONENT, VGA, ETC.
AX	ANALOG EXTENDED	REFERS TO ALL ANALOG VIDEO THAT ARE TRANSMITTED VIA CATEGORY CABLING
CN	CONTROL	REFERS TO CONTROL VIA SERIAL, RELAYS, I/O, CRESNET, ETC.
DA	DIGITAL AUDIO	REFERS TO ALL DIGITAL AUDIO SUCH AS DANTE, S/PIDF, ETC.
DV	DIGITAL VIDEO	REFERS TO ALL DIGITAL VIDEO SUCH AS HDMI, DISPLAY PORT, DVI, HD-SDI, ETC.
DX	DIGITAL EXTENDED	REFERS TO ALL DIGITAL VIDEO THAT ARE TRANSMITTED VIA CATEGORY CABLING SUCH AS DM, HDBT, FIBER, ETC.
LN	LAN	REFERS TO CONNECTIONS PERTAINING TO DATA, VOIP, ETC.
MC	MIC CONNECTION	REFERS TO ALL MICROPHONE AND MICROPHONE LEVEL SIGNALS
PH	POWER HIGH	REFERS TO ALL POWER THAT IS CONSIDERED HIGH VOLTAGE
PL	POWER LOW	REFERS TO ALL POWER THAT IS CONSIDERED LOW VOLTAGE
RF	RADIO FREQUENCY	REFERS TO CONNECTIONS THAT TRANSMIT OR RECEIVE RADIO WAVES SUCH AS WIRELESS MICROPHONES, ANTENNAS, SATELLITE TV, BROADCAST TV, CABLE TV, ETC.
SP	SPEAKER	REFERS TO ALL SPEAKER LEVEL CONNECTIONS
UB	USB	REFERS TO UNIVERSAL SERIAL BUS CABLING
UX	UB EXTENDED	REFERS TO USB THAT IS TRANSMITTED VIA CATEGORY CABLING

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CAS-0017

REVISIONS:		
Δ	DATE	DESCRIPTION
PROJECT NAME: CAS-0017		
DRAWN BY: JM	DESIGNER: --	APPROVER: --
PAGE NAME: SCHEMATIC LEGEND AND WIRE NUMBER LABELING GUIDE		
PAGE NUMBER: AVS-00.00.03		
SCALE: NTS		

GENERAL NOTES

GENERAL ELECTRICAL NOTES:

- 120VAC SERVICES FOR EQUIPMENT RACKS AND VIDEO PROJECTORS TO SHARE THE SAME PHASE
- ALL TELE/DATA, NETWORK AND 120VAC CONVENIENCE OUTLETS INDICATED ON THESE DRAWINGS ARE FOR COORDINATION PURPOSES ONLY. REFER TO COMMUNICATIONS AND POWER PLANS FOR FULL TELE/DATA, NETWORK AND ELECTRICAL REQUIREMENTS.
- REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL LIGHTING CONTROL STATION LOCATIONS, 120VAC REQUIREMENTS AND LIGHTING REQUIREMENTS.
- COORDINATE FINAL LOCATIONS OF SWITCHES, AV-PLATES AND J-BOXES WITH WALL TREATMENT AND SURFACES.
- ANY DISCREPANCIES OCCURRING BETWEEN THESE DOCUMENTS AND ELECTRICAL DOCUMENTS ARE TO BE REFERRED TO THE ARCHITECT.
- ALL AC OUTLETS INDICATED ON THESE DRAWINGS ARE FOR AV PURPOSES. FOR ALL OTHER AC NEEDS, REFER TO POWER PLANS.
- FINAL LOCATION AND COORDINATION OF ALL FLOOR BOXES TO BE VERIFIED IN FIELD WITH ARCHITECT PRIOR TO INSTALLATION.
- REFER TO ELECTRICAL DRAWINGS FOR ALL POWER CIRCUITRY.
- UNLESS SPECIFIED, JUNCTION BOXES SHALL BE SIZED AS REQUIRED BY THE ELECTRICAL CONTRACTOR.
- AV DRAWINGS, COMMUNICATIONS DRAWINGS, POWER PLAN DRAWINGS AND ARCHITECTURAL DRAWINGS SHOULD BE CAREFULLY REVIEWED SIMULTANEOUSLY TO AVOID UNDER-COUNTING OR OVER-COUNTING DEVICES AND MIS-LOCATING DEVICES.
- QUANTITIES GIVEN ON AV DETAIL PAGES AND AV ROOM SCHEDULE DRAWING (IF APPLICABLE) MUST BE CONFIRMED BY EACH DISCIPLINE WHEN REVIEWING THE AV DRAWINGS. THE QUANTITIES GIVEN ARE PRELIMINARY AND MAY NOT REFLECT ALL LAST MINUTE CHANGES. ANY DISCREPANCIES SHOULD BE REVIEWED WITH THE OWNER.

