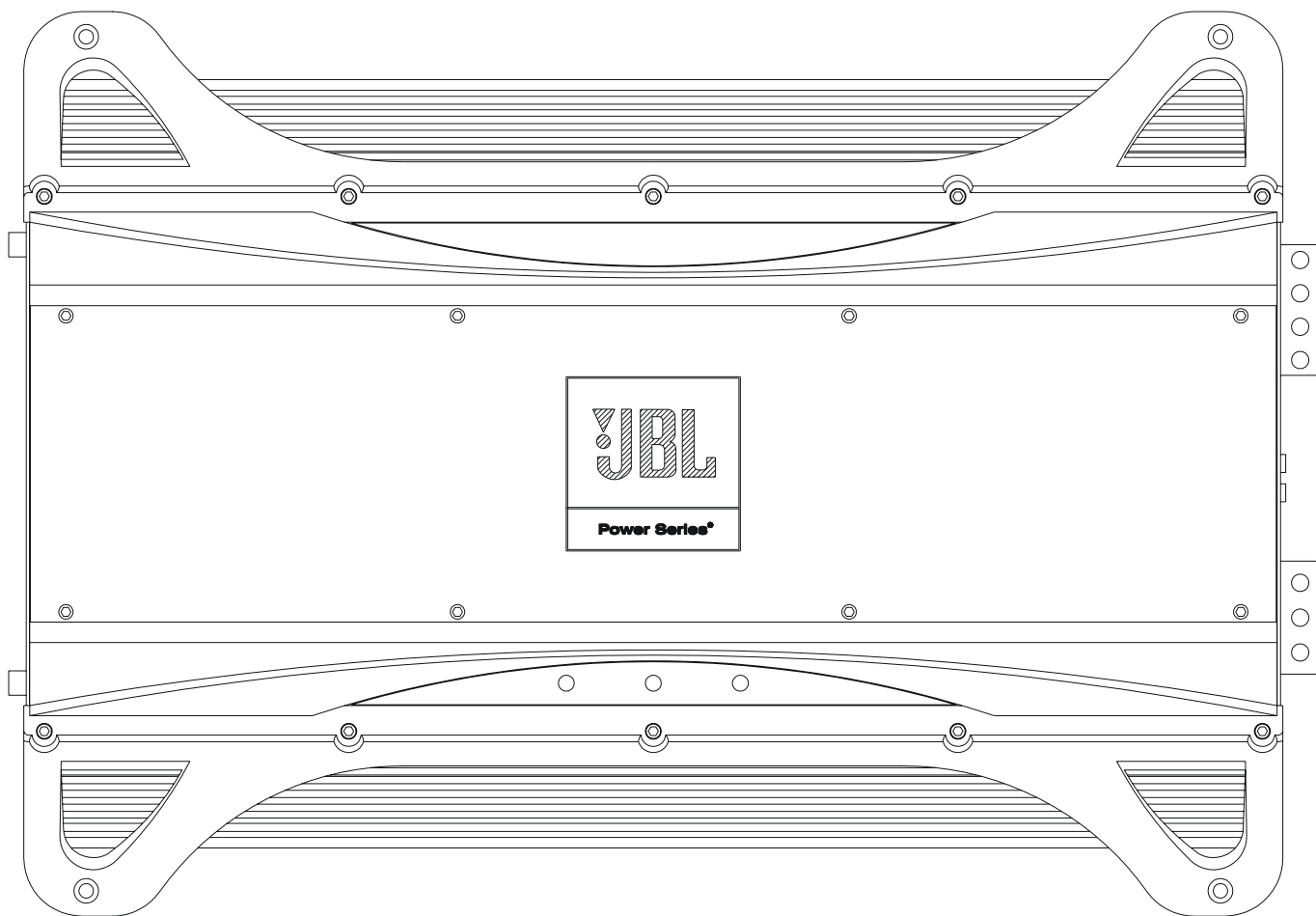


BPX1100.1



2 CHANNEL POWER AMPLIFIER

SERVICE MANUAL



JBL Consumer Products
250 Crossways Park Dr.
Woodbury, New York 11797

Rev1 2/2004

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SPECIFICATIONS

Power Output, 4 Ohms:	n/a
Power Output, 2 Ohms:	575W x 2
Power Output, Bridged, 4 Ohms:	1100W x 1
Power Output, Parallel, 1 Ohm:	1100W x 1
MIN. Speaker Impedance:	1 ohm
Frequency Response:	20Hz~320Hz, -3dB
Input Sensitivity (RCA type):	250mV~6V
THD + Noise (4 Ohms):	0.5%
Signal-to-Noise:	93 dB
Maximum Current Draw:	110A
Fuse Replacement:	30Ax3
External Dimensions:	
Length	12 ¼" (312mm)
Width	17" (432mm)
Depth	2 9/16" (66mm)

JBL continually strives to improve its products. New materials, production methods and design refinements are introduced into existing models without notice as a routine expression of our design philosophy. For this reason, Power Series Multichannel Automotive Amplifiers may differ in some respects from their published specifications and descriptions, but will always equal or exceed the original specifications unless otherwise stated.

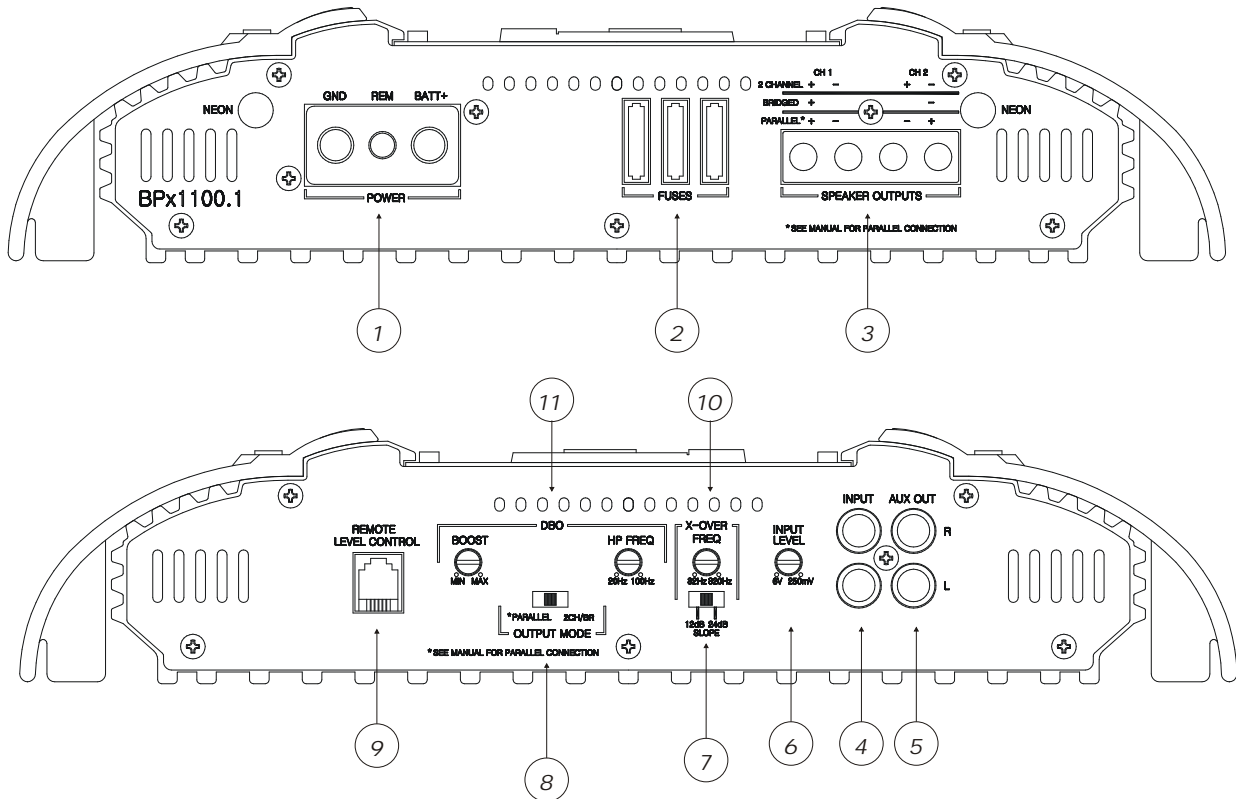
Features

- 2-Channel Operation
- Advanced MOSFET Oversized Floating Rail Power Supply
- Floating Ground Factory - Head - Unit Speaker - Level input
- Variable Input Sensitivity (250mV - 6V)
- Fully Complementary Output Stage with Class-D Voltage Amplification
- Gold-plated Power, Input and Output Connectors
- 1-Ohm Stable (2 ohm parallel)

Test Conditions and Notes

- *All tests to be done, unless otherwise specified, from 20Hz to 320Hz at 14.4V DC into 2 ohm loads and adjust the units gain so that with a .775 volt input signal the unit is at its maximum rated output. All measurements will be done using an Audio precision system one and the supply voltage.*
- *An A+ line voltage of 14.4V DC shall be applied to the unit under test for all measurements unless otherwise specified. The voltage applied to the unit shall be measured at the power connection on the Amplifier.*
- *Signal Source*
Unless otherwise specified, all tests shall be conducted with the Audio Signal Generator output configured to be balanced, less than or equal to 50 ohm source impedance, and floating. The signal source "GND" shall be connected to the Amplifier PWR GND at the Amplifier.
- *Output Load*
Unless otherwise specified, all tests shall be conducted with 2 ohm resistive loads having less than 10% reactive components at any frequency below 350Hz. Each resistor shall have a value that remains within 1% while dissipating the rated output of the unit under test.
- *Power Indicator LED steadily illuminates for normal operation. LED blinks when protection circuitry is engaged, and during power up.*

Controls and Connections



Controls and Connections

1. Power Connection for 12V+, GND and REM connections for power wires. See wiring instructions on page 4 for more information.
2. Fuse - Three 30 Amp ATC type Fuses.
3. Speaker Output Connector - Connect speaker wiring to these connectors. See wiring instructions on page 4 for more information.
4. Preamp-Level Input Connector - Connects to line-level output from the source unit.
5. Pre amp-Level AUX output Connector
6. Input-Level Control - Adjusts input sensitivity for pre-amp level and speaker level inputs.
7. This switch is select X-over slope
8. This switch is set to 2-channel mode(2CH/BR) to drive a pair of subwoofers or bridge(mono) mode to drive a single subwoofer(PARALLEL). It's allowed to use parallel mode when the nominal impedance of the speaker system is 2 ohm or greater
9. Remotr Volume Control Jack.
10. The crossover frequency can be set at any frequency Between 32Hz and 320Hz.
11. (1) The HP frequency can be set at any frequency Between 20Hz and 100Hz.
(2) Bass Boost control will provide at frequency Being set between 20Hz ~ 100Hz

Mounting the Amplifier

The JBL BP Series amplifiers can be mounted in virtually any location inside the vehicle. However, make sure to keep the amplifier away from heater vents or ducts.

1. At the chosen site, use the amplifier as a mounting template and mark the locations of the four mounting holes.
2. Drill a small pilot hole at each marked location.
3. Mount the amplifier and securely tighten the mounting screws.

APPLICATIONS - BPx MODELS

To the right are several application diagrams to help plan your subwoofer system installation. **Figures 1 through 3** show how to configure the JBL Power Series subwoofer amplifiers (models BPx500.1, BPx1100.1 and BPx2200.1) for 2-channel, bridged-mono and parallel-mono operation (Setting the Output Mode" on page 6).

NOTE: For simplicity, Figures 1 through 3 do not show power, remote and input connections.

NOTE: If the nominal impedance of your speaker system is close to 2 ohms, be prepared to try both bridged and parallel configurations to determine which performs better.

Set OUTPUT MODE to 2CH/BR (on input panel)

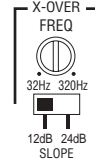
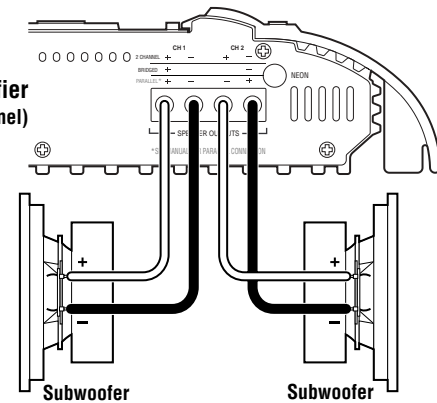


Figure 1. The JBL Power Series subwoofer amplifier is set to 2-channel mode to drive a pair of subwoofers.



Set OUTPUT MODE to 2CH/BR (on input panel)

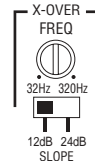
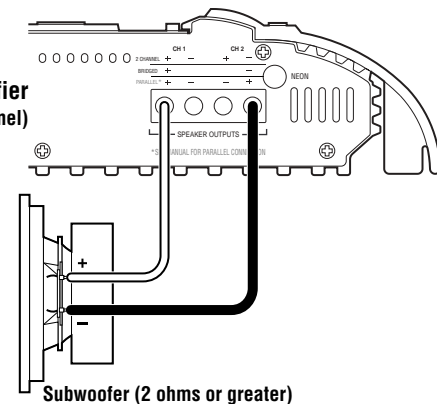


Figure 2. The JBL Power Series subwoofer amplifier is set to bridged (mono) mode to drive a single subwoofer. Use this mode only when the nominal impedance of the speaker system is 2 ohms or greater.



Set OUTPUT MODE to PARALLEL (on input panel)

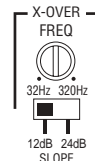
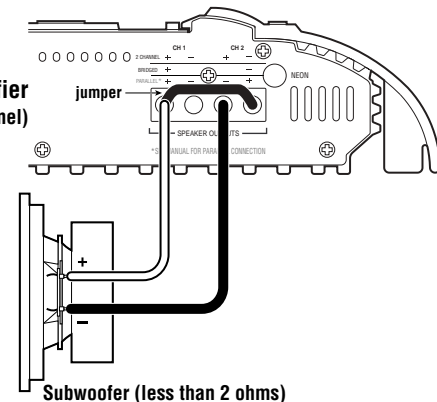
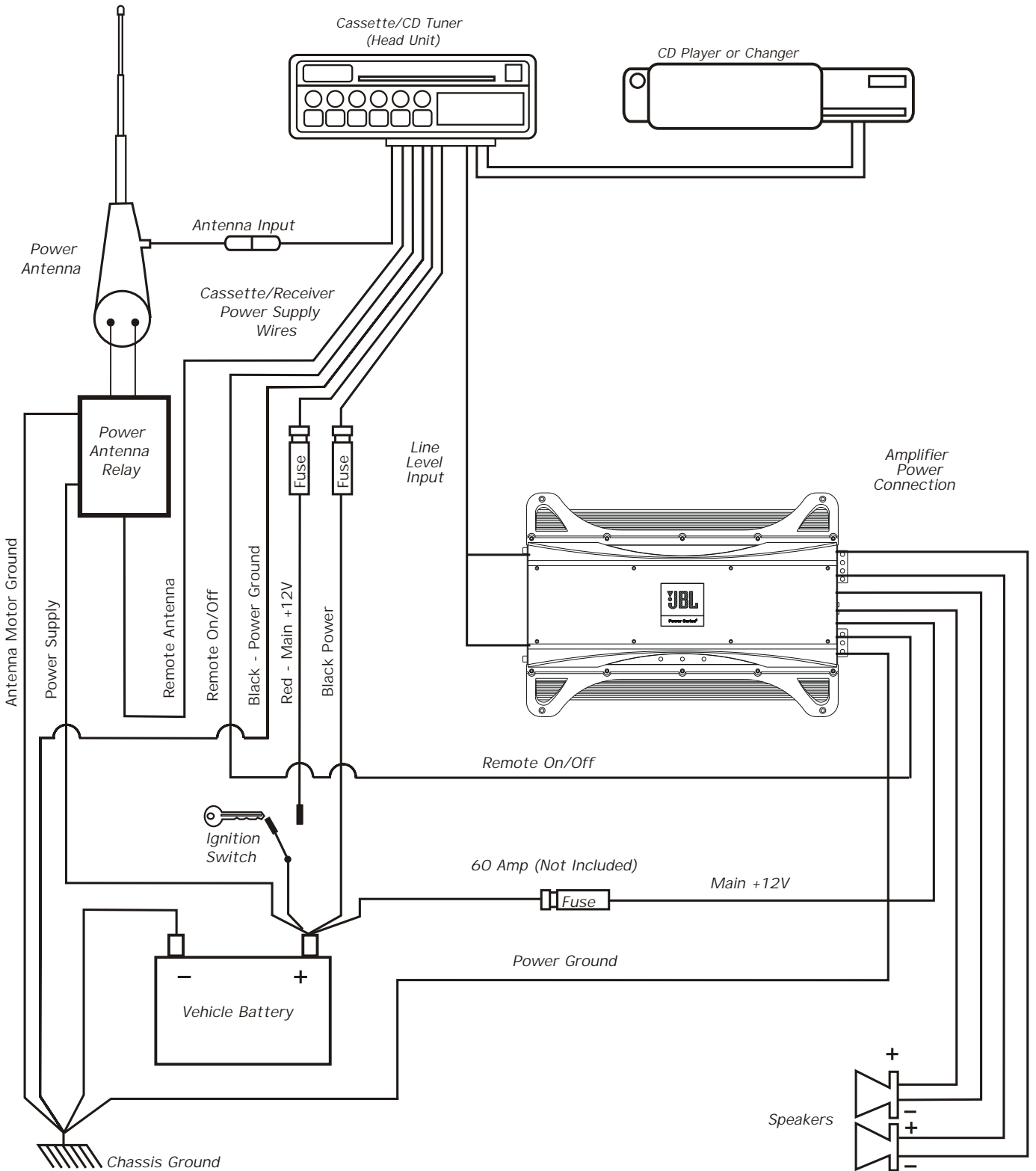


Figure 3. The JBL Power Series subwoofer amplifier is set to parallel mode to drive a single subwoofer. Use this mode only when the nominal impedance of the speaker system is less than 2 ohms.



