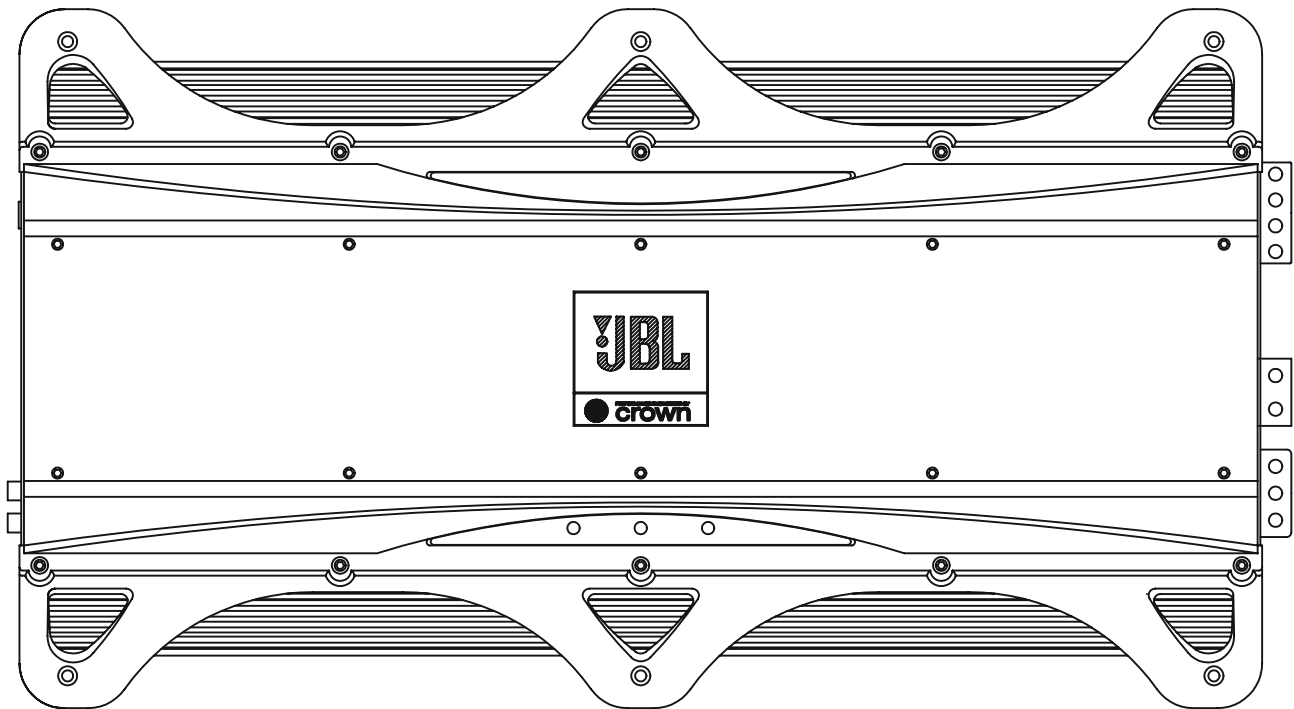


BPX2200.1



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:	1100 x 2
Power Output, Bridged, 4 Ohms:	2200W x 1
Power Output, Parallel, 1 Ohm:	2200W 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:	190A
Fuse Replacement:	150A x 1
External Dimensions:	
Length	12 ¼" (312mm)
Width	21 5/8" (555mm)
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.

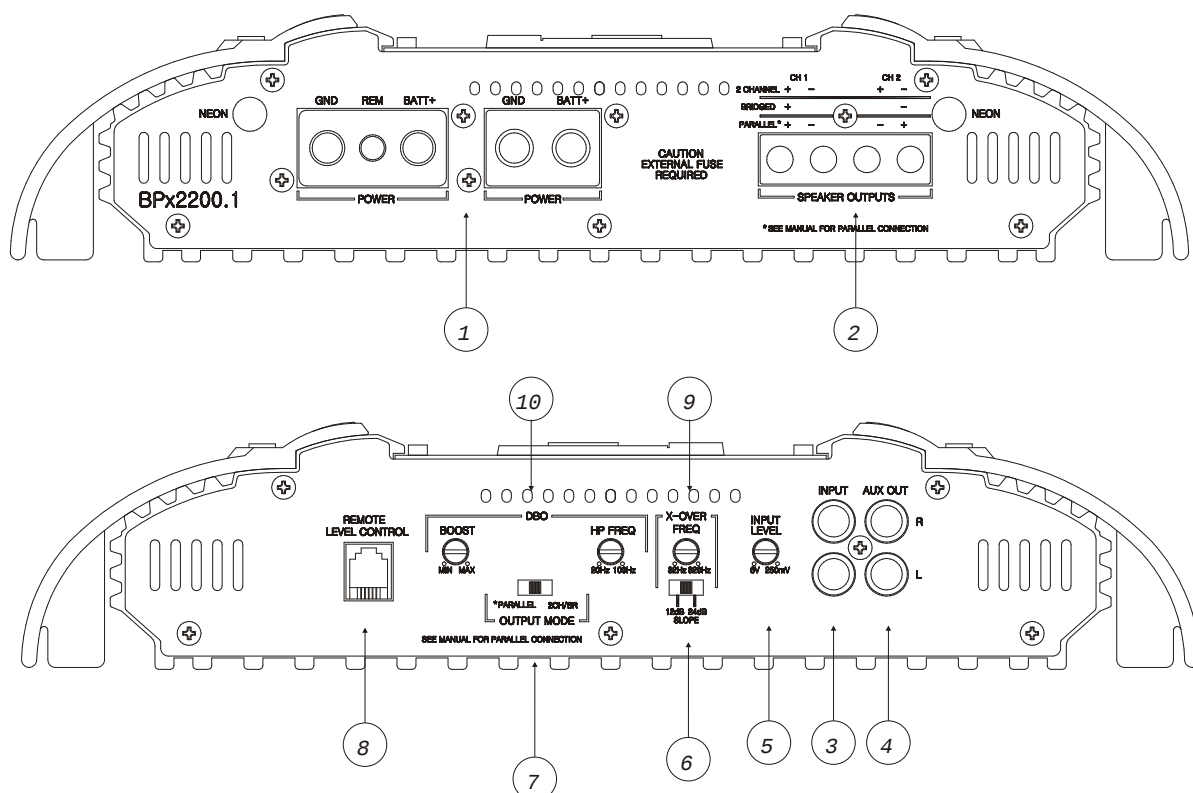
Features

- 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 MODE)

Test Conditions and Notes

- All tests to be done, unless otherwise specified, from 10Hz to 320Hz at 14.4V DC into 2 ohm loads and 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 1% 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. Speaker Output Connector - Connect speaker wiring to these connectors. See wiring instructions on page 4 for more information.
3. Preamp-Level Input Connector - Connects to line-level output from the source unit.
4. Pre amp-Level AUX output Connector
5. Input-Level Control - Adjusts input sensitivity for pre-amp level and speaker level inputs.
6. This switch is select X-over slope
7. 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
8. Remotr Volume Control Jack.
9. The crossover frequency can be set at any frequency Between 32Hz and 320Hz.
10. (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).

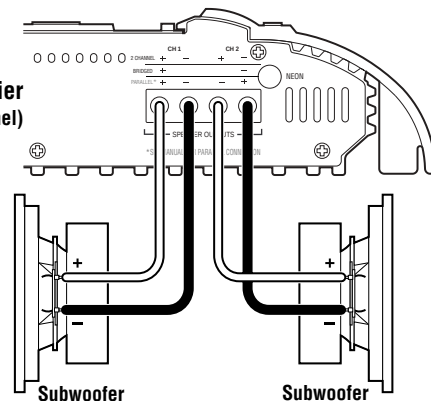
NOTE: For simplicity, Figures 1 through 3 do not show power, remote and input connections.

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)

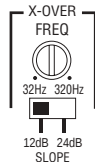
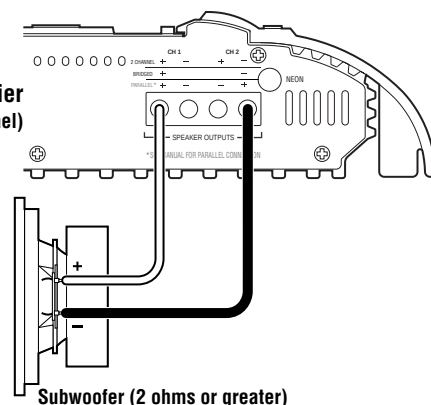


Figure 2. The JBL Power Series subwoofer amplifier is set to bridged (mono) mode to drive a single subwoofer. Use this mode only when the nominal impedance of the speaker system is 2 ohms or greater.



Set OUTPUT MODE
to PARALLEL
(on input panel)

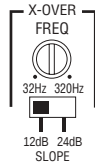
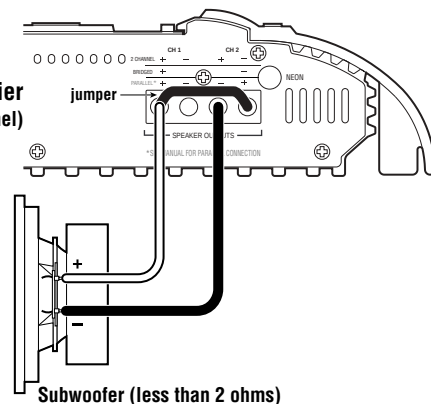
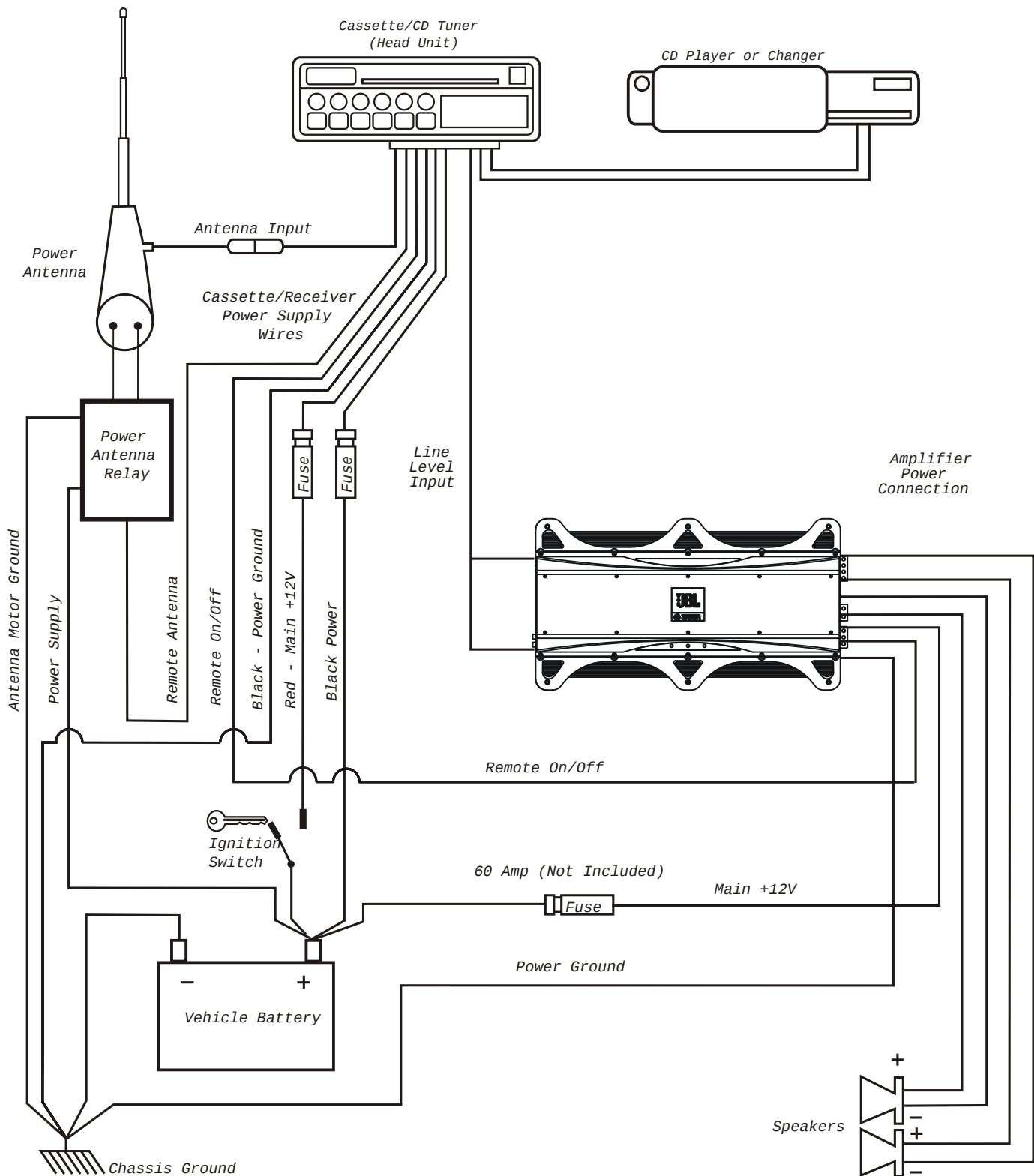


Figure 3. The JBL Power Series subwoofer amplifier is set to parallel mode to drive a single subwoofer. Use this mode only when the nominal impedance of the speaker system is less than 2 ohms.



NOTE: A jumper is added between the + terminals.