GENERAL LIGHTING NOTES FOR VIDEO CONFERENCING APPLICATIONS:

- INDIRECT FLORESCENT LIGHTING FIXTURES, CAPABLE OF PROVIDING EVEN ILLUMINATION WITHOUT SHADOWS IS SUGGESTED.
- AN EVEN 70 FOOT CANDLES REQUIRED AT 4'-0" ABOVE FINISHED FLOOR.
- LAMP COLOR TEMPERATURE OF 3500 KELVIN RECOMMENDED.
- WINDOWS WITHOUT TREATMENT WHERE APPLICABLE MAY CAUSE ISSUES BY ALLOWING A "MIX" OF LIGHTING COLOR TEMPERATURE FROM HALLWAY OR OUTSIDE LIGHTING.

GENERAL ACOUSTICAL NOTES:

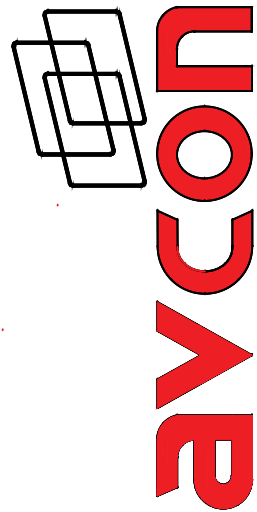
- ROOM AMBIENT FROM ALL IN-ROOM OR EXTERNAL NOISE SOURCES NOT TO EXCEED 40dB A-WEIGHTED.
- AN OVERALL DESIGN GOAL FOR AN NC-25 TO NC-30 NOISE CRITERIA RATING IS DESIRABLE.
- ACOUSTICAL PANELS OR "SOUND-SOAK" WALL TREATMENTS SHOULD BE CONSIDERED FOR ONE WALL SURFACE.
- ACOUSTICAL PROPERTIES OF THE CEILING TILES, CARPET AND CARPET PAD SHOULD BE CONSIDERED DURING SELECTION.
- TO PREVENT SOUND LEAKAGE INTO THESE ROOMS FROM ADJOINING SPACES, ALL WALLS SHOULD EXTEND TO THE DECKING ABOVE. ALL PENETRATIONS LEAVING THE SPACE SHOULD BE SEALED AS REQUIRED. THE SPACE ABOVE THE CEILING TILES MAY ALSO NEED CONSIDERATION AND TREATED WITH FIBERGLASS BATTING.
- ACOUSTICAL REFLECTIONS OFF ALL GLASS SURFACES SHOULD BE ADDRESSED WITH APPROPRIATE WINDOW TREATMENTS.
- MAXIMUM REVERBERATION TIME SHOULD NOT EXCEED .6 SECONDS FOR ALL ROOMS.
- 8) RECOMMENDED SOUND TRANSMISSION CLASS FOR WALL CONSTRUCTION METHOD TO BE OF A STC-45 RATING.

