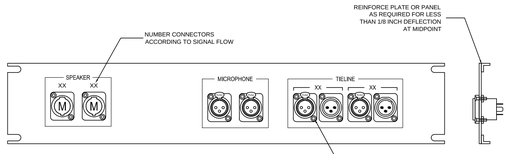
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FABRICATION NOTES:
1. NOMENCLATURE AND PANEL COORDINATED WITH ROOM FINISHES WHERE EXPOSED.
2. NOMENCLATURE TO BE UPPER CASE,14 POINT, HELVETICA LIGHT. (12 POINT ACCEPTABLE WHERE SPACING IS CRITICAL)
3. PANEL SHOWN IS AN EXAMPLE AND APPLIES TO ALL PANEL AND PLUG BOX DRAWINGS.
4. POSITION CONNECTORS, CONTROLS, ETC. TO ALLOW FOR BACK BOX DIMENSIONS AND PANEL MOUNTING POINTS.
5. MOUNT CONTROLS IN D-SHAPED HOLES TO PREVENT ROTATION OF CONTROL BODY.

1 TYPICAL PANEL FABRICATION
AV0001 — 6" = 1'

TABLE 2 - AUDIO WIRING TYPES

Audio system wiring is divided into wiring groups according to their nominal voltage levels:

	Wiring Type
Group A	Microphones and other sensitive wiring (0 mV to 100 mV)
Group B	Line level wiring (100 mV to 10 V)
Group C	Loudspeaker and control wiring (10 V to 70 V)
Group D	Telephone, video, control and digital circuits
Group E	Fiber optic cable

Note: These wiring groups must never be intermixed within a given conduit run!

TABLE 3 - AUDIO CONDUIT SEPARATION

Minimum conduit separation between conduits carrying wiring of different audio groups is as follows:

	Group A	Group B	Group C	Group D	Group E
Group A	adjacent	6"	12"	12"	adjacent
Group B	-	adjacent	12"	6"	adjacent
Group C	-	-	adjacent	6"	adjacent
Group D	-	-	-	adjacent	adjacent
Group E	-	-	-	-	adjacent

Note: Ninety degree crossings in close proximity are acceptable.

TABLE 4 - ELECTRICAL CONDUIT SEPARATION

Minimum conduit separation between conduits carrying audio wiring and other electrical service conduit is as follows:

	Group A	Group B	Group C	Group D	Group E
Dimmer controlled lighting	24"	12"	6"	12"	adjacent
SCR controlled services	24"	12"	6"	12"	adjacent
220/440VAC circuits	6"	6"	adjacent	adjacent	adjacent
All other services	6"	6"	adjacent	adjacent	adjacent

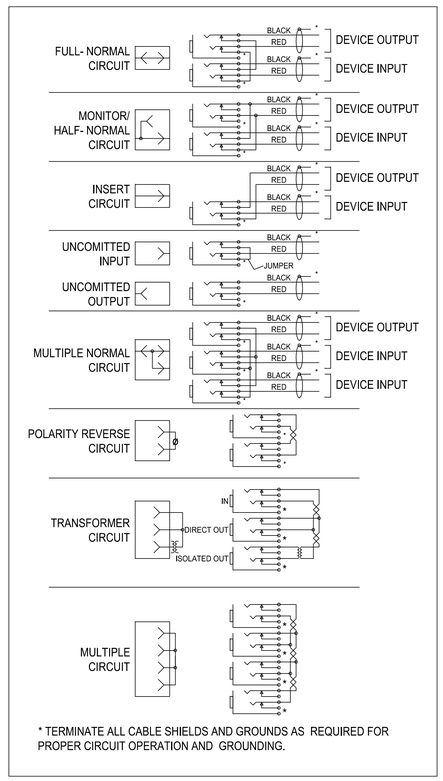
Note: Heavy current demands in or long parallel runs with the above services may dictate greater separations to avoid interference with the audio system.

