



Reference Series

5760a

6 CHANNEL POWER AMPLIFIER

SERVICE MANUAL



Infinity Systems, Inc.
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Woodbury, New York 11797

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Reference 5760a Specifications

Output Power:	56W RMS x 4 and 107W RMS x 2 channels @ 4 ohms; ≤1% THD + N 80W RMS x 4 and 150W RMS x 2 channels @ 2 ohms; ≤1% THD + N 148W RMS x 2 and 287W RMS x 1 channels @ 4 ohms; ≤1% THD + N
Signal-to-noise ratio:	82dBA (reference 1W into 4 ohms)
Dynamic power:	117W channels 1,2,3,4; 163W channels 5,6 @ 2 ohms
Effective damping factor:	6.373 @ 4 ohms
Frequency response:	10Hz – 57kHz channels 1,2,3,4; 10Hz – 302Hz channels 5,6
Maximum input signal:	6.3V
Maximum sensitivity:	250mV
DC Offset	<50mV (-50%)
Output regulation:	.063dB @ 4 ohms
Idle Current	2.1A
Input Impedance	22kΩ
Max Current Draw	34A @ 4 ohms 88A @ 2 ohms 89.5 @ 4 ohm bridged
Dimensions:	12 x 18 1/2 x 2 11/16" (L x W x D) (305mm x 470mm x 68mm)
Fuse:	2 x 30A

Infinity continually strives to update and improve existing products, as well as create new ones. The specifications and details in this and related JBL publications are therefore subject to change without notice.

Features

- 4-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-A6 Voltage Amplification
- Gold-plated Power, Input and Output Connectors
- 2-Ohm Stable (Stereo)

Test Conditions and Notes

- All tests to be done, unless otherwise specified, from 10Hz to 47KHz and 302Hz at 14.4V DC into 4 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 4 ohm resistive loads having less than 10% reactive components at any frequency below 47KHz and 302Hz. Each resistor shall have a value that remains within 1 % while dissipating the rated output of the unit under test.
- Power Indicator Green LED steadily illuminates for normal operation. Illuminates up Red LED blinks when protection circuitry is engaged, and during power up.

POWER CONNECTIONS

The Reference amplifiers are capable of delivering high power levels, and require a reliable connection to the vehicle's electrical system in order to perform optimally. See Figure 1 for connection location. Please adhere to the following instructions carefully.

GROUND CONNECTION

Connect the amplifier's Ground (GND) terminal to a solid point on the vehicle's metal chassis, as close to the amplifier as possible. Refer to the chart below to determine minimum wire-gauge size. Sand away any paint from this location; use a star-type-lock washer to secure the connection.

POWER CONNECTION

Connect a wire (see chart at right for appropriate gauge) directly to the vehicle's positive battery terminal, and install an appropriate fuse holder within 18" of the battery terminal. Do not install the fuse at this time. Route the wire to the amplifier's location, and connect it to the amplifier's positive (+12V) terminal. Be sure to use appropriate grommets whenever routing wires through the firewall or other sheet metal. Failure to adequately protect the positive wire from potential damage may result in a vehicle fire. When you are done routing and connecting this wire to the battery and to the amplifier, you may install the fuse at the battery. The fuse value should be selected based on total amplifier-current draw; see chart at right.

REMOTE CONNECTION

Connect the amplifier's Remote (REMOTE) terminal to the source unit's Remote Turn-On lead using a minimum of 18-gauge wire. If your source unit does not have a remote turn-on connection, connect the amplifier's (REMOTE) terminal to the vehicle's accessory circuit.

WIRE-GAUGE CHART

Amplifier Model	Maximum Current Draw	Minimum Wire Gauge
7520a	34A	#8 AWG
7540a	85A	#8 AWG
5760a	87A	#8 AWG
310a	40A	#8 AWG
610a	69A	#6 AWG
1210a	115A	#4 AWG

These recommendations assume 7' - 10' wire runs. If your installation differs markedly, you will need to adjust the wire gauge accordingly.

SPEAKER CONNECTIONS

Refer to the application guides on the pages that follow. Speaker connections should be made using a minimum of 16-gauge wire.

HIGH-LEVEL INPUT CONNECTIONS

The 7520a, 7540a and 5760a amplifiers are equipped with speaker-level inputs that allow you to add an amplifier to head units that do not have RCA line outputs. The speaker outputs for the source unit should be connected to the amplifier using the supplied connector (square four-wire plug). Remember to check for proper polarity. The 310a, 610a and 1210a amplifiers are not equipped with high-level inputs.

NOTE: When using the low-level or high-level inputs, the AUX outputs can be used to pass a full-range line-level signal to another amplifier.

Figure 2. Speaker-level connector.

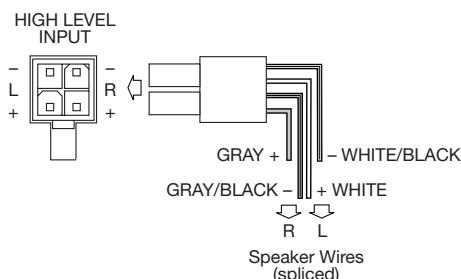
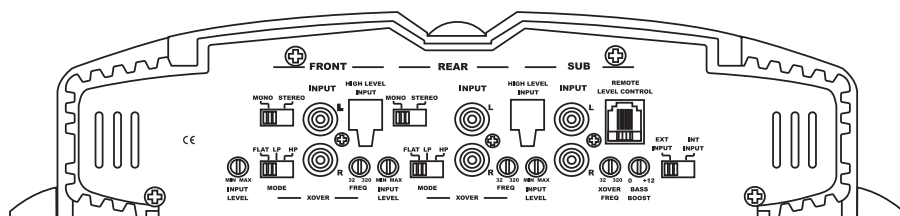


Figure 1. Terminal-connection end plate.



APPLICATIONS – 5760a

The 5760a can be configured for 6-channel, 5-channel or 3-channel operation, as shown in Figures 10 through 12.

INPUT MODE SWITCH:

- Use INT (internal mode) to send a signal from the front and rear inputs to the subwoofer.
- Use EXT (external mode) when sending a dedicated signal to the subwoofer inputs; e.g., if your source unit has a subwoofer output.

NOTE: For simplicity, Figures 10 through 12 do not show power, remote and input connections.

NOTE: Minimum speaker impedance for stereo operation is 2 ohms. Minimum speaker impedance for bridged operation is 4 ohms.

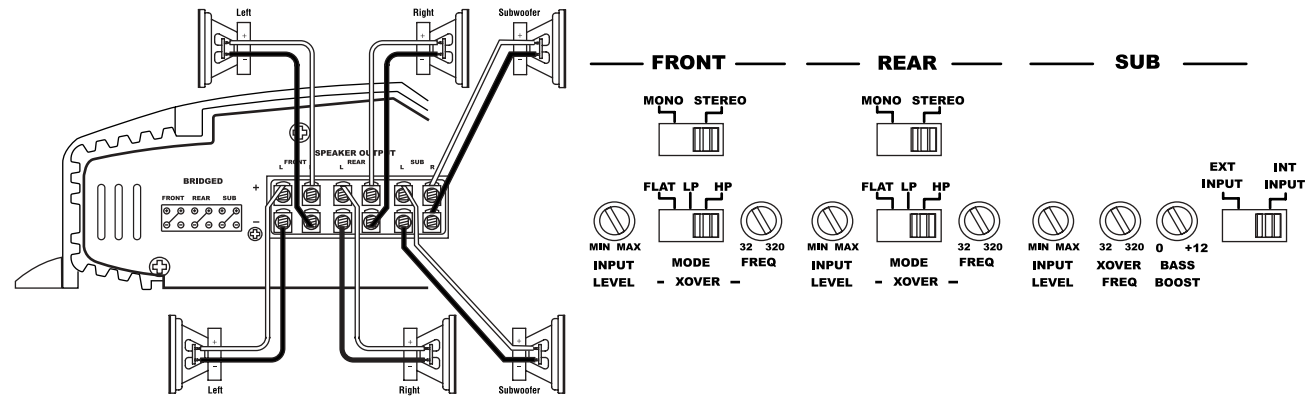


Figure 10. 6-Channel operation: 5760a amplifier driving full-range front and rear speakers and a pair of subwoofers.

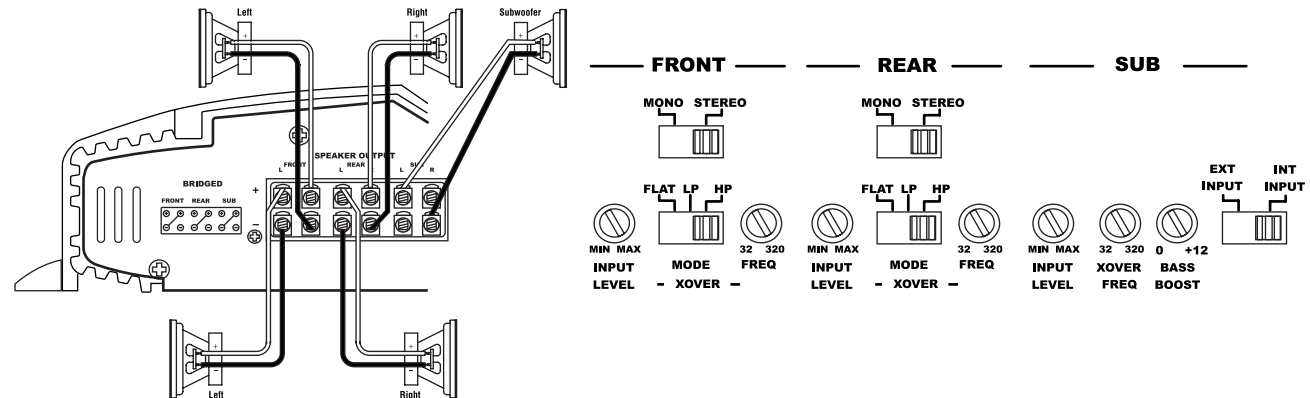


Figure 11. 5-Channel operation: The same as Figure 10, with the subwoofer output bridged to drive a single 4-ohm subwoofer, providing the speaker with more power.

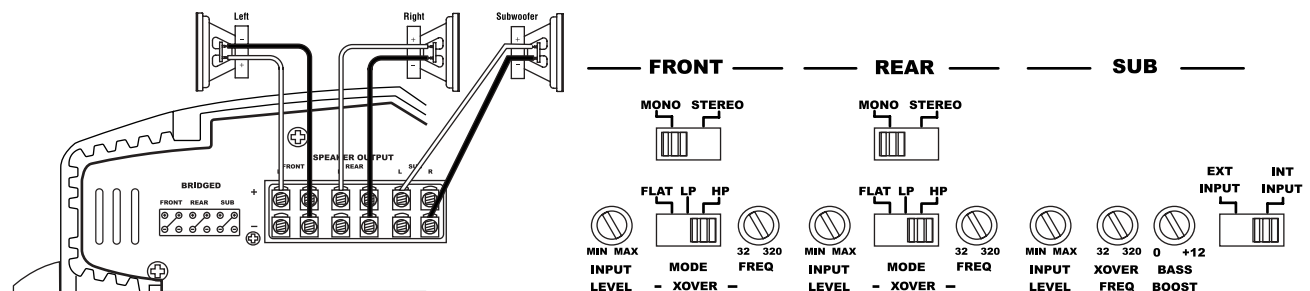


Figure 12. 3-Channel operation: 5760a amplifier configured for 3-channel operation, where all of the channels are bridged for a subwoofer and a pair of component speakers.

INSTALLATION AND SETUP

SETTING THE CROSSOVER(S)

Determine your system plans and set the crossover-mode switch accordingly. If your system design does not include a subwoofer, set the crossover mode to FLAT and skip to "Setting Input Sensitivity."

MODE SWITCH

Flat: Allows a full-range signal through to the speakers; can be used with larger full-range speakers such as 6" x 9"s.

HP: Allows a high-pass signal through to the speakers; should be used with most loudspeakers (can protect your full-range speakers from being overdriven with low frequencies, one cause of speaker damage).

LP: Allows bass to pass through to the speakers; should be selected when powering subwoofers.

Initially set the crossover-frequency control midway. While listening to music, adjust the crossover for the least perceived distortion from the speakers, allowing them to reproduce as much bass as possible.

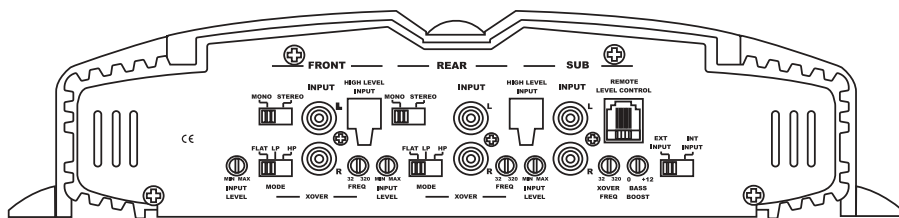
Systems using a separate subwoofer set the crossover mode to HP (high pass) for your full-range speakers. Adjust the crossover frequency to limit bass, and provide increased system volume with less distortion.

For subwoofers, choose the highest frequency that removes vocal information from the sound of the subwoofer.

If using the 7520a or 7540a to drive a subwoofer(s), set the crossover mode to LP (low pass).

