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REVISIONS				
REV	DESCRIPTION	EFF. DATE	CHK	APPROVED/DATE
A	PROD RLSE W/O CHG. ECO 10474	1-7-11		DD

D

D

C

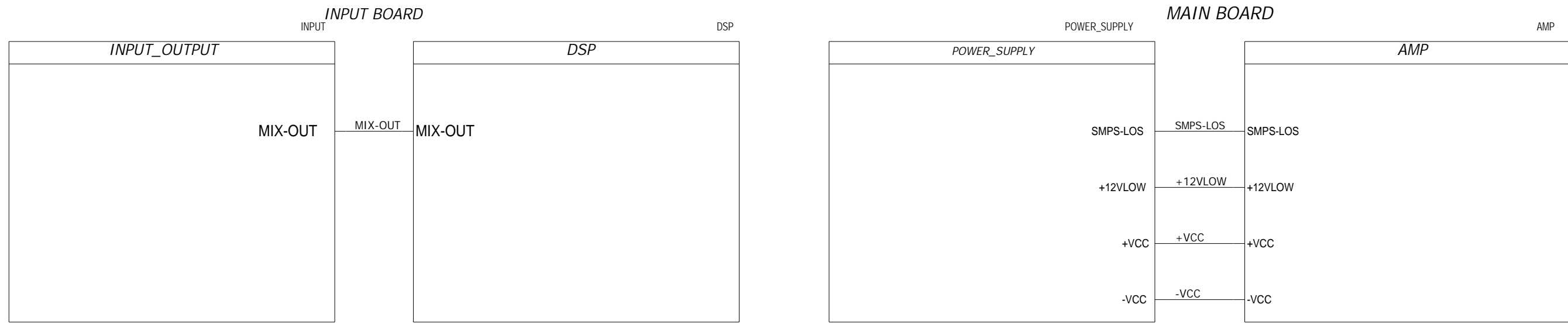
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PLUMBING SCHEDULE
 +/-15V: MAIN BOARD RAW
 +/-15V_A: AMP CH 1 AUDIO
 +/-15V_B: AMP CH 2 AUDIO
 +/-15V_C: INPUT BOARD RAW
 +/-15V_D: INPUT BOARD AUDIO
 VDD1: MAIN BOARD +7V
 VDD2: INPUT BOARD +7V
 +/-VCC: AMPLIFIER RAILS

GROUND SCHEDULE
 C1: INPUT PCB CHASSIS
 P1: MAIN PCB POWER
 A1: MAIN PCB AUDIO
 C2: XCAP CHASSIS

SCHEMATIC ASSOCIATION
 PC-212206-00 FOR ALL MODELS
 WP-212202-00 KW122
 WP-215302-00 KW152
 WP-215302-00 KW153
 WP-218102-00 KW181

COMPONENT NOTES
 '2-WAY' MEANS ONLY FOR KW122/152/153
 'SUB' MEANS ONLY FOR KW181
 USE VALUE AS SHOWN AFTER NOTE
 DNI MEANS 'DO NOT INSERT'



1. THIS DRAWING USED IN CONJUNCTION WITH ASSEMBLIES WP-212202-00.
 WP-215202-00
 WP-215302-00
 WP-218102-00

NOTES: UNLESS OTHERWISE SPECIFIED

CONTRACT NO.		QSC AUDIO PRODUCTS, LLC. COSTA MESA, CALIFORNIA			
APPROVALS	DATE	SCHEMATIC DIAGRAM KW SERIES			
DRAWN EVAN SHULTZ	1-4-11				
CHECKED DAVID G	1-4-11				
ISSUED DENISE D	1-4-11				
SEED FILE NO. SUBVERSION	PLOT DATE:	SIZE C	CAGE CODE OOPW4	DWG NO. SH-212206-00	REV A
		SCALE NONE	CAD FILE NO. AR-212206-00.ZIP	SHEET 1 OF 5	