NOTE: A jumper is added between the + terminals.

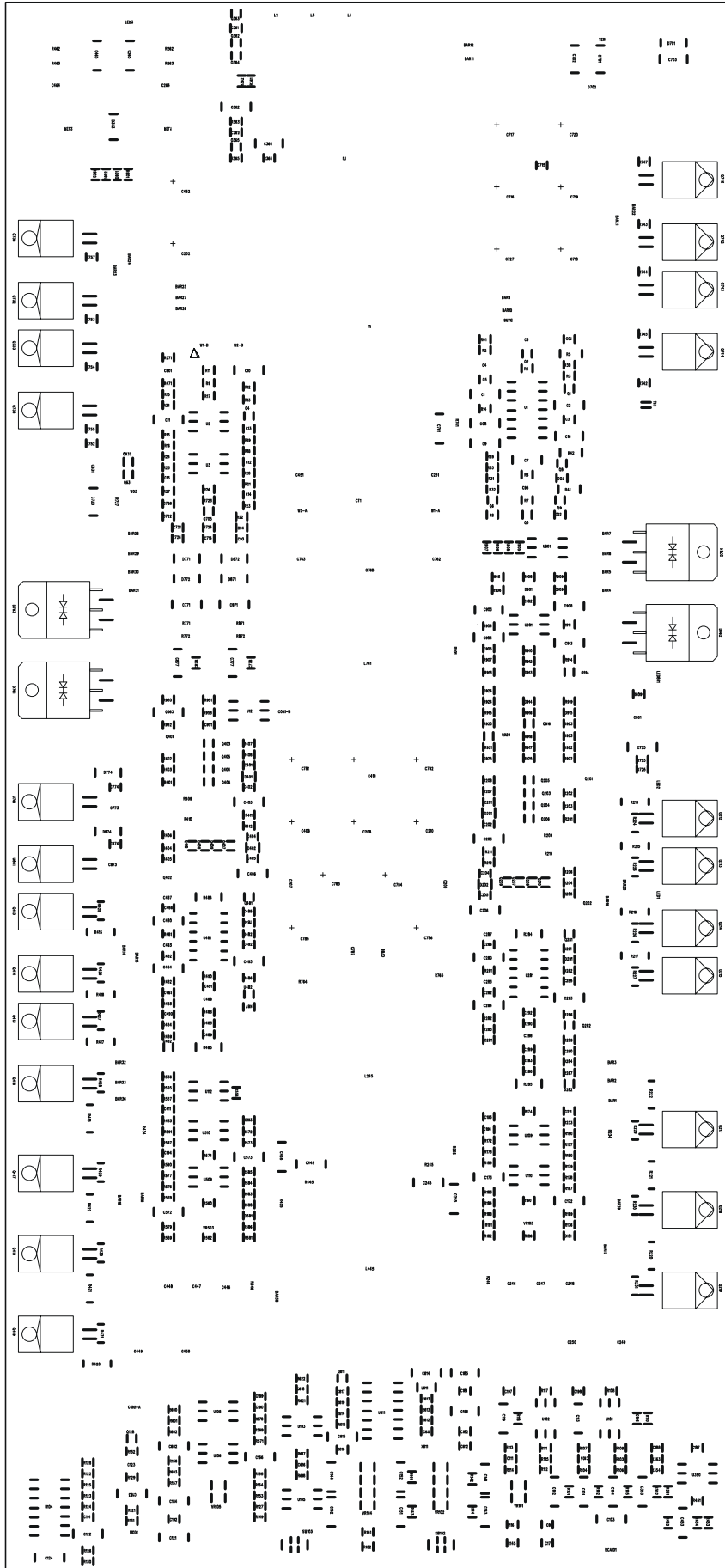
Typical System Configuration



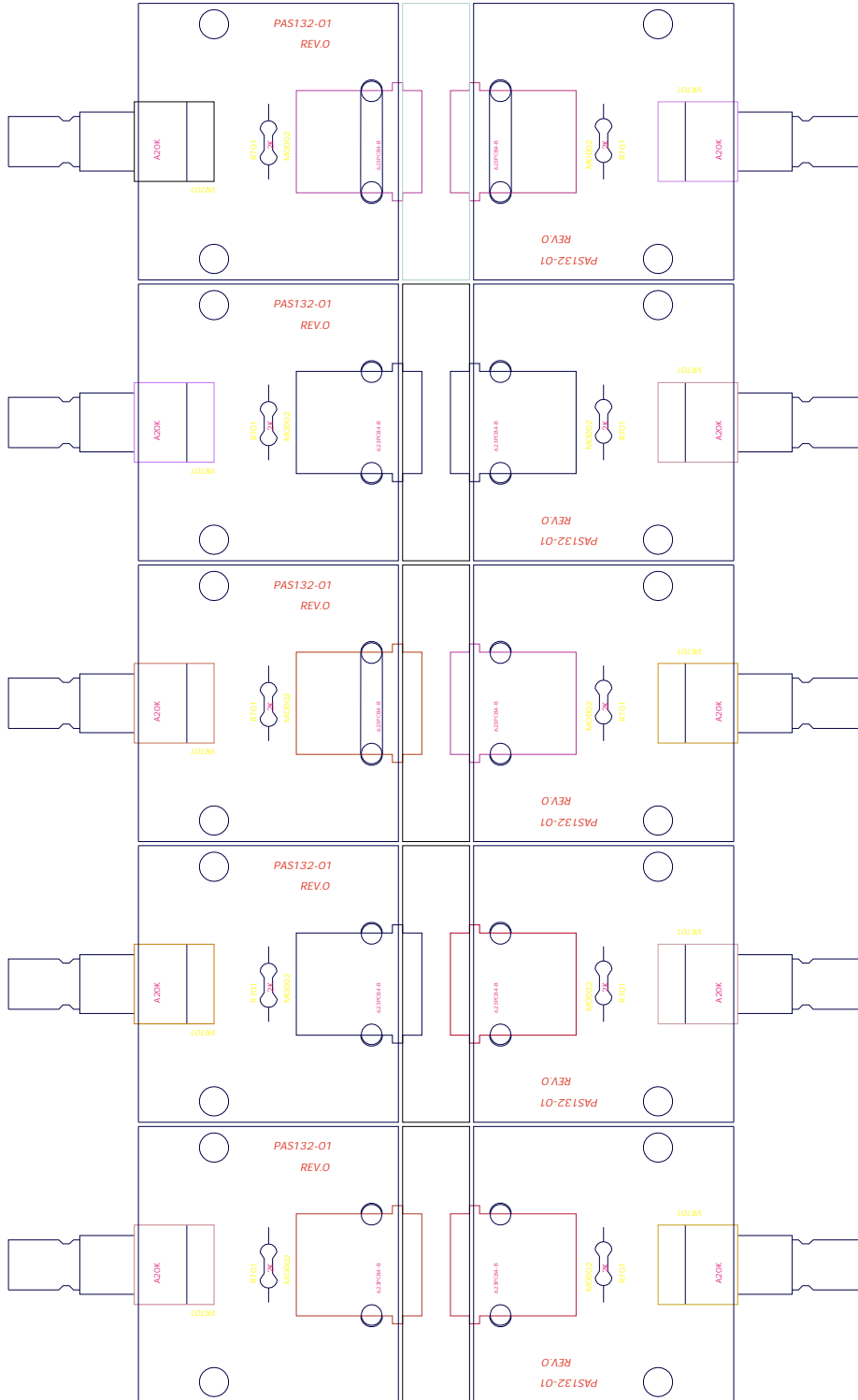
TROUBLESHOOTING

SYMPTOM	LIKELY CAUSE	SOLUTION
No audio (POWER LED is off)	No voltage at BATT+ or REM terminals, or bad or no ground connection	Check voltages at amplifier terminals with VOM
No audio (PROTECT LED flashes every 4 sec.)	DC voltage on amplifier output	Amplifier may need service; see enclosed warranty card for service information
No audio (PROTECT LED is on)	Amplifier is overheated	Make sure amplifier cooling is not blocked at mounting location; verify speaker-system impedance is within specified limits (see "Specifications" on the next page)
No audio (PROTECT and POWER LEDs flash)	Voltage less than 9V on BATT+ connection	Check vehicle charging system for defective voltage regulator
I-E/OPT LED is on all times (not flashing)	Amplifier is being overdriven	Check INPUT LEVEL setting; see previous page
No audio (PROTECT LED is on)	Voltage more than 16V or less than 8.5V on BATT+ connection regulator	Check vehicle charging system for defective voltage regulator
Distorted audio	Input sensitivity is not set properly, or amplifier or source unit is defective	Check INPUT LEVEL setting; or check speaker wires for shorts or grounds
Distorted audio and PROTECT LED flashes	Short circuit in speaker or wire	Remove speaker leads one at a time to locate shorted speaker or wire, then repair
Music lacks "punch"	Speakers are not connected properly	Check speaker connections for proper polarity

Printed Circuit Board (BOTTOM View)



Printed Circuit Board (SUB TOP View)



BPX1100.1 Parts List

PART NO.	NOMENCATURE	DESCRIPTION	MFR PARTS	REF. NO	Q'TY
PCB-00-00952	IC	SHUNT REGULATOR	KIA431/KIA431A	U282,482	2
TRS-00-00088	TRANSISTOR	SMALL SIGNAL NPN	KTC1027Y	Q203,205,207,209,281,403,405,407,409,481 Q914	11
TRS-00-00087	TRANSISTOR	SMALL SIGNAL PNP	KTA1023Y	Q1,204,206,208,210,282,404,406,408,410 Q482,916,920	13
TRS-00-00110	TRANSISTOR	SMALL SIGNAL NPN	KTC3198GR	Q2,6,128,362,363,365,611,631,632,705	10
TRS-00-00090	TRANSISTOR	SMALL SIGNAL PNP	KTA1266GR	Q3,4,8,9,364	5
DIO-00-00108	DIODE	FEST RECOVERY	FR154	D771,772,774,871,872,874	6
DIO-00-00003	DIODE	RECTIFIER	1N4004	D363,701	2
DIO-00-00006	DIODE	SWITCHING SIGNAL	1SS133	D01,02,181,281,282,283,284,481,482,483 D484,581,725,801,802,909,913,914,915,922 D923,924,925	23
DIO-00-00041	DIODE	ZENER 0.5W 12V	1N5242	D201,202,401,402,901	5
RES-00-00401	RESISTOR	METAL FILM 1/5WF	100 OHM	R204,404	2
RES-00-00463	RESISTOR	METAL FILM 1/5WF	220 OHM	R203,403	2
RES-00-00499	RESISTOR	METAL FILM 1/5WF	300 OHM	R906,952	2
RES-00-00586	RESISTOR	METAL FILM 1/5WF	820 OHM	R116	1
RES-00-00590	RESISTOR	METAL FILM 1/5WF	910 OHM	R202,206,402,406	4
RES-00-00393	RESISTOR	METAL FILM 1/5WF	1.5K OHM	R288,488	2
RES-00-00443	RESISTOR	METAL FILM 1/5WF	2.2K OHM	R113,557	2
RES-00-00450	RESISTOR	METAL FILM 1/5WF	2.7K OHM	R117	1
RES-00-00489	RESISTOR	METAL FILM 1/5WF	3.3K OHM	R554	1
RES-00-00523	RESISTOR	METAL FILM 1/5WF	4.7K OHM	R111,112,114,177,179,555,556,577,579	9
RES-00-00541	RESISTOR	METAL FILM 1/5WF	5.1K OHM	R2	1
RES-00-00561	RESISTOR	METAL FILM 1/5WF	6.8K OHM	R807	1
RES-00-00581	RESISTOR	METAL FILM 1/5WF	8.2K OHM	R905,951	2
RES-00-00588	RESISTOR	METAL FILM 1/5WF	9.1K OHM	R805	1
RES-00-00402	RESISTOR	METAL FILM 1/5WF	10K OHM	R150,353,354,453,454,591	6
RES-00-00415	RESISTOR	METAL FILM 1/5WF	12K OHM	R806	1
RES-00-00436	RESISTOR	METAL FILM 1/5WF	18K OHM	R118	1
RES-00-00456	RESISTOR	METAL FILM 1/5WF	20K OHM	R26	1
RES-00-00480	RESISTOR	METAL FILM 1/5WF	27K OHM	R27	1
RES-00-00508	RESISTOR	METAL FILM 1/5WF	33K OHM	R01	1
RES-00-00537	RESISTOR	METAL FILM 1/5WF	47K OHM	R103,104,105,106,107,108,109,110,904,950	10
RES-00-00550	RESISTOR	METAL FILM 1/5WF	51K OHM	R23	1
RES-00-00565	RESISTOR	METAL FILM 1/5WF	62K OHM	R808	1
RES-00-00591	RESISTOR	METAL FILM 1/5WF	91K OHM	R101,102	2
RES-00-00405	RESISTOR	METAL FILM 1/5WF	110K OHM	R22	1
RES-00-00498	RESISTOR	METAL FILM 1/5WF	300K OHM	R30	1
RES-00-00636	RESISTOR	CARBON FILM 1/5WJ	1 OHM	R207,208,211,212,407,408,411,412	8
RES-00-00705	RESISTOR	CARBON FILM 1/5WJ	4.7 OHM	R8	1
RES-00-00660	RESISTOR	CARBON FILM 1/5WJ	22 OHM	R619,743,744,745,747,753,754,755,757	9
RES-00-00606	RESISTOR	CARBON FILM 1/5WJ	100 OHM	R115,282,482,915,922,924,925	7
RES-00-00622	RESISTOR	CARBON FILM 1/5WJ	150 OHM	R130	1
RES-00-00656	RESISTOR	CARBON FILM 1/5WJ	220 OHM	R21,603	2
RES-00-00662	RESISTOR	CARBON FILM 1/5WJ	240 OHM	R151	1
RES-00-00712	RESISTOR	CARBON FILM 1/5WJ	470 OHM	R174,233,433,574	4
RES-00-00723	RESISTOR	CARBON FILM 1/5WJ	510 OHM	R123,125	2
RES-00-00728	RESISTOR	CARBON FILM 1/5WJ	560 OHM	R809	1
RES-00-00633	RESISTOR	CARBON FILM 1/5WJ	1K OHM	R33,183,185,290,351,451,490,583,585,613 R622,742,752	13
RES-00-00598	RESISTOR	CARBON FILM 1/5WJ	1.5K OHM	R723,725	2
RES-00-00602	RESISTOR	CARBON FILM 1/5WJ	1.8K OHM	R3,153	2
RES-00-00637	RESISTOR	CARBON FILM 1/5WJ	2.2K OHM	R6,155,173,201,205,281,401,405,481,573	10
RES-00-00644	RESISTOR	CARBON FILM 1/5WJ	2.7K OHM	R4,157,363	3
RES-00-00699	RESISTOR	CARBON FILM 1/5WJ	3K OHM	R181,581	2
RES-00-00672	RESISTOR	CARBON FILM 1/5WJ	3.3K OHM	R10,600,614	3
RES-00-00700	RESISTOR	CARBON FILM 1/5WJ	4.3K OHM	R141,142,156	3
RES-00-00702	RESISTOR	CARBON FILM 1/5WJ	4.7K OHM	R17,34,145,154,180,188,189,287,487,571 R588,589,590,601,726,916	16
RES-00-00720	RESISTOR	CARBON FILM 1/5WJ	5.6K OHM	R9,11,143,144	4
RES-00-00608	RESISTOR	CARBON FILM 1/5WJ	10K OHM	R25,121,124,126,127,132,283,286,289,362 R364,483,486,489,569,570,617,618,724,907 R908,910,911,913,918,920,921,923,953	29
RES-00-00616	RESISTOR	CARBON FILM 1/5WJ	12K OHM	R602	1
RES-00-00623	RESISTOR	CARBON FILM 1/5WJ	15K OHM	R7,122,129	3
RES-00-00630	RESISTOR	CARBON FILM 1/5WJ	18K OHM	R917	1
RES-00-00658	RESISTOR	CARBON FILM 1/5WJ	22K OHM	R14,16,19,31,32,187,365,587,615	9
RES-00-00663	RESISTOR	CARBON FILM 1/5WJ	24K OHM	R184,584	2
RES-00-00666	RESISTOR	CARBON FILM 1/5WJ	27K OHM	R28,172,572,919	4
RES-00-00680	RESISTOR	CARBON FILM 1/5WJ	30K OHM	R128	1
RES-00-00697	RESISTOR	CARBON FILM 1/5WJ	39K OHM	R152	1
RES-00-00714	RESISTOR	CARBON FILM 1/5WJ	47K OHM	R18,182,186,582,586	5
RES-00-00748	RESISTOR	CARBON FILM 1/5WJ	75K OHM	R160,176,178,560,576,578,801,802	8
RES-00-00604	RESISTOR	CARBON FILM 1/5WJ	100K OHM	R13,224,225,226,227,229,230,231,352,425 R426,427,428,429,430,431,452	17
RES-00-00620	RESISTOR	CARBON FILM 1/5WJ	150K OHM	R131	1
RES-00-00647	RESISTOR	CARBON FILM 1/5WJ	200K OHM	R149,271,471	3
RES-00-00654	RESISTOR	CARBON FILM 1/5WJ	220K OHM	R914	1
RES-00-00635	RESISTOR	CARBON FILM 1/5WJ	1M OHM	R12,15,20,24,361,612,616,621,912	9
RES-00-00600	RESISTOR	CARBON FILM 1/5WJ	1.5M OHM	R909	1
RES-00-00053	RESISTOR	METAL FILM 0.5WJ	4.7 OHM	R5	1
RES-00-00018	RESISTOR	METAL FILM 0.5WJ	10 OHM	R214,215,216,217,220,221,222,415,416,417 R418,420,421,422	14
RES-00-00040	RESISTOR	METAL FILM 0.5WJ	22 OHM	R284,285,484,485	4
RES-00-00038	RESISTOR	METAL FILM 0.5WJ	220 OHM	R41,42	2
RES-00-00808	RESISTOR	METAL FILM 1WJ	22 OHM	R771,772,871,872	4
RES-00-00800	RESISTOR	METAL FILM 1WJ	2.2K OHM	R901	1
IND-00-00020	INDUCTOR	COIL AXIAL 5%	100uH	L611	1
CEC-00-00007	CAPACITOR	CERAMIC TUBULAR 50V	10pF	C105,106	2