Typical System Configuration



TROUBLESHOOTING

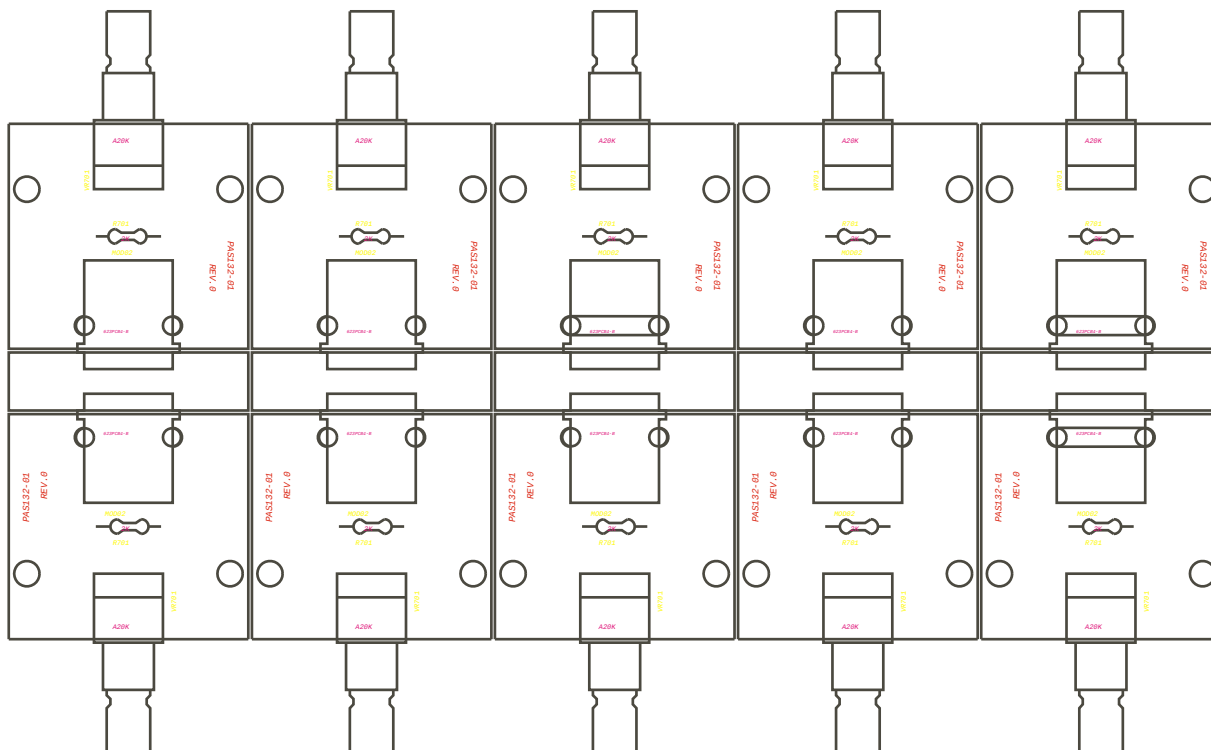
SYMPTOM	LIKELY CAUSE	SOLUTION
No audio (POWER LED is off)	No voltage at BATT+ or REM terminals, or bad or no ground connection	Check voltages at amplifier terminals with VOM
No audio (PROTECT LED flashes every 4 sec.)	DC voltage on amplifier output	Amplifier may need service; see enclosed warranty card 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	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



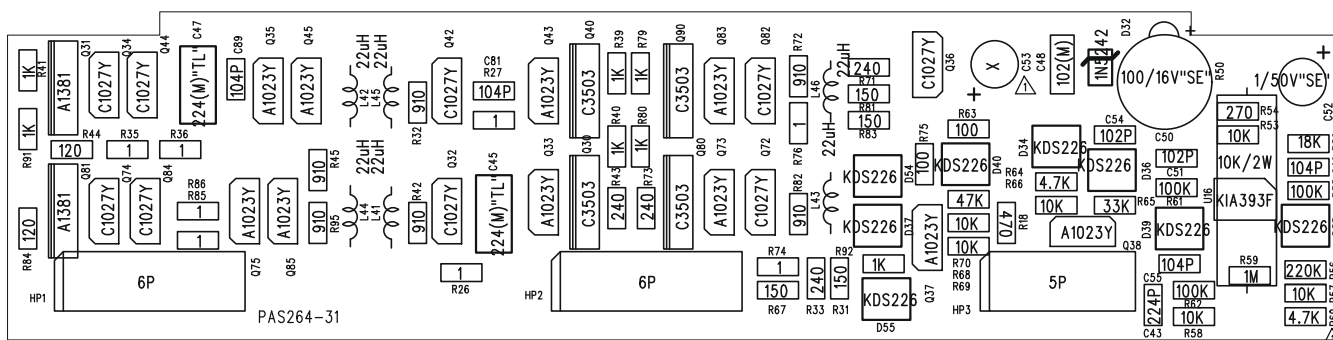
This architectural drawing is a detailed floor plan of the top side of a ship's hull. It shows a complex arrangement of compartments, machinery, and structural elements. Key features include:

- Structural Elements:** Numerous circular and rectangular frames representing bulkheads, decks, and structural supports. Dimensions are provided for many of these elements.
- Machinery and Equipment:** Various mechanical components are labeled, including pumps, motors, and structural frames (e.g., 10-5040, 10-5042, 10-5044, 10-5046, 10-5048, 10-5050, 10-5052, 10-5054, 10-5056, 10-5058, 10-5060, 10-5062, 10-5064, 10-5066, 10-5068, 10-5070, 10-5072, 10-5074, 10-5076, 10-5078, 10-5080, 10-5082, 10-5084, 10-5086, 10-5088, 10-5090, 10-5092, 10-5094, 10-5096, 10-5098, 10-5100, 10-5102, 10-5104, 10-5106, 10-5108, 10-5110, 10-5112, 10-5114, 10-5116, 10-5118, 10-5120, 10-5122, 10-5124, 10-5126, 10-5128, 10-5130, 10-5132, 10-5134, 10-5136, 10-5138, 10-5140, 10-5142, 10-5144, 10-5146, 10-5148, 10-5150, 10-5152, 10-5154, 10-5156, 10-5158, 10-5160, 10-5162, 10-5164, 10-5166, 10-5168, 10-5170, 10-5172, 10-5174, 10-5176, 10-5178, 10-5180, 10-5182, 10-5184, 10-5186, 10-5188, 10-5190, 10-5192, 10-5194, 10-5196, 10-5198, 10-5200, 10-5202, 10-5204, 10-5206, 10-5208, 10-5210, 10-5212, 10-5214, 10-5216, 10-5218, 10-5220, 10-5222, 10-5224, 10-5226, 10-5228, 10-5230, 10-5232, 10-5234, 10-5236, 10-5238, 10-5240, 10-5242, 10-5244, 10-5246, 10-5248, 10-5250, 10-5252, 10-5254, 10-5256, 10-5258, 10-5260, 10-5262, 10-5264, 10-5266, 10-5268, 10-5270, 10-5272, 10-5274, 10-5276, 10-5278, 10-5280, 10-5282, 10-5284, 10-5286, 10-5288, 10-5290, 10-5292, 10-5294, 10-5296, 10-5298, 10-5300, 10-5302, 10-5304, 10-5306, 10-5308, 10-5310, 10-5312, 10-5314, 10-5316, 10-5318, 10-5320, 10-5322, 10-5324, 10-5326, 10-5328, 10-5330, 10-5332, 10-5334, 10-5336, 10-5338, 10-5340, 10-5342, 10-5344, 10-5346, 10-5348, 10-5350, 10-5352, 10-5354, 10-5356, 10-5358, 10-5360, 10-5362, 10-5364, 10-5366, 10-5368, 10-5370, 10-5372, 10-5374, 10-5376, 10-5378, 10-5380, 10-5382, 10-5384, 10-5386, 10-5388, 10-5390, 10-5392, 10-5394, 10-5396, 10-5398, 10-5400, 10-5402, 10-5404, 10-5406, 10-5408, 10-5410, 10-5412, 10-5414, 10-5416, 10-5418, 10-5420, 10-5422, 10-5424, 10-5426, 10-5428, 10-5430, 10-5432, 10-5434, 10-5436, 10-5438, 10-5440, 10-5442, 10-5444, 10-5446, 10-5448, 10-5450, 10-5452, 10-5454, 10-5456, 10-5458, 10-5460, 10-5462, 10-5464, 10-5466, 10-5468, 10-5470, 10-5472, 10-5474, 10-5476, 10-5478, 10-5480, 10-5482, 10-5484, 10-5486, 10-5488, 10-5490, 10-5492, 10-5494, 10-5496, 10-5498, 10-5500, 10-5502, 10-5504, 10-5506, 10-5508, 10-5510, 10-5512, 10-5514, 10-5516, 10-5518, 10-5520, 10-5522, 10-5524, 10-5526, 10-5528, 10-5530, 10-5532, 10-5534, 10-5536, 10-5538, 10-5540, 10-5542, 10-5544, 10-5546, 10-5548, 10-5550, 10-5552, 10-5554, 10-5556, 10-5558, 10-5560, 10-5562, 10-5564, 10-5566, 10-5568, 10-5570, 10-5572, 10-5574, 10-5576, 10-5578, 10-5580, 10-5582, 10-5584, 10-5586, 10-5588, 10-5590, 10-5592, 10-5594, 10-5596, 10-5598, 10-5600, 10-5602, 10-5604, 10-5606, 10-5608, 10-5610, 10-5612, 10-5614, 10-5616, 10-5618, 10-5620, 10-5622, 10-5624, 10-5626, 10-5628, 10-5630, 10-5632, 10-5634, 10-5636, 10-5638, 10-5640, 10-5642, 10-5644, 10-5646, 10-5648, 10-5650, 10-5652, 10-5654, 10-5656, 10-5658, 10-5660, 10-5662, 10-5664, 10-5666, 10-5668, 10-5670, 10-5672, 10-5674, 10-5676, 10-5678, 10-5680, 10-5682, 10-5684, 10-5686, 10-5688, 10-5690, 10-5692, 10-5694, 10-5696, 10-5698, 10-5700, 10-5702, 10-5704, 10-5706, 10-5708, 10-5710, 10-5712, 10-5714, 10-5716, 10-5718, 10-5720, 10-5722, 10-5724, 10-5726, 10-5728, 10-5730, 10-5732, 10-5734, 10-5736, 10-5738, 10-5740, 10-5742, 10-5744, 10-5746, 10-5748, 10-5750, 10-5752, 10-5754, 10-5756, 10-5758, 10-5760, 10-5762, 10-5764, 10-5766, 10-5768, 10-5770, 10-5772, 10-5774, 10-5776, 10-5778, 10-5780, 10-5782, 10-5784, 10-5786, 10-5788, 10-5790, 10-5792, 10-5794, 10-5796, 10-5798, 10-5800, 10-5802, 10-5804, 10-5806, 10-5808, 10-5810, 10-5812, 10-5814, 10-5816, 10-5818, 10-5820, 10-5822, 10-5824, 10-5826, 10-5828, 10-5830, 10-5832, 10-5834, 10-5836, 10-5838, 10-5840, 10-5842, 10-5844, 10-5846, 10-5848, 10-5850, 10-5852, 10-5854, 10-5856, 10-5858, 10-5860, 10-5862, 10-5864, 10-5866, 10-5868, 10-5870, 10-5872, 10-5874, 10-5876, 10-5878, 10-5880, 10-5882, 10-5884, 10-5886, 10-5888, 10-5890, 10-5892, 10-5894, 10-5896, 10-5898, 10-5900, 10-5902, 10-5904, 10-5906, 10-5908, 10-5910, 10-5912, 10-5914, 10-5916, 10-591

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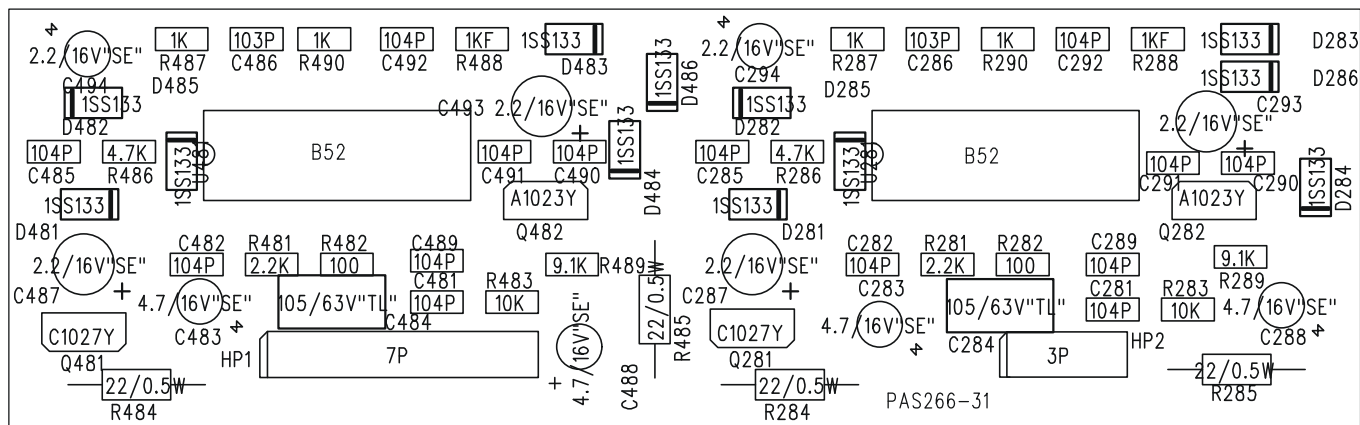


PAS264-31

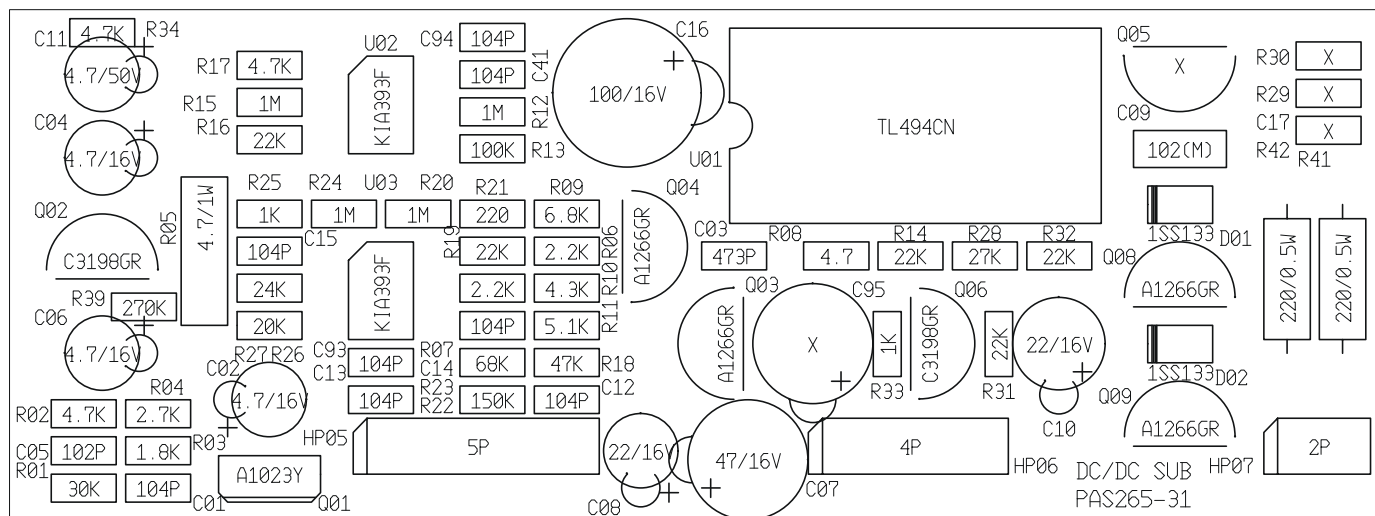


Printed Circuit Board (SUB TOP View)