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INPUT STAGE, SIGNAL PRESENCE, GAIN, INPUT SUMMING

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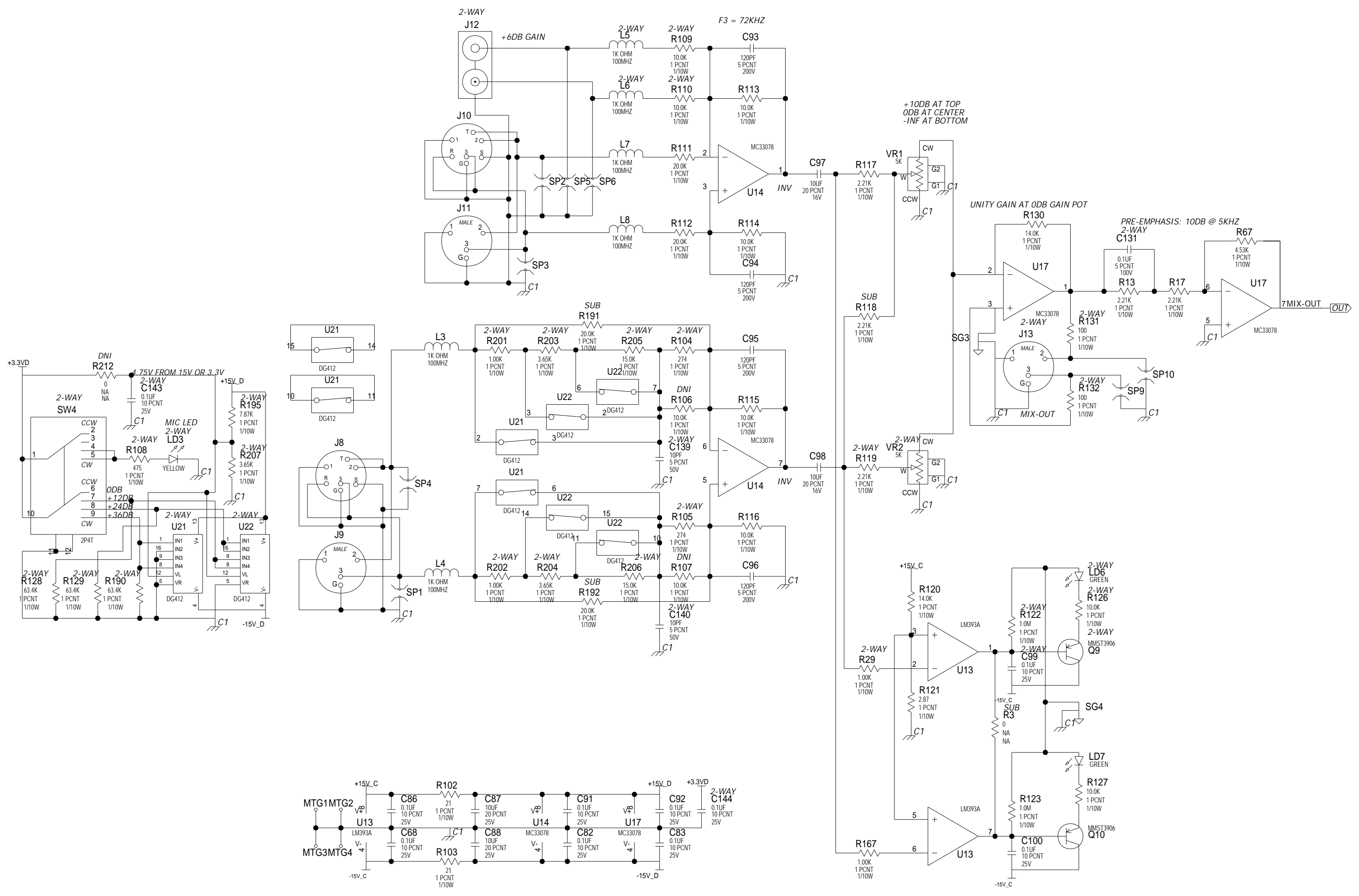