NOTE: The 310a, 610a, 1210a and the subwoofer output of the 5760a are low-pass only and do not have a crossover-mode switch.

Figure 13. Control end panel.



5760a

SETTING INPUT SENSITIVITY

1. Initially turn the INPUT LEVEL control(s) to minimum (counterclockwise).
2. Reconnect the (–) negative lead to the vehicle's battery. Apply power to the audio system and play a dynamic music track.
3. On the source unit, increase the volume control to 3/4 volume. Slowly increase the INPUT LEVEL control(s) toward three o'clock until you hear slight distortion in the music. Then reduce the INPUT LEVEL slightly until distortion is no longer heard.

NOTE: After the source unit is on, blue LEDs (on the top panel) will light, indicating the amplifier is on. If not, check the wiring, especially the remote connection from the source unit. Also refer to "Troubleshooting" on the page 7.

REMOTE LEVEL CONTROL (OPTIONAL)

All three Reference subwoofer amplifiers and the 5760a amplifier have inputs for an optional remote level control (100rc). This will allow the subwoofer level to be adjusted from the listening position. Connect the optional remote level control using the RJ-11 jack on the side of the amplifier. Install the control module in the front of the vehicle within easy reach of the driver. Both the underside of the dash and the center console are suitable locations. Refer to the mounting instructions accompanying the 100rc.

SETTING THE BASS BOOST

The 7520a, 7540a and 5760a are all equipped with a bass-boost control. This allows you to enhance the bass output of your system at 50Hz up to 12dB.

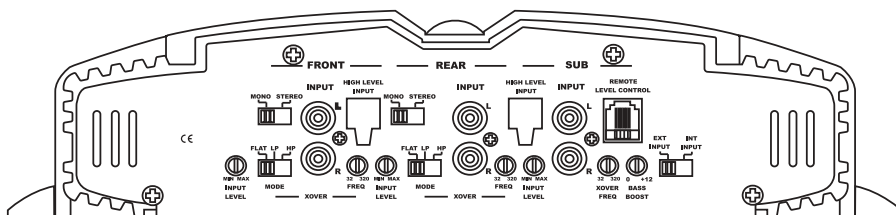
NOTE: Only rear channels of the 7540a are affected by the bass boost control.

AUX OUTPUT

Reference amplifiers (except 5760a) are equipped with full-range outputs that can be used to connect additional amplifiers.

NOTE: When using the low- or high-level inputs, the AUX outputs can be used to pass a full-range line-level signal to another amplifier.

Figure 13. Control end panel.



5760a

INSTALLATION AND SETUP (CONT.)

SETTING DBO™ (310a, 610a and 1210a)

The Dynamic Bass Optimizer (DBO) is used to enhance low-frequency reproduction in a vehicle. Conventional bass-boost circuits only increase bass at a fixed frequency, and cause the amplifier to consume considerable power. The DBO allows you to adjust the frequency (20Hz – 80Hz) as well as the boost level (up to 12dB; see Figure 14), allowing you to fine-tune the bass in your system to optimize performance.

For sealed enclosures, the DBO can be used to enhance the lower bass region of sealed enclosures.

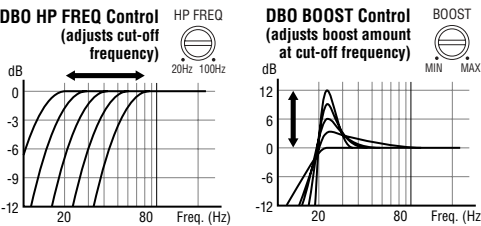
For bigger/fuller bass, adjust the HP FREQ between 35Hz and 45Hz; adjust the BOOST control according to your preference.

For tighter-sounding bass, adjust the HP FREQ between 45Hz and 55Hz; adjust the BOOST control according to your preference.

For vented enclosures, the DBO should be used as a subsonic filter to reduce overexcursion of the woofers. Set the HP FREQ control 10Hz below the tuning frequency of the enclosure (e.g., 25Hz for a box tuning of 35Hz); adjust the BOOST control to taste. This will conserve amplifier power typically wasted on frequencies below the tuned frequency of the enclosure.

For infinite-baffle applications, set the HP FREQ to the speaker's Fs value (reducing overexcursion of the woofer); adjust the Boost control to taste.

Figure 14. Frequency-response curves show typical DBO control ranges.



STATUS LEDs

Clip: Indicates the amplifier is being overdriven, and your speakers may be in danger. This should blink only on musical peaks, and not be on constantly.

Power: Indicates the amplifier is on.

Protection: Refer to "Troubleshooting" for specific indications.

Figure 15. LED status.

Clip	Power	Protect

TROUBLESHOOTING

- **PROBLEM:**

No audio (POWER LED is off).

CAUSE and SOLUTION:

No voltage at BATT+ and/or REM terminals, or bad or no ground connection. Check voltages at amplifier terminals with VOM.

- **PROBLEM:**

No audio (PROTECT LED flashes every 4 seconds).

CAUSE and SOLUTION:

DC voltage on amplifier output. Amplifier may need service; see enclosed warranty card for service information.

- **PROBLEM:**

No audio (PROTECT LED is on).

CAUSE and SOLUTION:

Amplifier is overheated. Make sure amplifier cooling is not blocked at mounting location; verify that speaker-system impedance is within specified limits.

- **PROBLEM:**

No audio (PROTECT and POWER LEDs flash).

CAUSE and SOLUTION:

Voltage less than 9V on BATT+ connection. Check vehicle charging system.

- **PROBLEM:**

No audio (PROTECT LED is on).

CAUSE and SOLUTION:

Voltage greater than 16V or less than 8.5V on BATT+ connection. Check vehicle charging system.

- **PROBLEM:**

Distorted audio.

CAUSE and SOLUTION:

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.

- **PROBLEM:**

Distorted audio (PROTECT LED flashes).

CAUSE and SOLUTION:

Short circuit in speaker or wire. Remove speaker leads one at a time to locate shorted speaker or wire, then repair.

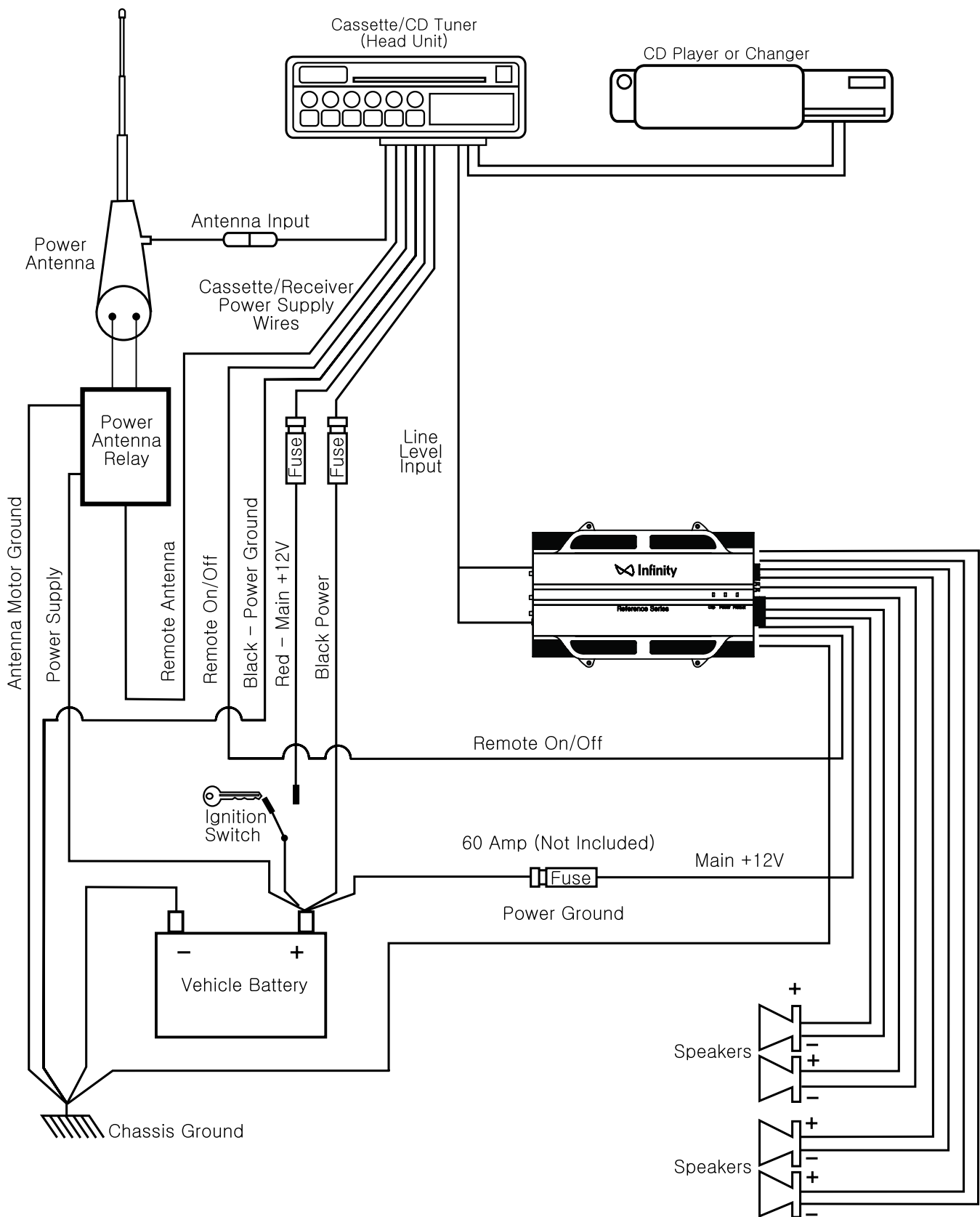
- **PROBLEM:**

Music lacks "punch."

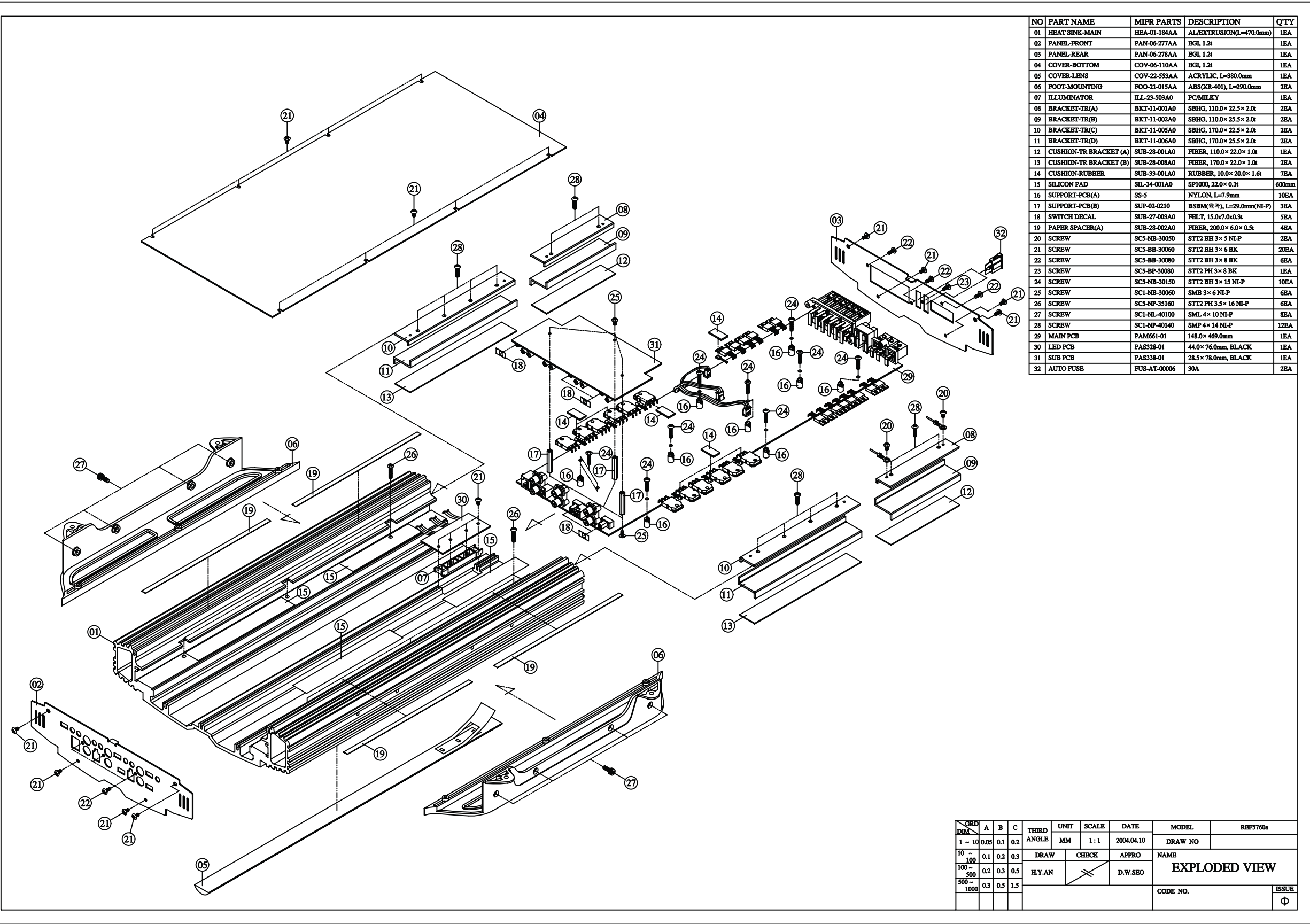
CAUSE and SOLUTION:

Speakers are not connected properly. Check speaker connections for proper polarity.