PAS266-31



PAS266-31



BPX2200.1

Parts List

PART NO.	NOMENCATURE	DESCRIPTION	MFR PARTS	REF. NO	Q'TY
PCB-00-01276	MAIN PCB	FR-4 DOUBLE LAYER, 1.6t 40z GREEN	PAM585-01	159 X 569 m/m (GUIDE 20m/m)	1
PCB-00-01278	SUB PCB	FR-4 DOUBLE LAYER, 1.6t 10z GREEN	PAS265-31	28X75m/m (S1)- 41m ARRAY(95X118m/m)	1
PCB-00-01279	SUB PCB	FR-4 DOUBLE LAYER, 1.6t 10z GREEN	PAS266-31	28 X 90m/m (S2)- 41m ARRAY(110X118m/m)	1
PCB-00-01277	SUB PCB	FR-4 DOUBLE LAYER, 1.6t 10z GREEN	PAS264-31	28 X 114m/m (S3,4), 41m ARRAY(118X136m/m)	2
PCB-00-00952	SUB PCB	FR-4 SINGLE LAYER, 1.6t 10z GREEN	PAS132-01	31x31m/m(REMOTE), -10 1m ARRAY(71X167m/m)	1
TRS-00-00087	TRANSISTOR	SMALL SIGNAL PNP	KTA1023Y	Q251, 252, 451, 452	4
TRS-00-00090	TRANSISTOR	SMALL SIGNAL PNP	KTA1266GR	Q364	1
TRS-00-00110	TRANSISTOR	SMALL SIGNAL NPN	KTC3198GR	Q128, 362, 363, 365, 611, 631, 632, 705	8
DIO-00-00006	DIODE	SWITCHING SIGNAL	1S133	D181, 581, 725, 801, 802	5
DIO-00-00003	DIODE	RECTIFIER	1N4004	D361, 701	2
DIO-00-00108	DIODE	FEST RECOVERY	FR154	D771, 772, 773, 774, 791, 792, 794, 795	8
DIO-00-00019	DIODE	ZENER 1W 12V	1N4742	D793, 796	2
RES-00-00463	RESISTOR	METAL FILM 1/5WF	220 OHM	R603	1
RES-00-00536	RESISTOR	METAL FILM 1/5WF	470 OHM	R201, 301, 401, 901	4
RES-00-00443	RESISTOR	METAL FILM 1/5WF	2.2K OHM	R113	1
RES-00-00450	RESISTOR	METAL FILM 1/5WF	2.7K OHM	R117	1
RES-00-00523	RESISTOR	METAL FILM 1/5WF	4.7K OHM	R111, 112, 114, 177, 179, 555, 556, 577, 579, 601	10
RES-00-00402	RESISTOR	METAL FILM 1/5WF	10K OHM	R569, 570	2
RES-00-00415	RESISTOR	METAL FILM 1/5WF	12K OHM	R602	1
RES-00-00456	RESISTOR	METAL FILM 1/5WF	20K OHM	R118	1
RES-00-00537	RESISTOR	METAL FILM 1/5WF	47K OHM	R102, 103, 105, 106, 107, 108, 109, 110	8
RES-00-00591	RESISTOR	METAL FILM 1/5WF	91K OHM	R101, 104	2
RES-00-00545	RESISTOR	METAL FILM 1/5WF	5.6K OHM	R191, 591	2
RES-00-00610	RESISTOR	CARBON FILM 1/5WJ	10 OHM	R208, 209, 210, 211, 237, 238, 308, 309, 310, 311 R337, 338, 408, 409, 410, 411, 437, 438, 908, 909 R910, 911, 937, 938	24
RES-00-00660	RESISTOR	CARBON FILM 1/5WJ	22 OHM	R619, 743, 744, 745, 746, 753, 754, 755, 756, 843 R844, 845, 846, 853, 854, 855, 856	17
RES-00-00606	RESISTOR	CARBON FILM 1/5WJ	100 OHM	R115	1
RES-00-00622	RESISTOR	CARBON FILM 1/5WJ	150 OHM	R130	1
RES-00-00662	RESISTOR	CARBON FILM 1/5WJ	240 OHM	R151	1
RES-00-00712	RESISTOR	CARBON FILM 1/5WJ	470 OHM	R174, 574	2
RES-00-00723	RESISTOR	CARBON FILM 1/5WJ	510 OHM	R123, 125	2
RES-00-00728	RESISTOR	CARBON FILM 1/5WJ	560 OHM	R454, 809	2
RES-00-00756	RESISTOR	CARBON FILM 1/5WJ	820 OHM	R116	1
RES-00-00633	RESISTOR	CARBON FILM 1/5WJ	1K OHM	R183, 185, 583, 585, 613, 622, 742, 752, 842, 852	10
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	R153	1
RES-00-00637	RESISTOR	CARBON FILM 1/5WJ	2.2K OHM	R155, 173, 224, 324, 424, 557, 573, 924	8
RES-00-00643	RESISTOR	CARBON FILM 1/5WJ	2.4K OHM	R247, 347, 447, 947	4
RES-00-00644	RESISTOR	CARBON FILM 1/5WJ	2.7K OHM	R363	1
RES-00-00699	RESISTOR	CARBON FILM 1/5WJ	3K OHM	R181, 581	2
RES-00-00672	RESISTOR	CARBON FILM 1/5WJ	3.3K OHM	R158, 600, 614	3
RES-00-00675	RESISTOR	CARBON FILM 1/5WJ	3.6K OHM	R157	1
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	R145, 154, 188, 189, 190, 225, 252, 325, 425, 452 R571, 588, 589, 590, 726, 925	16
RES-00-00720	RESISTOR	CARBON FILM 1/5WJ	5.6K OHM	R143, 144	2
RES-00-00751	RESISTOR	CARBON FILM 1/5WJ	8.2K OHM	R807	1
RES-00-01017	RESISTOR	CARBON FILM 1/5WJ	9.1K OHM	R805	1
RES-00-00608	RESISTOR	CARBON FILM 1/5WJ	10K OHM	R121, 124, 126, 127, 132, 253, 362, 364, 453, 501 R502, 504, 505, 507, 508, 617, 618, 724, 806	19
RES-00-00623	RESISTOR	CARBON FILM 1/5WJ	15K OHM	R122, 129, 251	3
RES-00-00658	RESISTOR	CARBON FILM 1/5WJ	22K OHM	R187, 365, 587, 615	4
RES-00-00663	RESISTOR	CARBON FILM 1/5WJ	24K OHM	R184, 584	2
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	R172, 182, 186, 254, 572, 582, 586	7
RES-00-00748	RESISTOR	CARBON FILM 1/5WJ	75K OHM	R176, 178, 192, 576, 578, 592	6
RES-00-00757	RESISTOR	CARBON FILM 1/5WJ	82K OHM	R801, 802	2
RES-00-00604	RESISTOR	CARBON FILM 1/5WJ	100K OHM	R214, 215, 216, 217, 242, 243, 314, 315, 316, 317 R342, 343, 414, 415, 416, 417, 442, 443, 503, 506 R808, 914, 915, 916, 917, 942, 943	27
RES-00-00620	RESISTOR	CARBON FILM 1/5WJ	150K OHM	R131	1
RES-00-00647	RESISTOR	CARBON FILM 1/5WJ	200K OHM	R146	1

BPX2200.1 Parts List

PART NO.	NOMENCATURE	DESCRIPTION	MFR PARTS	REF. NO	Q' TY
RES-00-00654	RESISTOR	CARBON FILM 1/5WJ	220K OHM	R271, 471	2
RES-00-00710	RESISTOR	CARBON FILM 1/5WJ	470K OHM	R451	1
RES-00-00635	RESISTOR	CARBON FILM 1/5WJ	1M OHM	R361, 612, 616, 621	4
IND-00-00012	INDUCTOR	COIL AXIAL 5%	47uH	L771, 772	2
IND-00-00020	INDUCTOR	COIL AXIAL 5%	100UH	L611	1
CES-00-00077	CAPACITOR	CERAMIC DISK 50V "NPO"	10 pF	C101, 102	2
CES-00-00103	CAPACITOR	CERAMIC DISK 50V "NPO"	47 pF	C611, 612, 617	3
CES-00-00086	CAPACITOR	CERAMIC DISK 50V	220 pF	C726	1
CES-00-00096	CAPACITOR	CERAMIC DISK 50V	330 pF	C616, 618	2
CES-00-00101	CAPACITOR	CERAMIC DISK 50V	470 pF	C111	1
CES-00-00074	CAPACITOR	CERAMIC DISK 50V	102 pF	C107, 108, 118, 157, 109	5
CES-00-00102	CAPACITOR	CERAMIC DISK 50V	473 pF	C187, 188, 189, 190, 191, 192, 193, 194, 195, 196	20
				C197, 198, 199, 200, 231, 232, 233, 234, 241, 242	
CES-00-00076	CAPACITOR	CERAMIC DISK 50V	104 pF	C181, 182, 361, 363, 613, 714, 715	7
CES-00-00124	CAPACITOR	CERAMIC RADIAL MLCC	104 pF"MLCC"	C721, 722, 774, 776, 778, 780, 793, 796	8
ELC-00-00114	CAPACITOR	ELECTROLYTIC"SE""SRE"	1/50V	C123, 801	2
ELC-00-00293	CAPACITOR	ELECTROLYTIC"SE""SRE"	4. 7/50V	C124, 614	2
ELC-00-00514	CAPACITOR	ELECTROLYTIC"SE""SRE"	10/25V	C501, 502	2
ELC-00-00626	CAPACITOR	ELECTROLYTIC"SE""SRE"	10/50V	C771, 772, 792, 795	4
ELC-00-00111	CAPACITOR	ELECTROLYTIC"SE""SRE"	22/16V	C103, 104, 105, 106, 121, 122	6
ELC-00-00081	CAPACITOR	ELECTROLYTIC"NP"	10/16V	C156	1
ELC-00-00333	CAPACITOR	ELECTROLYTIC"NP"	22/16V	C113, 173, 183, 184, 185, 186, 243, 244, 573	9
ELC-00-00112	CAPACITOR	ELECTROLYTIC"SE""SRE"	47/16V	C362	1
ELC-00-00113	CAPACITOR	ELECTROLYTIC"SE""SRE"	100/16V	C777, 779	2
ELC-00-00254	CAPACITOR	ELECTROLYTIC"SXE"	100/25V	C701	1
ELC-00-00162	CAPACITOR	ELECTROLYTIC"SG""SHL"	100/50V	C773, 775	2
ELC-00-00132	CAPACITOR	ELECTROLYTIC"SG""SHL"	220/16V	C631	1
ELC-00-00170	CAPACITOR	ELECTROLYTIC"SG""SHL"	10/100V	C791, 794	2
MYC-00-00184	CAPACITOR	MYLAR 5% 100V	102J	C725	1
MYC-00-00199	CAPACITOR	MYLAR 5% 400V "BOX TYPE"	102J	C761, 861	2
MYC-00-00084	CAPACITOR	MYLAR 5% 63V "TL TYPE"	103J	C172, 207, 307, 407, 572, 601, 615, 907	8
MYC-00-00157	CAPACITOR	MYLAR 5% 63V "TL TYPE"	823J	C141, 142	2
MYC-00-00089	CAPACITOR	MYLAR 5% 63V "TL TYPE"	333J	C144	1
MYC-00-00083	CAPACITOR	MYLAR 5% 63V "TL TYPE"	104J	C201, 221, 251, 265, 301, 321, 401, 421, 451, 465	14
				C901, 921, 252, 452	
MYC-00-00156	CAPACITOR	MYLAR 5% 63V "TL TYPE"	184J	C152	1
MYC-00-00088	CAPACITOR	MYLAR 5% 63V "TL TYPE"	224J	C253, 453	2
MYC-00-00061	CAPACITOR	MYLAR 5% 63V "TL TYPE"	334J	C143	1
MYC-00-00066	CAPACITOR	MYLAR 5% 63V "TL TYPE"	474J	C151	1
MYC-00-00085	CAPACITOR	MYLAR 5% 63V "TL TYPE"	105J	C150, 364, 558, 600, 702, 703, 723	7
IC0-00-00170	IC	VOLUME IC	NJM13600	U104	1
IC0-00-00055	IC	14-STAGE COUNTER(DIP-16)	F16	U611	1
IC0-00-00093	IC	DUAL OP AMP	TL072CP	U11, 101, 102, 105, 106, 108, 109, 110, 111, 112	12
				U509, 510	
IC0-00-00095	IC	COMPARATOR	KIA393P	U801	1
IC0-00-00157	IC	+12V REGULATOR	KIA7812PI	U761	1
IC0-00-00162	IC	-12V REGULATOR	KIA7912PI	U762	1
FET-00-00001	FET	MOSFET N-CH	IRF3205	Q742, 743, 744, 745, 752, 753, 754, 755, 842, 843	16
				Q844, 845, 852, 853, 854, 855	
FET-00-00021	FET	MOSFET P-CH	IRF9640	Q211, 212, 213, 214, 311, 312, 313, 314, 411, 412	16
				Q413, 414, 911, 912, 913, 914	
FET-00-00037	FET	MOSFET N-CH	IRFB31N20D	Q241, 242, 341, 342, 441, 442, 941, 942	8
DI0-00-00177	DIODE	RECTIFIER	6A00	D702, 703	2
DI0-00-00102	DIODE	FAST RECOVERY	MUR3040PT	D761, 762, 861, 862	4
DI0-00-00277	DIODE	3PHI RED	HNRD-3401L	LED1, 3	2
DI0-00-00198	DIODE	3PHI BLUE	HL304H1BC2	LED2	1
RES-00-01112	RESISTOR	METAL FILM SMALL TYPE 2WJ "FORMING 15m /m"	2. 2 OHM	R263, 463	2
RES-00-00077	RESISTOR	METAL FILM 2WJ	5. 6 OHM	R771, 772	2
RES-00-01077	RESISTOR	METAL FILM SMALL TYPE 2WJ "FORMING 20m /m"	100 OHM	R761, 861	2
RES-00-01225	RESISTOR	METAL FILM SMALL TYPE 2WJ	2. 2K OHM	R261, 262, 461, 462	4
RES-00-01227	RESISTOR	METAL FILM SMALL TYPE 2WJ	4. 7K OHM	R764, 765	2
RES-00-00919	RESISTOR	METAL FILM 3WJ	220 OHM	R727	1
RES-00-01257	RESISTOR	METAL FILM TYPE 5WJ	160 OHM	R791	1
RES-00-01216	RESISTOR	METAL FILM TYPE 5WJ	180 OHM	R792	1
RES-00-01229	RESISTOR	METAL FILM TYPE 5WJ	5. 6K OHM	R220, 320, 420, 920	4