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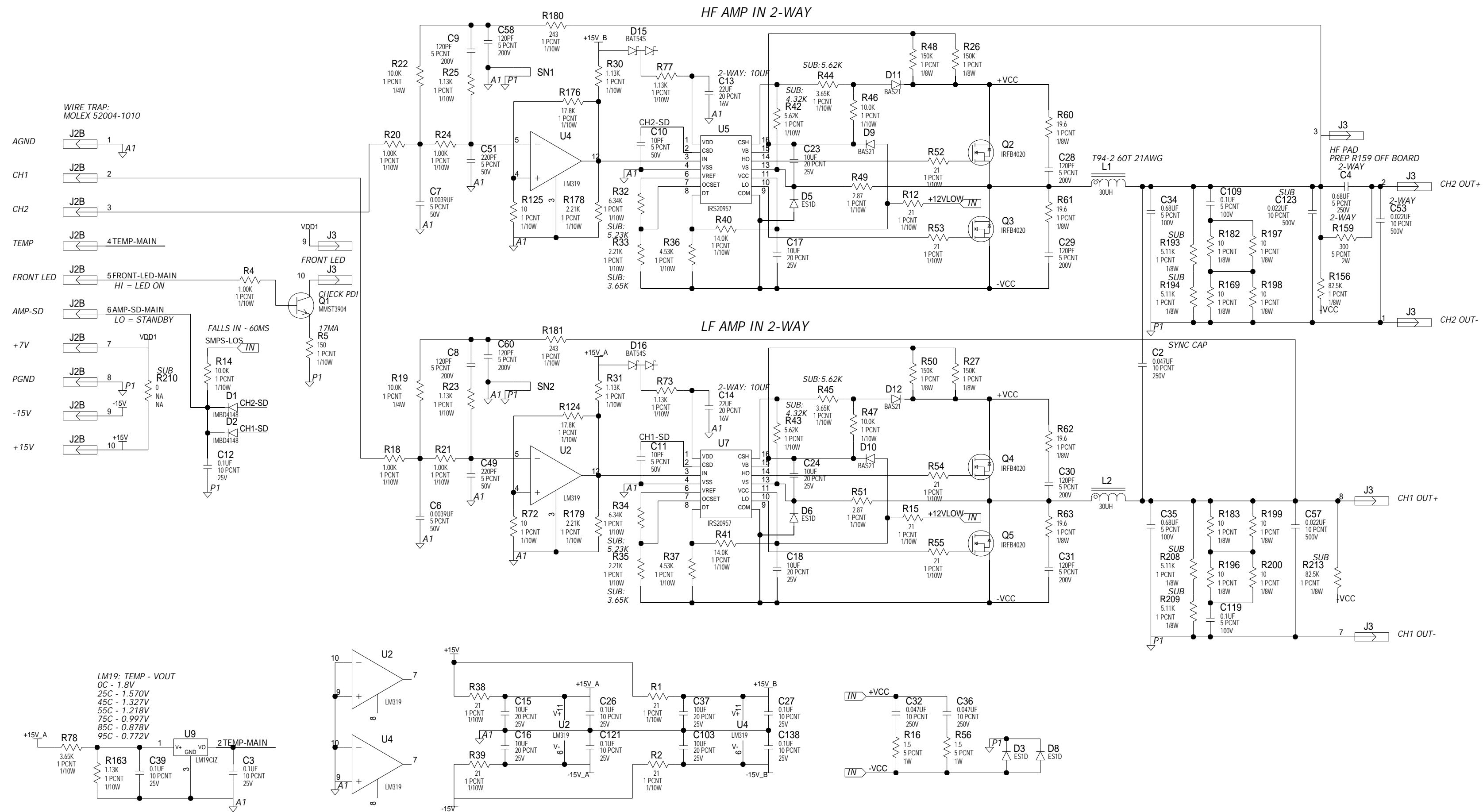
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SIZE C	CAGE CODE 00PW4	DWG NO. SH-212206-00	REV A
SCALE NONE	CAD FILE NO. AR-212206-00.ZIP	SHEET 2 OF 5	