Typical System Configuration



Ref5760a Exploded View



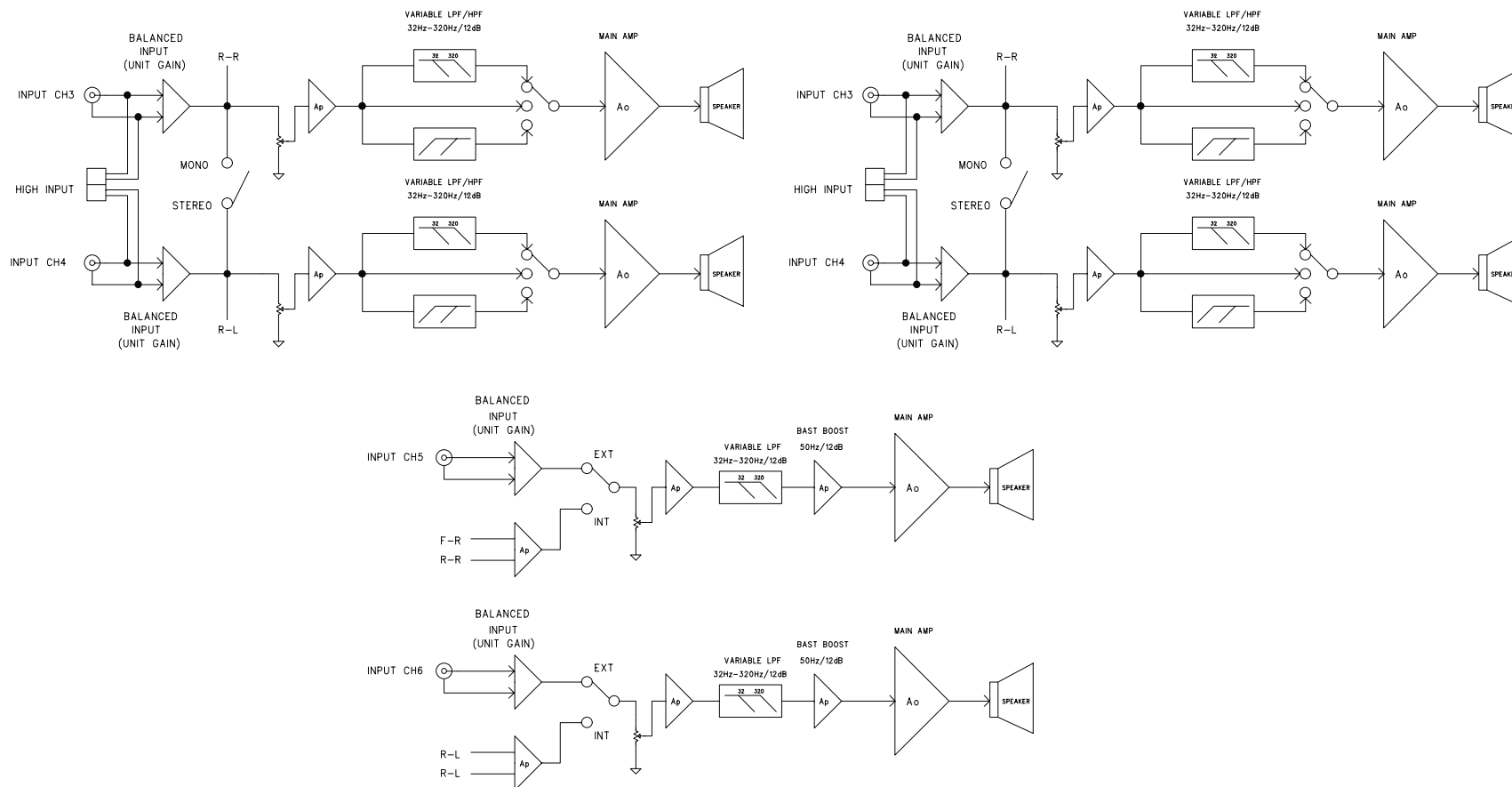
NO	PART NAME	MIFR PARTS	DESCRIPTION	QTY
01	HEAT SINK-MAIN	HEA-01-184AA	AL EXTRUSION(L=470.0mm)	1EA
02	PANEL-FRONT	PAN-06-277AA	BGI, 1.2t	1EA
03	PANEL-REAR	PAN-06-278AA	BGI, 1.2t	1EA
04	COVER-BOTTOM	COV-06-110AA	BGI, 1.2t	1EA
05	COVER-LENS	COV-22-553AA	ACRYLIC, L=380.0mm	1EA
06	FOOT-MOUNTING	FOO-21-015AA	ABS(XR-401), L=290.0mm	2EA
07	ILLUMINATOR	ILL-23-503A0	PC/MILKY	1EA
08	BRACKET-TR(A)	BKT-11-001A0	SBHG, 110.0×22.5×2.0t	2EA
09	BRACKET-TR(B)	BKT-11-002A0	SBHG, 110.0×25.5×2.0t	2EA
10	BRACKET-TR(C)	BKT-11-005A0	SBHG, 170.0×22.5×2.0t	2EA
11	BRACKET-TR(D)	BKT-11-006A0	SBHG, 170.0×25.5×2.0t	2EA
12	CUSHION-TR BRACKET (A)	SUB-28-001A0	FIBER, 110.0×22.0×1.0t	1EA
13	CUSHION-TR BRACKET (B)	SUB-28-008A0	FIBER, 170.0×22.0×1.0t	2EA
14	CUSHION-RUBBER	SUB-33-001A0	RUBBER, 10.0×20.0×1.6t	7EA
15	SILICON PAD	SIL-34-001A0	SP1000, 22.0×0.3t	600mm
16	SUPPORT-PCB(A)	SS-5	NYLON, L=7.9mm	10EA
17	SUPPORT-PCB(B)	SUP-02-0210	BSBM(Φ2), L=29.0mm(NI-P)	3EA
18	SWITCH DECAL	SUB-27-003A0	FELT, 15.0×7.0×0.3t	5EA
19	PAPER SPACER(A)	SUB-28-002A0	FIBER, 200.0×6.0×0.5t	4EA
20	SCREW	SCS-NB-30050	STT2 BH 3×5 NI-P	2EA
21	SCREW	SCS-BB-30060	STT2 BH 3×6 BK	20EA
22	SCREW	SCS-BB-30080	STT2 BH 3×8 BK	6EA
23	SCREW	SCS-BP-30080	STT2 PH 3×8 BK	1EA
24	SCREW	SCS-NB-30150	STT2 BH 3×15 NI-P	10EA
25	SCREW	SCI-NB-30060	SMB 3×6 NI-P	6EA
26	SCREW	SCS-NP-35160	STT2 PH 3.5×16 NI-P	6EA
27	SCREW	SCI-NL-40100	SML 4×10 NI-P	8EA
28	SCREW	SCI-NP-40140	SMP 4×14 NI-P	12EA
29	MAIN PCB	PAM661-01	148.0×469.0mm	1EA
30	LED PCB	PAS328-01	44.0×76.0mm, BLACK	1EA
31	SUB PCB	PAS338-01	28.5×78.0mm, BLACK	1EA
32	AUTO FUSE	FUS-AT-00006	30A	2EA

GRD	A	B	C	THIRD	UNIT	SCALE	DATE	MODEL	REF5760a
DIM	1 ~ 10	0.05	0.1	0.2	MM	1 : 1	2004.04.10	DRAW NO	
	10 ~ 100	0.1	0.2	0.3	DRAW	CHECK	APPRO	NAME	
	100 ~ 500	0.2	0.3	0.5	H.Y.AN		D.W.SEO	EXPLODED VIEW	
	500 ~ 1000	0.3	0.5	1.5				CODE NO.	ISSUE
									Φ

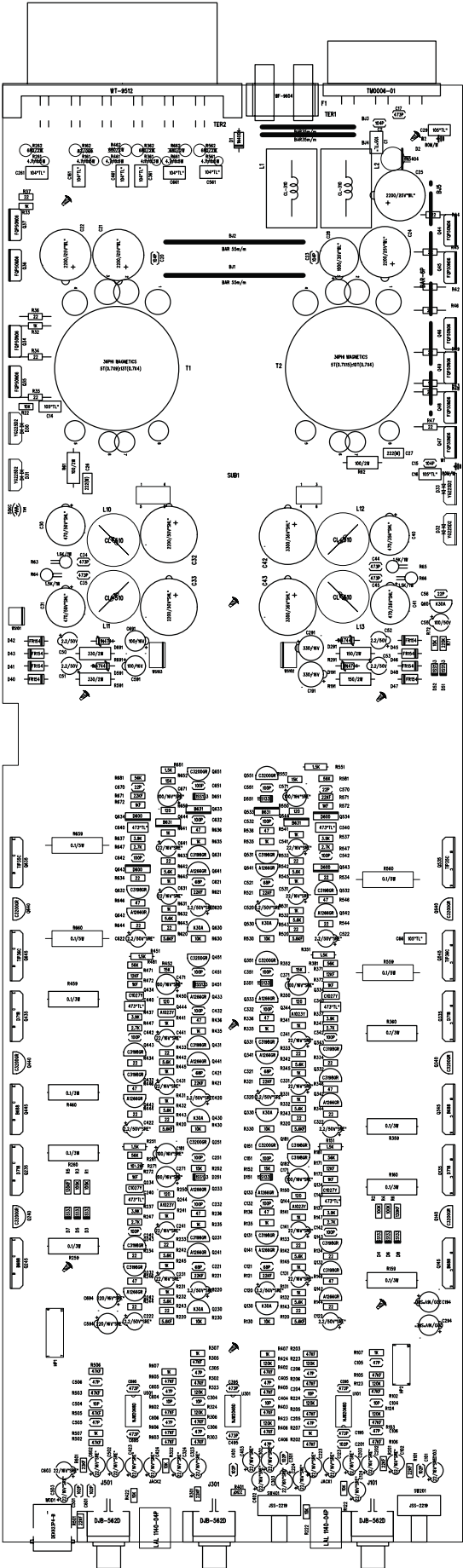
Ref5760a Parts List

PART NO.	NOMENCATURE	DESCRIPTION	MFR PARTS	Q'TY
HEA-01-184AA	HEAT SINK-MAIN	AL/EXTRUSION(L=470.0mm)	side:P432C sandton spray top:silver spray/silk screen	1
PAN-06-277AA	PANEL-FRONT	EGI, 1.2t	P432C Painting & silk screen	1
PAN-06-278AA	PANEL-REAR	EGI, 1.2t	P432C Painting & silk screen	1
COV-06-110AA	COVER-BOTTOM	EGI, 1.2t	P432C Painting	1
COV-22-553AA	cOVER-LENS	ACRYLIC,(L=470mm)	SILKSCREEN,DUAL TAPE	1
FOO-21-015AA	FOOT-MOUNTING	ABS(XR-401),L=380mm	SILVER SPRAY	2
ILL-23-503A0	ILLUMINATOR	PC/MILKY		1
BKT-11-001A0	BRACKET TR(A)	SBHG, 110.0x22.5x2.0t		2
BKT-11-002A0	BRACKET TR(B)	SBHG, 110.0x25.5x2.0t		2
BKT-11-005A0	BRACKET TR(C)	SBHG, 170.0x22.5x2.0t		2
BKT-11-006A0	BRACKET TR(D)	SBHG, 170.0x25.5x2.0t		2
SUB-28-001A0	CUSHION TR BRACKET(A)	FIBER, 110.0x22.0x1.0t		2
SUB-28-008A0	CUSHION TR BRACKET(B)	FIBER, 170.0x22.0x1.0t		2
SUB-33-001A0	CUSHION RUBBER	RUBBER, 10.0x20.0x1.6t		7
SIL-34-001A0	SILICON PAD	SP1000, 22.0x0.3t		600mm
SS-5	SUPPORT PCB(A)	NYLON, L=7.9mm		10
SUP-02-0210	SUPPORT-PCB(B)	BSBM, L=29.0mm(NI-P)	SUB PCB	3
SUB-27-003A0	SWITCH DECAL	FELT, 15.0x7.0x0.3t		5
SUB-28-002A0	PAPER SPACER(A)	FIBER, 200.0x6.0x0.5t	COVER-BOTTOM	4
SUB-28-519A0	PAPER SPACER(B)	FIBER, 200.0x8.0x0.5t	TR	1
SUB-28-503A0	PAPER SPACER(C)	FIBER, 200.0x10.0x0.5t	FET	1
SC5-NB-30050	SCREW	STT2 BH 3x5 NI-P	GROUND WIRE	1
SC5-BB-30060	SCREW	STT2 BH 3x6 BK	PANEL/S+H/S(8),SUB/P+ILLUMINATOR(2)	20
SC5-BB-30080	SCREW	STT2 BH 3x8 BK	SUB/P+H/S(2),C/B+H/S(8)	6
SC5-BP-30080	SCREW	STT2 PH 3x8 BK	RCA(3), TERMINAL(3)	1
SC5-NB-30150	SCREW	STT2 BH 3x15 NI-P	R/P + FUSE HOLDER	10
SC1-NB-30060	SCREW	SMB 3x6 NI-P	PCB + HEAT SINK	6
SC5-NP-35160	SCREW	STT2 PH 3.5x16 NI-P	SUB PCB	6
SC1-NL-40100	SCREW	SML 4x10 NI-P	FOOT/M+ H/SINK	8
SC1-NP-40140	SCREW	SMP 4x14 NI-P	FOOT/M + H/SINK	12
SC4-NO-40250	SCREW	STT1 OH 4x25 NI-P	BRACKET TR	4
POL-31-185A0	POLY BAG(A)	VINYL, 650.0x400.0x0.1t	ACCESSORY	1
POL-31-046A0	POLY BAG(B)	VINYL, 260.0x350.0x0.03t	SET	1
POL-31-003A0	POLY BAG(C)	VINYL, 120.0x120.0x0.03t	MANUAL	1
INN-42-010A0	SNOW PAD	EPS, 363.0x160.0x128.0	ACCESSORY	2
BOX-36-152AA	BOX-GIFT	SW#1(B), 620.0x368.0x133.0		1
BOX-39-163AA	BOX-CARTON	DW#2, 635.0x286.0x393.0	CLS-AM-4073	1/2
MAN-01-0197A	MANUAL	ART PAPER		1
SUB-00-001A0	SILICAGEL	3g		1
SUB-00-002A0	SCOTCH TAPE	WIDTH : 20mm		20cm
SUB-00-026A0	OPP TAPE	WHITE		3.6m
CAR-WA-0038A	WARRANTY CARD	ART PAPER		1
LAB-MD-0001A	STICKER	WHITE/BLACK		1
LAB-QC-0001A	QC STICKER	GOLD/BLACK		1
LAB-CE-0004A	CE STICKER	BLACK/WHITE		1
LAB-00-0427A	WINDOW STICKER	"INFINITY" LOGO		1
LAB-SR-0065A	SERIAL NO STICKER	WHITE/BLACK	"CODE 39" -> G/BOX, C/BOX, SET	3
LAB-SR-0066A	SERIAL NO STICKER	WHITE/BLACK	H/SINK	1
LAB-00-0424A	E-MARK STICKER	WHITE/BLACK		1
CAR-00-0061A	QUICK START GUIDE	ART PAPER		1