BPX2200.1 Parts List

PART NO.	NOMENCATURE	DESCRIPTION	MFR PARTS	REF. NO	Q'TY
RES-00-00947	RESISTOR	3 LEAD SHUNT	0.01 OHM	R221, 246, 321, 346, 421, 446, 921, 946	8
THS-00-00013	THERMISTOR	NTC RESISTOR 50K	FTD5-350	TH1	1
VOL-00-00134	SEMI VOLUME	SEMI H-TYPE(RG06P)6PHI	RG06P-5KB "SEMI"	VR103, 503	2
VOL-00-00282	VOLUME	V12L5(9x5)G(4R)(PH2D)N15KC-A2Kx2+A200K	x V12-CLG02A5N	VR1	1
VOL-00-00114	VOLUME	V12L5(9x5)G(PH2D)N17KC-3B20Kx2	V12-CLG0266N	VR101	1
VOL-00-00055	VOLUME	V12L5(9X5)G(PH2D)N15KC-15C50Kx4	V12-CLG0252NA	VR102	1
VOL-00-00283	VOLUME	V12L5(9x5)G(PH2D)N17KC-B500x2	V12-CLG02A6N	VR105	1
REN-00-00001	REGULATOR	2.56MHZ	CSA2.56MG	X611	1
ELC-00-00188	CAPACITOR	ELECTROLYTIC"SD""SHL"	220/100V	C306, 335, 406, 436	4
ELC-00-00473	CAPACITOR	ELECTROLYTIC"SD""SHL"	470/100V	C206, 236, 781, 782, 783, 784, 906, 936	8
ELC-00-00092	CAPACITOR	ELECTROLYTIC"RX"	2200/25V	C716, 717, 718, 719, 720, 816, 817, 818, 819, 820	10
ELC-00-00632	CAPACITOR	ELECTROLYTIC"HC""35X25"	2200/100V	C785, 786	2
ELC-00-00009	CAPACITOR	ELECTROLYTIC"BP""16X25"	33/100V	C267, 467, 262, 263, 266, 462, 463, 466	8
MYC-00-00152	CAPACITOR	MYLAR 10% 100V "BOX TYPE"	105K	C305, 336, 405, 435	4
MYC-00-00076	CAPACITOR	MYLAR 10% 100V "BOX TYPE"	225K	C208, 209, 237, 264, 408, 409, 437, 464, 762, 763	12
				C787, 788	
MYC-00-00109	CAPACITOR	MYLAR 10% 250V "BOX TYPE"	225K	C768	1
REL-00-00025	RELAY	DC 40A 12V	HR-85AKSW	RE111, 2	2
COI-00-00106	CURRENT SENSOR 50A		CCS-50	CT1	1
COI-00-00070	INDUCTOR	DRUM CORE	CL-1900C	L101, 301	2
COI-00-00083	INDUCTOR		CL-4100	L761	1
COR-TF-00367	CORE	3T:18:4T	44PHI MAGNETICS	T1 {3T(0.7X20):18T(0.7X4):4T(0.7X1)}	1
COR-TF-00368	CORE	3T:18:4T: 3T(BLUE)	44PHI MAGNETICS	T2 {3T(0.7X20):18T(0.7X4):4T(0.7X1):3T(0.7X1)}	1
TER-00-00220	TERMINAL	GOLD PLATED v0_M	KTD-9218A	TER1	1
TER-00-00221	TERMINAL	GOLD PLATED v0_M	KTD-9233A	TER2	1
TER-00-00219	TERMINAL	GOLD PLATED v0_M	KTD-9216A	TER03	1
JAC-00-00043	RCA JACK	GOLD PLATED	DJB-554A	RCA101	1
SWI-00-00056	SWITCH	NOBE 4m/m	JSS2208	SW102, 103	2
JUP-00-00003	BAR JUMPER	NI - PLATED	37m/m	BAR101, 102	2
JUP-00-00005	BAR JUMPER	NI - PLATED	55m/m	BAR103, 104, 105, 106, 107	5
JUM-00-00016	BAR JUMPER	COPPER 1.0t(ex{ Ni XIER0 } 3P	MA-BA-02-6398-0	BAR108	1
JUM-00-00072	BAR JUMPER	COPPER 0.8t 3P	MA-BA-02-1530-0	BAR109, 110	2
JUM-00-00011	BAR JUMPER	COPPER 0.8t 6P	MA-BA-02-1960-0	BAR111, 113, 115, 116	4
JUM-00-00031	BAR JUMPER	COPPER 0.8t 7P	MA-BA-02-1532-1	BAR112, 114	2
WIR-00-00177	WIRE	1007 AWG #22 BLACK (3PHI RING LUG)	40m/m	W1	1
WIR-00-00178	WIRE	UL1015 #14 RED	85m/m	WR(A-B), WL(A-B)	2
GAP-00-029A0	GAP PAD		25x50x5t	L101, 301	2
TUB-00-00008	TEFLON TUBE	0.7PHI	10m/m	TH1	2
JAC-00-00050	MODULAR JACK	4P	DEK623PCB4	MOD1	1
HOD-00-00033	FUSE HOLDER		540B	ACC'y	1
FUS-00-00044	FUSE	150A	AML 150A	ACC'y	1
PCB-00-01278	P.C.B	FR-4 DOUBLE LAYER, 1.6t 10z GREEN	PAS265-31	28X75m/m	1
ICO-00-00094	I.C	SMD "SOP-08"	KIA393F	U02, 03	2
RES-08-00193	RESISTOR	SMD"0805"1/8WJ	4.7 OHM	R08	1
RES-08-00159	RESISTOR	SMD"0805"1/8WJ	220 OHM	R21	1
RES-08-00148	RESISTOR	SMD"0805"1/8WJ	1K OHM	R25, 33	2
RES-08-00129	RESISTOR	SMD"0805"1/8WJ	1.8K OHM	R03	1
RES-08-00151	RESISTOR	SMD"0805"1/8WJ	2.2K OHM	R06, 07	2
RES-08-00156	RESISTOR	SMD"0805"1/8WJ	2.7K OHM	R04	1
RES-08-00190	RESISTOR	SMD"0805"1/8WJ	4.3K OHM	R10	1
RES-08-00191	RESISTOR	SMD"0805"1/8WJ	4.7K OHM	R02, 17, 34	3
RES-08-00200	RESISTOR	SMD"0805"1/8WJ	5.1K OHM	R11	1
RES-08-00210	RESISTOR	SMD"0805"1/8WJ	6.8K OHM	R09	1
RES-08-00100	RESISTOR	SMD"0805"1/8WJ	30K OHM	R01	1
RES-08-00160	RESISTOR	SMD"0805"1/8WJ	20K OHM	R26	1
RES-08-00164	RESISTOR	SMD"0805"1/8WJ	22K OHM	R14, 16, 19, 31, 32	5
RES-08-00167	RESISTOR	SMD"0805"1/8WJ	24K OHM	R27	1
RES-08-00170	RESISTOR	SMD"0805"1/8WJ	27K OHM	R28	1
RES-08-00198	RESISTOR	SMD"0805"1/8WJ	47K OHM	R18	1
RES-08-00216	RESISTOR	SMD"0805"1/8WJ	68K OHM	R23	1
RES-08-00130	RESISTOR	SMD"0805"1/8WJ	100K OHM	R13	1
RES-08-00141	RESISTOR	SMD"0805"1/8WJ	150K OHM	R22	1

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PART NO.	NOMENCATURE	DESCRIPTION	MFR PARTS	REF. NO	Q'TY
RES-08-00168	RESISTOR	SMD"0805"1/8WJ	270K OHM	R39	1
RES-08-00149	RESISTOR	SMD"0805"1/8WJ	1M OHM	R12,15,20,24	4
CEC-08-00002	CAPACITOR	SMD"0805"	102 pF	C05	1
CEC-08-00004	CAPACITOR	SMD"0805"	104 pF	C01,12,13,14,15,41,93,94	8
CEC-08-00040	CAPACITOR	SMD"0805"	473 pF	C03	1
DIO-00-00006	DIODE	SWITCHING SIGNAL	1SS133	D01,02	2
TRS-00-00087	TRANSISTOR	SMALL SIGNAL PNP "T0-92L"	KTA1023Y	Q01	1
TRS-00-00110	TRANSISTOR	SMALL SIGNAL NPN "T0-92"	KTC3198GR	Q02,06	2
TRS-00-00090	TRANSISTOR	SMALL SIGNAL PNP "T0-92"	KTA1266GR	Q03,04,08,09	4
RES-00-00038	RESISTOR	METAL FILM 1/2WJ	220 OHM	R41,42	2
RES-00-00025	RESISTOR	METAL FILM 1WJ	4.7 OHM	R05	1
MYC-00-00184	CAPACITOR	MYLAR 5% 100V	102J	C09	1
ELC-00-00117	CAPACITOR	ELECTROLYTIC "SE""SRE"	4.7uF/16V	C02,04,06	3
ELC-00-00293	CAPACITOR	ELECTROLYTIC "SE""SRE"	4.7uF/50V	C11	1
ELC-00-00111	CAPACITOR	ELECTROLYTIC "SE""SRE"	22uF/16V	C08,10	2
ELC-00-00112	CAPACITOR	ELECTROLYTIC "SE""SRE"	47uF/16V	C07	1
ELC-00-00113	CAPACITOR	ELECTROLYTIC "SE""SRE"	100uF/16V	C16	1
IC0-00-00022	I.C	PWM I.C "DIP-16"	TL494CN	U01	1
HED-00-00048	PIN CONNECTOR	PIN HEADER 2P(R-ANGLE)	TM2007-B11G-02	HP07	1
HED-00-00050	PIN CONNECTOR	PIN HEADER 4P(R-ANGLE)	TM2007-B11G-04	HP06	1
HED-00-00051	PIN CONNECTOR	PIN HEADER 5P(R-ANGLE)	TM2007-B11G-05	HP05	1
PCB-00-01279	P.C.B	FR-4 DOUBLE LAYER, 1.6t10z GREEN	PAS266-31	28 X 90m/m	1
RES-08-00028	RESISTOR	SMD"0805" 1/8WF	1K OHM	R288,488	2
RES-08-00131	RESISTOR	SMD"0805" 1/8WJ	100 OHM	R282,482	2
RES-08-00148	RESISTOR	SMD"0805" 1/8WJ	1K OHM	R287,290,487,490	4
RES-08-00151	RESISTOR	SMD"0805" 1/8WJ	2.2K OHM	R281,481	2
RES-08-00191	RESISTOR	SMD"0805" 1/8WJ	4.7K OHM	R286,486	2
RES-08-00228	RESISTOR	SMD"0805" 1/8WJ	9.1K OHM	R289,489	2
RES-08-00132	RESISTOR	SMD"0805" 1/8WJ	10K OHM	R283,483	2
CEC-08-00003	CAPACITOR	SMD"0805"	103 pF	C286,486	2
CEC-08-00004	CAPACITOR	SMD"0805"	104 pF	C281,282,285,289,290,291,292,481,482,485 C489,490,491,492	14
DIO-00-00006	DIODE	SIGNAL DIODE	1SS133	D281,282,283,284,285,286,481,482,483,484 D485,486	12
TRS-00-00087	TRANSISTOR	SMALL SIGNAL PNP	KTA1023Y	Q282,482	2
TRS-00-00088	TRANSISTOR	SMALL SIGNAL NPN	KTC1027Y	Q281,481	2
ELC-00-00334	CAPACITOR	ELECTROLYTIC "SE""SRE"	2.2/16V	C287,293,294,487,493,494	6
ELC-00-00117	CAPACITOR	ELECTROLYTIC "SE""SRE"	4.7/16V	C283,288,483,488	4
RES-00-00040	RESISTOR	METAL FILM 1/2WJ	22 OHM	R284,285,484,485	4
MYC-00-00085	CAPACITOR	MYLAR 5% 63V "TL TYPE"	105J	C284,484	2
IC0-00-00017	IC	PRECISION COMPARATOR(DIP-14)	B52	U281,481	2
HED-00-00049	PIN CONNECTOR	PIN HEADER 3P(R-ANGLE)	TM2007-B11G-03	HP2	1
HED-00-00053	PIN CONNECTOR	PIN HEADER 7P(R-ANGLE)	TM2007-B11G-07	HP1	1
PCB-00-01277	P.C.B	FR-4 DOUBLE LAYER, 1.6t10z GREEN	PAS264-31	28 X 114m/m	1
IC0-00-00094	IC	SMD "SOP-08"	KIA393F	U16	1
DIO-00-00079	DIODE	SOT-23	KDS226	D33.34.36.37.39.40.54.55	8
RES-08-00150	RESISTOR	SMD"0805" 1/8WJ	1 OHM	R26.27.35.36.74.76.85.86	8
RES-08-00131	RESISTOR	SMD"0805" 1/8WJ	100 OHM	R63.75	2
RES-08-00138	RESISTOR	SMD"0805" 1/8WJ	120 OHM	R44.84	2
RES-08-00142	RESISTOR	SMD"0805" 1/8WJ	150 OHM	R31.67.81.83	4
RES-08-00166	RESISTOR	SMD"0805" 1/8WJ	240 OHM	R33.43.71.73	4
RES-08-00169	RESISTOR	SMD"0805" 1/8WJ	270 OHM	R54	1
RES-08-00197	RESISTOR	SMD"0805" 1/8WJ	470 OHM	R18	1
RES-08-00229	RESISTOR	SMD"0805" 1/8WJ	910 OHM	R32.42.45.72.82.95	6
RES-08-00148	RESISTOR	SMD"0805" 1/8WJ	1K OHM	R39.40.41.79.80.91.92	7
RES-08-00191	RESISTOR	SMD"0805" 1/8WJ	4.7K OHM	R64,60	2
RES-08-00132	RESISTOR	SMD"0805" 1/8WJ	10K OHM	R53.57.58.66.68.69	6

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PART NO.	NOMENCATURE	DESCRIPTION	MFR PARTS	REF. NO	Q'TY
RES-08-00147	RESISTOR	SMD"0805" 1/8WJ	18K OHM	R52	1
RES-08-00182	RESISTOR	SMD"0805" 1/8WJ	33K OHM	R65	1
RES-08-00198	RESISTOR	SMD"0805" 1/8WJ	47K OHM	R70	1
RES-08-00130	RESISTOR	SMD"0805" 1/8WJ	100K OHM	R55.61.62	3
RES-08-00162	RESISTOR	SMD"0805" 1/8WJ	220K OHM	R56	1
RES-08-00149	RESISTOR	SMD"0805" 1/8WJ	1M OHM	R59	1
CEC-08-00002	CAPACITOR	SMD"0805"	102 pF	C51.54	2
CEC-08-00004	CAPACITOR	SMD"0805"	104 pF	C49.55.81.89	4
CEC-08-00021	CAPACITOR	SMD"0805"	224 pF	C43	1
TRS-00-00087	TRANSISTOR	SMALL SIGNAL PNP	KTA1023Y	Q33.35.37.38.43.45.73.75.83.85	10
TRS-00-00088	TRANSISTOR	SMALL SIGNAL NPN	KTC1027Y	Q32.34.36.42.44.72.74.82.84	9
DIO-00-00041	DIODE	ZENNER DIODE 0.5W 12V	1N5242	D32	1
ELC-00-00114	CAPACITOR	ELECTROLYTIC "SE""SRE"	1/50V	C52	1
ELC-00-00113	CAPACITOR	ELECTROLYTIC "SE""SRE"	100/16V	C50	1
MYC-00-00184	CAPACITOR	MYLAR 100V	102J	C48	1
MYC-00-00088	CAPACITOR	MYLAR 5% 63V "TL TYPE"	224J	C45.47	2
IND-00-00028	INDUCTOR	AXIAL TYPE 5%	22uH	L41.42.43.44.45.46	6
RES-00-01215	RESISTOR	METAL FILM LARGE TYPE 2WJ	10K OHM	R50	1
TRS-00-00096	TRANSISTOR	VIDEO TR NPN	KTA1381	Q31.81	2
TRS-00-00112	TRANSISTOR	VIDEO TR PNP	KTC3503	Q30.40.80.90	4
HED-00-00051	PIN CONNECTOR	PIN HEADER 5P(R-ANGLE)	TM2007-B11G-05	HP3	1
HED-00-00052	PIN CONNECTOR	PIN HEADER 6P(R-ANGLE)	TM2007-B11G-06	HP1.2	2
PCB-00-00952	P.C.B	FR-4 SINGLE LAYER, 10z GREEN	PAS132-01	31x31m/m	1
VOL-00-00044	VOLUME	V9M(7X6.5)G3(PH2R)N15KC-15A20K	V9M-5720009A	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	S4P(5 METER)		ACEESSORY	1