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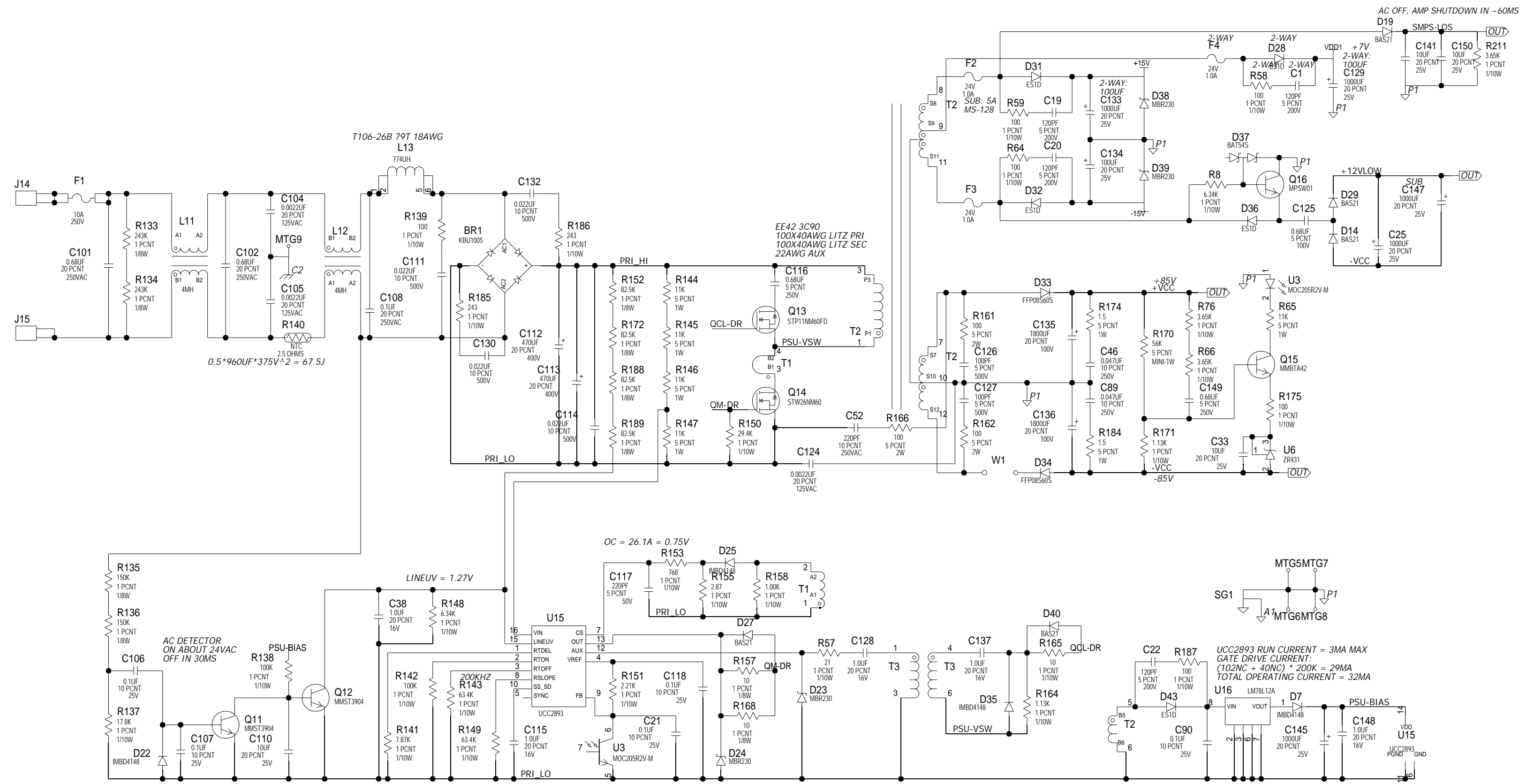
2-CHANNEL CLASS D AMPLIFIER AND PROTECTION