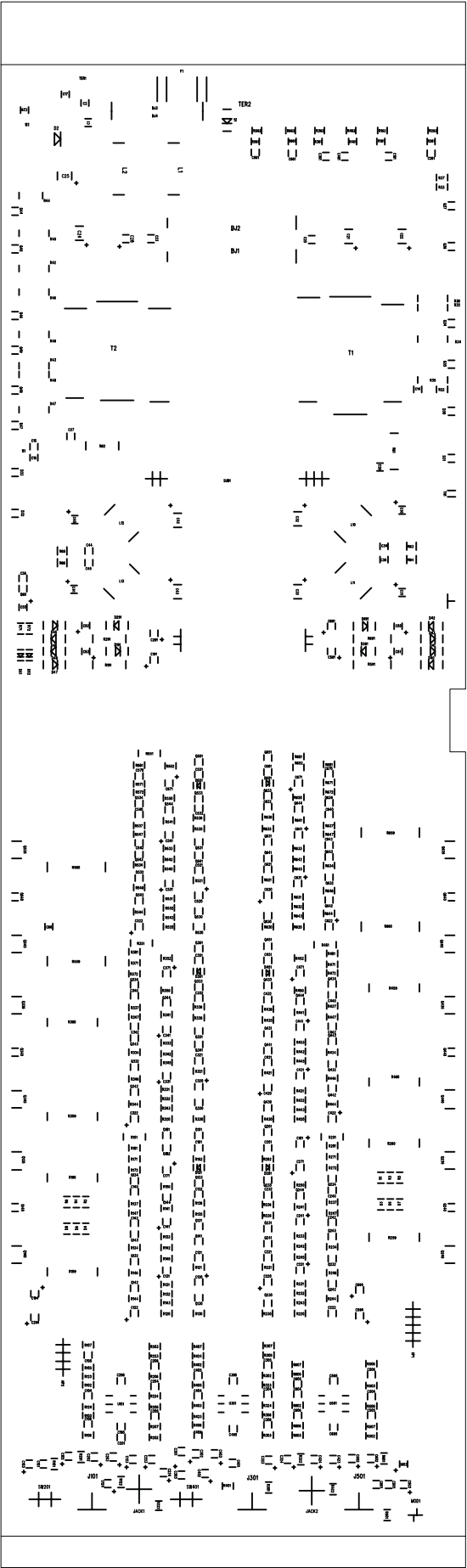
Ref5760a BLOCK DIAGRAM



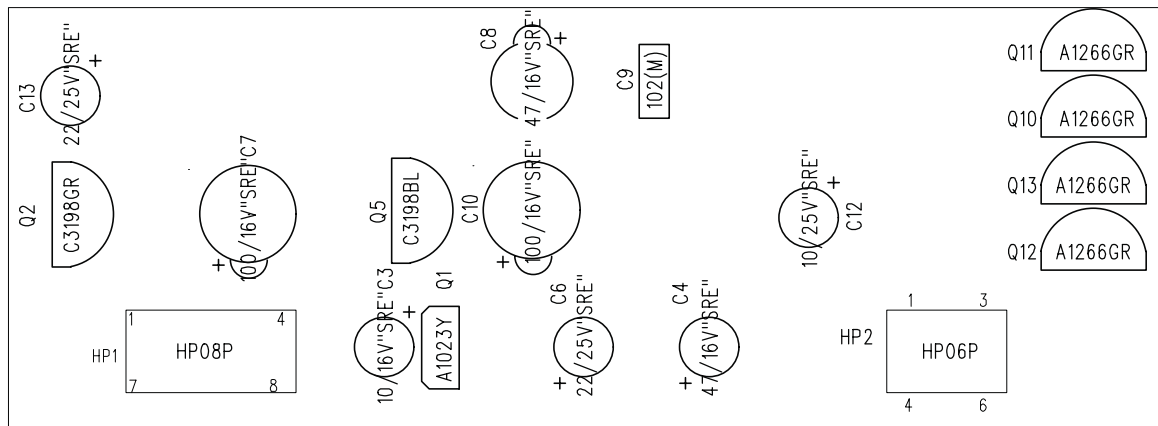
Printed Circuit Board (Top View)



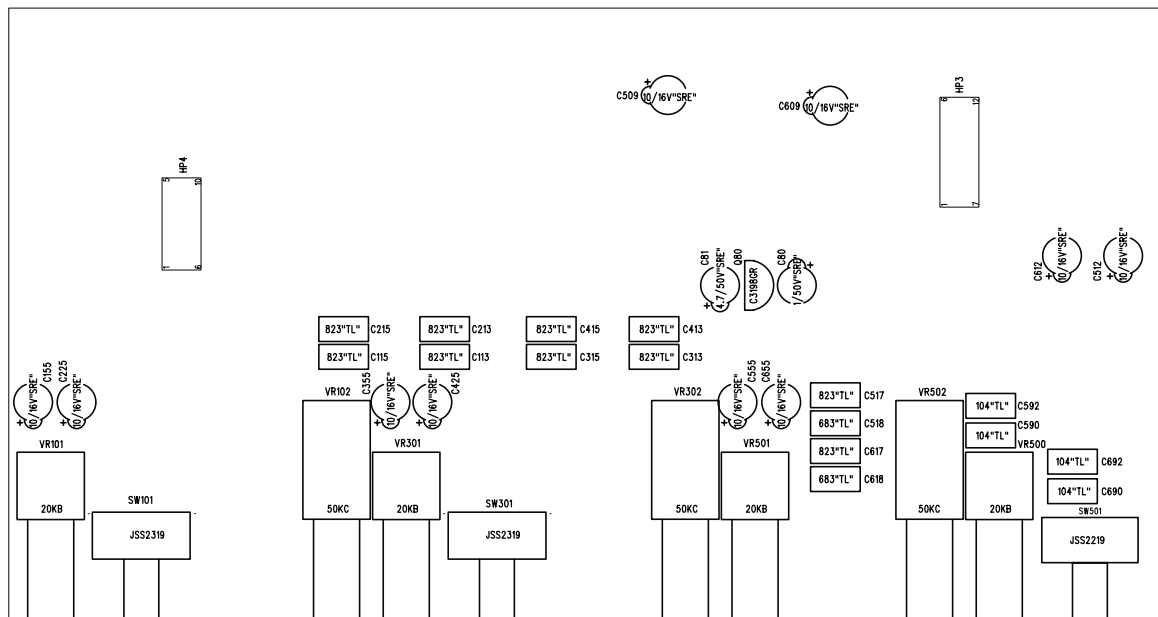
Printed Circuit Board (BOTTOM View)



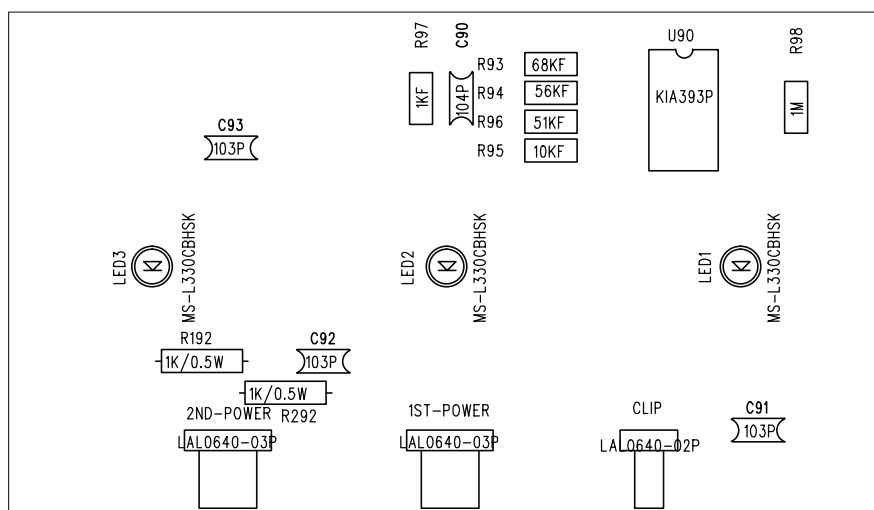
PAS338-01



PAS327-01

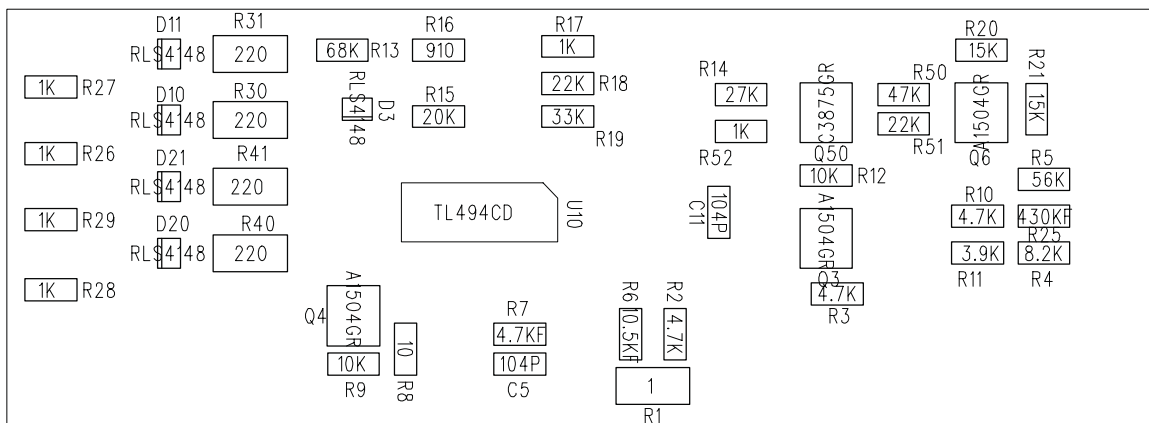


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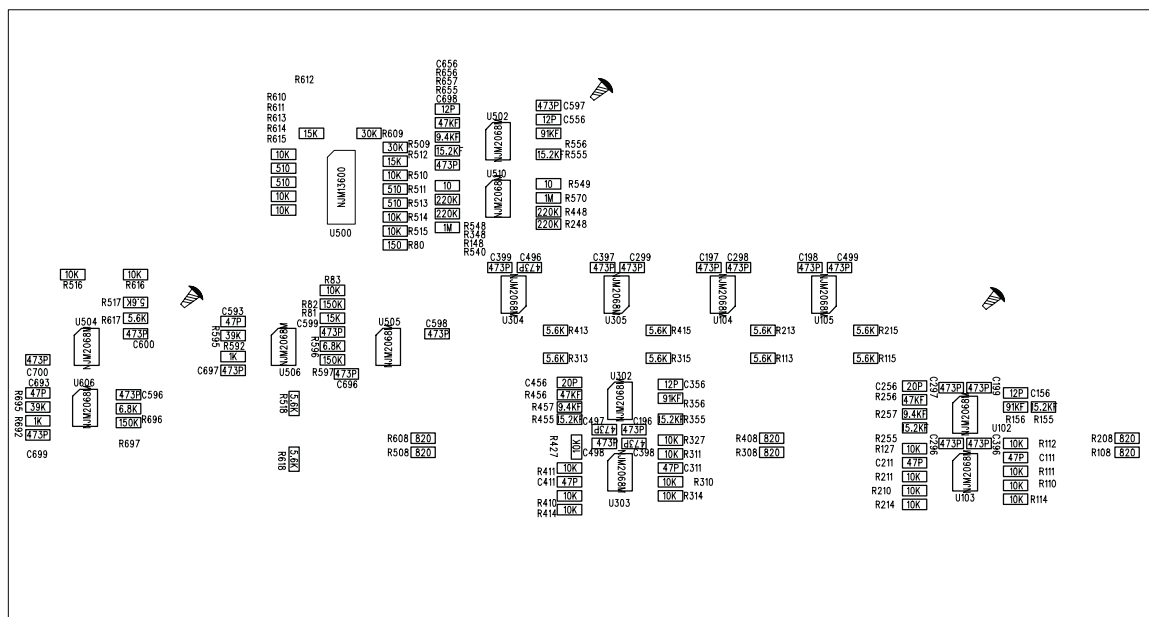