TABLE 5 - CONDUIT SIZING FOR AUDIO CABLES

Audio Cable (dimensions in inches)				Maximum number of audio cables allowed in each conduit size (Based on 40% fill of EMT)						
Mfr	Type	OD	Area	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
Belden	1351A	0.290	0.066	3	5	9	12	20	35	53
Belden	1502R	0.250	0.049	4	7	12	17	27	48	72
Belden	1694A	0.274	0.059	4	6	10	14	23	40	60
Belden	1696A	0.234	0.043	5	8	14	19	31	54	82
Belden	1700A	0.200	0.031	7	11	19	26	43	75	113
Belden	1810A	0.390	0.119	1	3	5	7	11	19	29
Belden	2412	0.220	0.038	5	9	15	21	35	61	93
Belden	5300UG	0.148	0.017	12	20	34	47	78	136	205
Belden	7710A	0.770	0.466	0	1	1	2	3	5	8
Belden	7712A	0.970	0.739	0	0	1	1	2	3	5
Belden	7810A	0.405	0.129	2	3	5	6	10	18	27
Belden	7987R	0.195	0.030	7	12	20	28	45	79	120
Belden	8240	0.193	0.029	7	12	20	28	46	80	121
Belden	8281	0.305	0.073	3	5	8	11	18	32	48
Belden	8444	0.185	0.027	8	13	22	30	50	87	132
Belden	8451	0.138	0.015	14	23	40	54	90	157	237
Belden	8465	0.282	0.062	3	6	10	13	21	38	57
Belden	8467	0.314	0.077	3	4	8	11	17	30	46
Belden	8471	0.274	0.059	4	6	10	14	23	40	60
Belden	8473	0.340	0.091	2	4	7	9	15	26	39
Belden	8477	0.386	0.117	2	3	5	7	11	20	30
Belden	8489	0.257	0.052	4	7	12	16	26	45	68
Belden	8620	0.376	0.111	2	3	5	7	12	21	32
Belden	8734	0.194	0.030	7	12	20	28	45	79	120
Belden	8760	0.222	0.039	6	9	15	21	35	61	91
Belden	9451	0.135	0.014	15	24	42	57	94	164	247
Belden	9460	0.230	0.042	5	8	14	20	32	56	85
Belden	9831	0.330	0.086	2	4	7	9	15	27	41
Belden	9844	0.390	0.119	2	3	5	7	11	20	30
Belden	9914	0.403	0.127	1	2	4	6	10	18	27
Belden	9941	0.230	0.042	5	8	14	20	32	56	85
Belden	M9A026	0.614	0.296	0	1	1	2	3	5	8
Crestron	Crescat-QM	0.236*	0.086	2	4	6	9	15	26	40
Crestron	Crescat-IM	0.250	0.049	4	7	12	17	27	48	72
Crestron	DM-CBL-NP	0.580	0.264	0	1	2	3	4	8	13
Crestron	DM-CBL-8G-NP	0.244	0.047	4	7	12	17	28	50	75
Trade	#08 THHN	0.216	0.037	6	9	16	22	37	64	97
Trade	#10 THHN	0.164	0.021	10	16	28	39	64	111	168
Trade	#12 THHN	0.130	0.013	16	26	45	61	101	177	267
Trade	#14 THHN	0.111	0.010	22	36	62	84	139	242	366

Note: Minimum conduit size allowed for audio cables is 3/4 inch.
* denotes paired cable. This cable consists of two cables of the given OD.

2 CONDUIT SEPARATION AND FILL SCHEDULES
AV0001 — NA

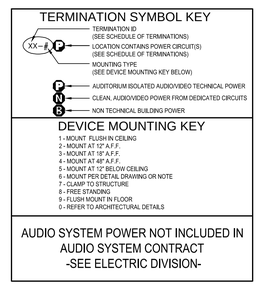


* TERMINATE ALL CABLE SHIELDS AND GROUNDS AS REQUIRED FOR PROPER CIRCUIT OPERATION AND GROUNDING.