BPX1100.1 Parts List

PART NO.	NOMENCATURE	DESCRIPTION	MFR PARTS	REF. NO	QTY
CEC-00-00038	CAPACITOR	CERAMIC TUBULAR 50V	47pF	C611,612,617	3
CEC-00-00017	CAPACITOR	CERAMIC TUBULAR 50V	220pF	C726	1
CEC-00-00028	CAPACITOR	CERAMIC TUBULAR 50V	330pF	C616,618	2
CEC-00-00035	CAPACITOR	CERAMIC TUBULAR 50V	470pF	C111	1
CEC-00-00004	CAPACITOR	CERAMIC TUBULAR 50V	102pF	C5,8,17,905,951	5
CEC-00-00005	CAPACITOR	CERAMIC TUBULAR 50V	103pF	C286,486	2
CEC-00-00037	CAPACITOR	CERAMIC TUBULAR 50V	473pF	C3,187,188,189,190,191,192,193,194,195 C196,197,198	13
CEC-00-00006	CAPACITOR	CERAMIC TUBULAR 50V	104pF	C01,12,13,14,15,94,181,182,201,202 C204,205,211,281,282,285,289,290,291,292 C361,363,401,402,404,405,411,481,482,485 C489,490,491,492,613,714,715,721,722,774 C778,874,878,902	44
MYC-00-00046	CAPACITOR	MYLAR 5% 63V "BOX"	102J	C9,280,480,904,950	5
MYC-00-00199	CAPACITOR	MYLAR 5% 400V "BOX"	102J	C761	1
MYC-00-00084	CAPACITOR	MYLAR 5% 63V "TL"	103J	C172,572	2
MYC-00-00083	CAPACITOR	MYLAR 5% 63V "TL"	104J	C265,465	2
MYC-00-00156	CAPACITOR	MYLAR 5% 63V "TL"	184J	C152	1
MYC-00-00085	CAPACITOR	MYLAR 5% 63V "TL"	105J	C284,364,484,702,703,723	6
MYC-00-00088	CAPACITOR	MYLAR 5% 63V "TL"	224J	C203,206,403,406	4
MYC-00-00061	CAPACITOR	MYLAR 5% 63V "TL"	334J	C143	1
MYC-00-00066	CAPACITOR	MYLAR 5% 63V "TL"	474J	C151	1
MYC-00-00184	CAPACITOR	MYLAR 5% 100V	102J	C119,245,445,725	4
MYC-00-00177	CAPACITOR	MYLAR 5% 100V	103J	C255,455,602,615	4
MYC-00-00034	CAPACITOR	MYLAR 5% 50V	333J	C144	1
MYC-00-00045	CAPACITOR	MYLAR 5% 50V	823J	C141,142	2
ELC-00-00571	CAPACITOR	ELECTROLYTIC "NE"	22/16V	C173,573	2
ELC-00-00333	CAPACITOR	ELECTROLYTIC "NP"	22/16V	C113,156	2
ELC-00-00114	CAPACITOR	ELECTROLYTIC "SRE,SE"	1/50V	C801,913	2
ELC-00-00334	CAPACITOR	ELECTROLYTIC "SRE,SE"	2.2/16V	C287,293,487,493	4
ELC-00-00117	CAPACITOR	ELECTROLYTIC "SRE,SE"	4.7/16V	C4,6,7,95,283,288,483,488	8
ELC-00-00293	CAPACITOR	ELECTROLYTIC "SRE,SE"	4.7/50V	C1,2,11,771,871,908	6
ELC-00-00111	CAPACITOR	ELECTROLYTIC "SRE,SE"	22/16V	C08,10	2
ELC-00-00113	CAPACITOR	ELECTROLYTIC "SRE,SE"	100/16V	C16,777,877,903	4
ELC-00-00153	CAPACITOR	ELECTROLYTIC "SMS/SHL/SG"	1/50V	C123	1
ELC-00-00160	CAPACITOR	ELECTROLYTIC "SMS/SHL/SG"	4.7/50V	C124,614	2
ELC-00-00137	CAPACITOR	ELECTROLYTIC "SMS/SHL/SG"	10/25V	C353,453	2
ELC-00-00127	CAPACITOR	ELECTROLYTIC "SMS/SHL/SG"	22/16V	C101,102,103,104,121,122,183,184,185,186	10
ELC-00-00130	CAPACITOR	ELECTROLYTIC "SMS/SHL/SG"	47/16V	C362	1
ELC-00-00162	CAPACITOR	ELECTROLYTIC "SMS/SHL/SG"	100/50V	C773,873	2
ELC-00-00132	CAPACITOR	ELECTROLYTIC "SMS/SHL/SG"	220/16V	C631	1
ELC-00-00254	CAPACITOR	ELECTROLYTIC "SXE"	100/25V	C701	1
REL-00-00009	RELAY	DC12V,10A	KB11-E12S	REL1,2	2
ICO-00-00017	I.C	PRECISION COMPARATOR(DIP-14)	B52	U281,481	2
ICO-00-00055	I.C	14-STAGE COUNTER(DIP-16)	F16	U611	1
ICO-00-00003	I.C	DUAL OP AMP	TLO72CP	U101,102,103,105,106,108,109,110,112,350 U509,510	12
ICO-00-00022	I.C	PWM	TL494CN	U1	1
ICO-00-00170	I.C	VOLUME IC	NJM13600	U104	1
ICO-00-00095	I.C		KIA393P	U2,3,12,801,901	5
ICO-00-00157	I.C	VOLTAGE REGULATOR	KIA7812PI	U761	1
ICO-00-00162	I.C	VOLTAGE REGULATOR	KIA7912PI	U861	1
FET-00-00001	FET	N-CH MOSFET	IRF3205	Q742,743,744,746,752,753,754,756	8
FET-00-00021	FET	P-CH MOSFET	IRF9640	Q212,213,214,215,413,414,415,416	8
FET-00-00037	FET	N-CH MOSFET	IRFB31N20D	Q217,218,219,417,418,419	6
TRS-00-00112	TRANSISTOR	VIDEO NPN	C3503	Q201,401	2
TRS-00-00096	TRANSISTOR	VIDEO PNP	A1381	Q202,402	2
DIO-00-00102	DIODE	FAST RECOVERY	MUR304OPT	D761,762,763,764	4
DIO-00-00048	DIODE	RECTIFIER	1N5404	D702	1
DIO-00-00198	LED	3PHI BLUE	HL304H1BC2	LED2	1
DIO-00-00277	LED	3PHI RED	HNRD-3401L	LED1,801	2
REN-00-00001	RESONATOR	2.56MHz	CSA2.56MG	X611	1
VOL-00-00282	VOLUME	V12L5(9x5)G(4R)(PH2D)N15KC-A2Kx2+A200Kx2		VR104	1
VOL-00-00114	VOLUME	V12L5(9x5)G(PH2D)N17KC-3B20Kx2		VR101	1
VOL-00-00283	VOLUME	V12L5(9x5)G(PH2D)N17KC-B500x2		VR105	1
VOL-00-00055	VOLUME	V12L5(9x5)G(PH2D)N15KC-15C50Kx4		VR102	1
VOL-00-00134	SEMI VOLUME	6PHI . 5KB	RG06P-5KB	VR103,503	2
RES-00-01112	RESISTOR	MOR 2WJ SMALL TYPE"FORMING 15m/m"	2.2 OHM	R263,463	2
RES-00-01018	RESISTOR	MOR 2WJ SMALL TYPE	47 OHM	R245,445	2
RES-00-01046	RESISTOR	MOR 2WJ SMALL TYPE"FORMING 15m/m"	100 OHM	R761	1
RES-00-01079	RESISTOR	MOR 2WJ SMALL TYPE"FORMING 15m/m"	2.2K OHM	R246,255,262,446,455,462	6
RES-00-01099	RESISTOR	MOR 2WJ SMALL TYPE"FORMING 15m/m"	3.9K OHM	R764,765	2
RES-00-00919	RESISTOR	MOR 3WJ	220 OHM	R727	1
RES-00-00916	RESISTOR	MOR 3WJ	2.7K OHM	R209,210,409,410	4
RES-00-00947	RESISTOR	SHUNT 5WJ (3P, 10m/m)	0.01 OHM	R234,434	2
THS-00-00013	THERMISTOR	NTC RESISTOR 50K	FTD5-350	TH1	1
MYC-00-00152	CAPACITOR	MYLAR 10% 100V "BOX"	105K	C207,209	2
MYC-00-00076	CAPACITOR	MYLAR 10% 100V "BOX"	225K	C246,247,248,264,446,447,448,464,762,763 C787,788	12
MYC-00-00109	CAPACITOR	MYLAR 10% 250V "BOX"	225K	C768	1
ELC-00-00357	CAPACITOR	ELECTROLYTIC "BP"(12.5x20)	10/100V	C249,250,251,449,450,451	6

BPX1100.1 Parts List

PART NO.	NOMENCATURE	DESCRIPTION	MFR PARTS	REF. NO	Q'TY
ELC-00-00009	CAPACITOR	ELECTROLYTIC "BP"(16x25)	33/100V	C252,452	2
ELC-00-00173	CAPACITOR	ELECTROLYTIC "SG"(16x25)	470/80V	C783,784	2
ELC-00-00282	CAPACITOR	ELECTROLYTIC "SHL/SD"(10x20)	100/100V	C901	1
ELC-00-00474	CAPACITOR	ELECTROLYTIC "SD"(16x31)	1000/80V	C208,210,408,410,781,782,785,786	8
ELC-00-00627	CAPACITOR	ELECTROLYTIC "WL"(16x25)	2200/25V "WL"	C716,717,718,719,720,727	6
COR-TF-00366	RING CORE	44PHI,MAGNETICS	3T(0.7x22)-13T(0.7x4)-4T(0.7x1)	T1	1
COI-00-00083	INDUCTOR		CL-4100	L761	1
COI-00-00104	INDUCTOR	120uH	CL-5100	L245,445	2
COI-00-00105	INDUCTOR		CL-330	L1	1
COI-00-00106	CURRENT SENSOR	50A	CCS-50	CT1	1
TER-00-00219	TERMINAL	GOLD PLATED	KTD-9216A	TER2	1
TER-00-00220	TERMINAL	GOLD PLATED	KTD-9218A	TER1	1
HOD-00-00006	FUSE HOLDER	PCB TYPE	JSF08031P	F1,2,3	3
JAC-00-00050	MODULAR JACK	4P	623PCB4-B	MOD1	1
JAC-00-00043	RCA JACK	GOLD PLATED	DJB-554A	RCA101	1
SWI-00-00056	SWITCH	SLIDE SWITCH	JSS-2208	SW102,103	2
JUP-00-00003	JUMPER	METAL BAR	35m/m	BAR1,2,3,4,5,6,7,8,9,10 BAR11,12,25,26,27,28,29,30,31,32 BAR33,36	22
JUP-00-00029	JUMPER	62mm 5 LEAD	MA-BA-02-1961-0(5P)	BAR15,19,20,22,23,39	6
JUP-00-00028	JUMPER	46mm 4 LEAD	MA-BA-02-1962-0(4P)	BAR13,14,16,17,21,24	6
JUP-00-00013	JUMPER	2P	MA-BA-02-1529-1(2P)	BAR38	1
WIR-00-00184	WIRE	AWG #14 RED	125m/m	W1(W1-A,W1-B)	1
WIR-00-00173	WIRE	AWG #14 RED	135m/m	W2(W2-A,W2-B)	1
WIR-00-00110	WIRE	AWG #22 BLACK (3PHI RING LUG)	150m/m	WO3	1
TUB-00-00008	TEFLON TUBE	0.7PHI	10m/m	TH1	2
FUS-00-00010	AUTO FUSE	ATC	30A	SET 3 + ACCESSORY 3	6
VOL-00-00044	VOLUME	V9M5720009A	A20Kx2 (9 PHI)	VR701	1
RES-00-00668	RESISTOR	CARBON FILM 1/5WJ	2K OHM	R701	1
JAC-00-00050	MODULAR JACK	4P	KEK623PCB4-B	MOD02	1
JAC-00-00128	MODULAR JACK ASSY	4P(5 METER)		ACESSORY	1

BPX1100.1 Parts List

PART NO.	NOMENCATURE	DESCRIPTION	REF. NO	Q'TY
HEA-01-576AA	HEAT SINK MAIN	AL/EXTRUSION(L=430.0mm)	(BLACK SPRAY,SANDTON)	1
PAN-06-562AA	PANEL FRONT	EGI,1.2t	BLACK SPRAY(SANDTON)	1
PAN-06-565AA	PANEL REAR	EGI,1.2t	BLACK SPRAY(SANDTON)	1
COV-22-623B0	WINDOW	ACRYLIC,3.0t		1
BAD-01-515AA	BADGE	AL	LOGO:JBL,MODEL NAME: SILK 1	1
FOO-01-504B0	FOOT MOUNTING	ADC-7(DIE CASTING)		2
COV-22-549AA	LENS (WITH SILKSCREEN)	ACRYLIC		1
COV-22-549A0	LENS (WITHOUT SILKSCREEN)	ACRYLIC		1
ILL-22-503A0	INDICATOR	ACRYLIC(CLEAR)		3
BKT-14-522A0	BRACKET LAMP	SK5(BK-P)	ACCESSORY	4
BKT-05-519A0	BRACKET TR(A)	CR,47.0x15.0x1.5t(NI-P)		2
BKT-05-520A0	BRACKET TR(B)	CR,91.0x15.0x1.5t(NI-P)		2
BKT-05-521A0	BRACKET TR(C)	CR,103.0x15.0x1.5t(NI-P)		4
SUB-28-572A0	CUSHION BKT-TR(A)	FIBER,43.0x15.0x0.5t		2
SUB-28-573A0	CUSHION BKT-TR(B)	FIBER,87.0x15.0x0.5t		2
SUB-28-574A0	CUSHION BKT-TR(C)	FIBER,99.0x15.0x0.5t		4
SUB-33-513A0	CUSHION RUBBER(A)	RUBBER,5.0x7.0x1.6t	THERMISTOR(1)	1
SUB-33-006A0	CUSHION RUBBER(B)	RUBBER, 0 12.0x 0 5.0x2.0t	SET(4),REMOTE(2)	6
SIL-34-001A0	SILICON PAD	(SP1000)22.0x0.3t		780mm
SUP-29-502A0	SUPPORT PCB	NYLON,L=4.5mm		6
SUB-27-524A0	SWITCH DECAL	FELT,12.0x7.0x0.3t		2
SUB-28-519A0	PAPER SPACER(A)	FIBER,200.0x8.0x0.5t	TR	1
SUB-28-503A0	PAPER SPACER(B)	FIBER,200.0x10.0x0.5t	FET	1
SUB-12-576A0	3> TUBE	0 5.0x40mm	INDICATOR	3
SC5-NB-30120	SCREW	STT2 BH 3x12 NI-P	PCB SUPPORT	6
SC5-BB-30080	SCREW	STT2 BH 3x8 BK	S/PANEL+H/S(10),RCA(1),TERMINAL(3)	14
SC1-NL-30060	SCREW	SML 3x6 NI(NO SERRATION)	H/S+WINDOW(8)	8
SC1-NL-40100	SCREW	SML 4x10 NI-P	H/S+FOOT MOUNTING(10)	10
SC4-BP-40250	SCREW	STT1 PH 4x25 BK	BRACKET TR (20)	20
SC4-BL-40250	SCREW	STT1 LH 4x25 BK	ACCESSORY(4)	4
SC4-BB-40200	SCREW	STT1 BH 4x20 BK	REMOTE	2
POL-31-084A0	POLY BAG(A)	VINYL,380.0x580.0x0.1t	SET	1
POL-31-007A0	POLY BAG(B)	VINYL,160.0x280.0x0.03t	MANUAL	1
POL-31-004A0	POLY BAG(C)	VINYL,80.0x100.0x0.03t	ACCESSORY	1
POL-31-002A0	POLY BAG(E)	VINYL,230.0x350.0x0.03t	MANUAL	1
INN-42-533A0	SNOW PAD(L),(R)	EPS,378.0x150.0x131.0		2
BOX-36-573AA	GIFT BOX	SW#1(B P)577.0x383.0x136.0		1
BOX-39-575BA	CARTON BOX	DW#2,592.0x292.0x408.0		1/2
MAN-01-0052A	MANUAL			1
SUB-00-001A0	SILICAGEL	3g		1
LAB-SR-0064A	SERIAL NO	3		1
SUB-00-002A0	SCOTCH TAPE	20mm	SET	5cm
SUB-00-003A0	OPP TAPE			2.3m
LAB-00-0227A	STICKER	"MADE IN KOREA"	9	1
LAB-QC-0001A	STICKER	QC LABEL		1
LAB-00-0165A	STICKER	WINDOW STICKER	SET	1
CAR-WA-0032A	WARRANTY CARD			1
PLA-08-016A0	PLATE(A)	PVC, 0 40x 0 20x1.0t	L245,445	2
PLA-08-004A0	PLATE(B)	PVC, 0 33	L761	1
SUP-21-006A0	LED GUIDE(A)	ABS,L=12mm	LED	3
CAR-00-0234A	E-1 STICKER	ART PAPER		2
LAB-CE-0004A	CE STICKER	ART PAPER		2
CAR-00-0100A	CERTIFICATE SHEET			1
	-----REMOTE CONTROL-----			
COV-01-523AA	CASE TOP	AL/BAR 41.0x21.5x45.8		1
COV-06-531AA	CASE BOTTOM	EGI,1.0t	BLACK SPRAY(SANDTON)	1
BTN-21-509A0	KNOB VOLUME	ABS/BK		1
SC5-BP-30060	SCREW	STT2 PH 3x6 BK	TOP CASE+BOTTOM CASE+PCB	2
SC5-BF-30060	SCREW	STT2 FH 3x6 BK (CUTTING TYPE)	TOP CASE+BOTTOM CASE	4
INN-36-512A0	INNER PAD(I-50)	SW#, 166x80		1
POL-31-003A0	POLY BAG(D)	VINYL,120.0x120.0x0.1t	REMOTE CONTROL	1
SUB-00-002A0	SCOTCH TAPE	20mm		5cm
SUB-21-525A0	LED GUIDE(B)	ABS,L=6mm	VOLUME KNOB 6>;	1