Printed Circuit Board (BOTTOM View)

PAS338-01



PAS327-01



Ref5760a Parts List

PART NO.	NOMENCATURE	DESCRIPTION	MFR PARTS	REF. NO	Q'TY
TRS-00-00073	F.E.T	J-FET, N-CH	KTK30AGR	Q60,130,230,330,430,530,630	7
TRS-00-00088	TRANSISTOR	SMALL SIGNAL NPN "TO-92L"	KTC1027Y	Q134,234,334,434	4
TRS-00-00087	TRANSISTOR	SMALL SIGNAL PNP "TO-92L"	KTA1023Y	Q144,244,344,444	4
TRS-00-00111	TRANSISTOR	SMALL SIGNAL NPN "TO-92"	KTC3200GR	Q151,251,351,451,551,651	6
TRS-00-00110	TRANSISTOR	SMALL SIGNAL NPN "TO-92"	KTC3198GR	Q131,132,143,181,182,231,232,243,331,332 Q343,431,432,443,531,532,631,632	18
TRS-00-00090	TRANSISTOR	SMALL SIGNAL PNP "TO-92"	KTA1266GR	Q133,141,142,233,241,242,333,341,342,433 Q441,442,541,542,641,642	16
DIO-00-00006	DIODE	SWITCHING SIGNAL	1SS133(1N4148)	D3,4,5,6,7,8,51,52,151,251 D351,451,551,651	14
DIO-00-00003	DIODE	RECTIFIER	1N4004	D1	1
DIO-00-00020	DIODE	ZENNER 15V 1W	1N4744	D191,291,591,691	4
DIO-00-00108	DIODE	FAST RECOVERY	FR154	D40,41,42,43,45,46,47,48	8
RES-00-00437	RESISTOR	METAL FILM 1/5WF	1K OHM	R172,272,372,472,572,672	6
RES-00-00545	RESISTOR	METAL FILM 1/5WF	5.6K OHM	R120,220,320,420,520,620	6
RES-00-00415	RESISTOR	METAL FILM 1/5WF	12K OHM	R171,271,371,471	4
RES-00-00467	RESISTOR	METAL FILM 1/5WF	22K OHM	R101,121,201,221,301,321,401,421,501,521 R571,601,621,671	14
RES-00-00537	RESISTOR	METAL FILM 1/5WF	47K OHM	R102,103,105,106,202,203,205,206,302,303 R305,306,402,403,405,406,502,503,505,506 R602,603,605,606	24
RES-00-00418	RESISTOR	METAL FILM 1/5WF	130K OHM	R5,6	2
RES-00-00660	RESISTOR	CARBON FILM 1/5WJ	22 OHM	R34,35,36,37,44,45,46,47,48,49 R133,134,143,144,233,234,243,244,333,334 R343,344,433,434,443,444,533,534,543,544 R633,634,643,644	34
RES-00-00716	RESISTOR	CARBON FILM 1/5WJ	47 OHM	R136,146,236,246,336,346,436,446,536,546 R636,646	12
RES-00-00615	RESISTOR	CARBON FILM 1/5WJ	120 OHM	R150,250,350,450,550,650	6
RES-00-00633	RESISTOR	CARBON FILM 1/5WJ	1K OHM	R32,33,42,43,107,131,135,141,145,207 R231,235,241,245,307,331,335,341,345,407 R431,435,441,445,507,531,535,541,545,607 R631,635,641,645	34
RES-00-00598	RESISTOR	CARBON FILM 1/5WJ	1.5K OHM	R151,251,351,451,551,651	6
RES-00-00644	RESISTOR	CARBON FILM 1/5WJ	2.7K OHM	R147,247,347,447,547,647	6
RES-00-00676	RESISTOR	CARBON FILM 1/5WJ	3.9K OHM	R137,237,337,437,537,637	6
RES-00-00720	RESISTOR	CARBON FILM 1/5WJ	5.6K OHM	R132,142,232,242,332,342,432,442,532,542 R632,642	12
RES-00-00608	RESISTOR	CARBON FILM 1/5WJ	10K OHM	R22,72,122,130,222,230,322,330,422,430 R530,630	12
RES-00-00623	RESISTOR	CARBON FILM 1/5WJ	15K OHM	R152,252,352,452,552,652	6
RES-00-00730	RESISTOR	CARBON FILM 1/5WJ	56K OHM	R181,281,381,481,581,681	6
RES-00-00604	RESISTOR	CARBON FILM 1/5WJ	100K OHM	R1,2,3,4	4
RES-00-00614	RESISTOR	CARBON FILM 1/5WJ	120K OHM	R123,124,223,224,323,324,423,424	8
RES-00-00654	RESISTOR	CARBON FILM 1/5WJ	220K OHM	R71	1
CEC-00-00077	CAPACITOR	CERAMIC DISK 50V "NPO"	10pF	C104,204,304,404,504,604	6
CEC-00-00090	CAPACITOR	CERAMIC DISK 50V "NPO"	22pF	C56,570,670	3
CEC-00-00103	CAPACITOR	CERAMIC DISK 50V "NPO"	47pF	C105,106,205,206,305,306,405,406,505,506 C605,606	12
CEC-00-00108	CAPACITOR	CERAMIC DISK 50V "NPO"	68pF	C121,221,321,421,521,621	6
CEC-00-00073	CAPACITOR	CERAMIC DISK 50V "NPO"	100pF	C132,142,151,232,242,251,332,342,351,432 C442,451,532,542,551,632,642,651	18
CEC-00-00074	CAPACITOR	CERAMIC DISK 50V	102pF	C101,201,301,401,501,601	6
CEC-00-00102	CAPACITOR	CERAMIC DISK 50V	473pF	C17,34,35,44,45,195,295,395,495,595 C695	11
CEC-00-00076	CAPACITOR	CERAMIC DISK 50V	104pF	C2,15,20,23	4
ELC-00-00249	CAPACITOR	ELECTROLYTIC"SRE"	2.2uF/50V	C120,122,220,222,320,322,420,422,520,522 C620,622	12
ELC-00-00641	CAPACITOR	ELECTROLYTIC"SRE"	22uF/16V	C102,103,123,124,131,141,202,203,223,224 C231,241,302,303,323,324,331,341,402,403 C423,424,431,441,502,503,531,541,602,603 C631,641	32

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PART NO.	NOMENCATURE	DESCRIPTION	MFR PARTS	REF. NO	Q'TY
ELC-00-00243	CAPACITOR	ELECTROLYTIC"SRE"	100uF/16V	C171,181,271,371,471,571,671	7
ELC-00-00701	CAPACITOR	ELECTROLYTIC"SRE"	220uF/16V	C194,294,594,694	4
ELC-00-00223	CAPACITOR	ELECTROLYTIC"SMS"	2.2uF/50V	C50,51,52,53	4
ELC-00-00199	CAPACITOR	ELECTROLYTIC"SMS"	100uF/16V	C591,691	2
ELC-00-00231	CAPACITOR	ELECTROLYTIC"SMS"	100uF/50V	C55	1
ELC-00-00249	CAPACITOR	ELECTROLYTIC"SRE/SE"	2.2uF/50V	C60	1
MYC-00-00031	CAPACITOR	MYLAR 5% 100V	222J	C26,27	2
MYC-00-00090	CAPACITOR	MYLAR 5% 63V "TL"	473J	C140,240,340,440,540,640	6
MYC-00-00083	CAPACITOR	MYLAR 5% 63V "TL"	104J	C161,261,361,461,561,661	6
MYC-00-00085	CAPACITOR	MYLAR 5% 63V "TL"	105J	C1,14,16,29,66	4
ICO-00-00111	I.C	DUAL OP AMP "DIP-08"	NJM2068D	U101,301,501	3
FET-00-00023	F.E.T	N-CH POWER FET "TO-220"	FQP50N06	Q34,35,36,37,44,45,46,47,48,49	10
TRS-00-00176	TRANSISTOR	AUDIO POWER NPN "TO-3P"	KTD718	Q135,235,335,435	4
TRS-00-00082	TRANSISTOR	AUDIO POWER PNP "TO-3P"	KT8688	Q145,245,345,445	4
TRS-00-00207	TRANSISTOR	AUDIO POWER PNP "TO-3P"	TIP36C	Q545,645	2
TRS-00-00188	TRANSISTOR	AUDIO POWER NPN "TO-3P"	TIP35C	Q535,635	2
TRS-00-00032	TRANSISTOR	MIDDLE POWER TR NPN "TO-126"	KTD600K	Q534,543,634,643	4
TRS-00-00081	TRANSISTOR	MIDDLE POWER TR PNP "TO-126"	KT8631K	Q533,544,633,644	4
TRS-00-00111	TRANSISTOR	SMALL SIGNAL NPN "TO-92"	KTC3200GR	Q140,240,340,440,540,640	6
DIO-00-00048	DIODE	RECTIFIER	1N5404	D2	1
DIO-00-00152	DIODE	FAST RECOVERY	YG225D2	D30,31,32,33	4
RES-00-00053	RESISTOR	CARBON FILM 1/2WJ	4.7 OHM	R161,261,361,461,561,661	6
RES-00-00787	RESISTOR	METAL FILM 1WJ	1.5K OHM	R63,64,65,66	4
RES-00-00845	RESISTOR	METAL FILM 2WJ	100 OHM	R61,62	2
RES-00-01273	RESISTOR	METAL FILM 2WJ	150 OHM	R191,291	2
RES-00-00869	RESISTOR	METAL FILM 2WJ	330 OHM	R591,691	2
RES-00-00881	RESISTOR	METAL FILM 2WJ	680 OHM	R162,262,362,462,562,662	6
RES-00-00896	RESISTOR	WIRE WOUND 3WJ	0.1 OHM	R159,160,259,260,359,360,459,460	8
RES-00-00958	RESISTOR	WIRE WOUND 5WJ	0.1 OHM	R559,560,659,660	4
THS-00-00013	THERMISTOR	NTC RESISTOR 50K	FTD5-350	TH1	1
ELC-00-00201	CAPACITOR	ELECTROLYTIC"SMS"	330uF/16V	C191,291	2
ELC-00-00185	CAPACITOR	ELECTROLYTIC"SHL"	470uF/35V	C40,C41	2
ELC-00-00463	CAPACITOR	ELECTROLYTIC"SHL"	470uF/50V	C30,31	2
ELC-00-00726	CAPACITOR	ELECTROLYTIC"WL"	1000uF/35V	C28	1
ELC-00-00727	CAPACITOR	ELECTROLYTIC"WL"	2200uF/25V	C21,22,24,25	4
ELC-00-00187	CAPACITOR	ELECTROLYTIC"SHL"	2200uF/50V	C32,33	2
ELC-00-00603	CAPACITOR	ELECTROLYTIC"SHL"	3300uF/35V	C42,43	2
COI-00-00028	INDUCTOR	DRUM COIL	CL-310	L1,2	2
COI-00-00093	INDUCTOR	DRUM COIL	CL-510	L10,11,12,13	4
COR-TF-00388	RING CORE	36PHI MAGNETICS		T1 , 5T(0.7X9) : 13T(0.7X4)	1
COR-TF-00389	RING CORE	36PHI MAGNETICS		T2 , 5T(0.7X15) : 10T(0.7X4)	1
WIR-00-00016	GND WIRE	AWG #22 BLACK	80m/m	W1,2	2
JAC-00-00042	RCA JACK	GOLD PLATED 2P	DJB-562D	J101,301,501	3
HOD-00-00011	FUSE HOLDER	P.C.B TYPE	WF-9604	F1	1
FUS-00-00010	FUSE	32V/30A	32V30A	2SET+2ASS'Y	4
JAC-00-00050	MODULAR JACK	BLACK	DEK623P4-B	MOD1	1
CON-00-00002	WAFER		LWL0640-2P	CLIP	1
CON-00-00033	WAFER		LWL0640-3P	1ST POWER,2ND POWER	2
CON-00-00128	WAFER		LAD1140-04PBK	JACK1,2	2
WIR-00-00208	WIRE ASS'Y	300m/m	CHD1140-04PBK	ACCESSORY	2
TUB-00-00008	TEFLON TUBE	0.7PHI	10m/m	Q140,240,340,440,540,640/ TH1	8
JUP-00-00003	BAR JUMPER		35m/m	BJ3,4	2
JUP-00-00005	BAR JUMPER		55m/m	BJ1,2	2
JUP-00-00011	BUS BAR	6PIN	MA-BA-02-1960-0	BJ5	1