BPX2200.1 Parts List

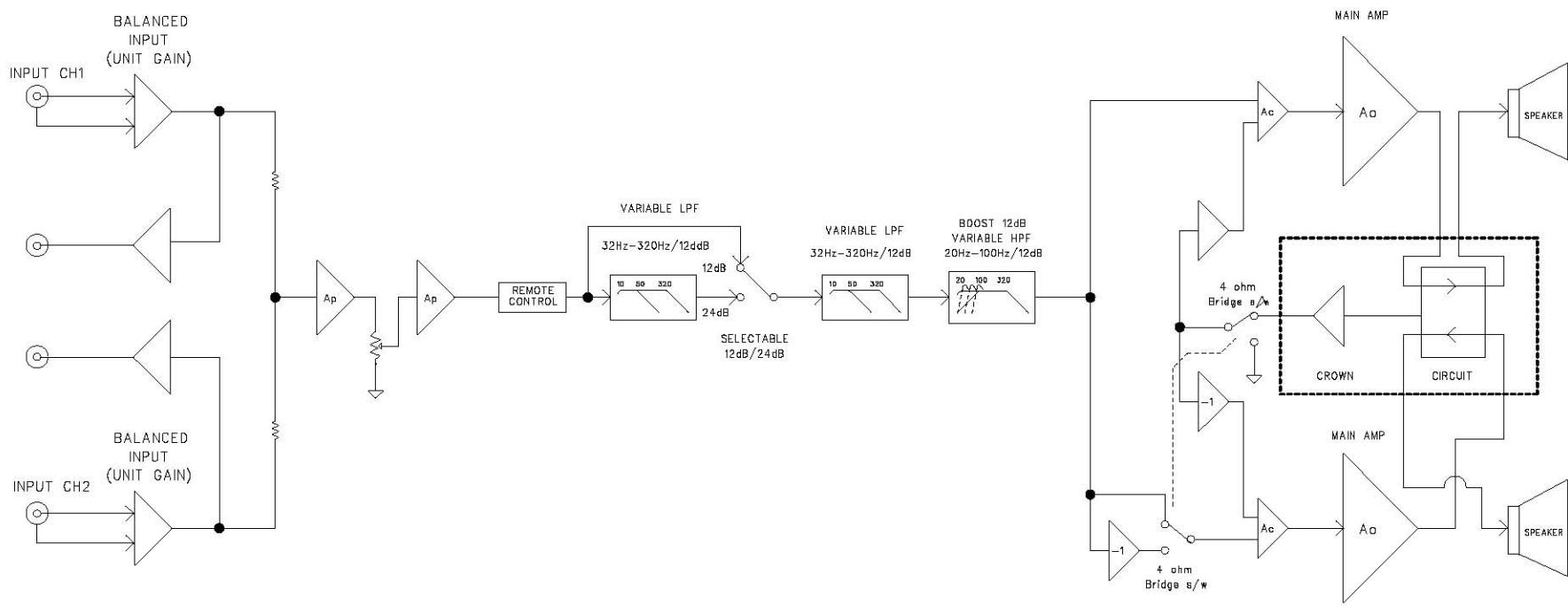
PART NO.	NOMENCATURE	DESCRIPTION	REF. NO	Q'TY
HEA-01-577AA	HEAT SINK MAIN	AL/EXTRUSION(L=550.0mm)	(BLACK SPRAY,SANDTON)	1
PAN-06-562AA	PANEL FRONT	EGI,1.2t	BLACK SPRAY(SANDTON)	1
PAN-06-566AA	PANEL REAR	EGI,1.2t	BLACK SPRAY(SANDTON)	1
COV-22-624B0	WINDOW	ACRYLIC,3.0t		1
BAD-01-515AA	BADGE	AL	LOGO:JBL,MODEL NAME: SILK 1	1
FOO-01-505B0	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)		3
BKT-05-520A0	BRACKET TR(B)	CR,91.0x15.0x1.5t(NI-P)		1
BKT-05-521A0	BRACKET TR(C)	CR,103.0x15.0x1.5t(NI-P)		6
SUB-28-572A0	CUSHION BKT-TR(A)	FIBER,43.0x15.0x0.5t		3
SUB-28-573A0	CUSHION BKT-TR(B)	FIBER,87.0x15.0x0.5t		1
SUB-28-574A0	CUSHION BKT-TR(C)	FIBER,99.0x15.0x0.5t		6
SUB-33-513A0	CUSHION RUBBER(A)	RUBBER,5.0x7.0x1.6t	THERMISTOR(1)	1
SUB-33-006A0	CUSHION RUBBER(B)	RUBBER, Ø 12.0x Ø 5.0x2.0t	SET(6).REMOTE(2)	8
SIL-34-001A0	SILICON PAD	(SP1000)22.0x0.3t		1000mm
SUP-29-502A0	SUPPORT PCB	NYLON,L=4.5mm		10
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	2
SUB-12-576A0	3> TUBE	Ø 5.0x40mm	INDICATOR	3
SC5-NB-30120	SCREW	STT2 BH 3x12 NI-P	PCB SUPPORT	10
SC5-BB-30080	SCREW	STT2 BH 3x8 BK	S/PANEL+H/S(10),RCA(1),TERMINAL(5)	16
SC1-NL-30060	SCREW	SML 3x6 NI(NO SERRATION)	H/S+WINDOW(10)	10
SC1-NL-40100	SCREW	SML 4x10 NI-P	H/S+FOOT MOUNTING(10)	10
SC4-BP-40250	SCREW	STT1 PH 4x25 BK	BRACKET TR (24)	24
SC4-BL-40250	SCREW	STT1 LH 4x25 BK	ACCESSORY(6)	6
SC4-BB-40200	SCREW	STT1 BH 4x20 BK		2
POL-31-162A0	POLY BAG(A)	VINYL,440.0x760.0x0.1t	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
INN-42-534A0	CENTER PAD	EPS,378.0x80.0x131.0		1
BOX-36-574AA	GIFT BOX	SW#1(B)697.0x383.0x136.0		1
BOX-39-128AA	CARTON BOX	DW#2,723.0x398.0x151.0		1
BOX-00-001A0	FUSE HOLDER BOX	SC ,117.0x58.0x42.0		1
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"		1
LAB-QC-0001A	STICKER	QC LABEL		1
LAB-00-0165A	STICKER	WINDOW STICKER	SET	1
CAR-WA-0032A	WARRANTY CARD			1
SUP-21-006A0	LED GUIDE(A)	ABS,L=12mm	LED	3
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#1, 1 66x80		1
POL-31-003A0	POLY BAG(D)	VINYL,120.0x120.0x0.1t	REMOTE CONTROL	
SUB-00-002A0	SCOTCH TAPE	20mm		5cm
SUB-21-525A0	LED GUIDE(B)	ABS,L=6mm	VOLUME KNOB	1



BPX2200.1

Power Amplifier

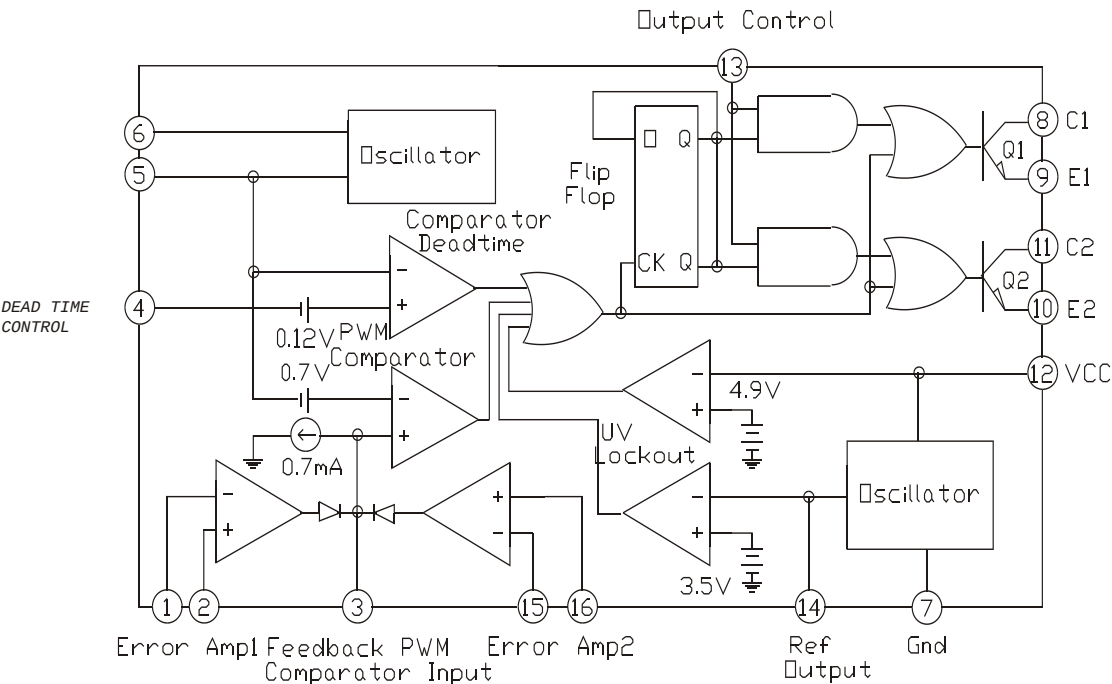
BPX2200.1 BLOCK DIAGRAM



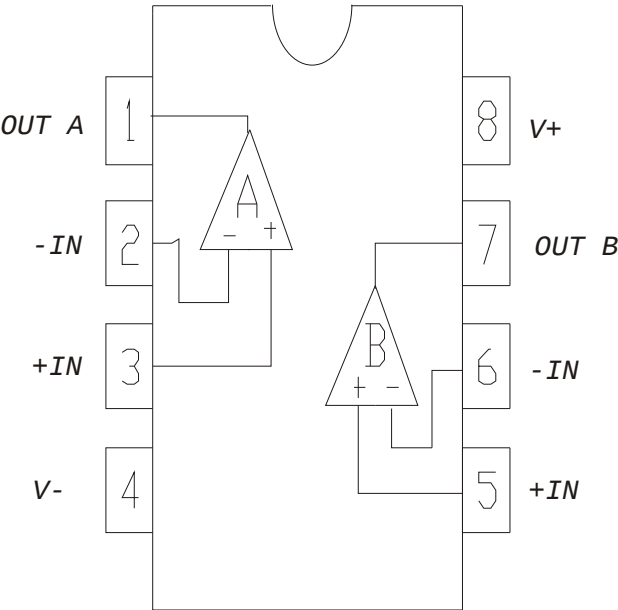
1 2 3 4 5 6 7

Integrated Circuit Diagrams

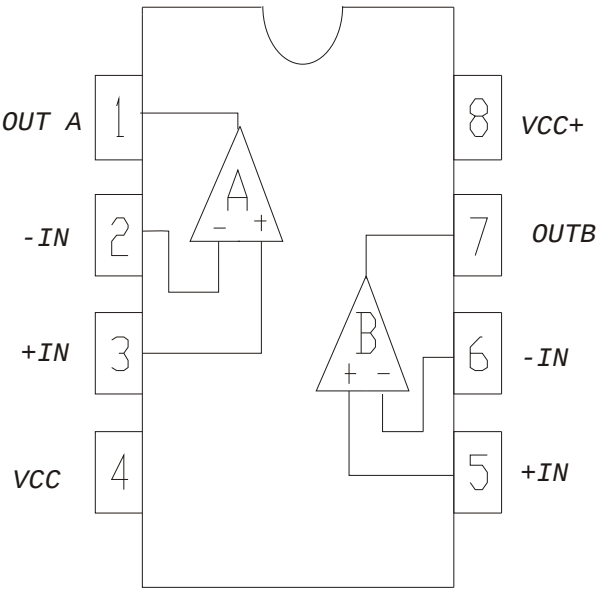
U1 (TL494CN) P.W.M IC



U2, 3, 801 (KIA393P)

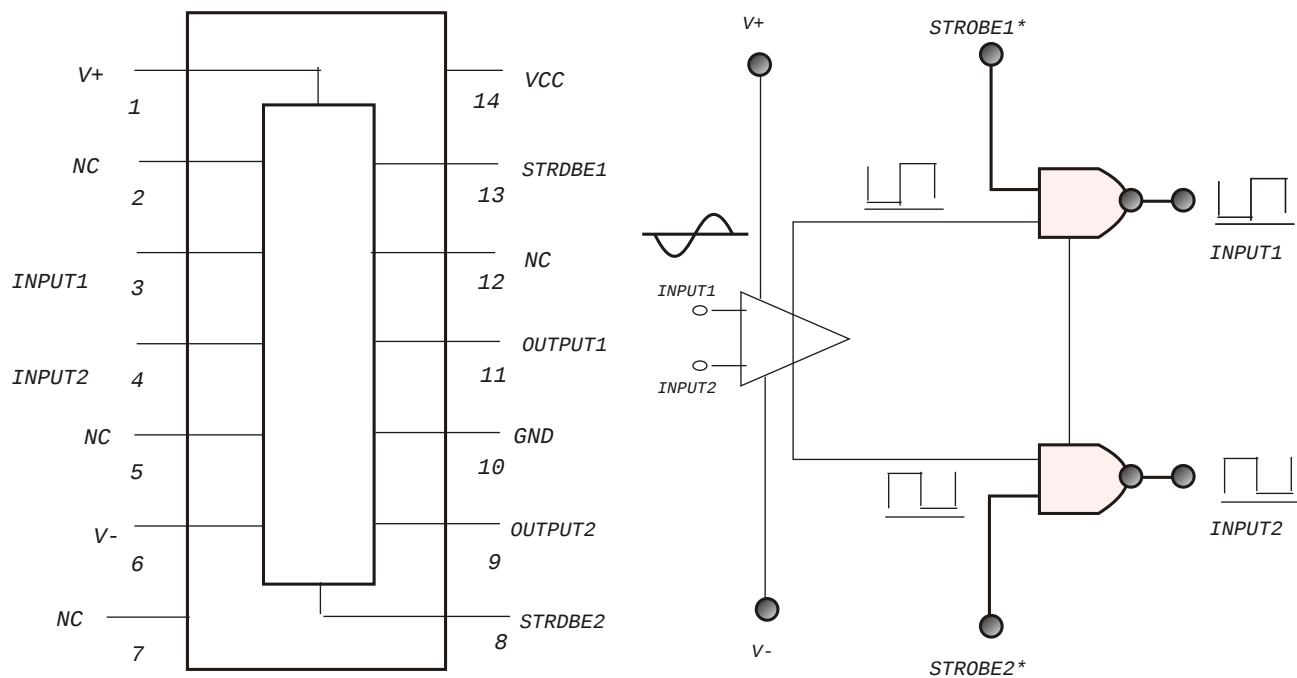


U11, 101, 102, 105, 106, 108
U109, 110, 111, 112, 350, 509, 510 (TL072CP)



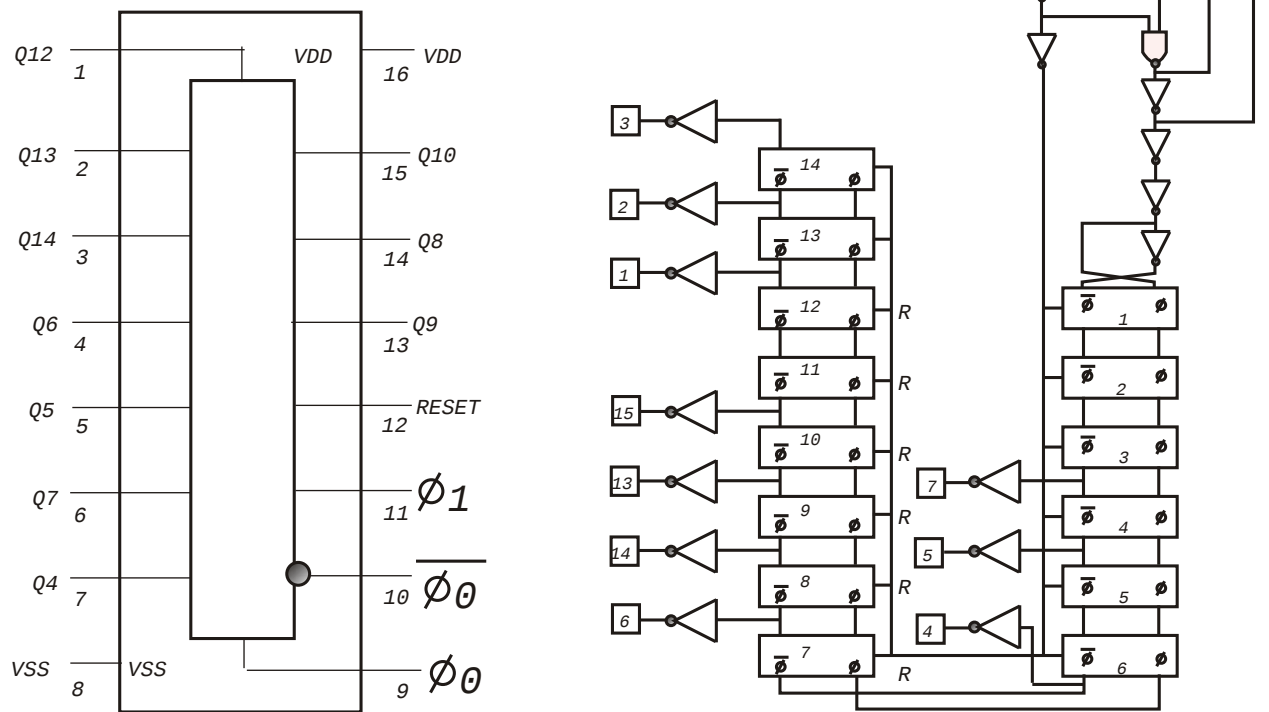
Integrated Circuit Diagrams

U281,481 (B52)