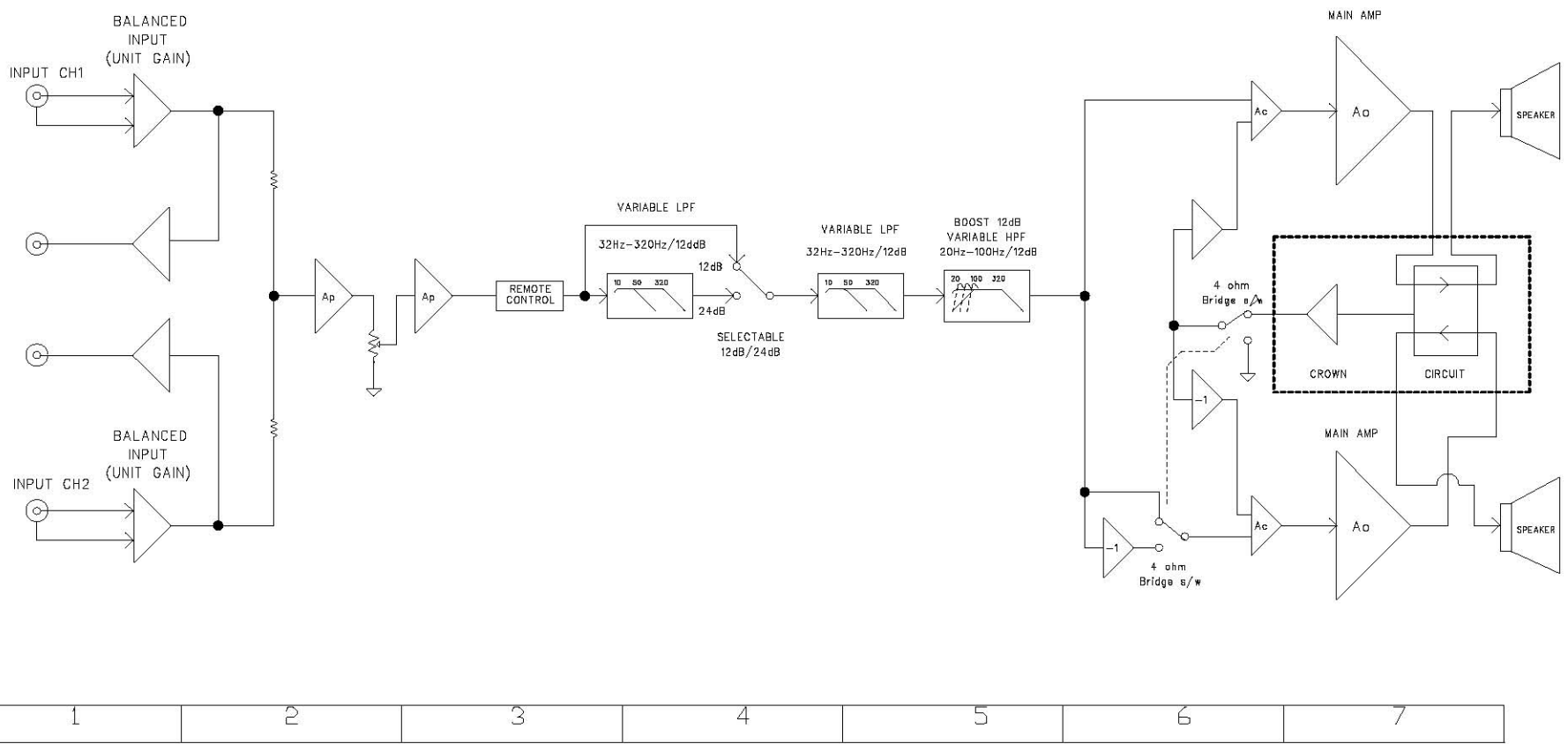


BPX1100.1

Power Amplifier

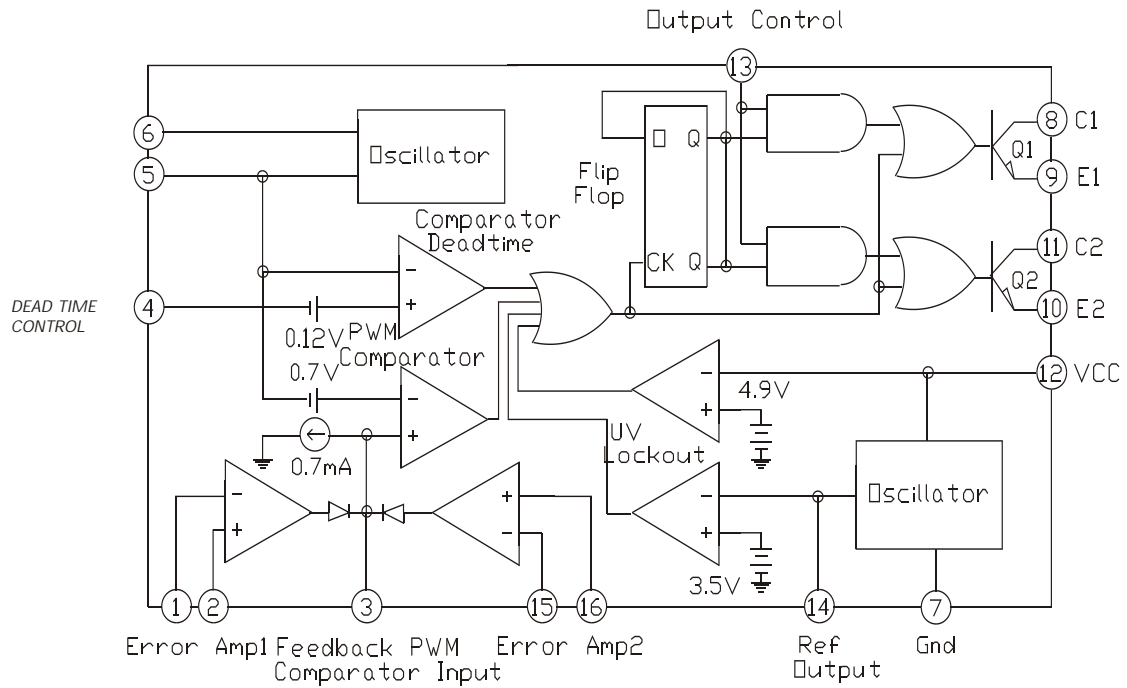
BPX1100.1 BLOCK DIAGRAM

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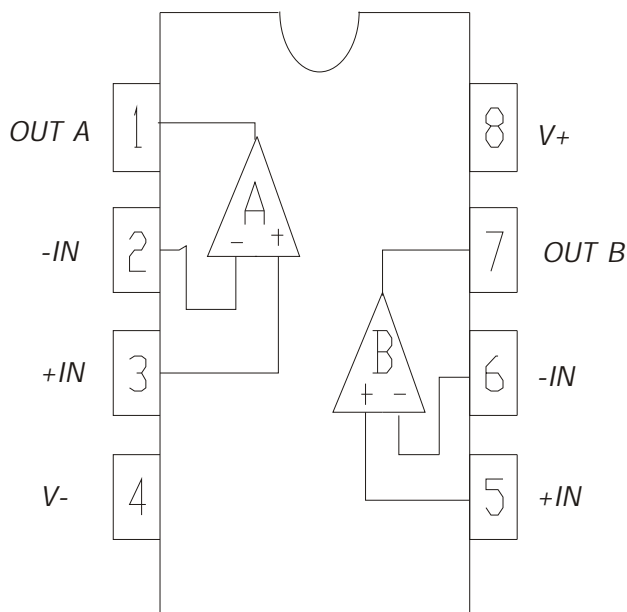


Integrated Circuit Diagrams

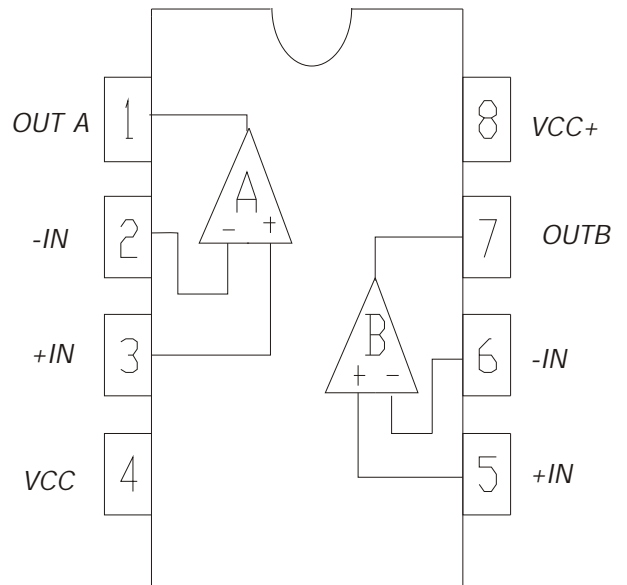
U1 (TL494CN) P.W.M IC



U2,3,12,801,901 (KIA393P)

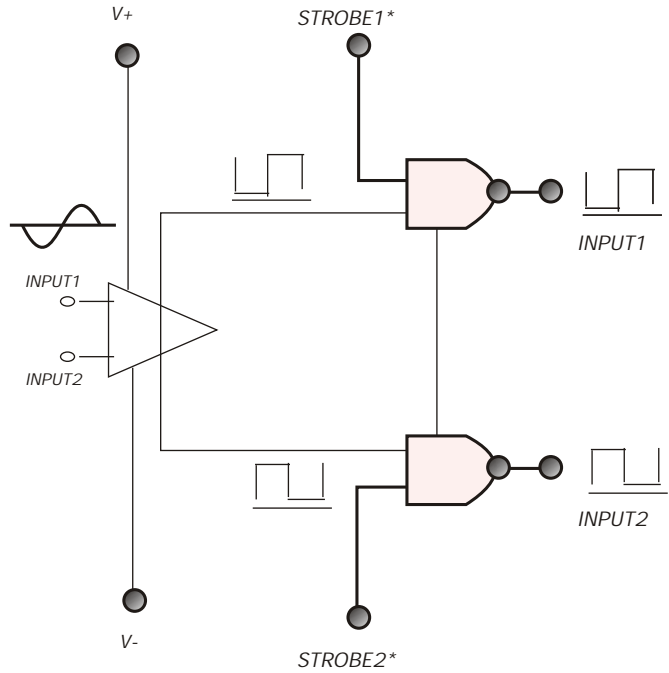
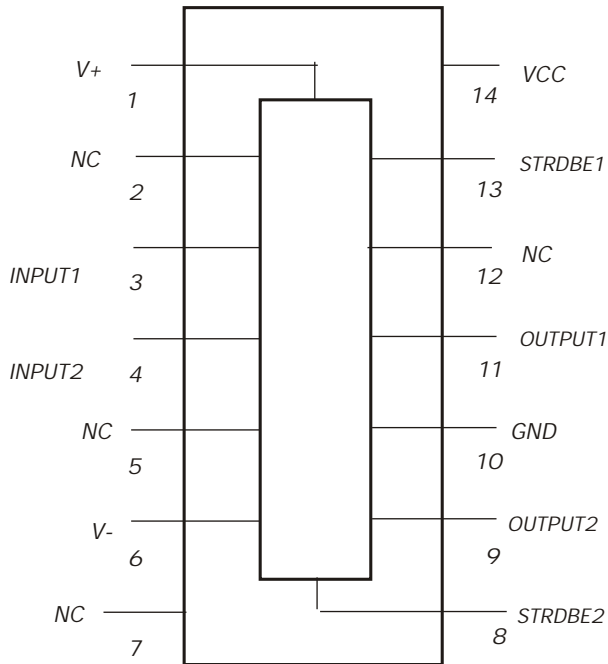


U101,102,103,105,106,108
U109,110,112,350,509,510 (TL072CP)



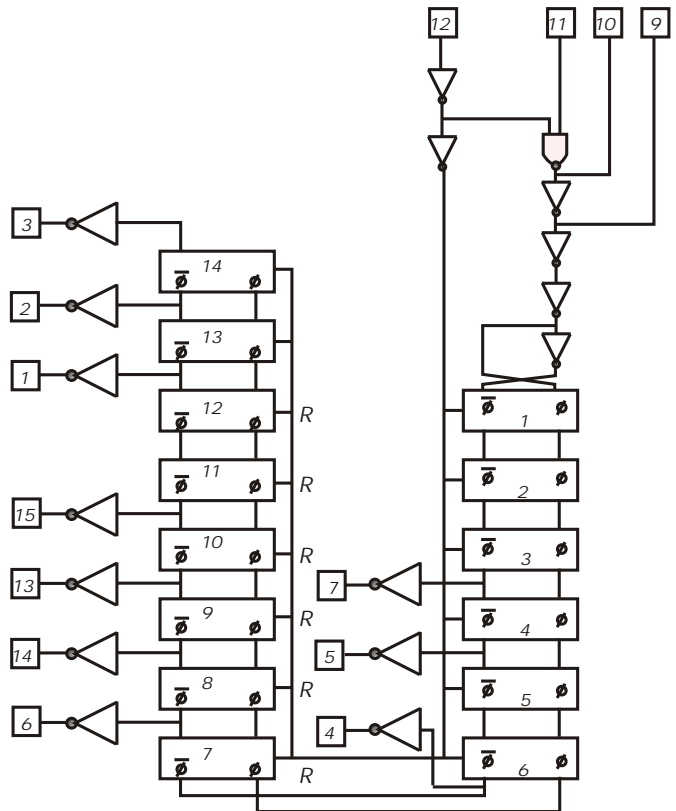
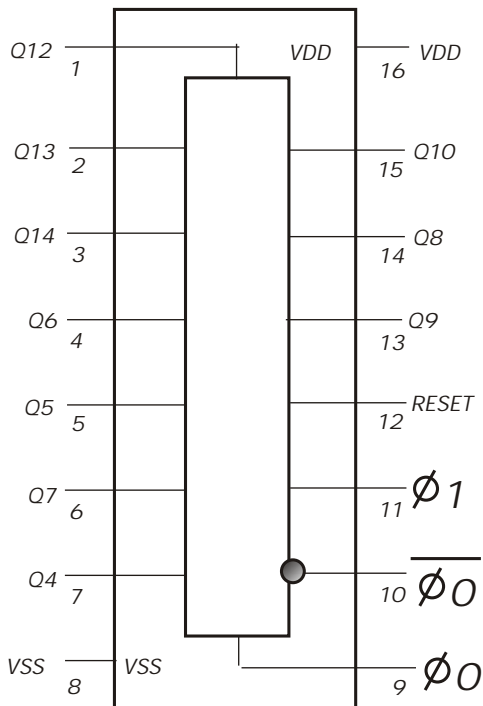
Integrated Circuit Diagrams

U281,481 (B52)