Ref5760a Parts List

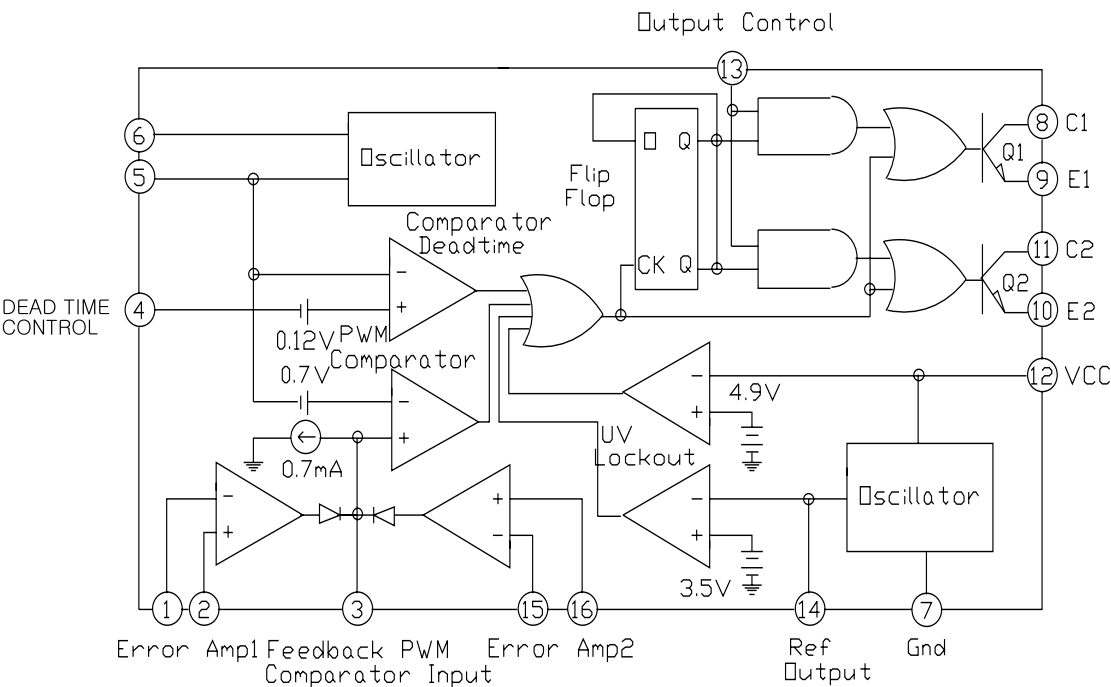
PART NO.	NOMENCATURE	DESCRIPTION	MFR PARTS	REF. NO	Q'TY
SWI-00-00024	SWITCH	SLIDE SWITCH	JSS2219	SW201,401	2
TER-00-00030	POWER TERMINAL	GOLD PLATED,3P	TM0006-01	TER1	1
TER-00-00020	POWER TERMINAL	GOLD PLATED,12P	WT-9512	TER2	1
HED-00-00113	SOCKET		TM2501-DG-10P	HP2	1
HED-00-00114	SOCKET		TM2501-DG-12P	HP1	1
ICO-00-00021	I.C	PWM I.C "SO-16"	TL494CD	U10	1
TRS-00-00113	TRANSISTOR	SMD TO-23 NPN	KTC3875GR	Q50	1
TRS-00-00098	TRANSISTOR	SMD TO-23 PNP	KTA1504GR	Q3,4,6	3
DIO-00-00117	DIODE	SWITCHING SIGNAL	RLS4148	D3,10,11,20,21	5
RES-08-00077	RESISTOR	SMD 0805 1/10WF	4.7K OHM	R7	1
RES-08-00251	RESISTOR	SMD 0805 1/10WF	10.5K OHM	R6	1
RES-08-00250	RESISTOR	SMD 0805 1/10WF	430K OHM	R25	1
RES-08-00135	RESISTOR	SMD 0805 1/10WJ	10 OHM	R8	1
RES-08-00229	RESISTOR	SMD 0805 1/10WJ	910 OHM	R16	1
RES-08-00148	RESISTOR	SMD 0805 1/10WJ	1K OHM	R17,26,27,28,29,52	6
RES-08-00177	RESISTOR	SMD 0805 1/10WJ	3.9K OHM	R11	1
RES-08-00191	RESISTOR	SMD 0805 1/10WJ	4.7K OHM	R2,3,10	3
RES-08-00223	RESISTOR	SMD 0805 1/10WJ	8.2K OHM	R4	1
RES-08-00132	RESISTOR	SMD 0805 1/10WJ	10K OHM	R9,12	2
RES-08-00143	RESISTOR	SMD 0805 1/10WJ	15K OHM	R20,21	2
RES-08-00160	RESISTOR	SMD 0805 1/10WJ	20K OHM	R15	1
RES-08-00164	RESISTOR	SMD 0805 1/10WJ	22K OHM	R18,51	2
RES-08-00170	RESISTOR	SMD 0805 1/10WJ	27K OHM	R14	1
RES-08-00182	RESISTOR	SMD 0805 1/10WJ	33K OHM	R19	1
RES-08-00198	RESISTOR	SMD 0805 1/10WJ	47K OHM	R50	1
RES-08-00208	RESISTOR	SMD 0805 1/10WJ	56K OHM	R5	1
RES-08-00216	RESISTOR	SMD 0805 1/10WJ	68K OHM	R13	1
RES-12-00147	RESISTOR	SMD 1206 1/8WJ	1 OHM	R1	1
RES-12-00159	RESISTOR	SMD 1206 1/8WJ	220 OHM	R30,31,40,41	4
CEC-08-00004	CAPACITOR	SMD 0805	104pF	C5,11	2
TRS-00-00087	TRANSISTOR	SMALL SIGNAL PNP "TO-92L"	KTA1023Y	Q1	1
TRS-00-00090	TRANSISTOR	SMALL SIGNAL PNP "TO-92"	KTA1266GR	Q10,11,12,13	4
TRS-00-00110	TRANSISTOR	SMALL SIGNAL NPN "TO-92"	KTC3198GR	Q2	1
TRS-00-00109	TRANSISTOR	SMALL SIGNAL NPN "TO-92"	KTC3198BL	Q5	1
MYC-00-00020	CAPACITOR	MYLAR 5% 100V	102J	C9	1
ELC-00-00699	CAPACITOR	ELECTROLYTIC"SRE"	10uF/25V	C12	1
ELC-00-00241	CAPACITOR	ELECTROLYTIC"SRE"	10uF/16V	C3	1
ELC-00-00700	CAPACITOR	ELECTROLYTIC"SRE"	22uF/25V	C6,13	2
ELC-00-00242	CAPACITOR	ELECTROLYTIC"SRE"	47uF/16V	C4,8	2
ELC-00-00243	CAPACITOR	ELECTROLYTIC"SRE"	100uF/16V	C7,10	2
HED-00-00068	HEADER PIN	GOLD PLATED	TM2008-CG-06P	HP2	1
HED-00-00172	HEADER PIN	GOLD PLATED	TM2008-CG-08P	HP1	1
ICO-00-00354	I.C	REMOTE CONTROL IC "SMD"	NJM13600D	U500	1
ICO-00-00113	I.C	DUAL OP AMP	NJM2068M	U102,103,104,105,302,303,304,305,502,504 U505,506,510,606	14
RES-08-00252	RESISTOR	SMD 0805 1/10WF	9.4K OHM	R257,457,657	3
RES-08-00253	RESISTOR	SMD 0805 1/10WF	15.2K OHM	R155,255,355,455,555,655	6
RES-08-00088	RESISTOR	SMD 0805 1/10WF	47K OHM	R256,456,656	3
RES-08-00117	RESISTOR	SMD 0805 1/10WF	91K OHM	R156,356,556	3
RES-08-00135	RESISTOR	SMD 0805 1/10WJ	10 OHM	R548,549	2
RES-08-00142	RESISTOR	SMD 0805 1/10WJ	150 OHM	R80	1
RES-08-00203	RESISTOR	SMD 0805 1/10WJ	510 OHM	R511,513,611,613	4
RES-08-00225	RESISTOR	SMD 0805 1/10WJ	820 OHM	R108,208,308,408,508,608	6
RES-08-00148	RESISTOR	SMD 0805 1/10WJ	1K OHM	R592,692	2
RES-08-00201	RESISTOR	SMD 0805 1/10WJ	5.6K OHM	R113,115,213,215,313,315,413,415,517,518 R617,618	12

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PART NO.	NOMENCATURE	DESCRIPTION	MFR PARTS	REF. NO	Q'TY
RES-08-00210	RESISTOR	SMD 0805 1/10WJ	6.8K OHM	R596,696	2
RES-08-00132	RESISTOR	SMD 0805 1/10WJ	10K OHM	R83,110,111,112,114,127,210,211,214,310 R311,314,327,410,411,414,427,510,514,515 R516,610,614,615,616	25
RES-08-00143	RESISTOR	SMD 0805 1/10WJ	15K OHM	R81,512,612	3
RES-08-00179	RESISTOR	SMD 0805 1/10WJ	30K OHM	R509,609	2
RES-08-00187	RESISTOR	SMD 0805 1/10WJ	39K OHM	R595,695	2
RES-08-00141	RESISTOR	SMD 0805 1/10WJ	150K OHM	R82,597,697	3
RES-08-00162	RESISTOR	SMD 0805 1/10WJ	220K OHM	R148,248,348,448	4
RES-08-00149	RESISTOR	SMD 0805 1/10WJ	1M OHM	R540,570	2
CEC-08-00009	CAPACITOR	SMD 0805	12pF	C156,356,556,656	4
CEC-08-00017	CAPACITOR	SMD 0805	20pF	C256,456	2
CEC-08-00042	CAPACITOR	SMD 0805	47pF	C111,211,311,411,593,693	6
CEC-08-00040	CAPACITOR	SMD 0805	473pF	C196,197,198,199,296,297,298,299,396,397 C398,399,496,497,498,499,596,597,598,599 C600,696,697,698,699,700	26
TRS-00-00110	TRANSISTOR	SMALL SIGNAL NPN "TO-92"	KTC3198GR	Q80	1
MYC-00-00091	CAPACITOR	MYLAR 5% 63V "TL"	683J	C518,618	2
MYC-00-00157	CAPACITOR	MYLAR 5% 63V "TL"	823J	C113,115,213,215,313,315,413,415,517,617	10
MYC-00-00083	CAPACITOR	MYLAR 5% 63V "TL"	104J	C590,592,690,692	4
ELC-00-00642	CAPACITOR	ELECTROLYTIC"SRE"	1uF/50V	C80	1
ELC-00-00250	CAPACITOR	ELECTROLYTIC"SRE"	4.7uF/50V	C81	1
ELC-00-00241	CAPACITOR	ELECTROLYTIC"SRE"	10uF/16V	C155,255,355,425,509,512,555,609,612,655	10
SWI-00-00033	SWITCH	SLIDER SWITCH	JSS2319	SW101,301	2
SWI-00-00024	SWITCH	SLIDER SWITCH	JSS2219	SW501	1
VOL-00-00349	VOLUME	V9M(7x5) G3(PH2R)N 15S	20KBx2	VR101,301,500,501	4
VOL-00-00351	VOLUME	V9M(7x5) G(4R)(PH2R)N-15S	50KCx4	VR102,302,502	3
HED-00-00250	PIN CONNECTOR	TM2008-D76G-10P	10P	HP4	1
HED-00-00251	PIN CONNECTOR	TM2008-D76G-12P	12P	HP3	1
ICO-00-00095	I.C	COMPARATOR DIP-8P	KIA393P	U90	1
RES-00-00437	RESISTOR	METAL FILM 1/5WF	1K OHM	R97	1
RES-00-00402	RESISTOR	METAL FILM 1/5WF	10K OHM	R95	1
RES-00-00550	RESISTOR	METAL FILM 1/5WF	51K OHM	R96	1
RES-00-00556	RESISTOR	METAL FILM 1/5WF	56K OHM	R94	1
RES-00-00573	RESISTOR	METAL FILM 1/5WF	68K OHM	R93	1
RES-00-00635	RESISTOR	CARBON FILM 1/5WJ	1M OHM	R98	1
RES-00-00029	RESISTOR	METAL FILM 1/2WJ	1K OHM	R192,292	2
CEC-00-00005	CAPACITOR	CERAMIC TUBULAR 50V	103P	C91,92,93	3
CEC-00-00006	CAPACITOR	CERAMIC TUBULAR 50V	104P	C90	1
DIO-00-00321	LED	BLUE 3PHI	MS-L330CBHSH	LED1,2,3	3
CON-00-00139	WAFER		LAL0640-2P	CLIP	1
CON-00-00140	WAFER		LAL0640-3P	1ST POWER,2ND POWER	2
WIR-AS-00220	WIRE ASS'Y	BK,RED	CHL0640-2P(300m/m)	CLIP	1
WIR-AS-00218	WIRE ASS'Y	BK,RED,GREEN	CHL0640-3P(300m/m)	1ST POWER	1
WIR-AS-00219	WIRE ASS'Y	BK,YELLOW,GREEN	CHL0640-3P(300m/m)	2ND POWER	1