SIZE C	CAGE CODE 00PW4	DWG NO. SH-212206-00	REV A
SCALE NONE	CAD FILE NO. AR-212206-00.ZIP	SHEET 4 OF 5	

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UNIVERSAL INPUT POWER SUPPLY



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SIZE C	CAGE CODE 00PW4	DWG NO. SH-212206-00	REV A
SCALE NONE	CAD FILE NO. AR-212206-00.ZIP	SHEET 5 OF 5	

WP-215301-00

AMP MODULE ASSY.,KW153.,UNIV SPLY,FULL RNG,15" 3-WAY

Part Number	Description	Qty
CA-010002-30	10PF, 5 PCNT, 50V, CERAMIC NPO, 0805,	C10, C11, C139, C140
CA-018002-30	18PF, 5 PCNT, 50V, CERAMIC NPO, SMT,	C59, C61
CA-110001-10	100PF, 5 PCNT, 500V, MICA, DIPPED,	C126, C127
CA-112001-30	120PF, 5 PCNT, 200V, CERAMIC NPO, 0805,	C19, C20, C22, C28, C29, C30, C31, C58, C60, C8, C9, C75, C76, C77, C78, C93, C94, C95, C96, C1
CA-122002-30	220PF, 5 PCNT, 50V, CERAMIC NPO, 0805,	C117, C49, C51
CA-122011-00	220PF, 10 PCNT, 250VAC, CERAMIC CLASS Y1, DISC, YCAP	C52
CA-168003-30	680PF, 5 PCNT, 50V, CERAMIC NPO, 0805,	C72, C73
CA-222001-00	0.0022UF, 20 PCNT, 125VAC, CERAMIC Y5U, DISC, YCAP	C104, C105, C124
CA-233003-30	0.0033UF, 10 PCNT, 50V, CERAMIC X7R, 0805,	C122, C50
CA-239002-30	0.0039UF, 5 PCNT, 50V, CERAMIC C0G/NP0, 0805,	C6, C7
CA-322013-30	0.022UF, 10 PCNT, 500V, CERAMIC X7R, 1206,	C111, C114, C130, C132, C57, C123
CA-347008-10	0.047UF, 10 PCNT, 250V, FILM, BOX,	C2, C32, C36, C46, C89
CA-368007-30	0.068UF, 10 PCNT, 100V, CERAMIC X7R, 0805,	C55
CA-410001-00	0.1UF, 20 PCNT, 250VAC, FILM, BOX STYLE, XCAP	C108
CA-410012-30	0.1UF, 10 PCNT, 25V, CERAMIC X7R, 0805,	C3, C5, C12, C21, C26, C27, C39, C41, C47, C63, C64, C68, C69, C70, C71, C74, C82, C83, C84, C85, C86, C90, C91, C92, C99, C100, C106, C107, C118, C120, C121, C138, C143, C144
CA-410027-10	0.1UF, 5 PCNT, 100V, FILM, BOX STYLE,	C109, C119, C131
CA-468005-10	0.68UF, 5 PCNT, 100V, FILM, BOX,	C34, C35
CA-468006-00	0.68UF, 5 PCNT, 250V, POLYPROPYLENE, BOX,	C116, C149
CA-468007-00	0.68UF, 20 PCNT, 250VAC, FILM, BOX STYLE, X2 CAP	C101, C102
CA-468008-10	0.68UF, 5 PCNT, 100V, FILM, BOX, DO NOT USE W/HI RIPPLE CURRENT	C125
CA-510007-30	1.0UF, 20 PCNT, 16V, CERAMIC Y5V, 0805,	C38, C44, C115, C128, C137, C148
CA-610011-30	10UF, 20 PCNT, 16V, ELECTROLYTIC, SMT, NON-POLAR	C54, C79, C80, C97, C98
CA-610021-30	10UF, 20 PCNT, 25V, CERAMIC CAP, 1206,	C103, C110, C15, C16, C17, C18, C23, C24, C33, C37, C48, C56, C65, C66, C67, C81, C87, C88
CA-622020-30	22UF, 20 PCNT, 16V, X5R, 1206,	C13, C14
CA-710004-10	100UF, 20 PCNT, 25V, ELECTROLYTIC, , LOW ESR	C133, C134, C42, C62, C129
CA-747011-00	470UF, 20 PCNT, 400V, ELECTROLYTIC, SNAP IN,	C112, C113
CA-810010-10	1000UF, 20 PCNT, 25V, ELECTROLYTIC, ,	C145
CA-810010-10	1000UF, 20 PCNT, 25V, ELECTROLYTIC, ,	C25, C45
CA-818001-00	1800UF, 20 PCNT, 100V, ELECTROLYTIC, 22MM X 40MM SNAP IN,	C135, C136
CH-000856-00	CHASSIS, MAIN, BUCKET, BOP-2CH,	1
CH-000880-00	CLAMP, TRANSISTOR, , BOP-2CH,	2
CH-001025-00	SHIELD, LINE FILTER, SHORT, KW SERIES,	1
CH-001030-00	INPUT PANEL, , , KW153,	1
CO-000009-ZT	ZTAB, 0.25" TAB, 1 POS, MALE, AUTO INSERTABLE	J14, J15
CO-000155-00	HEADER, 0.1" CENTERS, 2 POS (1X2), MALE, RAMP LOCK	J1
CO-000185-30	TEST POINT, SMT, 1 POS, , 1206	TN1
CO-000329-00	WIRE HOLDER, RIBBON CABLE, 10 POS, FEMALE,	
CO-000371-00	JACK, PHONO, 2 POS, FEMALE, VERTICAL	J12
CO-000413-00	HEADER, 4.2MM CENTERS, 10 POS (2X5), MALE,	J3
CO-000414-00	XLR, COMBO, 3 POS, FEMALE, VERTICAL WITHOUT TAB	J8, J10
CO-000421-00	XLR, , 3 POS, MALE, VERTICAL PLASTIC SHELL	J9, J11, J13