RESPONSIBILITY SCHEDULE

	SUPPLIED BY:					INSTALLED BY:						
	G.C.	G.C.	E.C.	T/D.C.	CLIENT	AV C.	G.C.	E.C.	T/D.C.	CLIENT	AV C.	N/A
CEILING MOUNTED EQUIPMENT												
EQUIPMENT HARD POINTS:												X
PROJECTION SCREENS:												X
PROJECTOR/DISPLAY MOUNTS:												X
PROJECTOR/DISPLAY:												X
SPEAKER HARDWARE & BACKBOX:												X
CEILING MICROPHONES:												X
WALL MOUNTED EQUIPMENT												
ALL SPECIFIED BLOCKING:												X
FLAT PANEL MOUNTS:												X
FLAT PANEL DISPLAYS:												X
PROGRAM SPEAKERS:												X
CAMERAS:												X
PROJECTION SCREENS:												X
ELECTRICAL (FOR AV USE)												
ALL AV ELECTRICAL OUTLETS AND JUNCTION BOXES:												X
AV ELECTRICAL CONDUITS & PULL STRINGS:												X
FLOOR BOX AND ACCESSORIES:												X
AV LOW VOLTAGE CABLES:												X
ALL AV CONNECTORS:												X
ALL AV WALL PLATES:												X
VOICE & DATA NETWORK (FOR AV USE)												
ALL TELECOMMUNICATION PLATES:												X
IP/NETWORK CONFIGURATION FOR AV CONTROL:												X
IP/NETWORK CONFIGURATION FOR VIDEO CONFERENCING:												X
VoIP/SIP CONFIGURATION FOR AUDIO CONFERENCING:												X
POTS/ANALOG TELEPHONE SERVICE & TERMINATION:												X
WIRELESS ACCESS POINT FOR AV:												X
ALL COAX RF PLATES/CABLE/CONNECTIONS:												X
LIGHTING DIMMING SYSTEMS												
LIGHTING DIMMING EQUIPMENT:												X
LIGHTING DIMMING LVC FOR AV INTERFACE:												X
LIGHTING DIMMING LVC PROGRAMMED:												X
MOTORIZED DRAPES/SHADES												
DRAPERY/SHADE MOTOR:												X
DRAPERY/SHADE MOTOR LVC:												X
DRAPERY/SHADE MOTOR LVC CABLE TERMINATED:												X
PERMANENT FURNISHINGS												
MILLWORK/TABLE PENETRATIONS & MODIFICATIONS:												X
CREDENZA VENTILATION:												X
EQUIPMENT RACKS FOR MILLWORK:												X
AV EQUIPMENT RACKS												X