3 WIRING DETAILS
AV0001 — NA

BID PACKAGE 3 - ELECTRICAL CONTRACTOR SCOPE OF WORK (FOR REFERENCE ONLY):
1. ALL CONDUIT AND BACKBOX INFRASTRUCTURE IN FLOOR, WALLS AND CEILINGS AS REQUIRED TO SUPPORT THE AV DESIGN AS SHOWN ON THE AV DRAWINGS. THIS INFRASTRUCTURE TO BE PROVIDED AND INSTALLED BY BP3 ELECTRICAL CONTRACTOR.
2. INFRASTRUCTURE ONLY CONSISTS OF CONDUIT, PULLBOX/BACKBOXES AND BLANK COVER PLATES. ALL CONDUIT WILL HAVE TWO (2) PULL STRINGS INSTALLED
3. WIRE COUNTS FOR INFRASTRUCTURE ONLY ARE ANTICIPATED QUANTITY FOR CONDUIT SIZING PURPOSES ONLY
4. POWER REQUIRED TO SUPPORT AV DESIGN WILL BE INSTALLED BY BP3 ELECTRICAL CONTRACTOR.
5. WALL BACKING TO BE PROVIDED BY BP3 CONTRACTOR AT ALL WALL-MOUNTED DISPLAY AND EQUIPMENT RACK LOCATIONS AS REQUIRED TO SUPPORT AV DESIGN. REFER TO ARCHITECTURAL WALL BACKING DETAILS ON SHEET A7003. BACKING FOR FLAT PANEL DISPLAYS AND WALL-MOUNTED EQUIPMENT RACKS REQUIRED FOR AV SYSTEMS SHALL NOT BE INCLUDED IN THE ELECTRICAL CONTRACTOR'S CONTRACT.
6. REFER TO A7101 AND A7102 FOR CEILING-MOUNTED DEVICES.
7. HIGH VOLTAGE RECEPTACLES WHICH SHARE BACK BOX LOCATIONS WITH AUDIO/VIDEO CONNECTION PANELS ARE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL HIGH VOLTAGE RECEPTACLES AND WIRING WHICH ARE NOT MOUNTED IN A SEPARATE BACKBOX ARE TO BE PHYSICALLY SEPARATED FROM THE LOW VOLTAGE WIRING BY MEANS OF A METALLIC VOLTAGE BARRIER. FINAL CONNECTION OF HIGH VOLTAGE RECEPTACLES BY BP3 ELECTRICAL CONTRACTOR.
8. ALL BACKBOX DEVICES TO BE FLUSH MOUNTED.
9. ALL PENETRATIONS MADE THROUGH WALL OR WITHIN BARRIER BELOW RAISED FLOOR SHALL BE SEALED AIR TIGHT. SEAL CONDUIT STUBS, PIPING STUBS, DUCT PENETRATIONS, ELECTRICAL JUNCTION BOX OPENINGS, CONTROL WIRING OPENINGS, GYPSUM BOARD OPENINGS, CONCRETE OPENINGS AND PIPING PENETRATIONS. CAP ALL OPEN CONDUITS. SEAL WITH MATERIAL HAVING A 50 YEAR RATING, WITH FLAME SPREAD RATING NOT TO EXCEED 25, AND SMOKE DEVELOPED RATING NOT TO EXCEED 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84.
10. ALL FLOORBOX CONDUIT PATHS WILL PENETRATE BELOW THE BOX INTO THE ACCESSIBLE CEILING OF THE LEVEL BELOW. WHERE NO ACCESSIBLE CEILING EXISTS, CONDUIT WILL BE ROUTED THROUGH THE NEAREST ACCESSIBLE CEILING AREA.
11. LOCATE ALL FLOORBOXES USING DIMENSIONAL LAYOUT PER ARCHITECTURAL SLAB EDGE PLANS, BID PACKAGE 2 ADDENDUM. SEE A7405 FOR FLOOR BOX DETAILS.
12. REFER TO A1800 SERIES ARCHITECTURAL DRAWINGS FOR EXACT FLOOR BOX LOCATIONS.

AUDIO-VIDEO PHASE BID PACKAGE - AUDIO-VIDEO INSTALLER SCOPE OF WORK:
1. LOW VOLTAGE AUDIO-VIDEO WIRING AND CABLING.
2. NEW AUDIO-VIDEO EQUIPMENT: PROVIDE, INSTALL, COMMISSION
3. RELOCATED AUDIO-VIDEO EQUIPMENT; INSTALL, COMMISSION
4. INSTALL INCLUDES PROVIDING AV MOUNTING BRACKETS, LECTERNS, RACKS AND ALL EQUIPMENT AS SHOWN ON DRAWINGS AND TO BE LISTED IN FUTURE EQUIPMENT LIST.
5. ALL CUSTOM PANELS TO REPLACE BLANK COVER PLATES PROVIDED BY BP3 ELECTRICAL CONTRACTOR SHALL BE NUMBERED ACCORDING TO AUDIO/VIDEO SYSTEM SIGNAL FLOW (PROVIDED TO FUTURE AV INSTALLER).
6. TABLE BOXES AND CONNECTION PANELS TO BE PROVIDED AND INSTALLED BY AV INSTALLER, TO BE COORDINATED WITH FURNITURE PROVIDED BY OTHERS.
7. CONFIRM ANY CUSTOM COLOR REQUIREMENTS WITH ARCHITECT PRIOR TO FABRICATION.
8. ALL AUDIO/VIDEO SYSTEM TECHNICAL AND COMMON POWER IS PROVIDED AS PART OF ELECTRICAL CONTRACT.
9. DRAWINGS ARE CONCEPT ONLY AND DETAILED ONLY TO THE EXTENT NECESSARY TO SHOW DESIGN INTENT AND SIGNAL FLOW. IT IS UNDERSTOOD AND AGREED BY THE CONTRACTOR THAT A COMPLETE WORKING SYSTEM SHALL BE SUPPLIED WHICH FULFILLS THE INTENT INDICATED IN THE DESIGN DOCUMENTS .
10. PRODUCT SHOWN OR INDICATED ARE BASIS OF DESIGN. EQUAL PRODUCTS WILL BE CONSIDERED SUBJECT TO SPECIFICATION.
11. WHERE SIGNAL FLOW INDICATES ANALOG AND DIGITAL SIGNAL TRANSMISSION FROM A SINGLE SOURCE DEVICE (THIN CLIENT PC, DOC CAM, ETC.) ONLY ONE SIGNAL TYPE IS REQUIRED. TO BE COORDINATED WITH OWNER PROVIDED AND SPECIFIED EQUIPMENT.