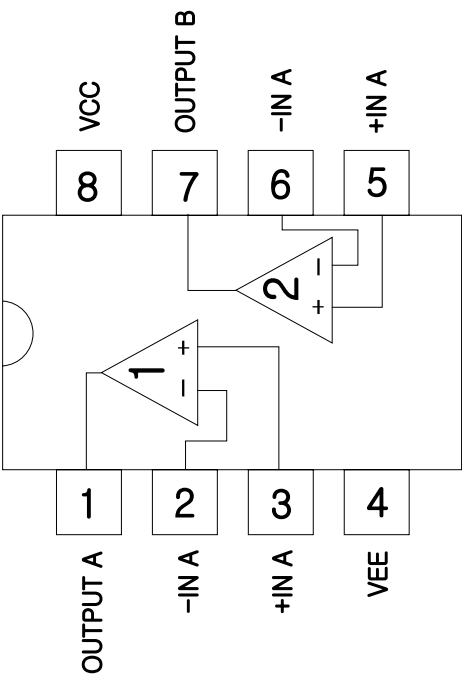
Integrated Circuit Diagrams

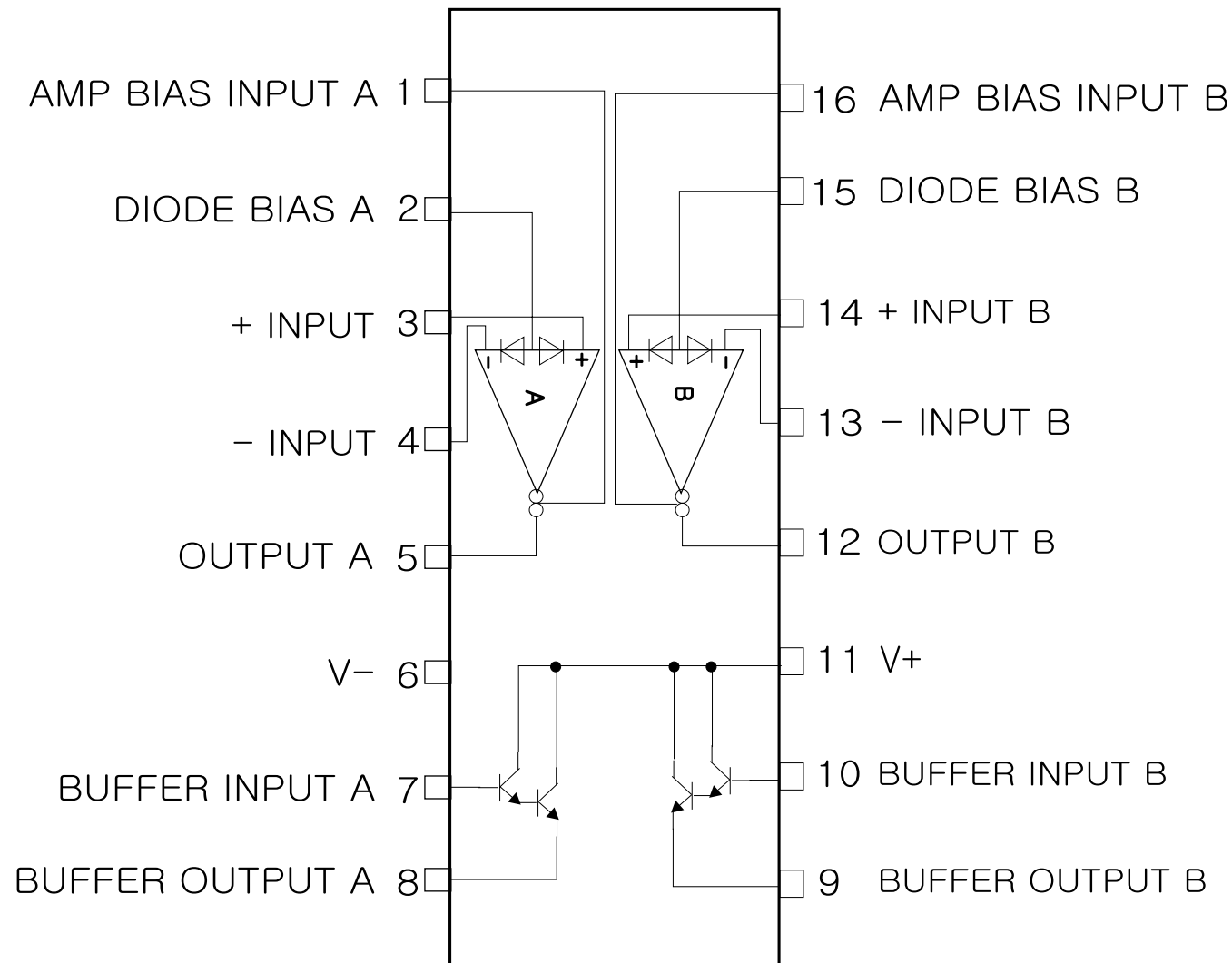
SUB B'D(PAS338-01) U10 (TL494CD) P.W.M IC



MAIN B'D : U101,301,501 (NJM2068D) DUAL OP AMP

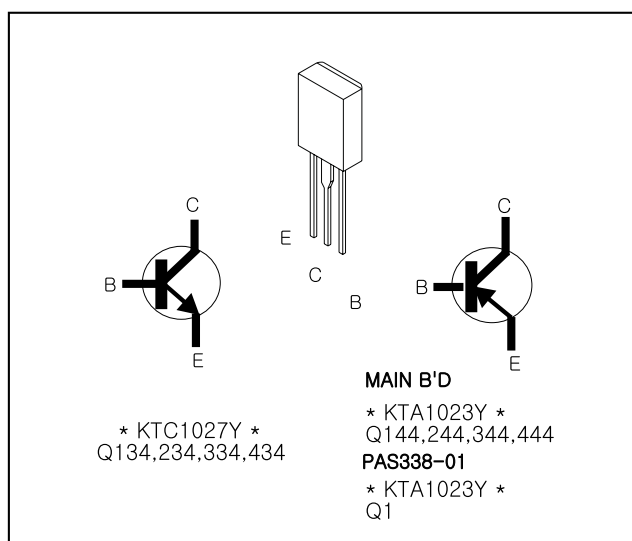
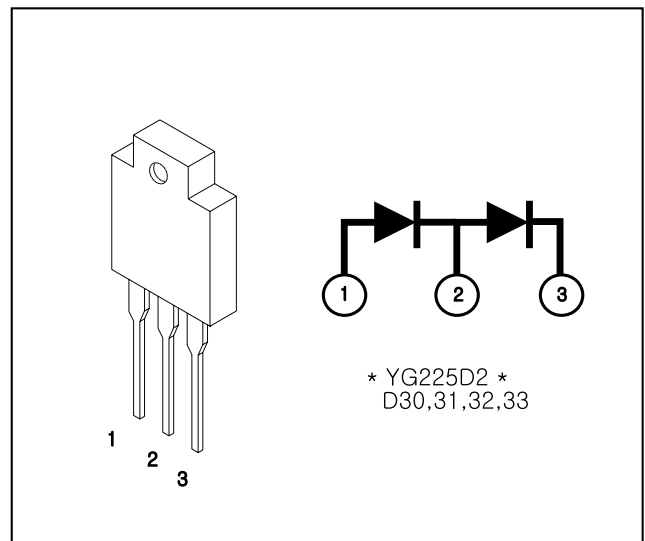
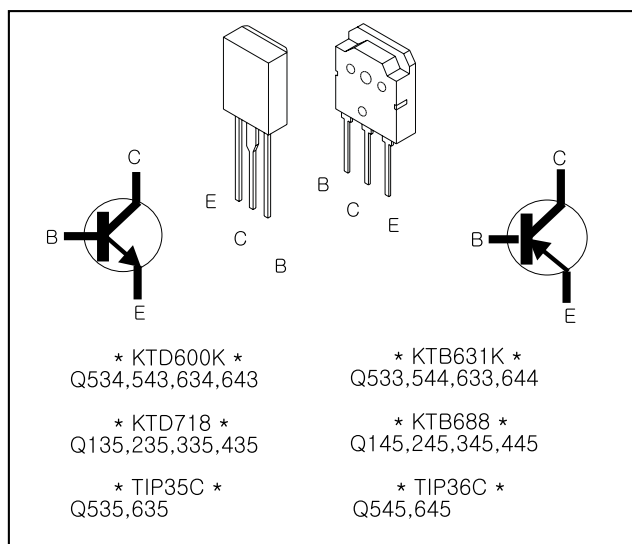
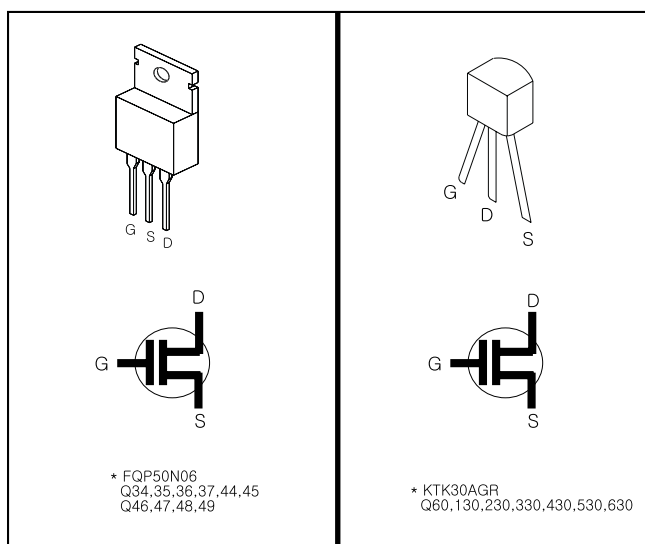
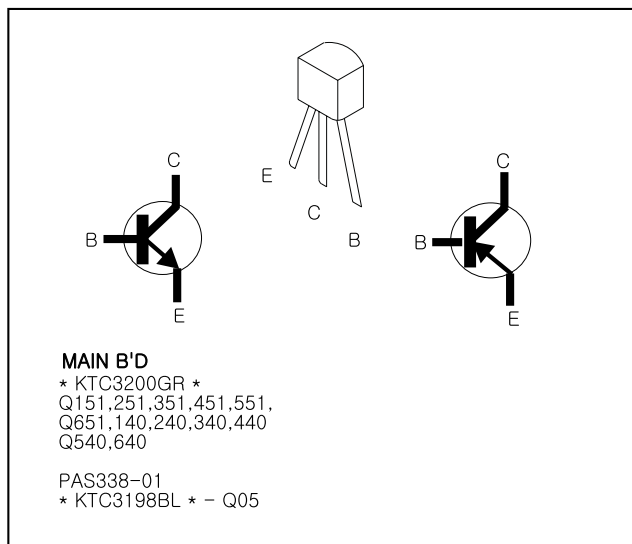
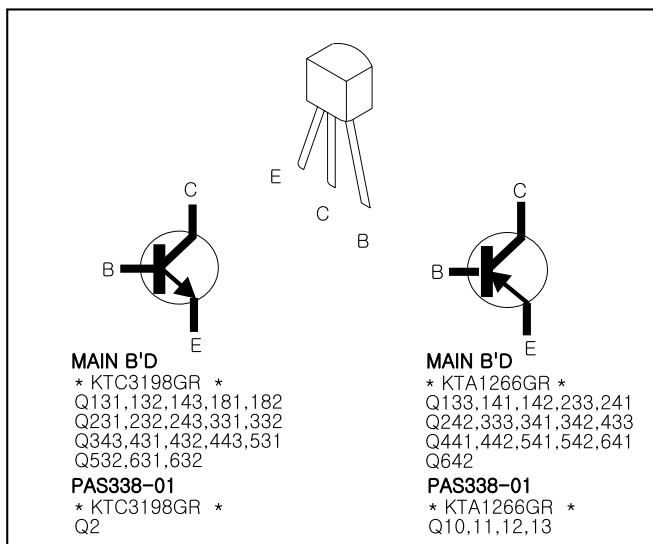
SUB B'D(PAS327-01) : U102,103,104,105,302,303,304,305,502,504,505,506
U510,606 (NJM2068M) DUAL OP AMP