WP-215301-00

AMP MODULE ASSY.,KW153.,UNIV SPLY,FULL RNG,15" 3-WAY

Part Number	Description	Qty
CO-000422-00	JACK, EURO, 3 POS, MALE, VERTICAL BLACK TALL	J6
CO-000426-00	WIRE TRAP, RIBBON CABLE, 10 POS, FEMALE, RELEASABLE	J2B
CO-000458-00	TERMINAL STRIP, 2X3, 6 POS, MALE,	J7
CO-000483-00	CONNECTOR, STRAIGHT WAFER, 2 PIN, ,	J5
CY-000009-30	12.288MHZ, , SMT	Y1
HW-000007-HW	FUSE CLIP, PC MOUNT, , , TIN PLATED BRASS, 5MM	
IC-000048-30	OPAMP, DUAL, MC33078, ,	U1, U14, U17, U18, U19
IC-000157-30	REGULATOR, SHUNT, ZR431, ,	U6
IC-000188-30	VOLTAGE REGULATOR, +3.3V, LM2937-3.3, ,	U8
IC-000200-30	RESET, MICROPROCESSOR, MAX809S, ,	U12
IC-000279-30	COMPARATOR, DUAL, LM319, SMT,	U2, U4
IC-000315-00	SENSOR, TEMPERATURE, LM19CIZ, ,	U9
IC-000382-30	DSP 28/56 BIT, , ADAU1701, ,	U10
IC-000407-30	EEPROM, 8KX8, 24C64A, SMT, I2C	U11
IC-000412-30	CONTROLLER, ACTIVE CLAMP PWM, UCC2893, SMT,	U15
IC-000413-30	DRIVER, MOSFET HALF BRIDGE, IRS20957, SMT,	U5, U7
IC-000425-30	OPTO COUPLER, TRANSISTOR OUTPUT, MOC205R2V-M, SMT, VDE APPROVAL	U3
IC-000431-30	VOLTAGE REGULATOR, +12V, LM78L12A, SO-8,	U16
IC-000505-30	COMPARATOR, DUAL, LM393A, SO-8, VIO = 2MV MAX	U13
IC-000558-30	ANALOG SWITCH, QUAD, DG412, ,	U21, U22
MS-000115-30	FUSE, 1.0A, 24V, 1206, SLO	F2, F3, F4
MS-000487-00	GASKET, PCB CONNECTOR, SPEAKER, BOP-2CH,	1
MS-10.250-FU	FUSE, 10A, 250V, 5MM X 20MM, FAST	F1
NW-000034-00	WSHR, SPLKG, , M3, 3.4 ID, 6.2 OD, 0.7 THK, STL, CLR, ZINC CR3,	4
NW-000140-00	NUT, HEX KEPS W/TOOTH WSHR, M4, , STL, CLR, ZINC,	1
NW-000147-00	NUT, HEX, M3, , STL, CLR, ZINC CR3,	4
NW-000173-00	WSHR, FLT, M3, , 3.2 ID, 8.0 OD, 1.0 THK, STL, BLK, ZINC CR3,	8
PC-212204-00	SOB-PCB, KW SERIES, , (PENDING ECO 10040),	
PG-000233-00	FIRMWARE, , KW153, ,	
PL-000085-00	INSULATOR, TRANSISTOR, 1.525" X 0.950", ALUMINA, ,	4
PL-000627-00	SPRINGSEAT, TRANSISTOR, BOP, NYLON, ,	2
PL-000628-00	SPACER, T-1 LED, 0.85", PLASTIC, BLACK,	
PL-000636-00	KNOB, , K-SERIES, PLASTIC, BLACK,	2
PL-000643-00	SPACER, LED/TO-92, .115" (3MM), PVC, BLACK,	
PL-000686-00	SPACER, ROUND, 0.063"ID X 0.156"OD X 0.510"L, NYLON, ,	
PL-000709-00	KNOB, SMALL, ROTARY, , ,	1
PL-000710-00	BOAT, NTC SUPPORT, , , ,	
PT-250006-00	GAIN, 5K, 20 PCNT, , 21 DETENT, GX SERIES	VR1, VR2
QD-000052-00	LED, , , GREEN, , DIFFUSED	LD4, LD6, LD7
QD-000053-00	LED, , , YELLOW, , NA	LD3
QD-000054-00	LED, , , RED, , NA	LD1
QD-000066-10	TRANSISTOR NPN, 30V, 1A, 1W, MPSW01, TO-92,	Q1, Q16, Q7
QD-000102-30	DIODE, 75V, 0.075A, , IMBD4148, SOT-23, 4NS	D1, D2, D7, D13, D22, D25, D35, D45
QD-000103-30	TRANSISTOR NPN, 40V, 0.2A, 0.2W, MMST3904, SOT-23,	Q18, Q19, Q11, Q12, Q17, Q6
QD-000104-30	TRANSISTOR PNP, 40V, 0.2A, 0.2W, MMST3906, SOT-23,	Q10, Q8, Q9
QD-000105-30	TRANSISTOR NPN, 300V, 0.2A, 0.2W, MMBT442, SOT-23,	Q15
QD-000108-30	DIODE, 200V, 0.2A, , BAS21, SOT-23, 50NS	D9, D10, D11, D12, D14, D27, D29, D40
QD-000187-00	LED, , , BLUE, , NA	LD2
QD-000189-30	DIODE SCHOTTKY, 30V, 0.2A, , BAT54S, SOT-23,	D4, D15, D16, D17, D37
QD-000282-30	DIODE RECTIFIER ULTRAFASST, 200V, 1A, , ES1D, SMA,	D3, D31, D32, D36, D43, D5, D6, D8, D28
QD-000284-00	MOSFET N-CHANNEL, 600V, 26A, 313W, STW26NM60, TO-247,	Q14
QD-000363-30	DIODE, SCHOTTKY, 30V, 2.0A, , MBR230, SOD-123,	D23, D24, D38, D39
QD-000372-00	BRIDGE RECTIFIER, , , KBU1005, IN-LINE, 600V 10A	BR1