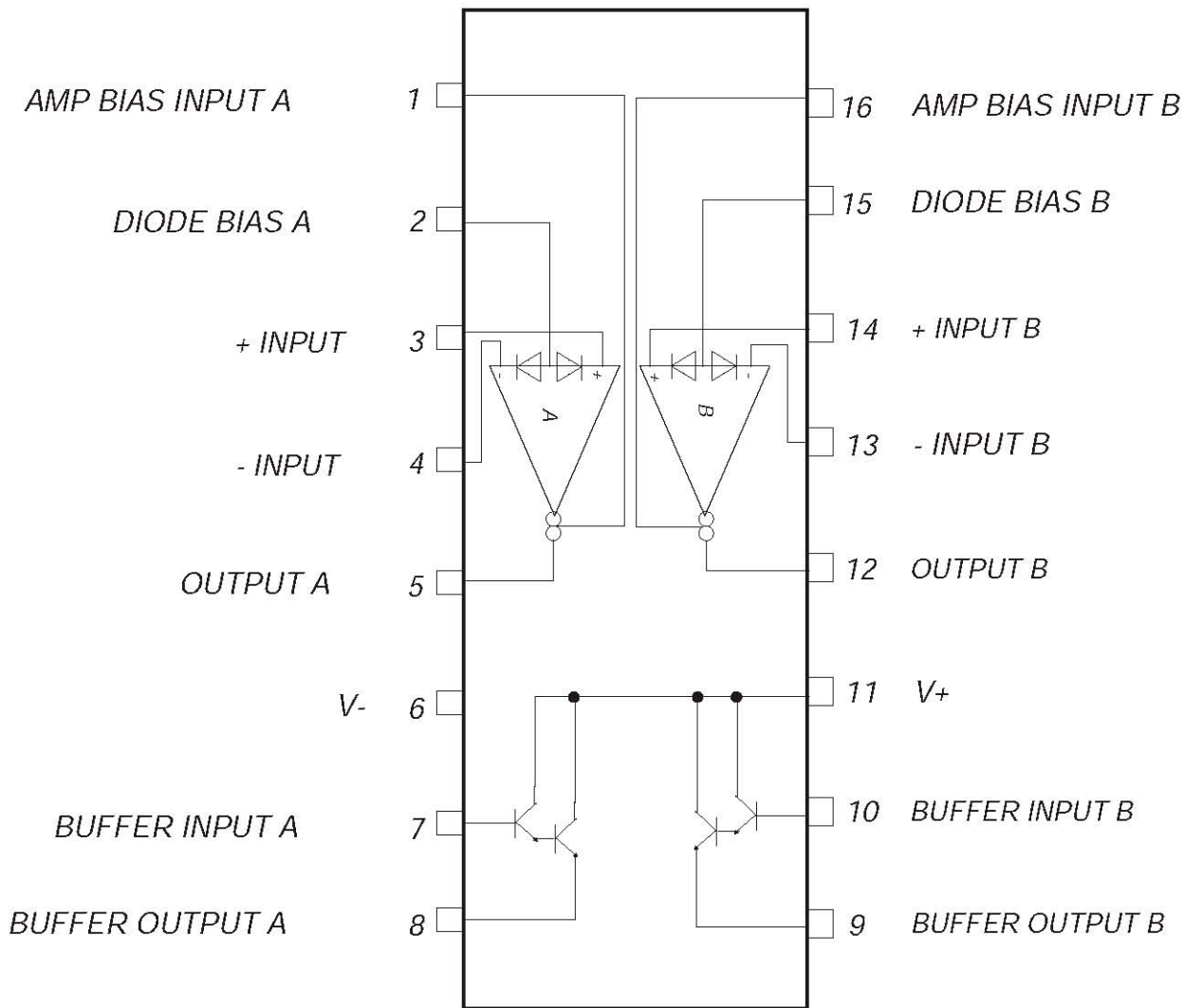


U611 (F16)

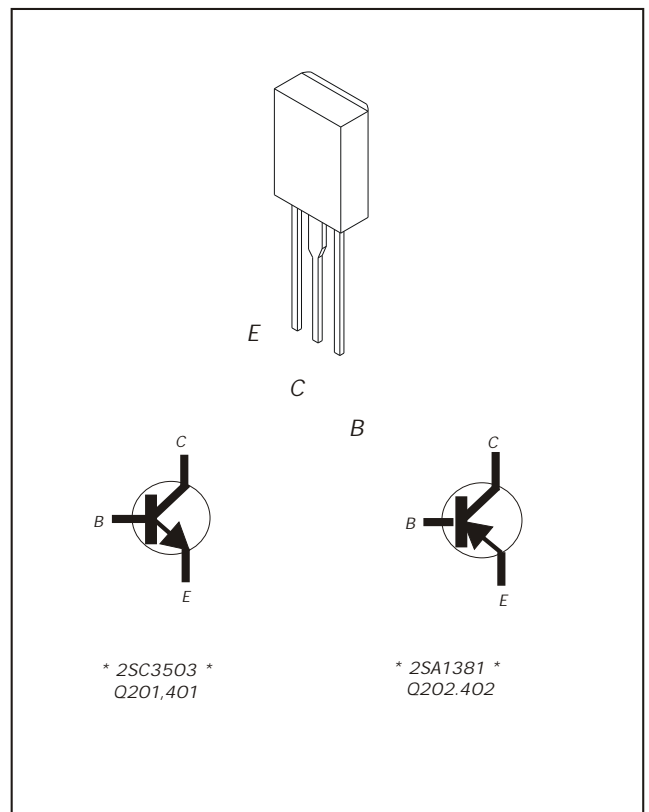
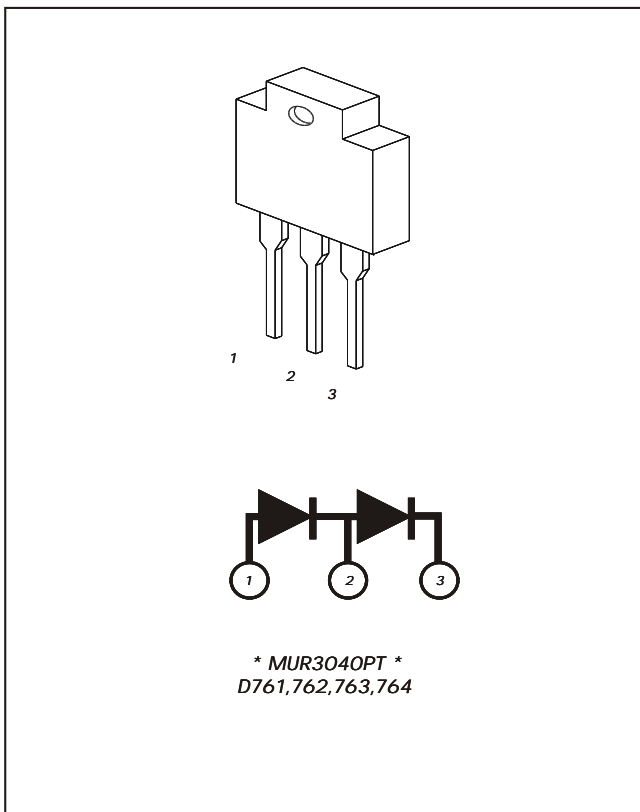
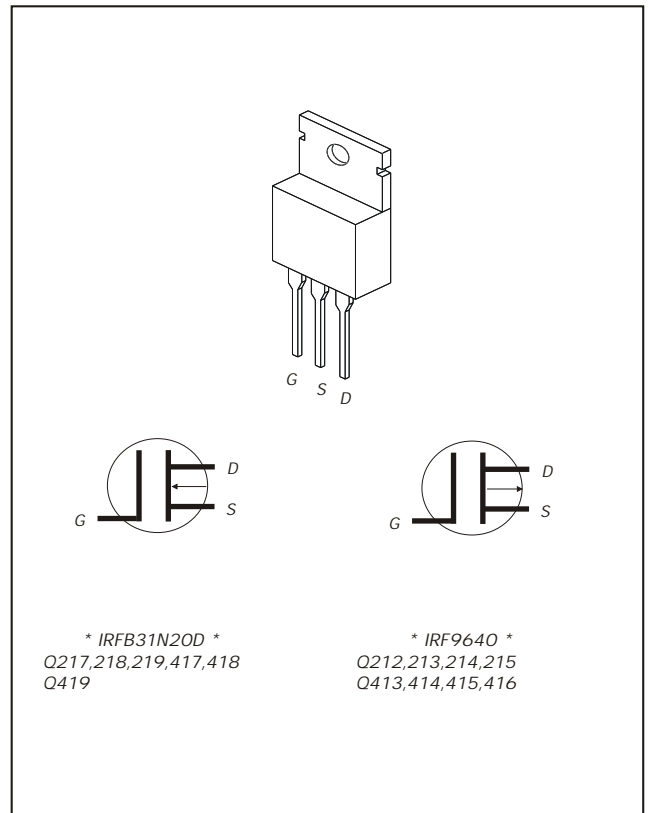
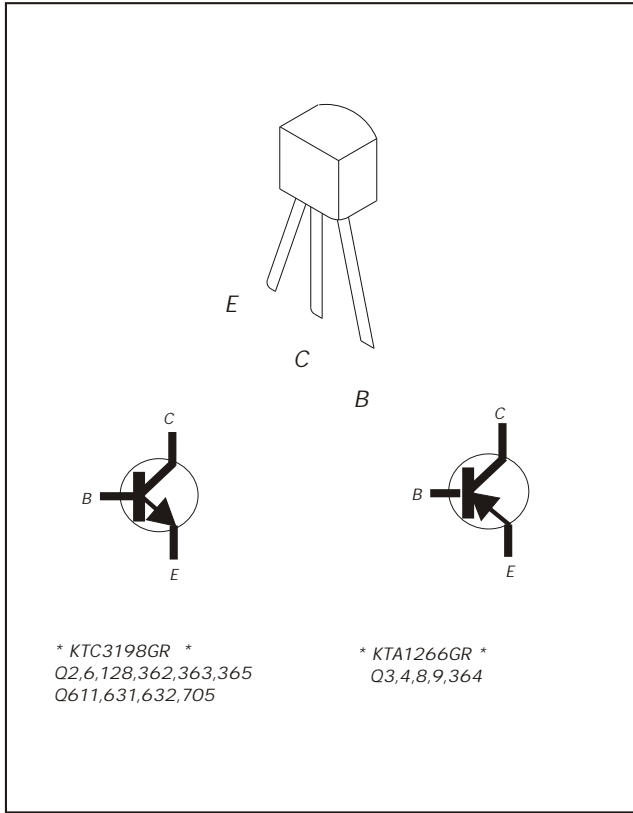
8 = VSS
16 = VDD



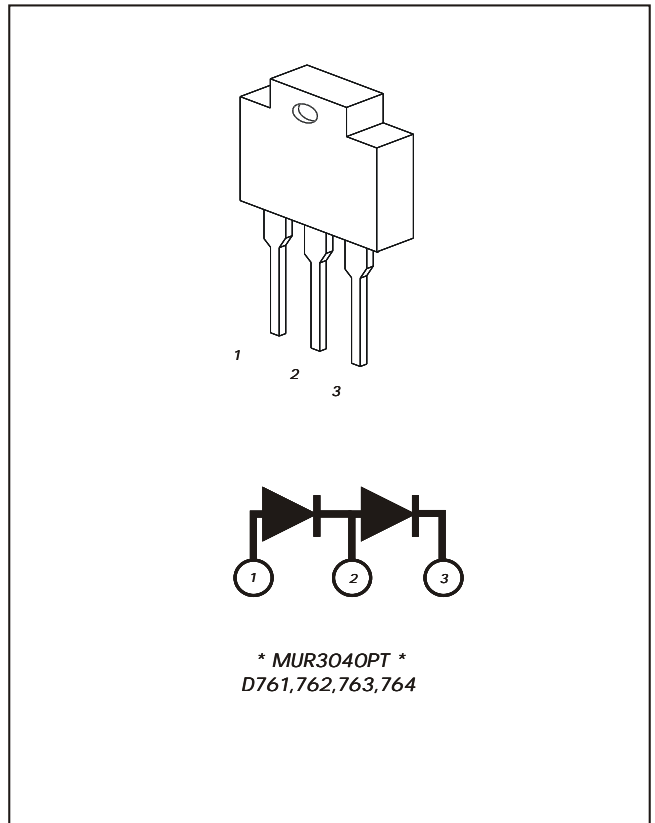
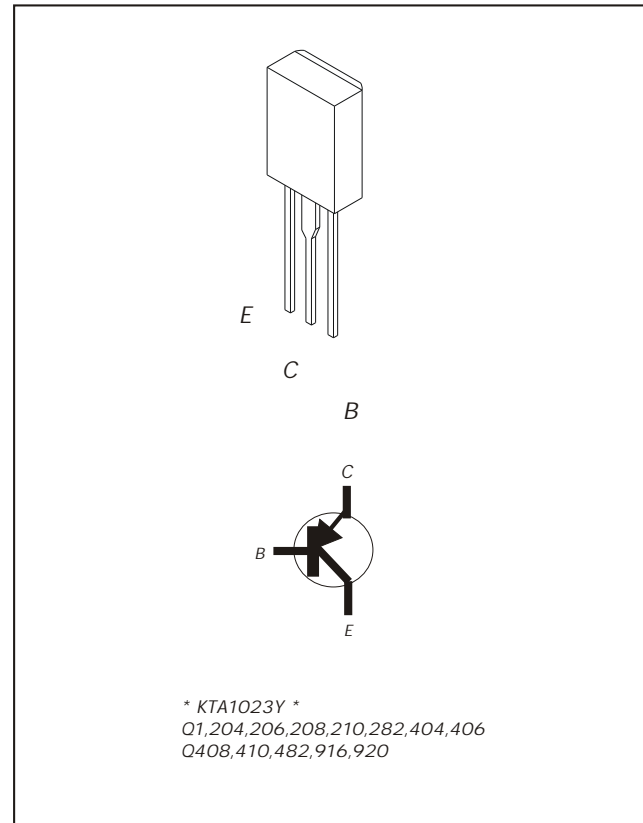
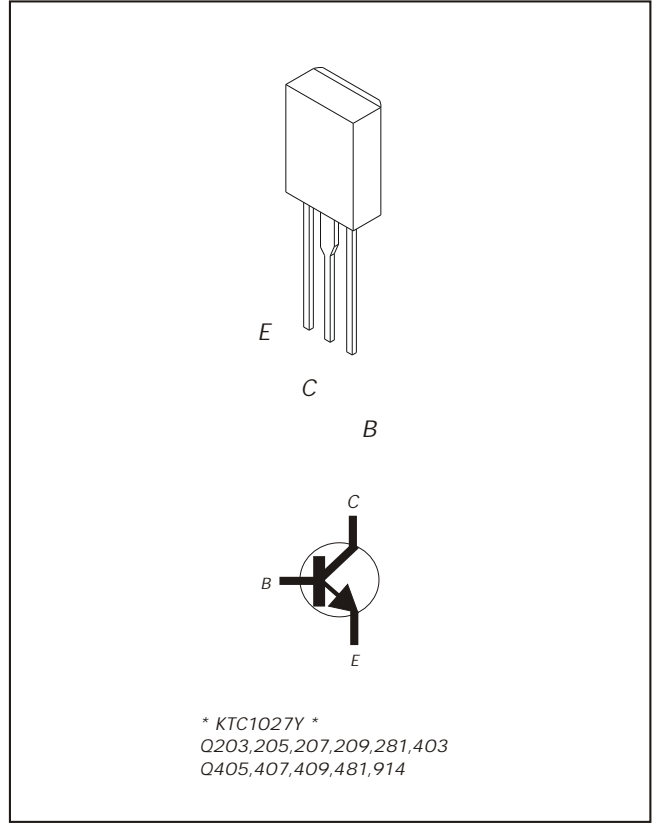
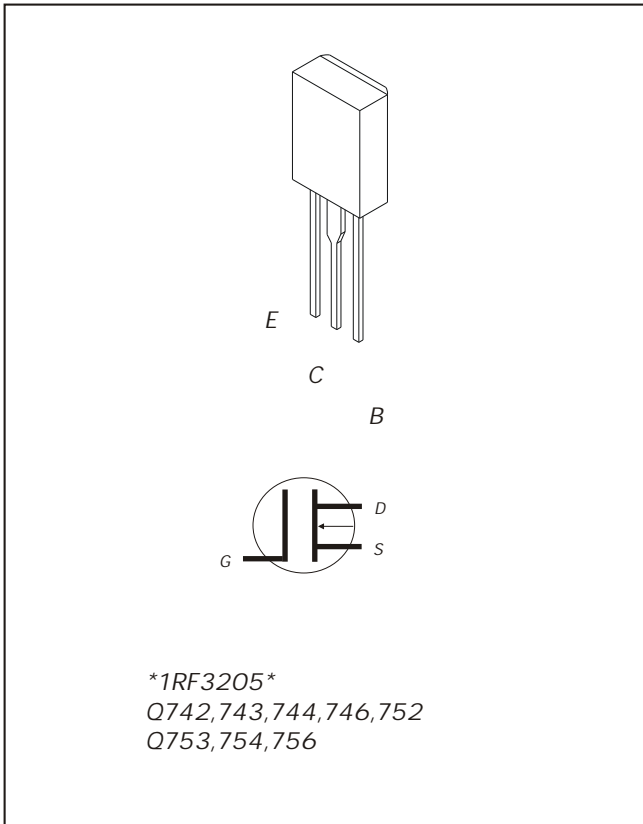
U104 (NJM13600D)