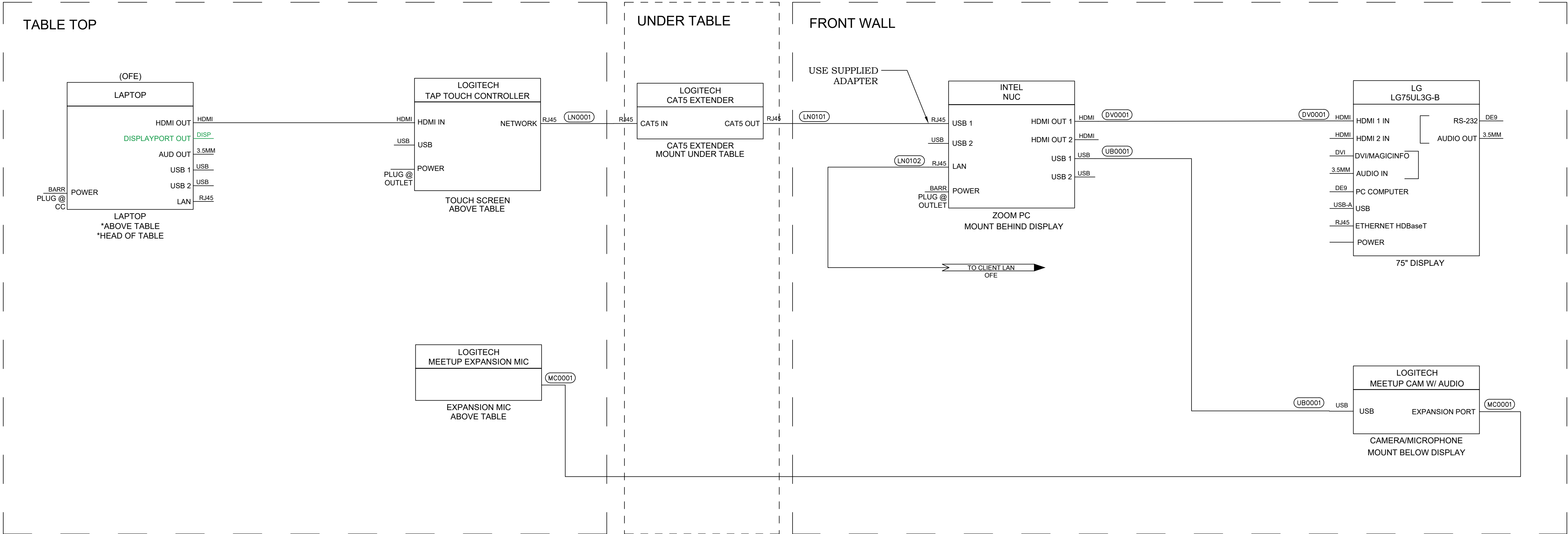
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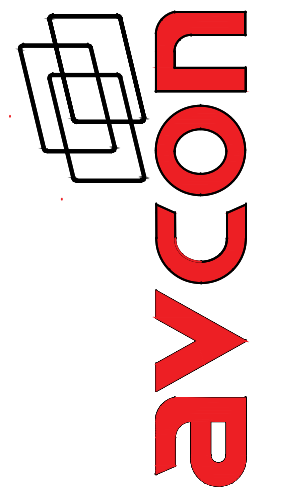
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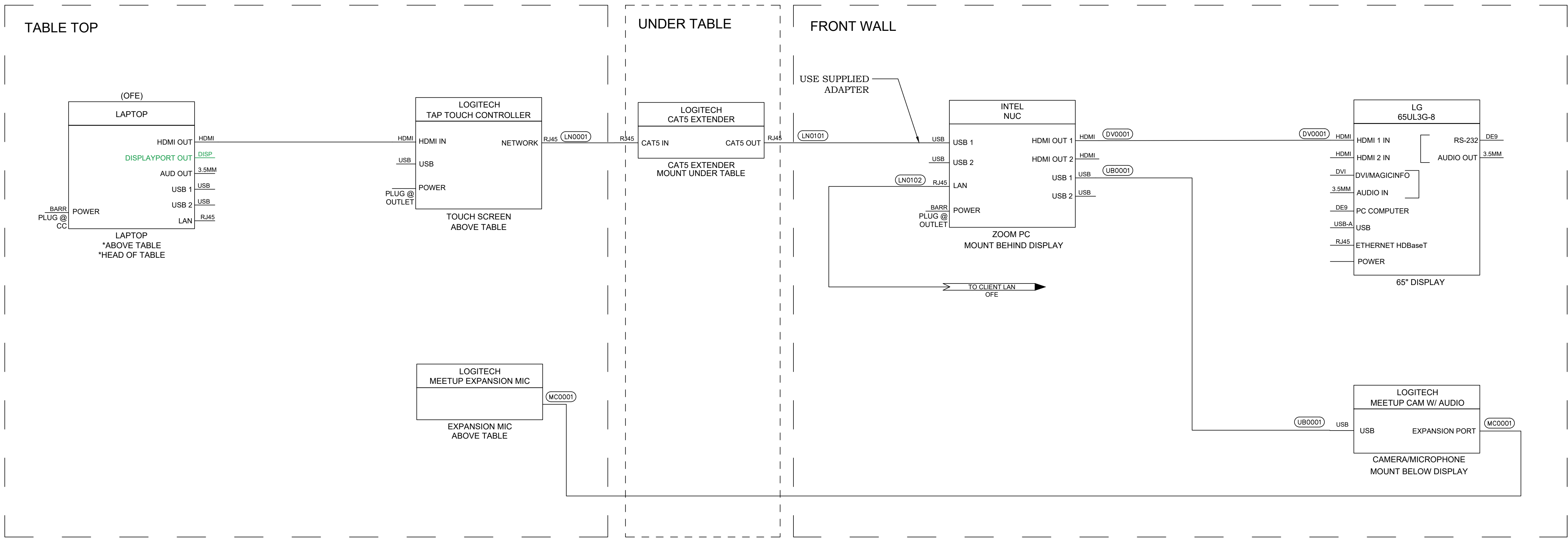
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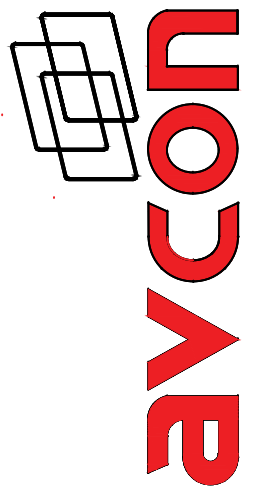
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AV SCHEMATICS

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