WP-215301-00

AMP MODULE ASSY.,KW153.,UNIV SPLY,FULL RNG,15" 3-WAY

Part Number	Description	Qty
QD-000373-00	MOSFET N-CHANNEL, 200V, 18A, 100W, IRFB4020, TO-220AB,	Q2, Q3, Q4, Q5
QD-000376-00	MOSFET N-CHANNEL, 600V, 11A, 160W, STP11NM60FD, TO-220,	Q13
QD-000391-00	DIODE RECTIFIER, 600V, 8A, , FFP08S60S, TO-220, 15NS STEALTH II	D33, D34
QD-000416-30	LED, BLUE, , , , SMT,	
RE-15002-30	1.5, 5 PCNT, 1W, THICK FILM, 2512, 200V	R16, R56, R174, R184
RE-28701-30	2.87, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R49, R51, R121, R155
RE-000300-NR	NTC, 2.5 OHMS, 8 AMPS, , , INRUSH LIMIT 90J	R140
RE-001003-30	10, 1 PCNT, 1/8W, THICK FILM, 1206, 200V	R157, R168, R169, R182, R183, R196, R197, R198, R199, R200
RE-001006-30	10, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R72, R125, R165
RE-001960-30	19.6, 1 PCNT, 1/8W, THICK FILM, 1206, 200V	R60, R61, R62, R63
RE-002100-30	21, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R1, R102, R103, R12, R15, R2, R38, R39, R52, R53, R54, R55, R57
RE-003920-30	39.2, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R5
RE-010002-30	100, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R100, R101, R131, R132, R139, R175, R187, R59, R64, R82, R58
RE-010018-10	100, 5 PCNT, 2W, METAL FILM, MINI,	R161, R162, R166
RE-024301-30	243, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R180, R181, R185, R186
RE-027401-30	274, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R104, R105
RE-047502-30	475, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R108, R28, R68, R79
RE-076801-30	768, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R153
RE-110002-30	1.00K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R158, R167, R18, R20, R21, R24, R29, R7, R87, R201, R202
RE-111301-30	1.13K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R163, R164, R171, R177, R23, R25, R30, R31, R73, R77
RE-122103-30	2.21K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R117, R119, R13, R151, R17, R178, R179, R33, R35, R6, R70, R83, R85, R86
RE-136502-30	3.65K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R4, R84, R160, R203, R204, R207, R44, R45, R66, R76, R78, R9
RE-145302-30	4.53K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R36, R37, R67
RE-156200-30	5.62K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R10, R42, R43, R88, R89, R90, R91, R92, R93, R94, R95
RE-163402-30	6.34K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R148, R32, R34, R8, R81
RE-178701-30	7.87K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R141, R195
RE-210001-BM	10.0K, 1 PCNT, 1/4W, METAL FILM, ,	R19, R22
RE-210003-30	10.0K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R109, R110, R113, R114, R115, R116, R126, R127, R14, R154, R46, R47, R69, R74
RE-211005-00	11K, 5 PCNT, 1W, METAL OXIDE FP, ,	R65, R144, R145, R146, R147
RE-214001-30	14.0K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R120, R130, R40, R41
RE-215002-30	15.0K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R205, R206
RE-217803-30	17.8K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R75, R124, R137, R176
RE-220002-30	20.0K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R111, R112, R96, R97, R98, R99
RE-229402-30	29.4K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R150
RE-256001-00	SOB-56K, 5 PCNT, 1W, METAL OXIDE, FP,	R170