Transistor Diagrams

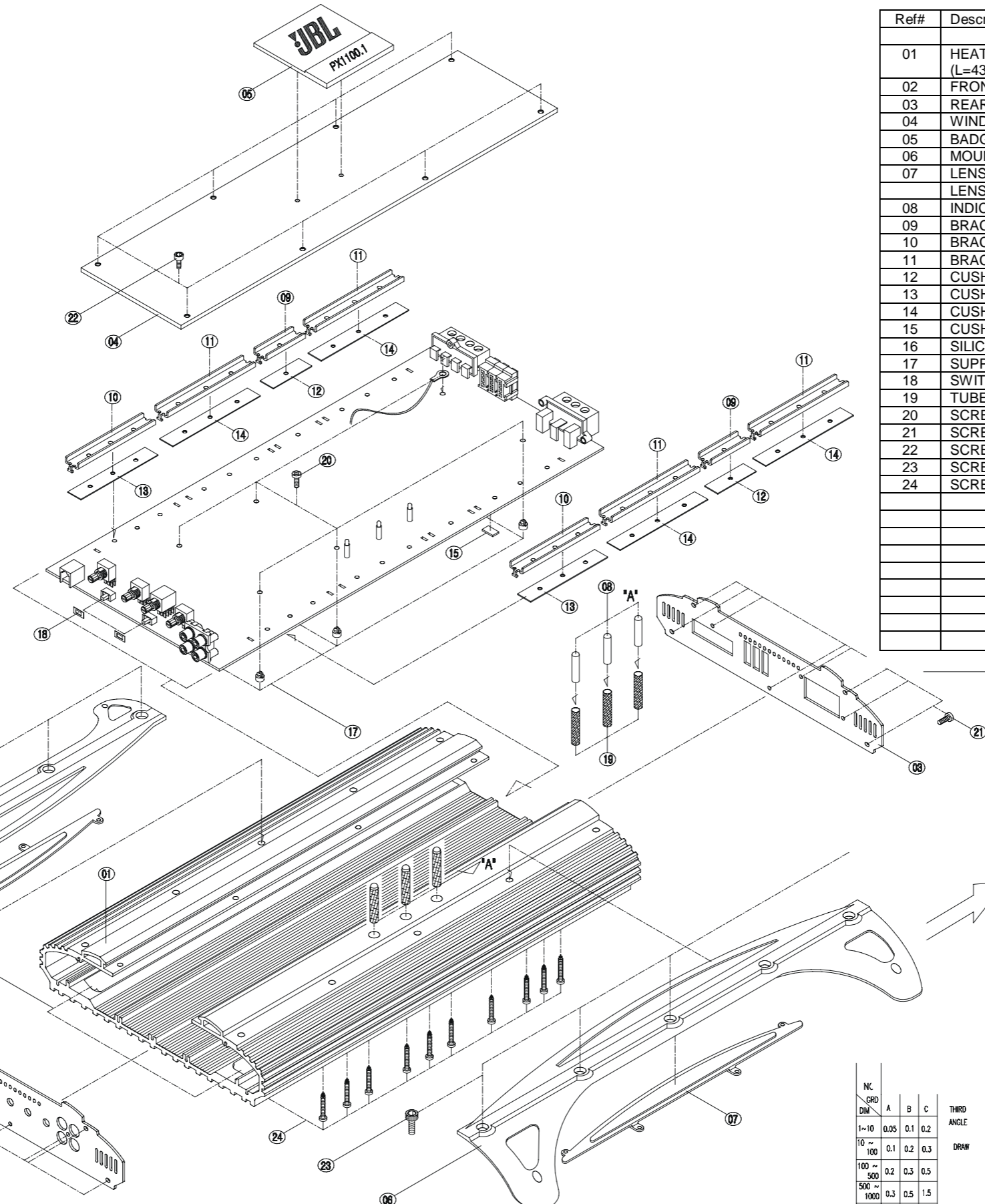
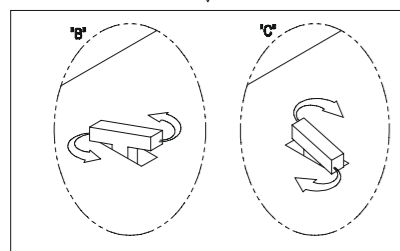
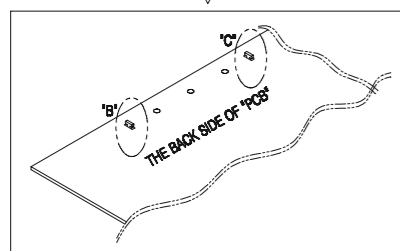
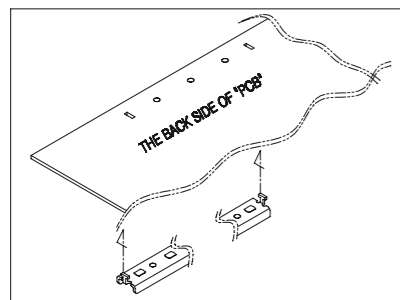


Transistor Diagrams

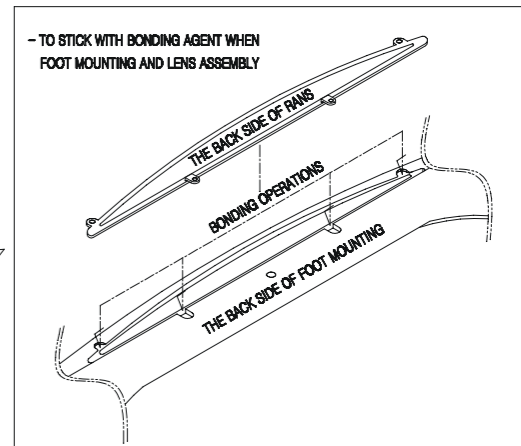


BPX1100.1 Exploded View

TR BRACKET AND PCB FIX A WAY

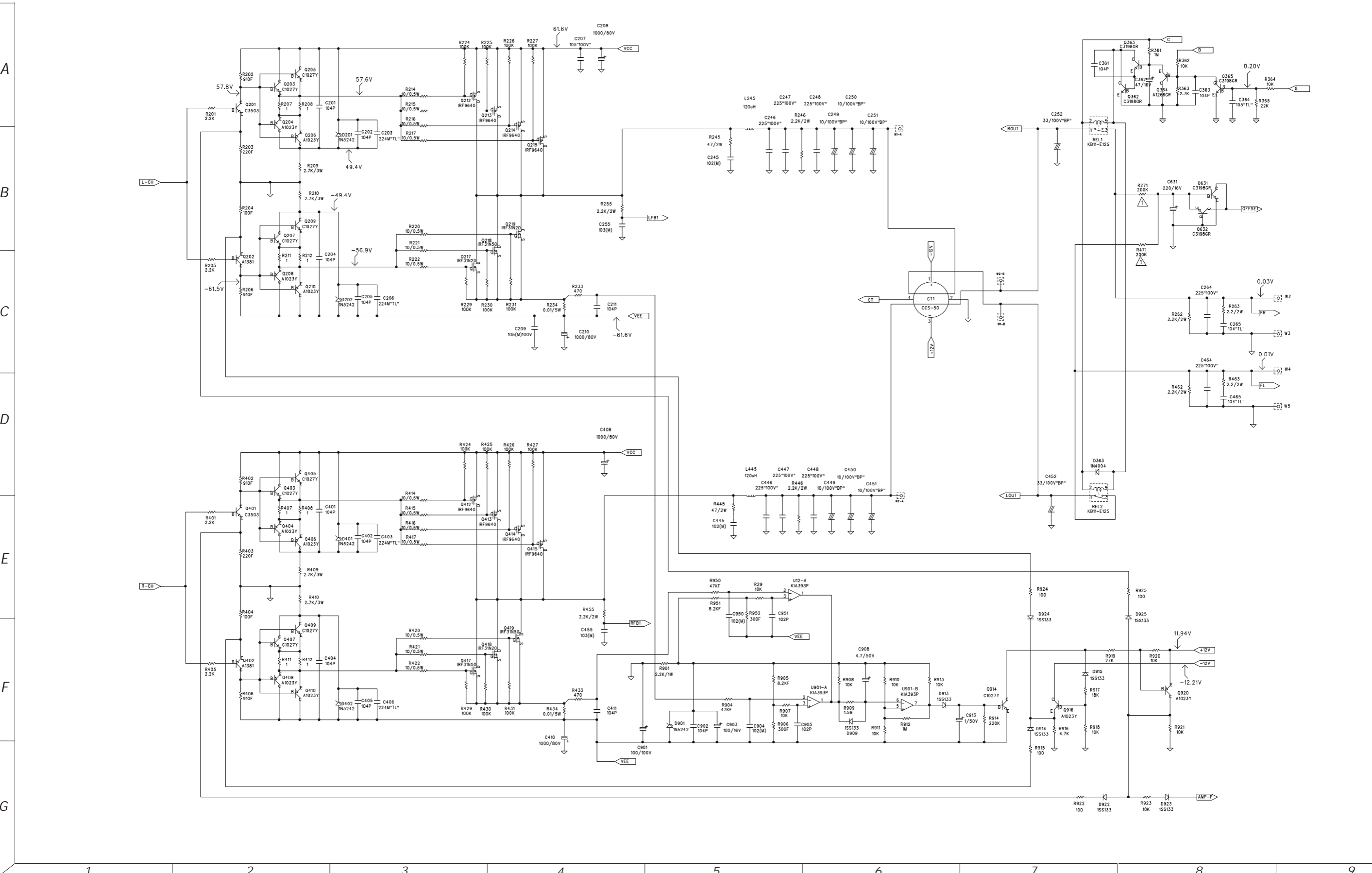


Ref#	Description	Part Number	Qty
01	HEAT SINK MAIN AL/EXTRUSION (L=430mm)	HEA-01-576A0	1
02	FRONT PANEL EGI 1.2T	PAN-06-562A0	1
03	REAR PANEL EGI 1.2T	PAN-06-565A0	1
04	WINDOW ACRYLIC 3.0T	COV-22-623B0	1
05	BADGE AL	BAD-01-515A0	1
06	MOUNTING FOOT ADC-7 DIE CASTING	FOO-01-504B0	2
07	LENS, ACRYLIC (WITH SILKSCREEN)	COV-22-549AA	1
	LENS, ACRYLIC (WITHOUT SILKSCREEN)	COV-22-549A0	1
08	INDICATOR ACRYLIC (CLEAR)	ILL-22-503A0	3
09	BRACKET TR(A) CR,47 X 15 X 1.5T (NI-P)	BKT-05-519A0	2
10	BRACKET TR(B) CR,91 X 15 X 1.5T (NI-P)	BKT-05-520A0	2
11	BRACKET TR(C) CR,103 X 15 X 1.5T (NI-P)	BKT-05-521A0	4
12	CUSHION BKT-TR(A) FIBER 43 X 15 X 0.5T	SUB-28-572A0	2
13	CUSHION BKT-TR(B) FIBER 87 X 15 X 0.5T	SUB-28-573A0	2
14	CUSHION BKT-TR(B) FIBER 99 X 15 X 0.5T	SUB-28-574A0	4
15	CUSHION RUBBER (A) 12 X 7 X 1.6T	SUB-33-513A0	1
16	SILICON PAD (SP1000) 22 X 0.3T	SIL-34-001A0	
17	SUPPORT PCB NYLON L=4.5mm	SUP-29-502A0	6
18	SWITCH DECAL FELT 12 X 7 X 0.3T	SUB-27-524A0	2
19	TUBE 5 X 40mm	SUB-12-575A0	3
20	SCREW STT2 BH 3 X 12 NI-P	SC5-NB-30120	6
21	SCREW STT2 BH 3 X 8 BK	SC5-BB-30080	14
22	SCREW SML 3 X 6 NI (NO SERRATION)	SC1-NL-30060	8
23	SCREW SML 4 X 10 NI-P	SC1-NL-40100	10
24	SCREW STT1 PH 4 X 25 BK	SC4-BP-40250	20

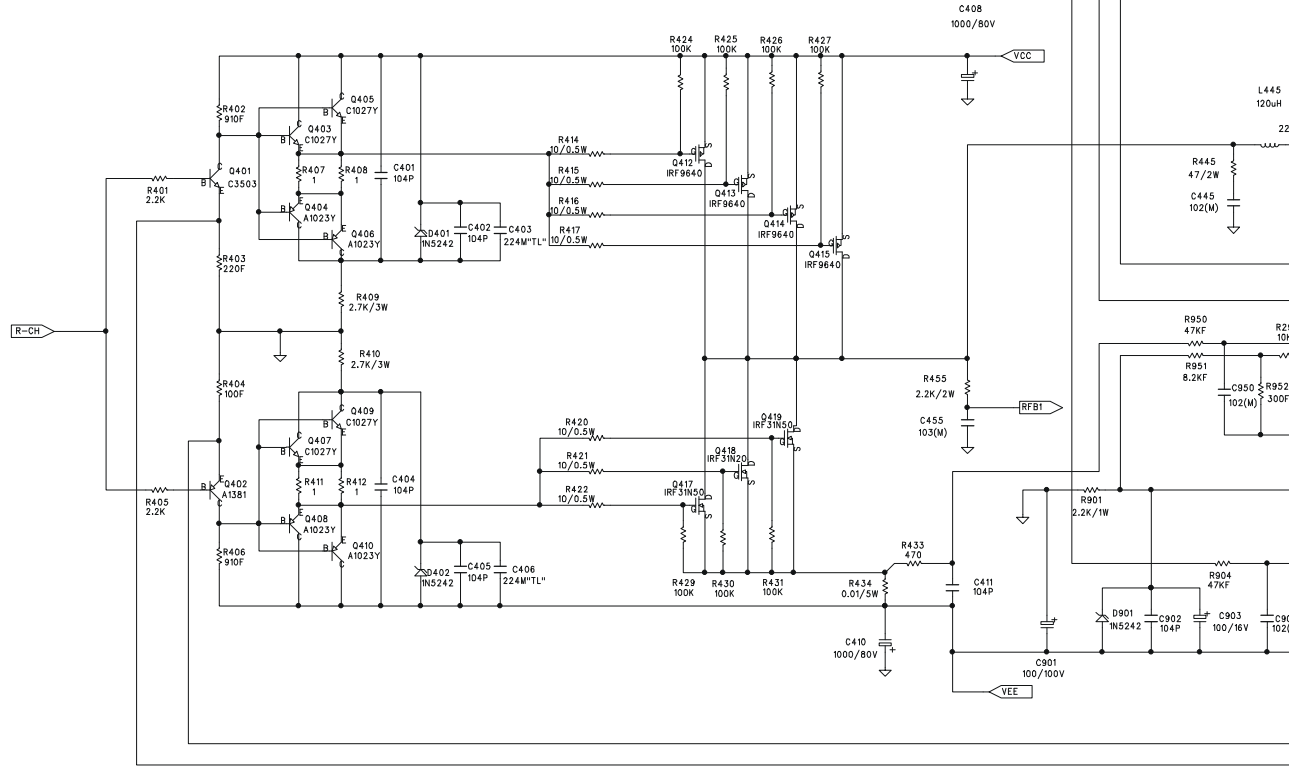
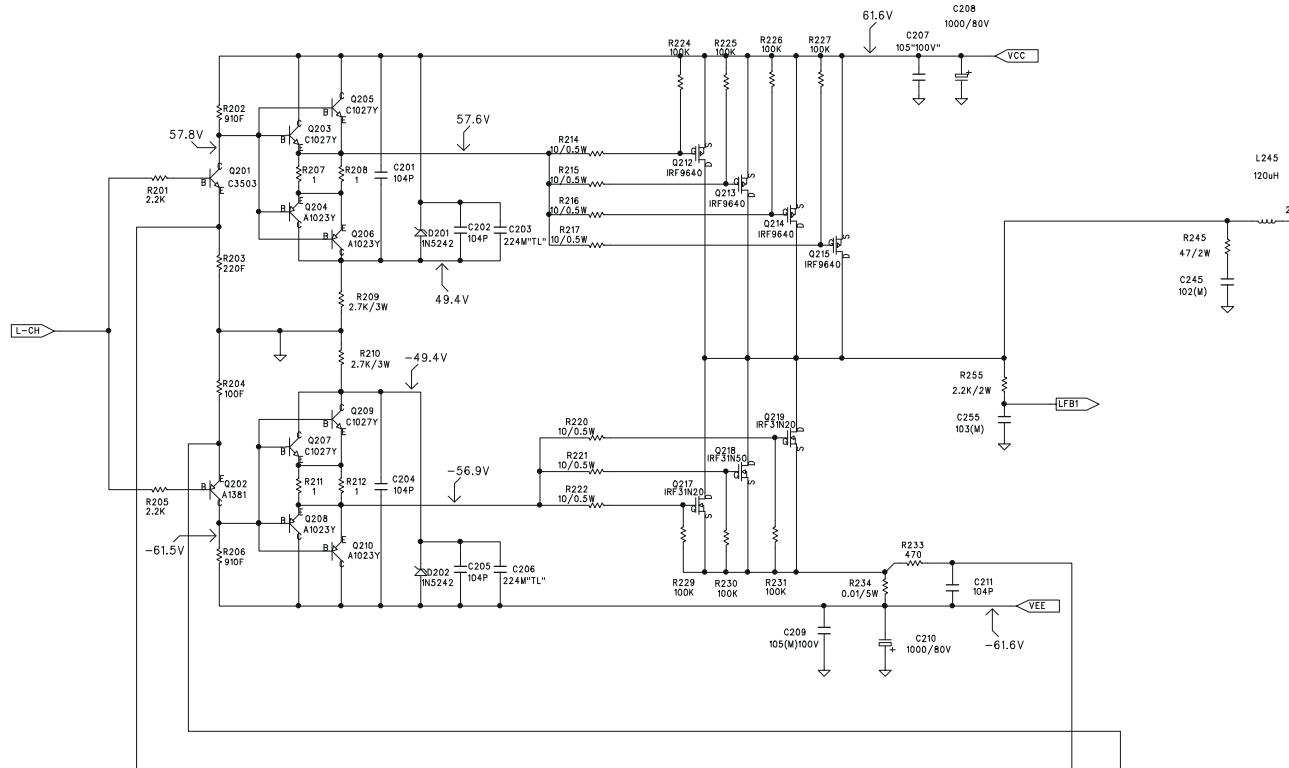