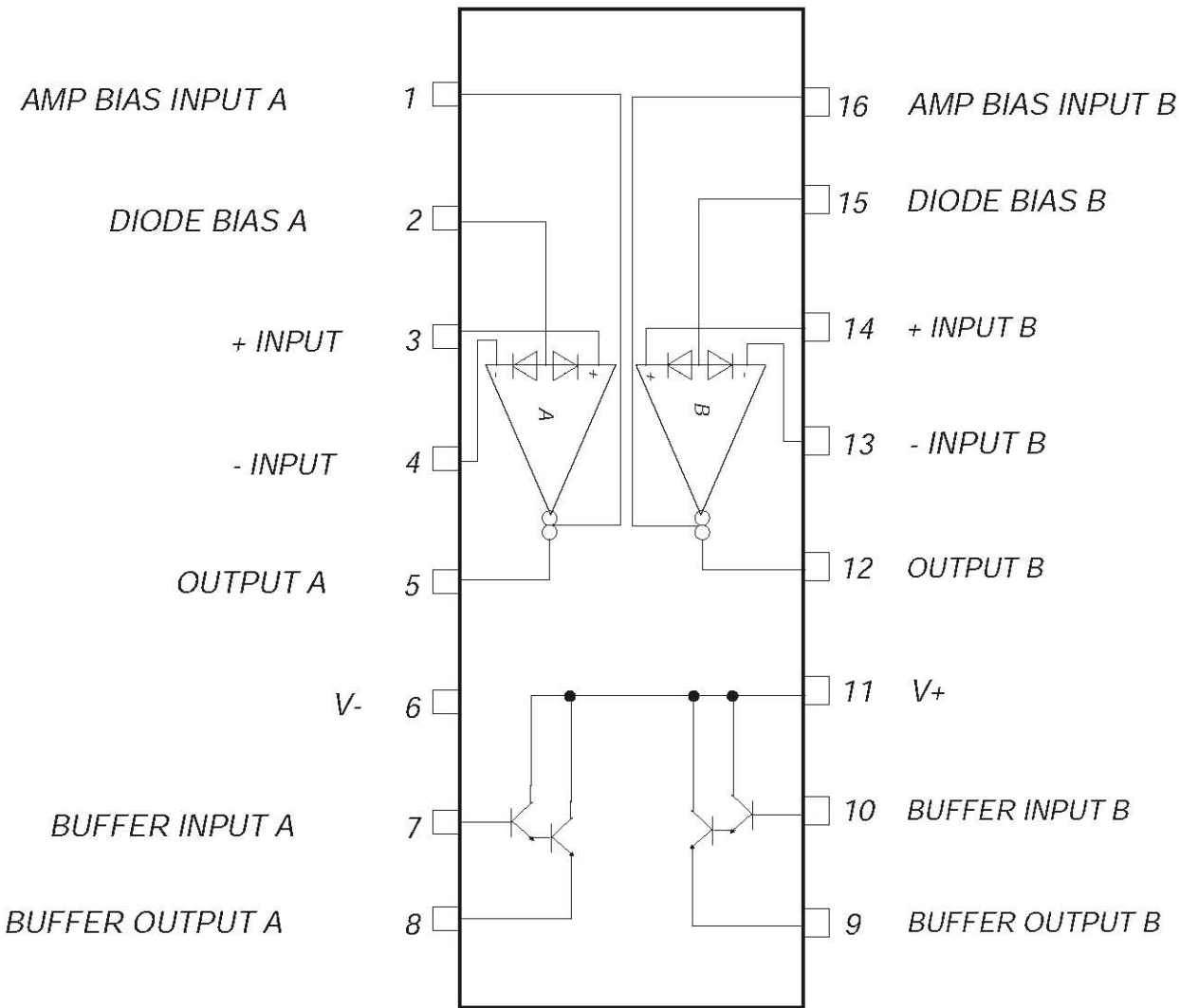


U611 (F16)

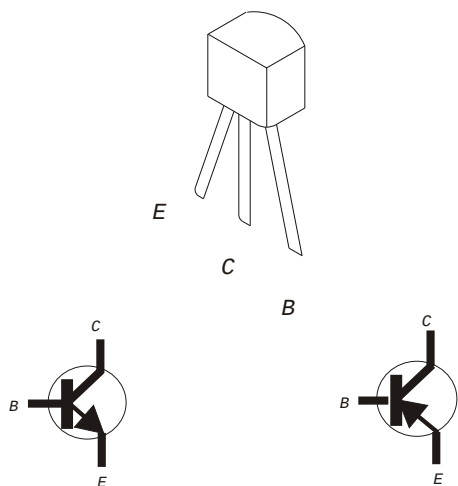
8 =VSS
16 =VDD



U104 (NJM13600D)

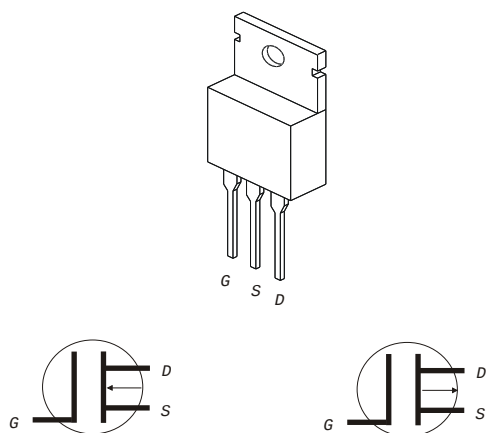


Transistor Diagrams



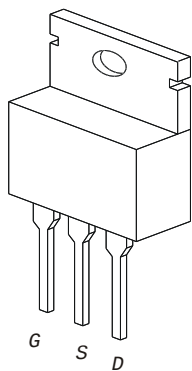
* KTC3198GR *
Q128, 362, 363, 365
Q611, 631, 632, 705

* KTA1266GR *
Q364

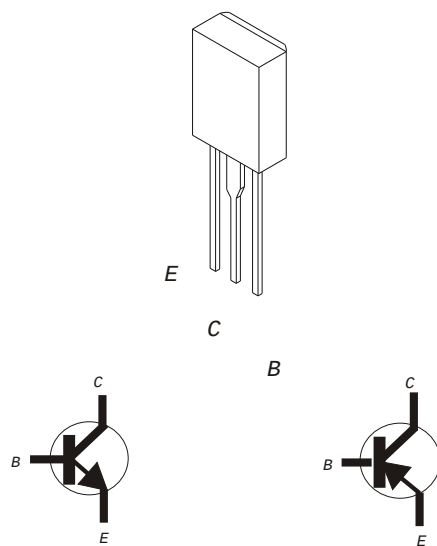


* IRF640 *
Q241, 242, 243, 244, 341
Q342, 343, 344

* IRF9640 *
Q211, 212, 213, 241, 311
Q312, 313, 314, 411, 412
Q413, 414, 911, 912, 913, 914



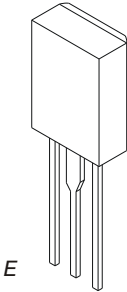
* IRFZ44
Q742, 743, 744, 752, 753, 754



* 2SC3503 *
Q201, 401

* 2SA1381 *
A202, 402

Transistor Diagrams

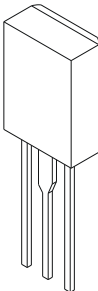


E
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B

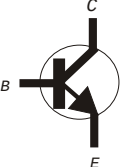


G D S

1RF3205
Q742, 743, 744, 745, 752, 753, 754, 755
Q842, 843, 844, 845, 852, 853, 854, 855

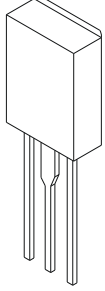


E
C
B



C
B
E

*** KTC1027Y ***
Q203, 205, 207, 209, 281, 403
Q405, 407, 409, 481, 914

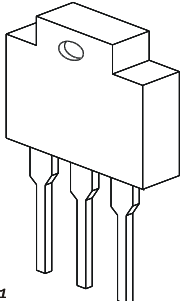


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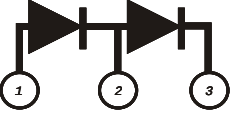


C
B
E

*** KTA1023Y ***
Q251, 252, 451, 452



1
2
3



1 2 3

*** MUR3040PT ***
D761, 762, 863, 864

BPX2200.1 EXPLODED VIEW

TR BRACKET AND PCB FIX A WAY

THE BACK SIDE OF "PCB"

B

C

THE BACK SIDE OF "PCB"

B

C

TO STICK WITH BONDING AGENT WHEN FOOT MOUNTING AND LENS ASSEMBLY

THE BACK SIDE OF RANG

BONDING OPERATIONS

THE BACK SIDE OF FOOT MOUNTING

Ref#	Description	Part Number	Qty
01	HEAT SINK MAIN AL/EXTRUSION (L=550mm)	HEA-01-577A0	1
02	FRONT PANEL EGI 1.2T	PAN-06-562A0	1
03	REAR PANEL EGI 1.2T	PAN-06-566A0	1
04	WINDOW ACRYLIC 3.0T	COV-22-624A0	1
05	BADGE AL	BAD-01-515A0	1
06	MOUNTING FOOT ADC-7 DIE CASTING	FOO-01-505A0	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	3
10	BRACKET TR(B) CR,91 X 15 X 1.5T (NI-P)	BKT-05-520A0	1
11	BRACKET TR(C) CR,103 X 15 X 1.5T (NI-P)	BKT-05-521A0	6
12	CUSHION BKT-TR(A) FIBER 43 X 15 X 0.5T	SUB-28-572A0	3
13	CUSHION BKT-TR(B) FIBER 87 X 15 X 0.5T	SUB-28-573A0	1
14	CUSHION BKT-TR(C) FIBER 99 X 15 X 0.5T	SUB-28-574A0	6
15	CUSHION RUBBER (A) 12 X 7 X 1.6T	SUB-33-502A0	1
16	SILICON PAD (SP1000) 22 X 0.3T	SIL-34-001A0	
17	SUPPORT PCB NYLON L=4.5mm	SUP-29-502A0	10
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	10
21	SCREW STT2 BH 3 X 8 BK	SC5-BB-30080	16
22	SCREW SML 3 X 6 NI (NO SERRATION)	SC1-NL-30060	10
23	SCREW SML 4 X 10 NI-P	SC1-NL-40100	10
24	SCREW STT1 PH 4 X 25 BK	SC4-BP-40250	24
25	GAP PAD 25 X 50 X 5	GAP-00-029A0	2

NO	PART'S NAME	MATERIAL	QTY	SPECIFICATION	REMARK
DIM	A B C	SCALE		MODEL	
1~10	0.05	1:1		REAR DRAW NO	
10 ~ 100	0.1 0.2 0.3	CHECK	APPRO	NAME	EXPLODE VIEW
100 ~ 500	0.2 0.3 0.5			CODE NO.	
500 ~ 1000	0.3 0.5 1.5			ISSUE	

UNIT: MM

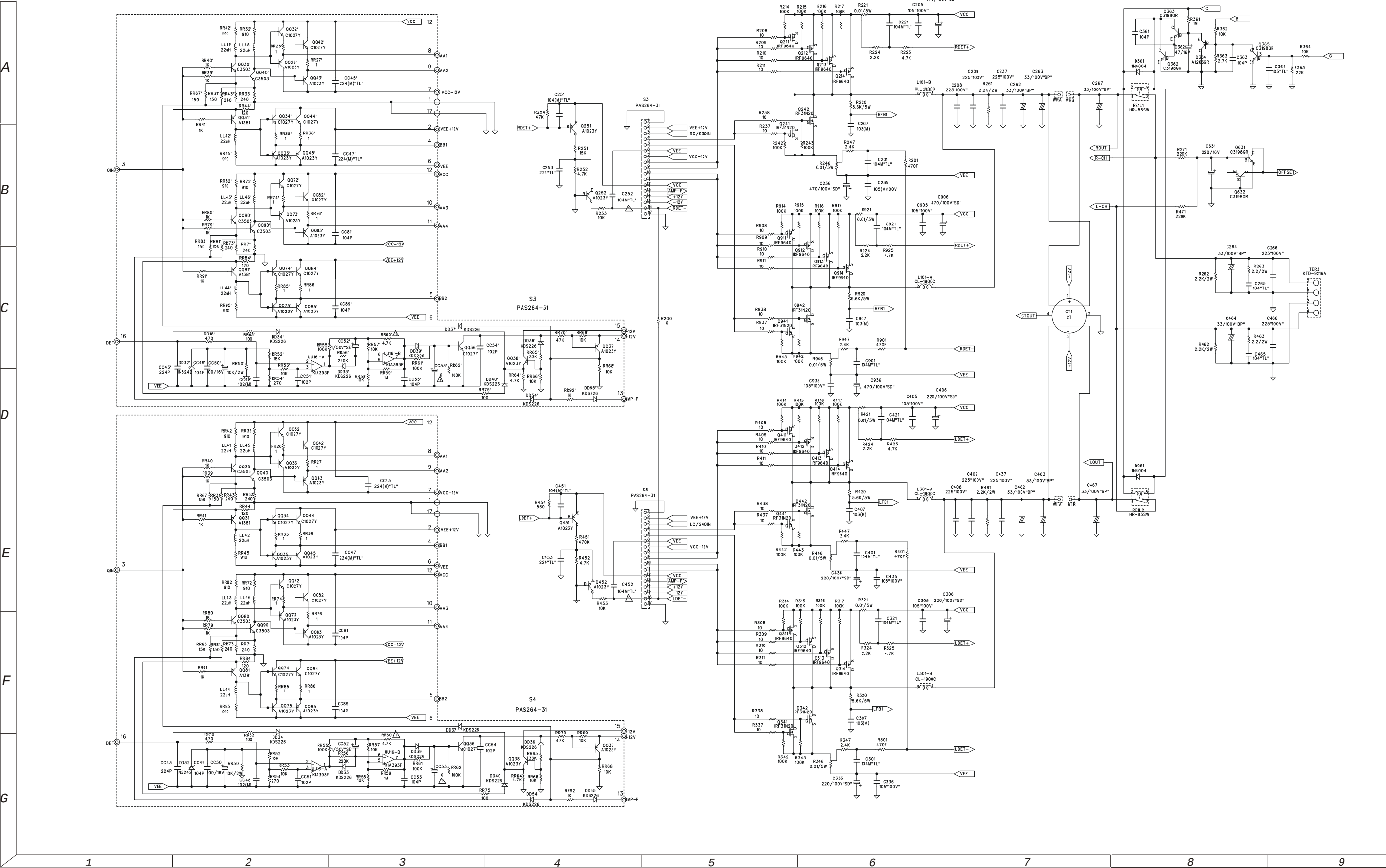
CHECK: /

SCALE: 1:1

CHECK: /

APPRO: /

Power Amplifier (Sheet 1)