WP-215301-00

AMP MODULE ASSY.,KW153.,UNIV SPLY,FULL RNG,15" 3-WAY

Part Number	Description	Qty
RE-263401-30	63.4K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R143, R149, R173, R128, R129, R190
RE-282501-30	82.5K, 1 PCNT, 1/8W, THICK FILM, 1206, 200V	R152, R172, R188, R189
RE-310002-30	100K, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R11, R138, R142, R71, R80
RE-315002-30	150K, 1 PCNT, 1/8W, THICK FILM, 1206, 200V	R26, R27, R48, R50, R135, R136
RE-324302-30	243K, 1 PCNT, 1/8W, THICK FILM, 1206, 200V	R133, R134
RE-410005-30	1.0M, 1 PCNT, 1/10W, THICK FILM, 0805, 100V	R122, R123
SC-000205-00	SCR, PHH, PNH SERR BSE, MACH, PLASTITE, , , M4, 10 L, STL, BLK, ZINC CR3, WAXED,	
SC-000229-00	SCR, PHH, PNH, MACH, , , M3, 8 L, STL, BLK, PHOS W/6219,	
SC-000230-00	SCR, PHH, FLH, TPG, TYPE AB, , #4-24, 3/8 L, STL, BLK, ZINC CR3,	
SC-000240-00	SCR, PHH, PNH, MACH, , , M3.5, 20 L, STL, NI-HARDENED, , 450 - 550-HV HARDNESS	
SC-000241-00	SCR, PHH, PNH, MACH, , , M3.5, 8 L, STL, NI, HARDENED, , 450 - 550-HV HARDNESS	
SC-043051-PP	PHILLIPS, PANHEAD, #4-20, 0.313" L, BLACK, STEEL "PLASTITE"	
SW-000016-SW	AC SWITCH, SPST, 20A, 125VAC,	
SW-000111-00	SWITCH, DPDT, SLIDE, PCB MOUNT 0.805" TERMINALS	SW3
SW-000112-00	SWITCH, DP3T, SLIDE, PCB MOUNT 0.805" TERMINALS	SW2, SW1
SW-000182-00	SWITCH, 2P4T, ROTARY, 4 POS VERTICAL	SW4
TP-100023-00	TEST PROCEDURE, QSC AMPLIFIER, ,	
WC-000467-00	WIRE ASSY, AC SWITCH, 16 AWG, 1 CONDUCTOR, BOP-2CH, 5.00" L, BROWN	
WC-000516-00	CONNECTOR ASSY, AC, 16AWG, 3 COND, 2 CH KW, ,	
WC-000523-00	RIBBON CABLE, , 26 AWG, 10 COND, KW SERIES, 9.0 IN INSULATION,	J2A
WC-1.1022-JW	WIRE, JUMPER, 22 GA, , BOP, 1.1, WHT	W1
WP-000367-00	FAN ASSY, , BOP-2CH, ,	
XF-000100-30	BEAD, 100MHZ, 1K OHM, SMT	L3, L4, L5, L6, L7, L8, L9, L10
XF-000360-30	TRANSFORMER, CURRENT SENSE, , , , , 100:1 BOP-2CH	T1
XF-000361-30	TRANSFORMER, GATE DRIVE, , , , BOP-2CH, ,	T3
XF-000362-00	TRANSFORMER, SWITCHING, 200KHZ, E42-21-20, 1000W, BOP-2CH, ,	T2
XF-000364-00	INDUCTOR, , TOROID T94-2, 30UH, BOP-2CH, ,	L1, L2
XF-000376-00	INDUCTOR, COMMON MODE, TOROID, 4MH, BOP, , 50/60HZ 6.3A	L11, L12
XF-000391-00	INDUCTOR, 60HZ PFC, TOROID, 774UH, KW SERIES, , 4 TO 6 PIN BASE	L13