4 DEVICE LOCATION KEY
AV0001 — NA

USC BUSINESS PARTNERSHIP FOUNDATION
ON BEHALF OF
USC CAMPUS PLANNING & CONSTRUCTION

PROJECT NAME:
UNIVERSITY OF SOUTH CAROLINA
DARLA MOORE SCHOOL OF BUSINESS CONSTRUCTION

OSE PROJECT NUMBER:
H27-6069-AC-3

743 GREENE STREET
COLUMBIA, SC 29298
TEL: 803 777 4022 FAX: 803 777 0484

ARCHITECT:
RAFAEL VIÑOLY ARCHITECTS PC
50 VANDAM STREET
NEW YORK, NY 10013
TEL: 212 924 5060 FAX: 212 924 5858

STRUCTURAL ENGINEER, MEP ENGINEER, CIVIL ENGINEER, FIRE PROTECTION ENGINEER:
STEVENS & WILKINSON, SC
1501 MAIN STREET, FLOOR G
COLUMBIA, SC 29201-5801
TEL: 803 765 0320 FAX: 803 254 6209

TELECOMMUNICATIONS, AUDIOVISUAL & ACOUSTICS:
JAFFE HOLDEN ACOUSTICS, INC.
114A WASHINGTON STREET
NORWALK, CT 06854-3007
TEL: 203 838 4167 FAX: 203 838 4168

LANDSCAPE ARCHITECT:
GROMBALL-COTTERILL ASSOCIATES
600 BELTLINE BOULEVARD
COLUMBIA, SC 29205
TEL: 803 738 9525 FAX:

SURVEYOR:
BP BARBER & ASSOCIATES, INC.
101 RESEARCH DRIVE
COLUMBIA, SC 29202-1116
TEL: 803 429 4028 FAX:

BUILDING CODE:
HUGHES ASSOCIATES
3610 COMMERCE DRIVE, SUITE 817
BALTIMORE, MD 21227-1652
TEL: 410 737 8677 FAX: 410 737 8688

LIGHTING DESIGNER
ONE LUX STUDIO, LLC
39 WEST 13TH. STREET
NEW YORK, NY 10011
TEL: 212 201 5192 FAX: 212 615 3700

FOOD & WASTE MANAGEMENT:
WILLIAM CARUSO & ASSOCIATES, INC.
8055 EAST TUFTS AVE, SUITE 1320
DENVER, CO 80237
TEL: 303.649.1600 FAX: 303.649.1660

SIGNAGE & WAYFINDING:
RAFAEL VIÑOLY ARCHITECTS PC
50 VANDAM STREET
NEW YORK, NY 10013
TEL: 212 924 5060 FAX: 212 924 5858

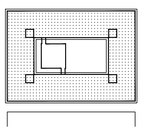
SPECIFICATIONS:
ROBERT SCHWARTZ & ASSOCIATES
589 8TH. AVE., 17TH. FLOOR
NEW YORK, NY 10018
TEL: 212 691 3248 FAX: 212 633 1613

AV BID PACKAGE B
AUDIO/VIDEO SYSTEMS
JANUARY 18, 2012

PHASE :
100% CONSTRUCTION DOCUMENTS

SEAL & SIGNATURE

ISSUE NO.	DATE
5	2013.01.18
4	2012.12.05
3	2012.10.26
2	2012.09.10
1	2012.07.23



KEY PLAN & NORTH SIGN

IF THIS DRAWING IS NOT 30" X 42" IT IS A REDUCED PRINT; REFER TO GRAPHIC SCALE

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AS NOTED

AUDIO / VIDEO SYSTEMS GENERAL INFO

SHEET TITLE :

AV0001

SHEET NUMBER :