A

B

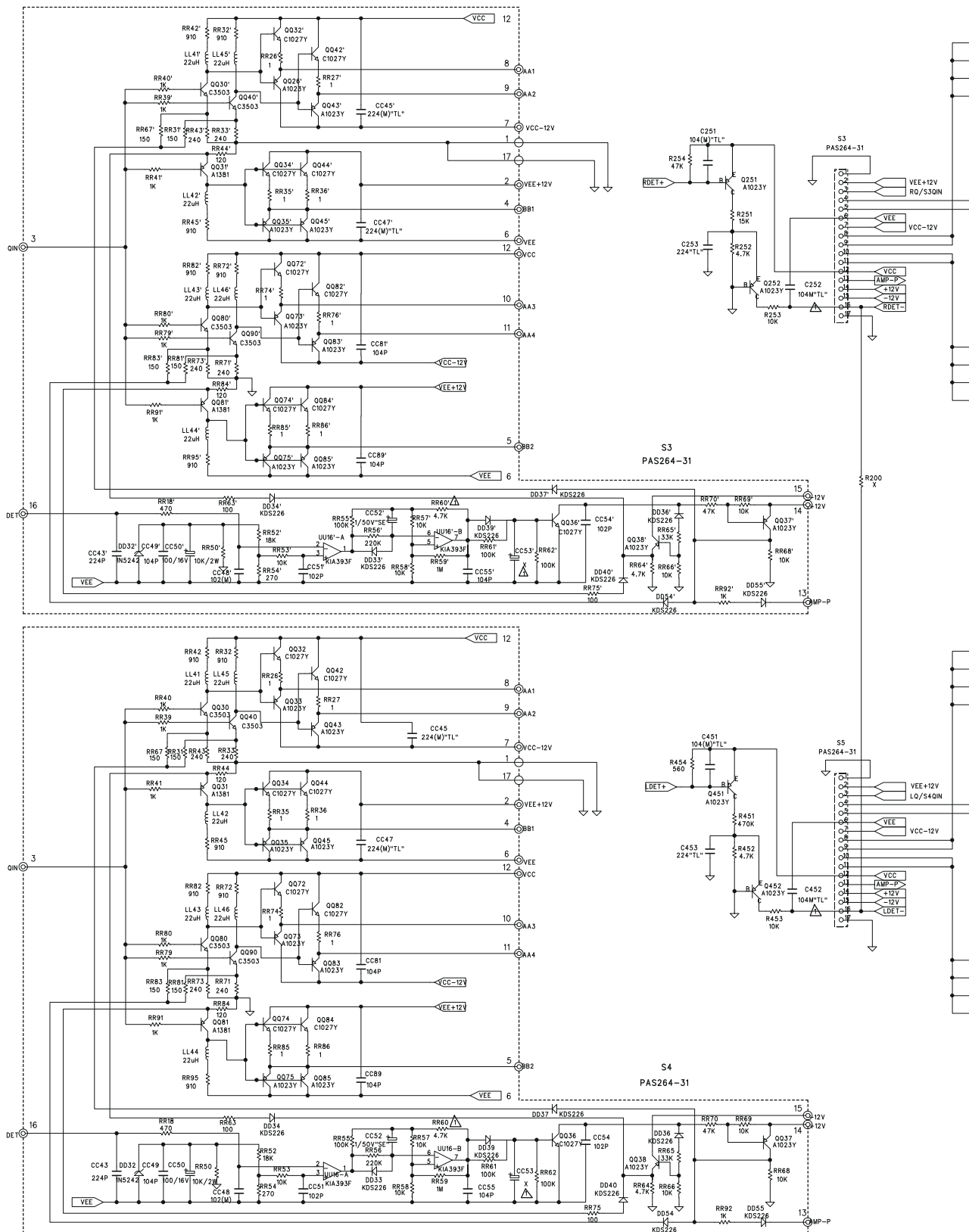
C

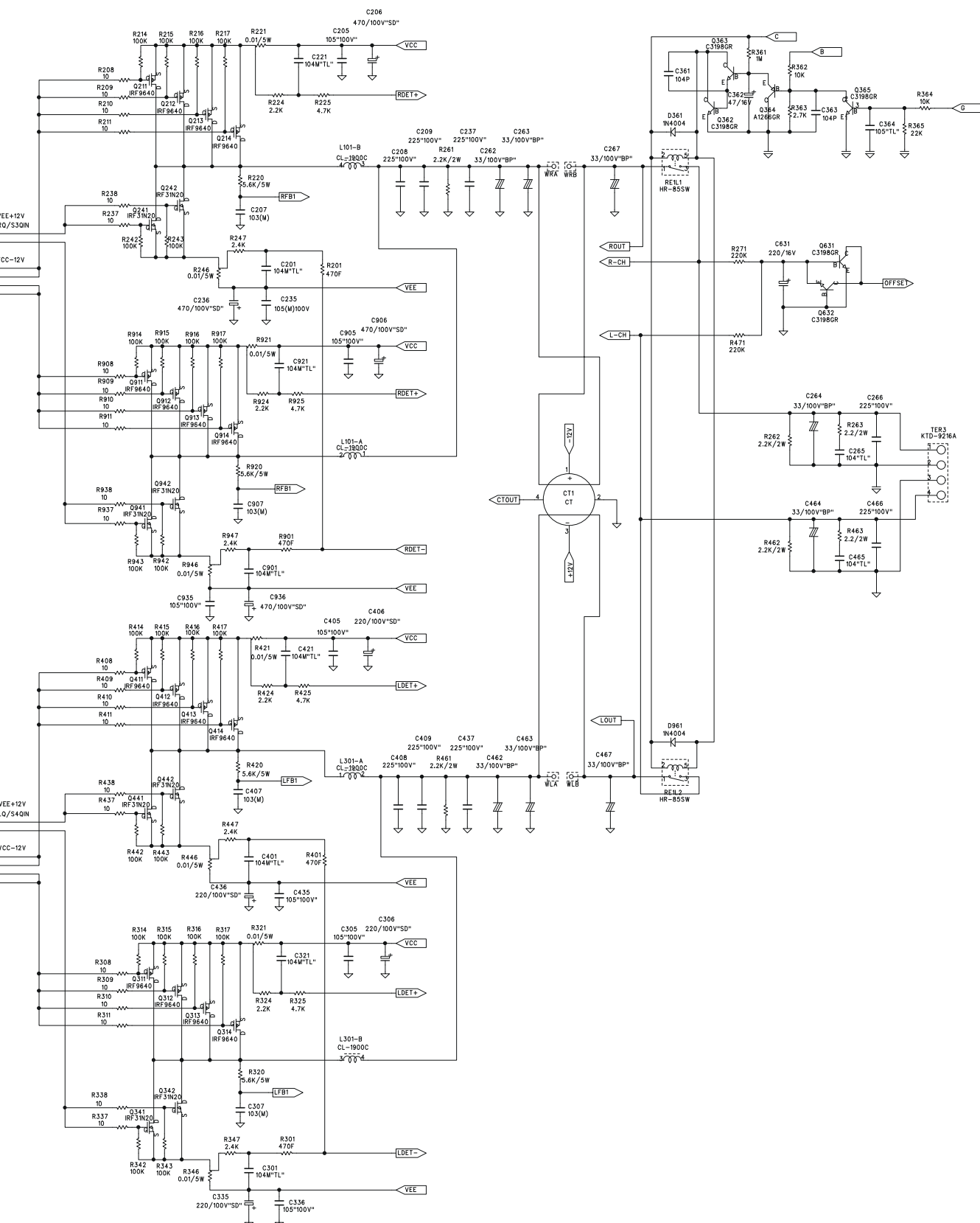
D

E

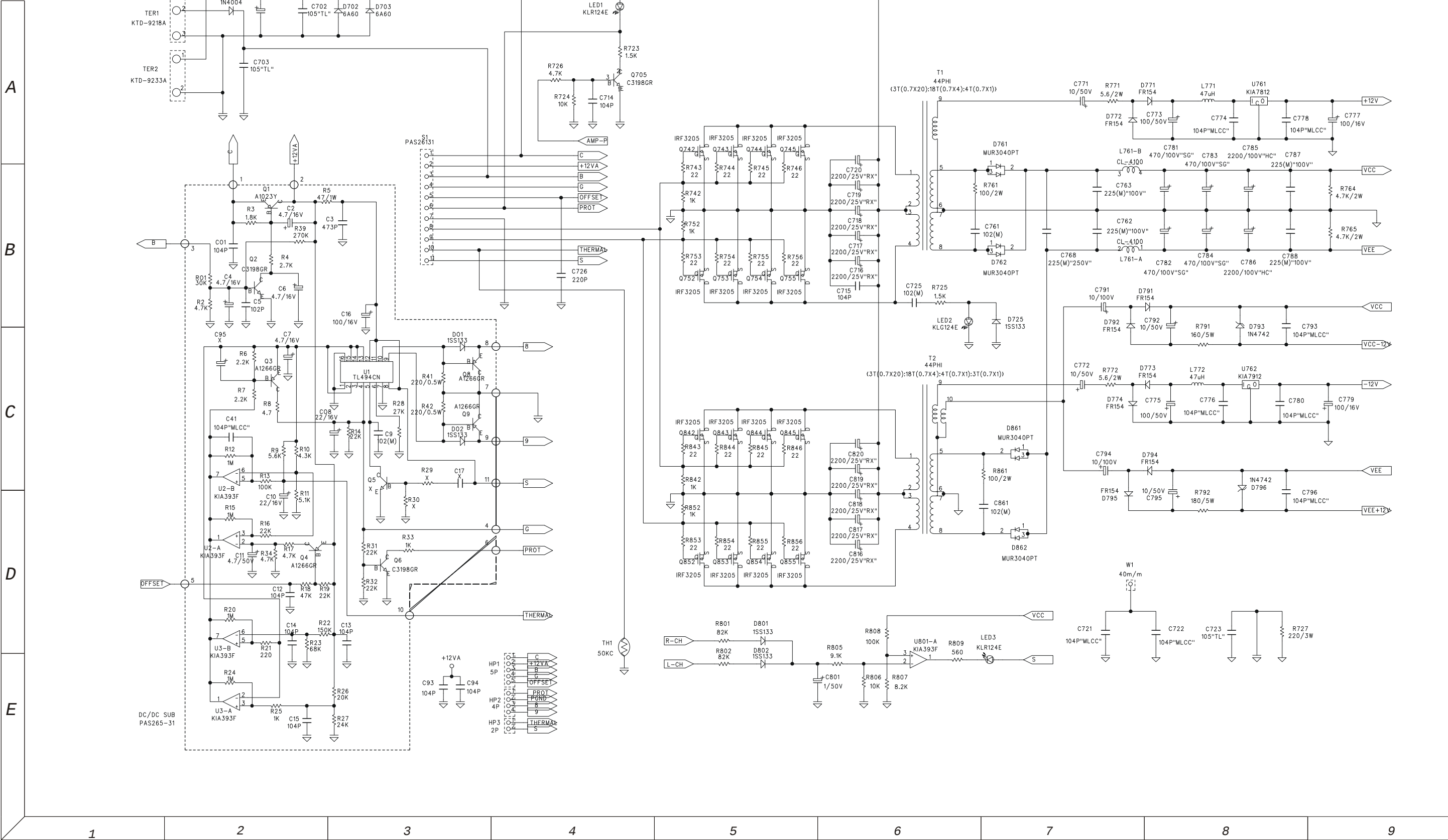
F

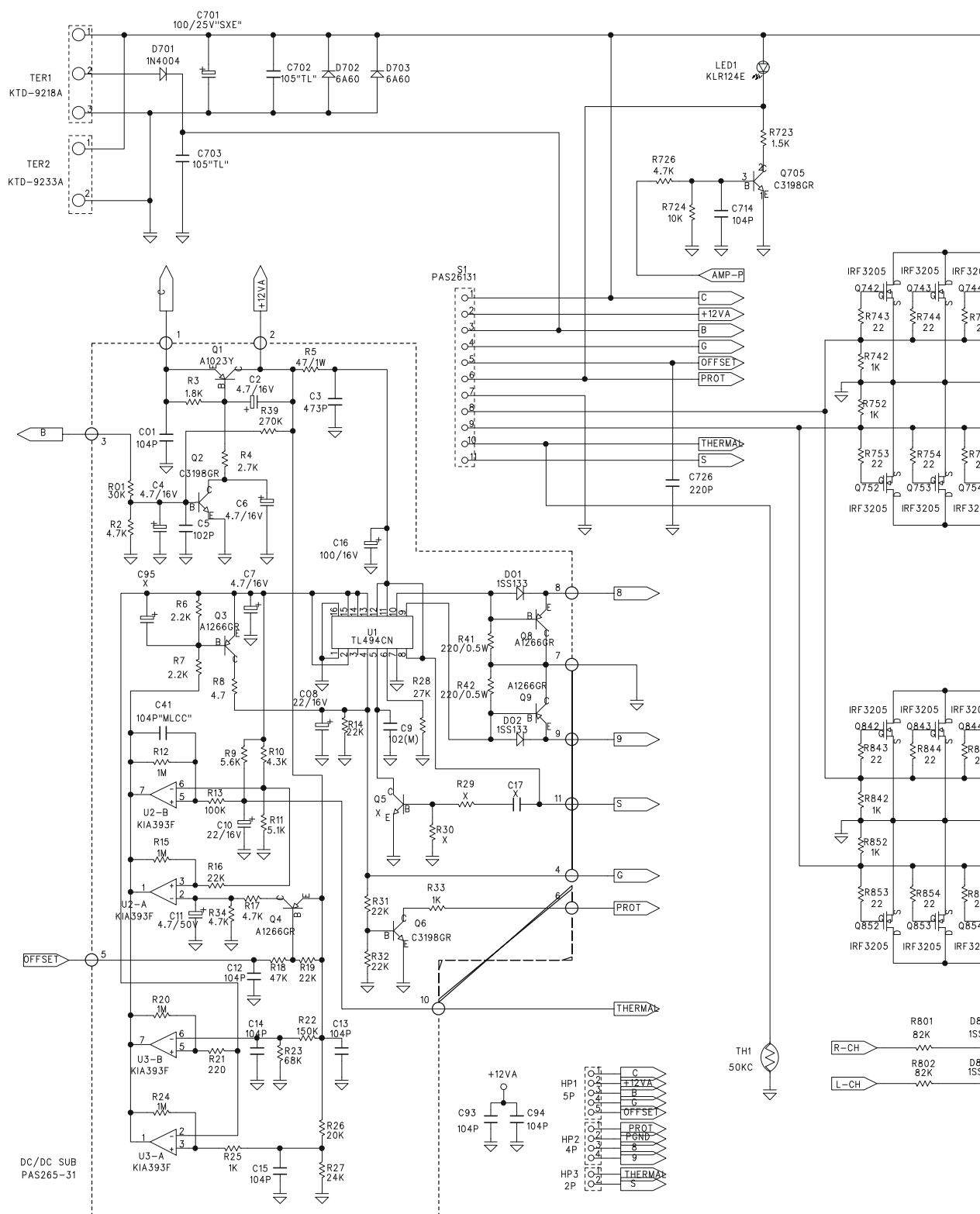
G

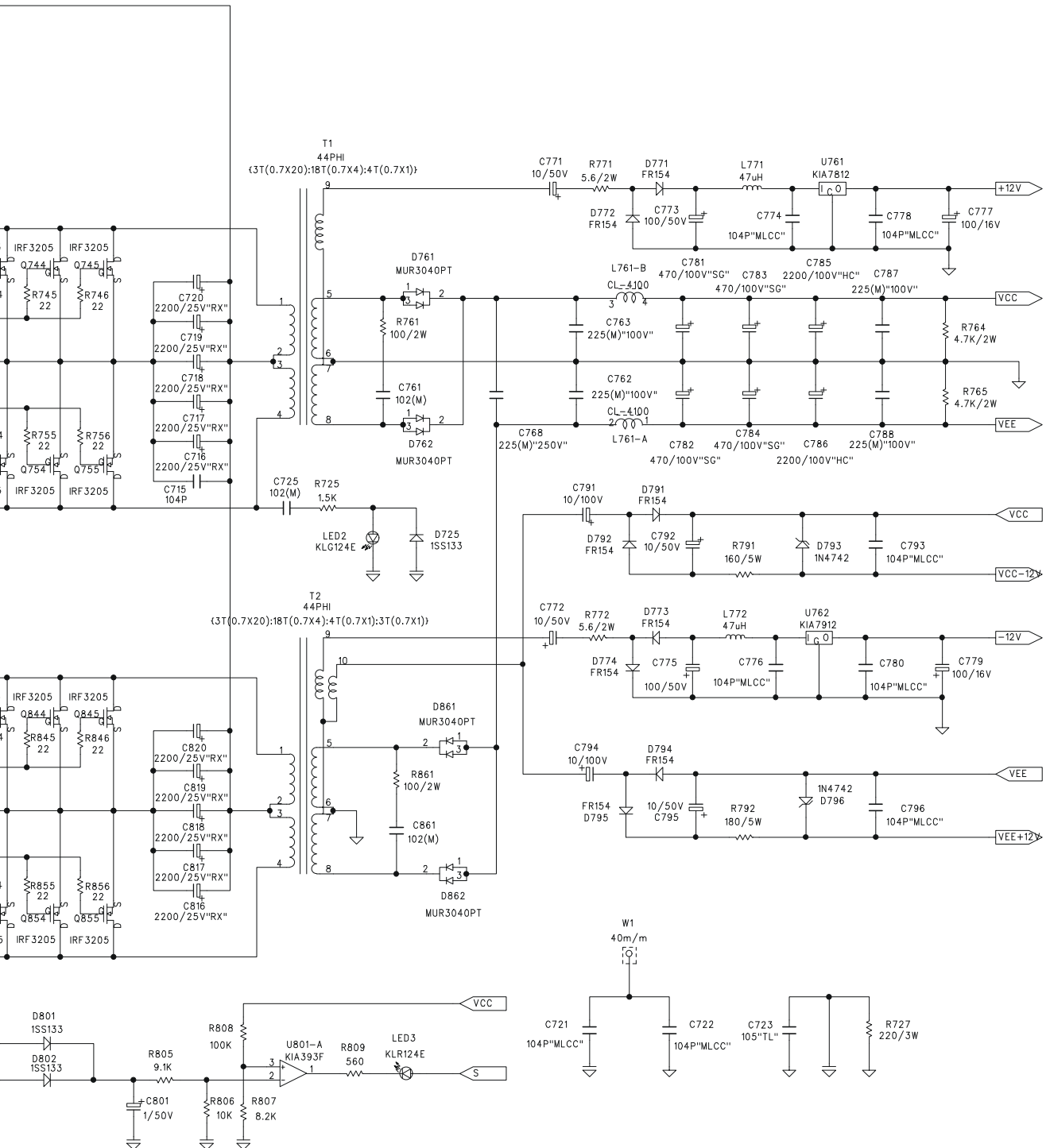




Power Amplifier (Sheet 2)







 BPX2200.1

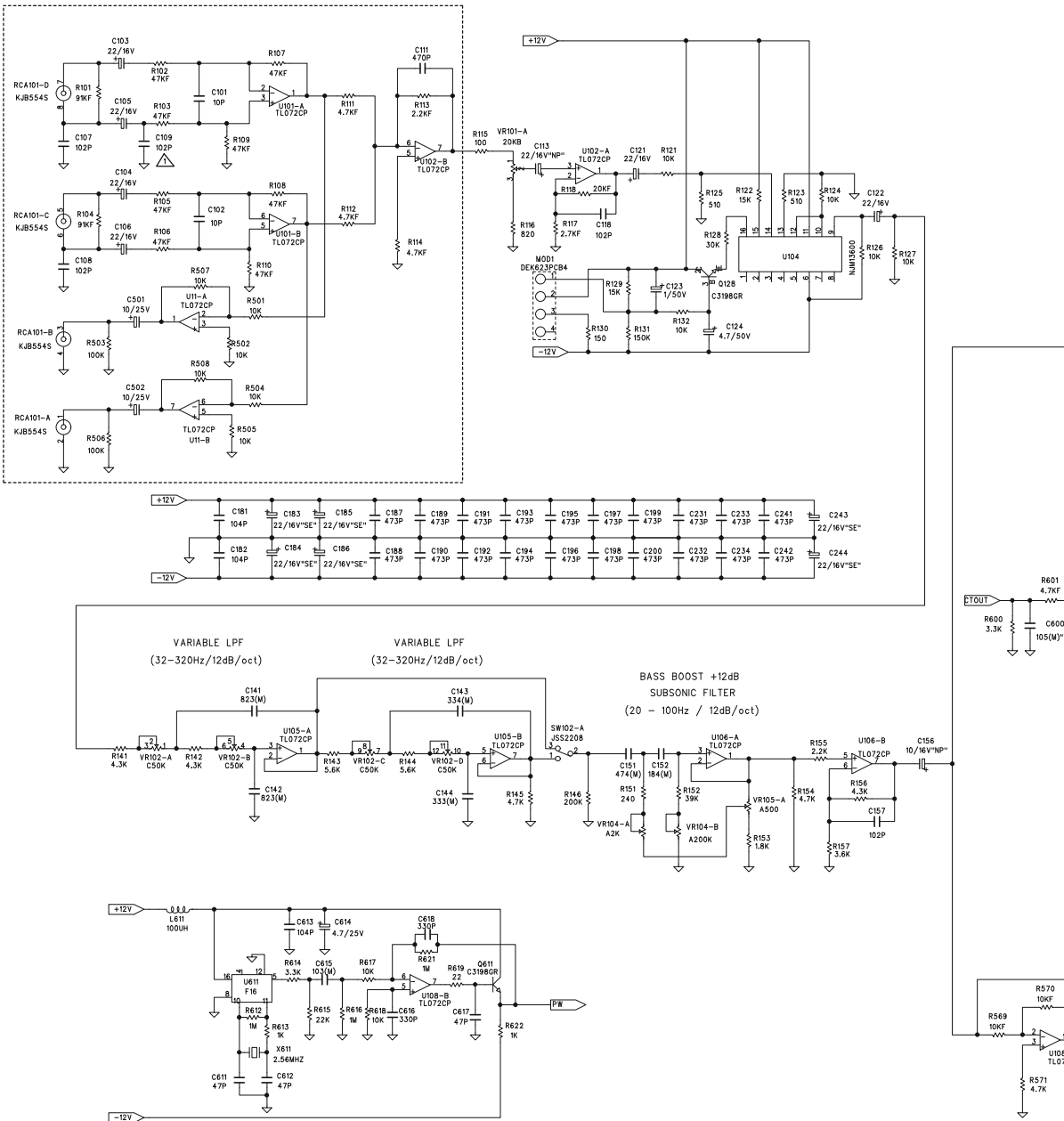
A

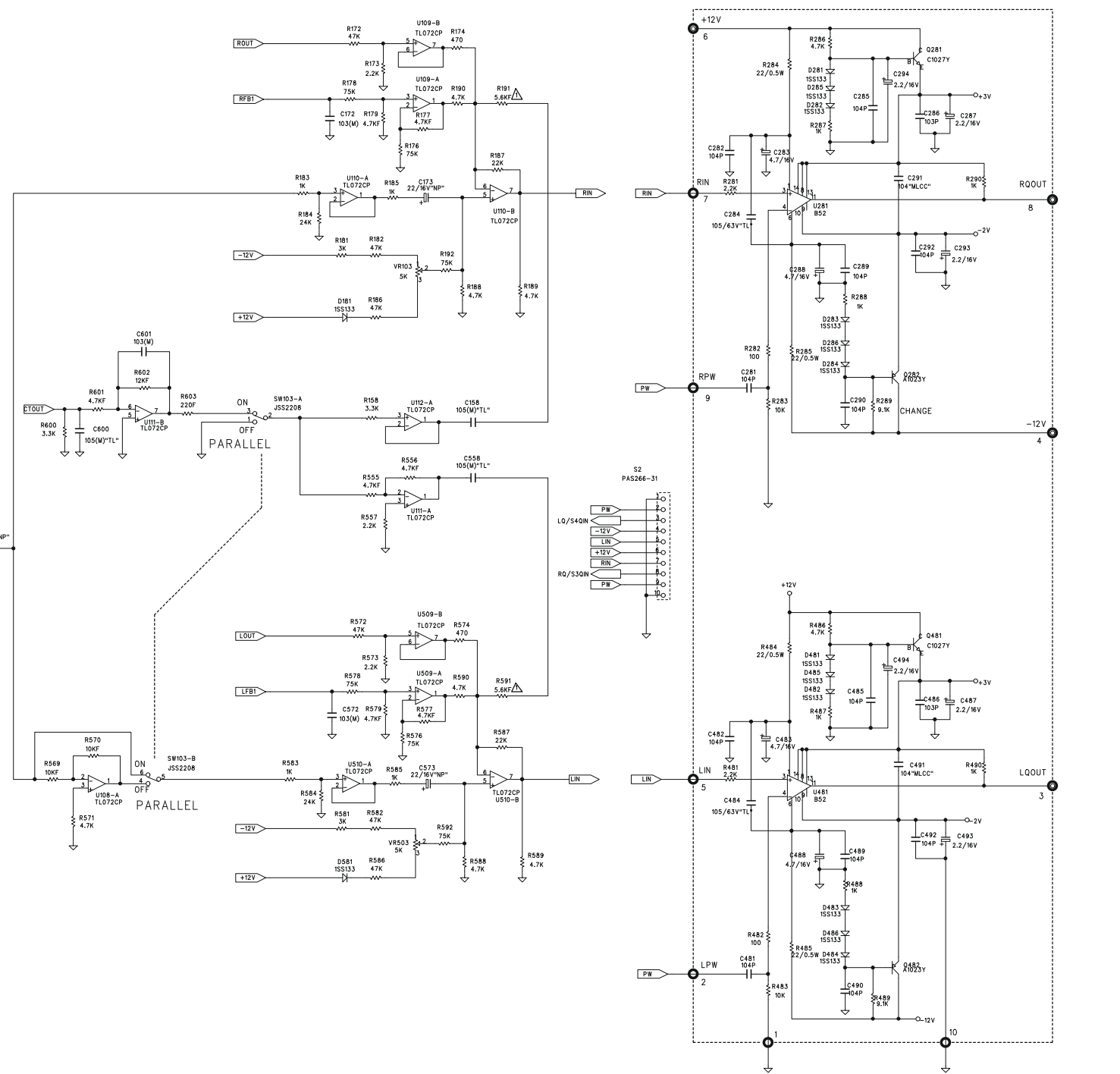
B

C

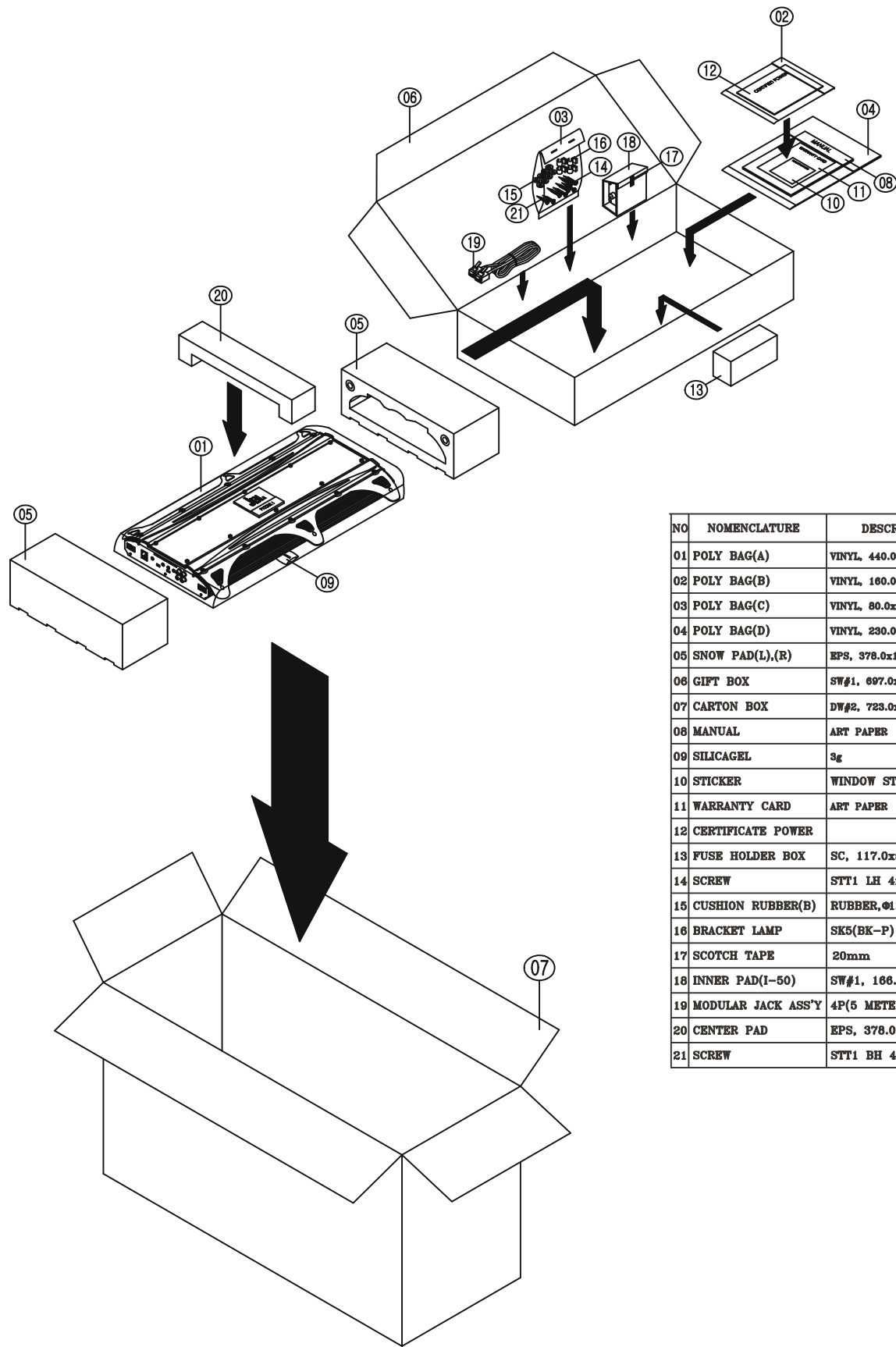
D

E





Packaging Exploded View



NO	NOMENCLATURE	DESCRIPTION	ERP CODE	Q'TY
01	POLY BAG(A)	VINYL, 440.0x760.0x0.1t	POL-31-162A0	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, 697.0x363.0x136.0	BOX-36-573AA	1
07	CARTON BOX	DW#2, 723.0x396.0x151.0	BOX-39-575BA	1
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	FUSE HOLDER BOX	SC, 117.0x58.0x42.0	BOX-00-001A0	1
14	SCREW	STT1 LH 4x25 BK	SC4-BL-40250	6
15	CUSHION RUBBER(B)	RUBBER, Ø12.0xØ5.0x2.0t	SUB-33-006A0	8
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	CENTER PAD	EPS, 378.0x80.0x131.0	INN-42-534A0	1
21	SCREW	STT1 BH 4x20 BK	SC4-BB-40200	2