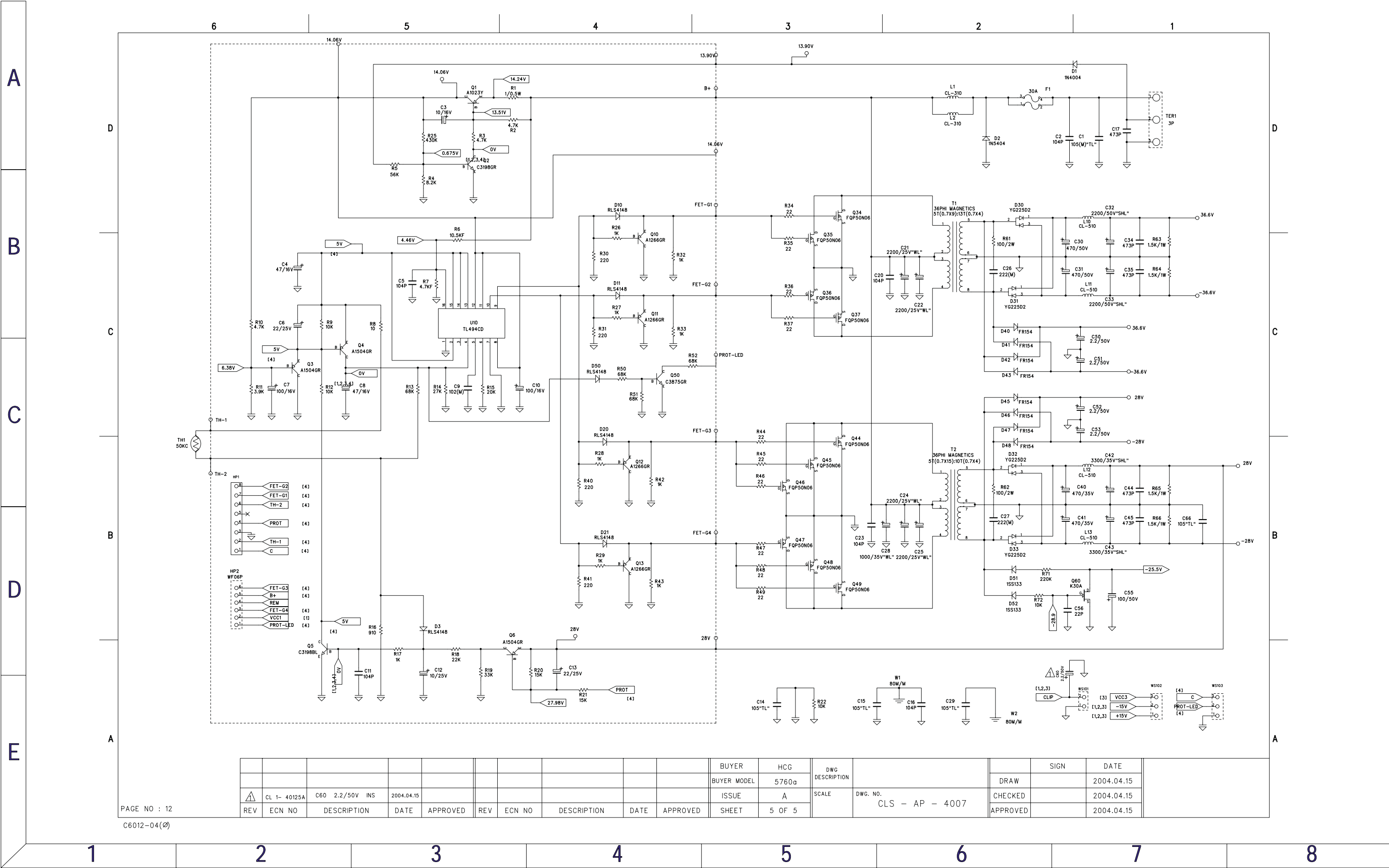



SUB B'D(PAS327-01) : U500 (NJM13600D)

Transistor Diagrams



Power Supply (Sheet 1)



										BUYER	HCG	DWG DESCRIPTION		SIGN	DATE		
										BUYER MODEL	5760g					DRAW	2004.04.15
	CL 1- 40125A	C60 2.2/50V INS	2004.04.15							ISSUE	A	SCALE		DWG. NO. CLS - AP - 4007	CHECKED	2004.04.15	
REV	ECN NO	DESCRIPTION	DATE	APPROVED	REV	ECN NO	DESCRIPTION	DATE	APPROVED	SHEET	5 OF 5				APPROVED		2004.04.15

PAGE NO : 12

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Power Amplifier

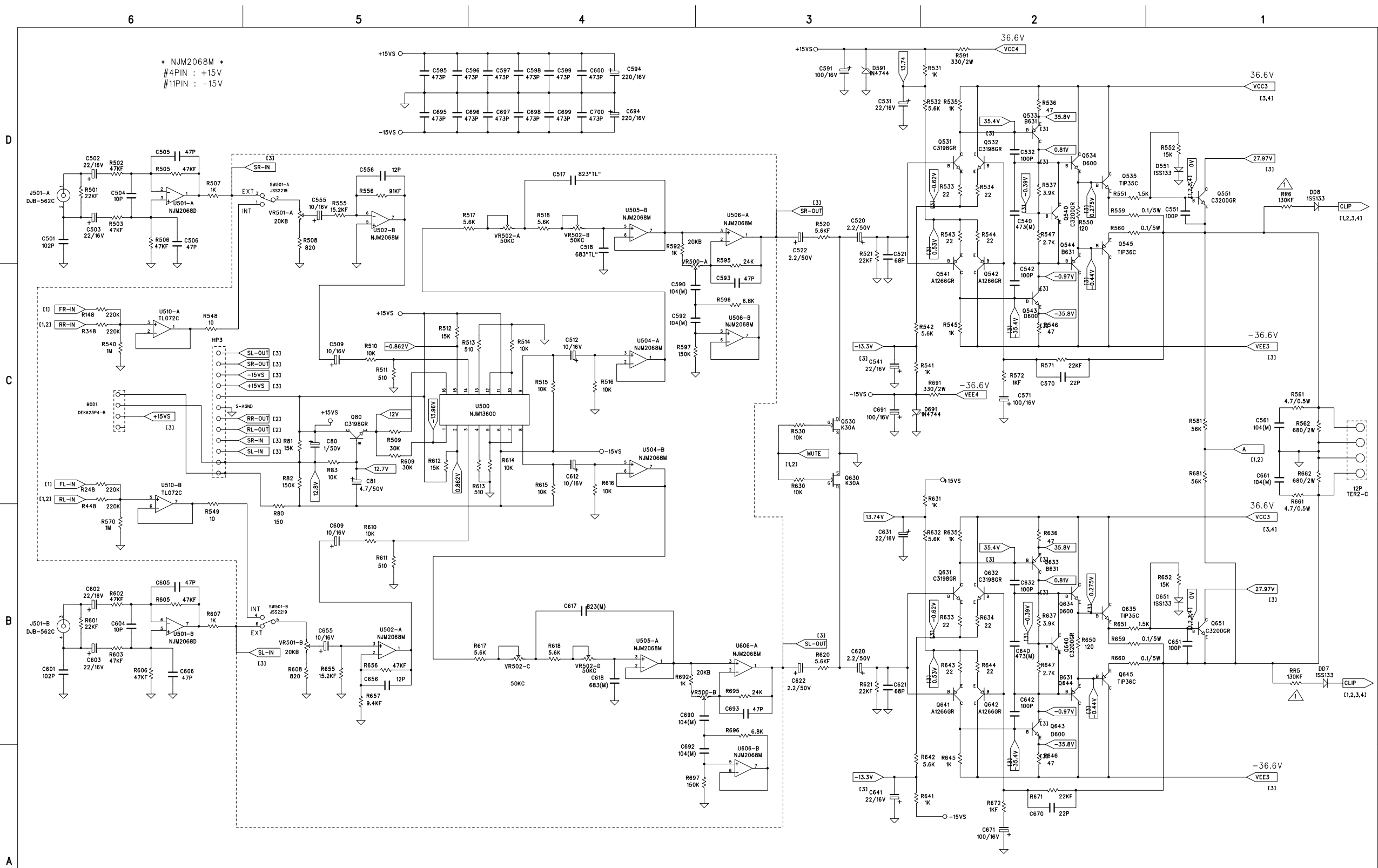


E




1	2	3	4	5	6	7	8
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Power Amplifier (Sheet 4)

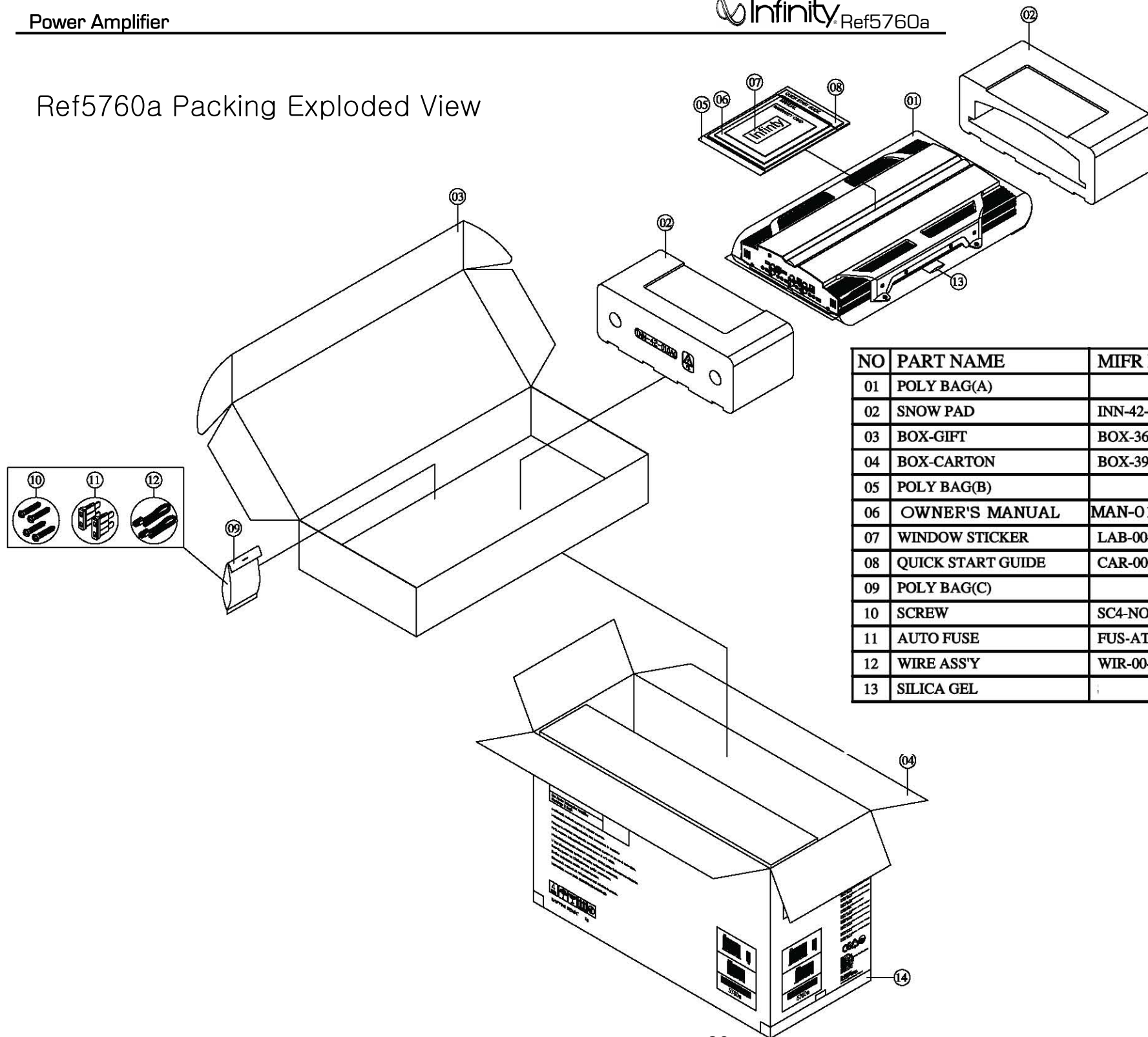


PAGE NO : 11

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										BUYER	HCG	DWG DESCRIPTION			SIGN	DATE	
										BUYER MODEL	5760a				DRAW		
	CL 1~40125A	R5,6 150K~>130KF	2004.04.15							ISSUE	A	SCALE	DWG. NO. CLS - AP - 4007	CHECKED		2004.04.15	
REV	ECN NO	DESCRIPTION	DATE	APPROVED	REV	ECN NO	DESCRIPTION	DATE	APPROVED	SHEET	4 OF 5				APPROVED		2004.04.15

Ref5760a Packing Exploded View



NO	PART NAME	MIFR PARTS	DESCRIPTION	Q'TY
01	POLY BAG(A)		VINYL, 650.0x400.0x0.1t	1EA
02	SNOW PAD	INN-42-010A0	EPS, 363.0x160.0x128.0	2EA
03	BOX-GIFT	BOX-36-152AA	SW#1(B), 620.0x368.0x133.0	1EA
04	BOX-CARTON	BOX-39-163AA	DW#2, 635.0x286.0X393.0	1/2EA
05	POLY BAG(B)		VINYL, 260.0x350.0x0.03t	1EA
06	OWNER'S MANUAL	MAN-01-0197A	ART PAPER	1EA
07	WINDOW STICKER	LAB-00-0427A	"INFINITY" LOGO	1EA
08	QUICK START GUIDE	CAR-00-0061A	ART PAPER	1EA
09	POLY BAG(C)		VINYL, 120.0x120.0x0.03t	1EA
10	SCREW	SC4-NO-40250	STT1 OH 4x25 NI-P	4EA
11	AUTO FUSE	FUS-AT-00006	30A	2EA
12	WIRE ASS'Y	WIR-00-00208	CHD1140-04PBK, 300mm	2EA
13	SILICA GEL		3g	1EA