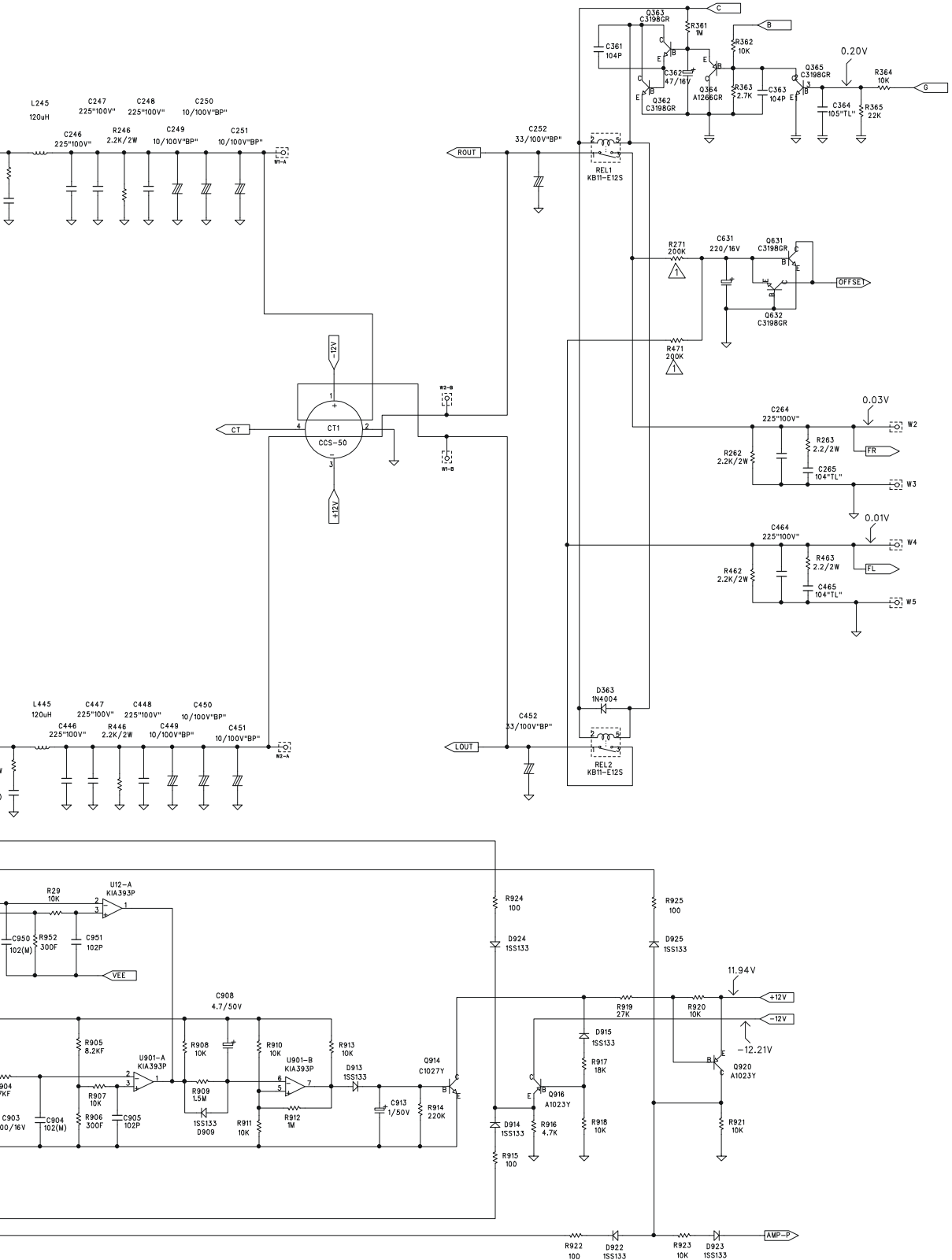
NC	GRD	A	B	C	THRD	UNIT	SCALE	DATE	QTY	SPECIFICATION	REMARK
1~10		0.05	0.1	0.2	ANGLE	MM	1:1	2002.12.26		MODEL	BPX1100.1
10 ~ 100		0.1	0.2	0.3	DRAW	CHECK				REAN DRAW NO	
100 ~ 500		0.2	0.3	0.5						NAME	EXPLODE VIEW
500 ~ 1000		0.3	0.5	1.5						CODE NO.	ISSUE
											Ø

Power Amplifier (Sheet 1)

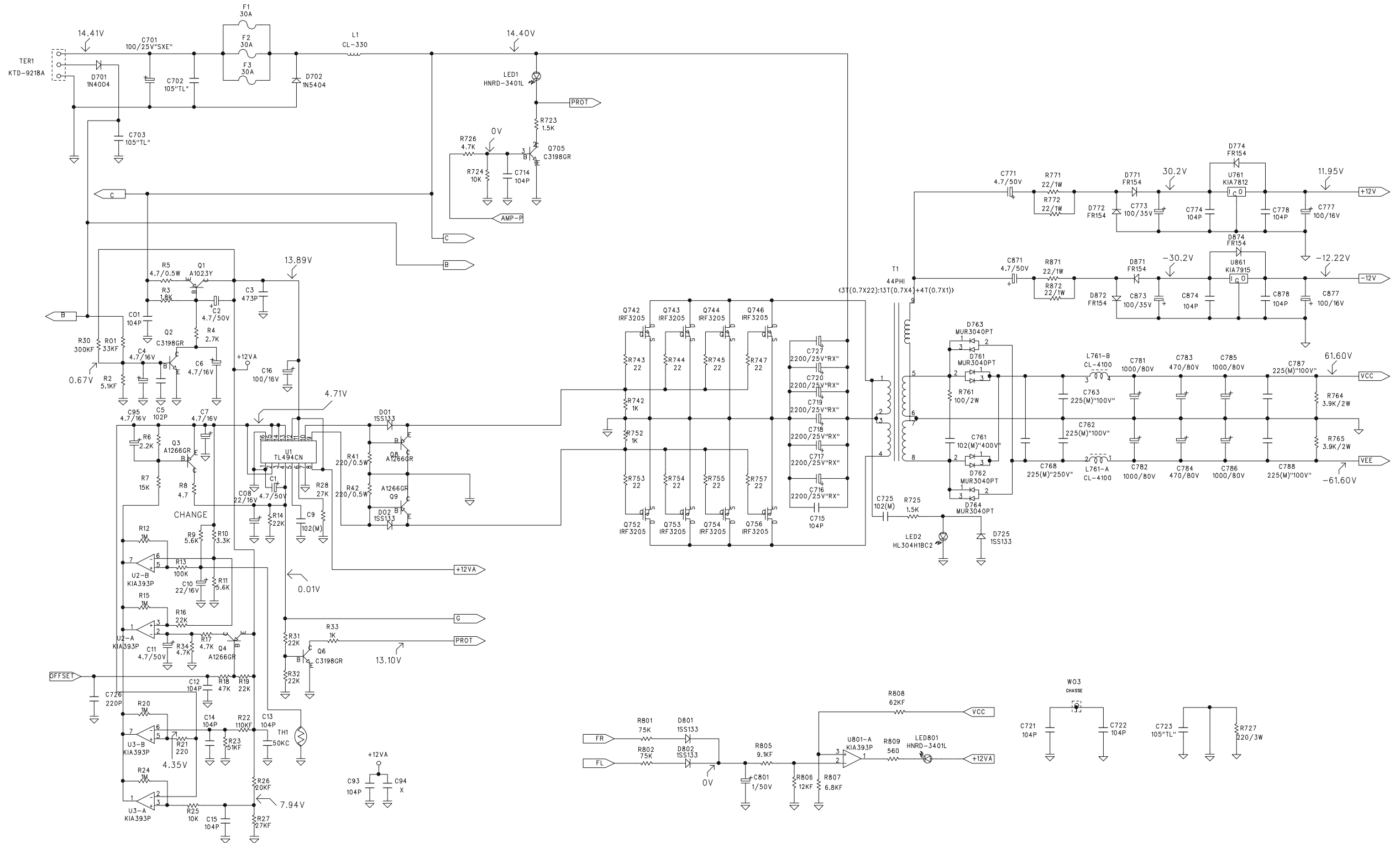


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Power Amplifier (Sheet 2)



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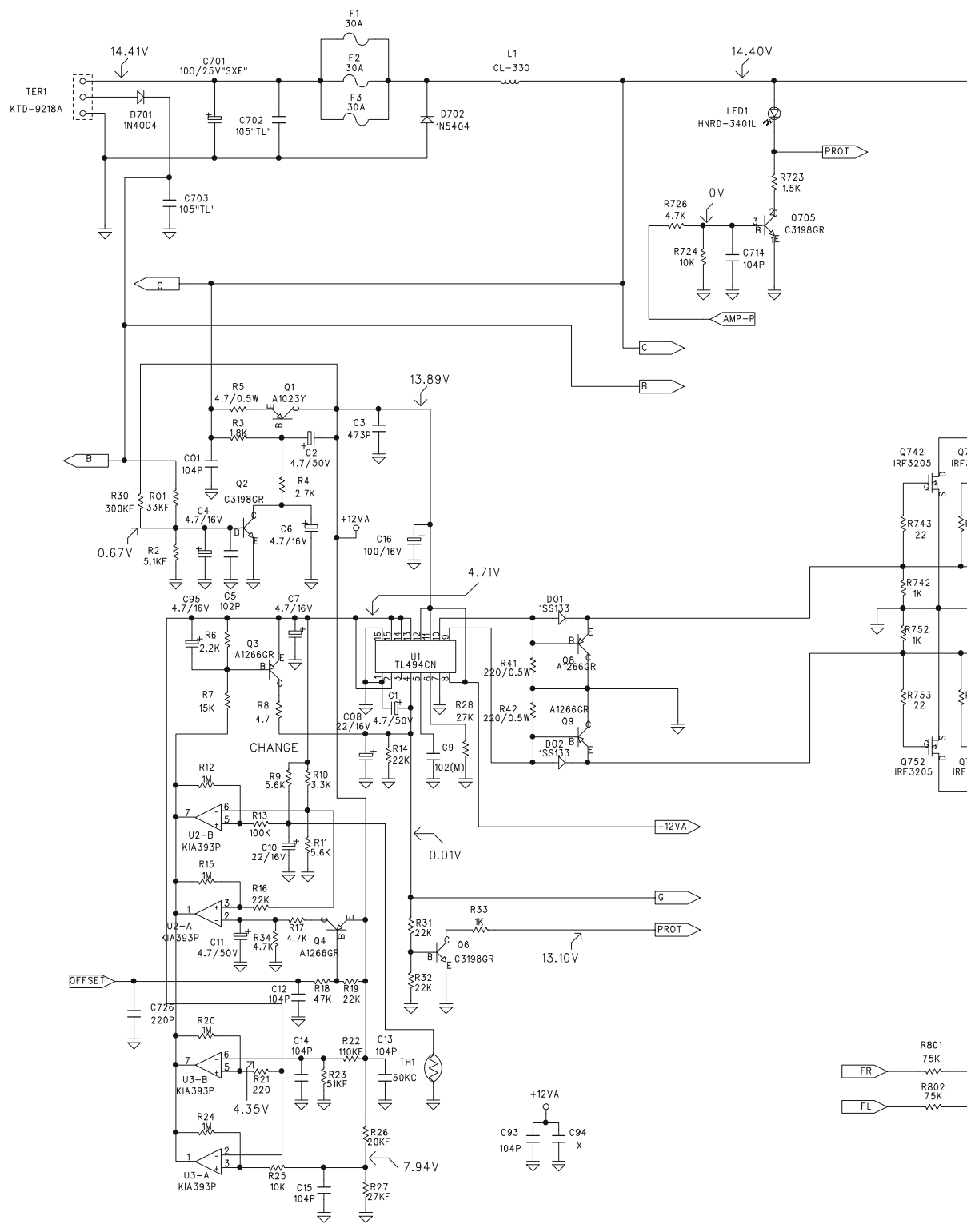
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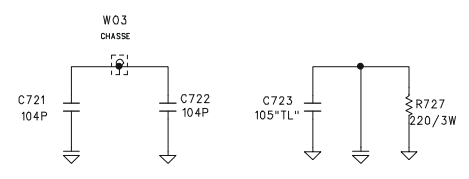
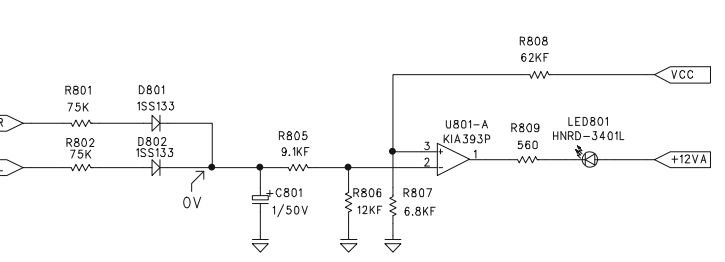
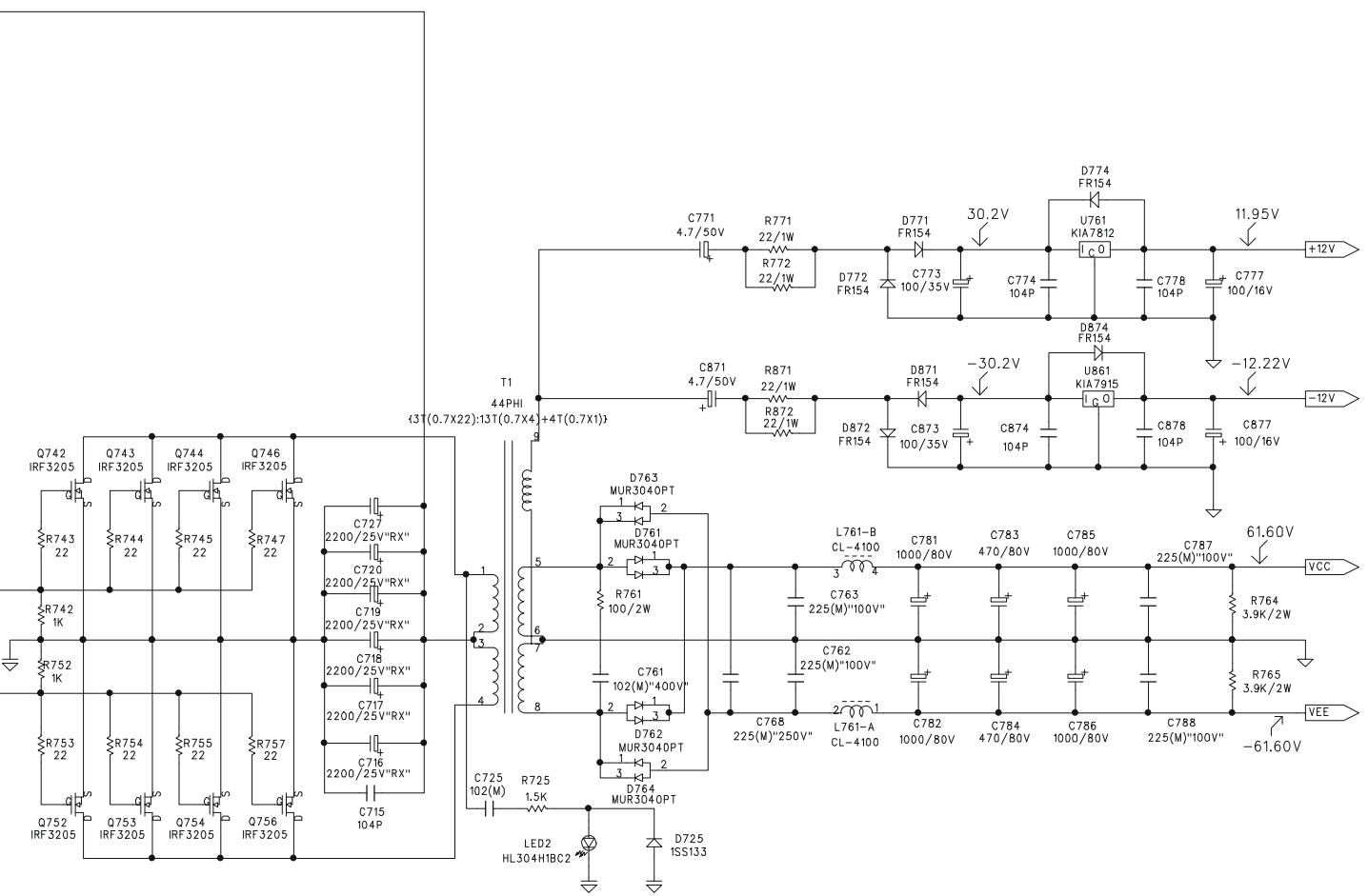
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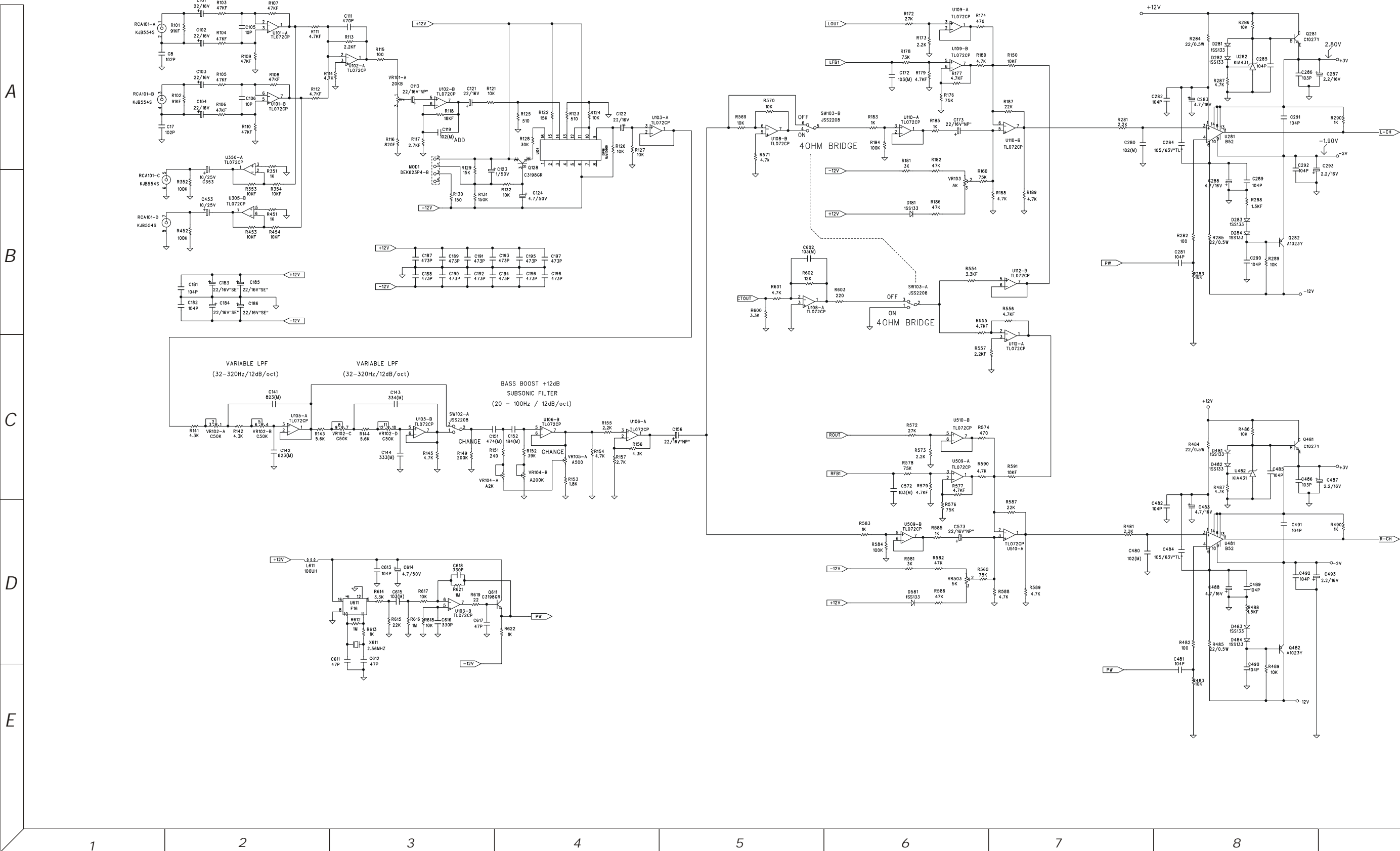
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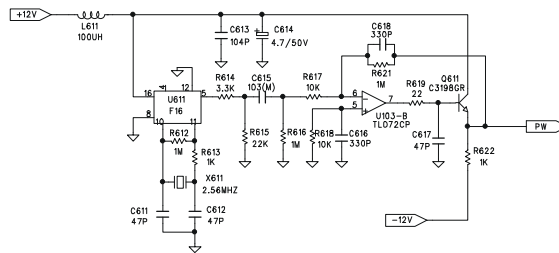
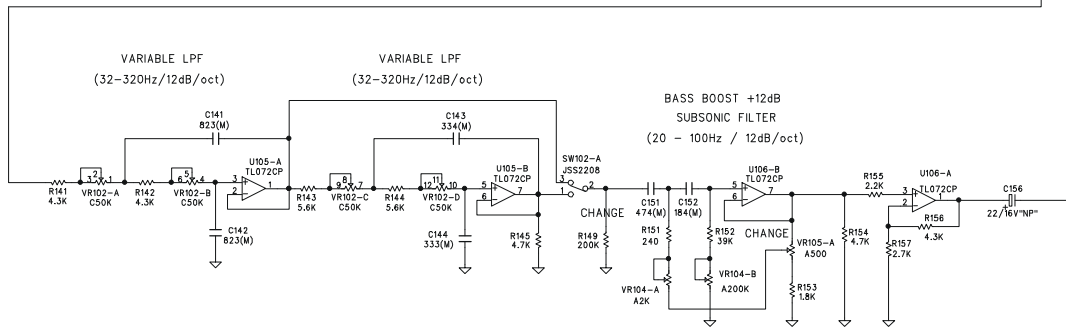
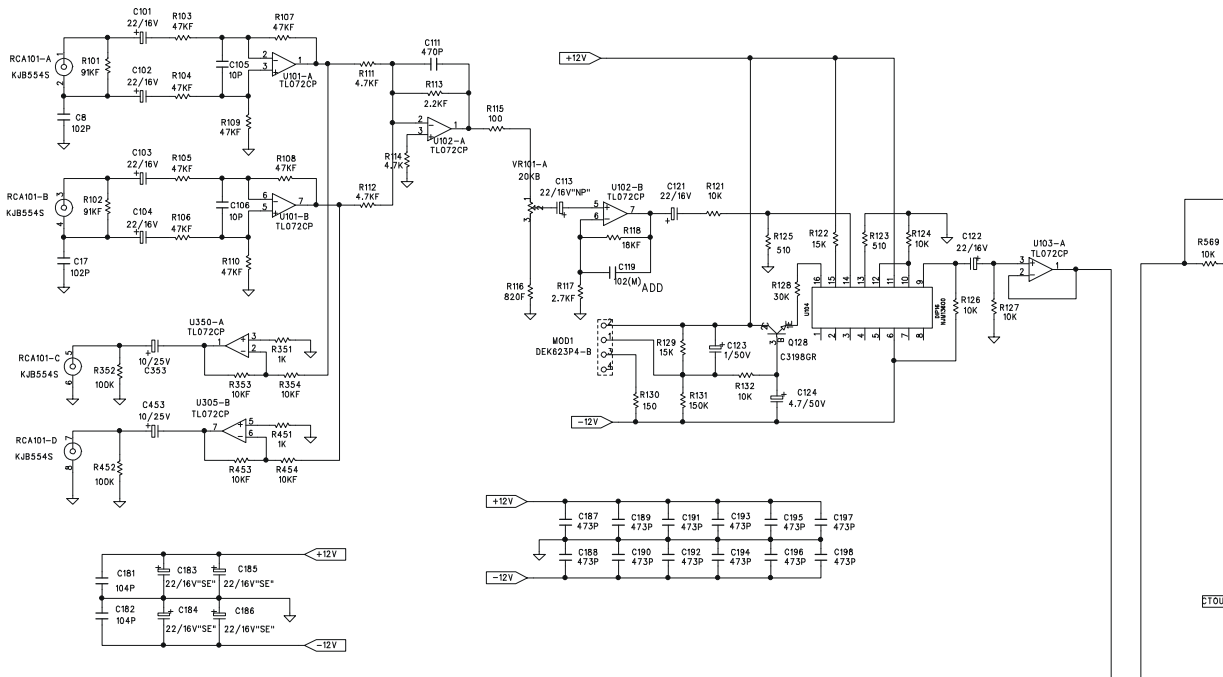
5

Amplifier (Sheet 2)



Power Amplifier (Sheet 3)





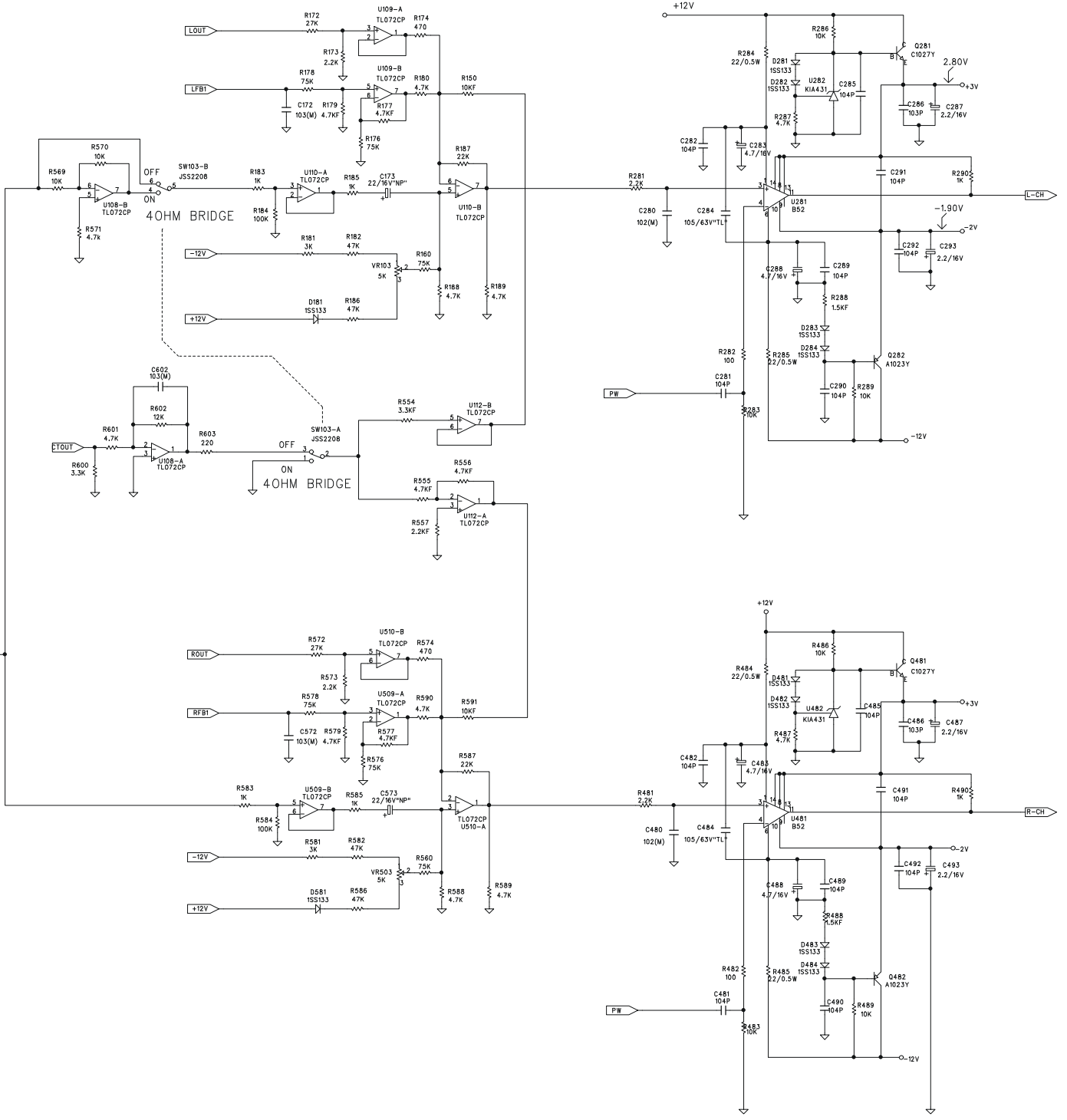
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2

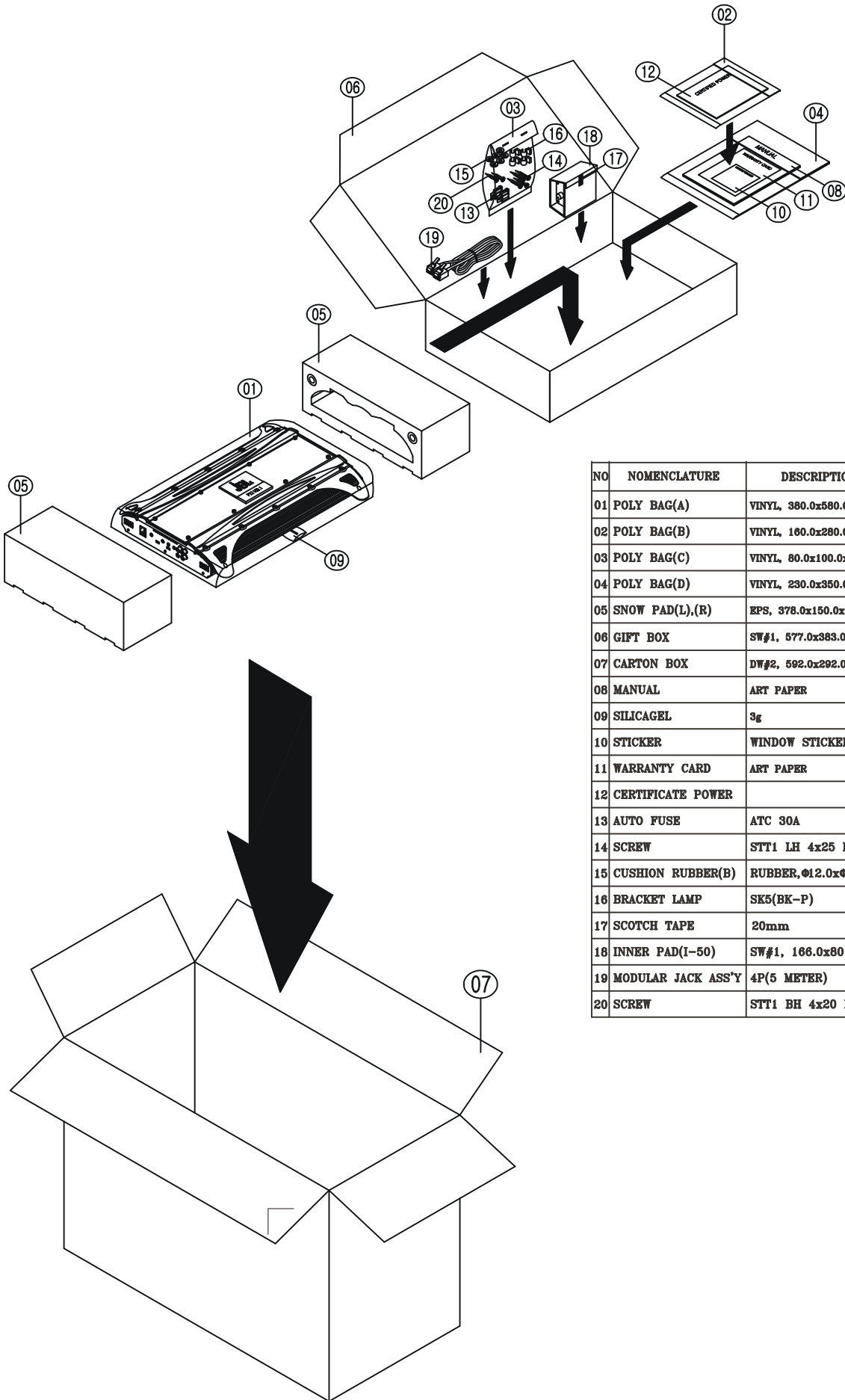
3

4

5



Packaging Exploded View



NO	NOMENCLATURE	DESCRIPTION	ERP CODE	Q'TY
01	POLY BAG(A)	VINYL, 380.0x580.0x0.1t	POL-31-084A0	1
02	POLY BAG(B)	VINYL, 160.0x280.0x0.03t	POL-31-007A0	1
03	POLY BAG(C)	VINYL, 80.0x100.0x0.03t	POL-31-004A0	1
04	POLY BAG(D)	VINYL, 230.0x350.0x0.03t	POL-31-002A0	1
05	SNOW PAD(L),(R)	EPS, 378.0x150.0x131.0	INN-42-533A0	2
06	GIFT BOX	SW#1, 577.0x383.0x136.0	BOX-36-573AA	1
07	CARTON BOX	DW#2, 592.0x292.0x408.0	BOX-39-575BA	1/2
08	MANUAL	ART PAPER	MAN-01-0052A	1
09	SILICAGEL	3g	SUB-00-001A0	1
10	STICKER	WINDOW STICKER	LAB-00-0165A	1
11	WARRANTY CARD	ART PAPER	CAR-WA-0032A	1
12	CERTIFICATE POWER		CAR-00-0100A	1
13	AUTO FUSE	ATC 30A	FUS-00-00010	3
14	SCREW	STT1 LH 4x25 BK	SC4-BL-40250	4
15	CUSHION RUBBER(B)	RUBBER, Ø12.0xØ5.0x2.0t	SUB-33-006A0	6
16	BRACKET LAMP	SK5(BK-P)	BKT-14-522A0	4
17	SCOTCH TAPE	20mm	SUB-21-002A0	5cm
18	INNER PAD(I-50)	SW#1, 166.0x80.0	SUB-33-006A0	1
19	MODULAR JACK ASS'Y	4P(5 METER)	JAC-00-00128	1
20	SCREW	STT1 BH 4x20 BK	SC4-BB-40200	2