

XM-7557

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model



SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

75watts/220watts per channel minimum continuous average power into 4ohms, 5channels driven from 20Hz to 20kHz with no more than 0.04%* total harmonic distortion per Car Audio Ad Hoc Committee Standards.

Other Specifications

Circuit system	Pure Direct Drive SEPP Pulse power supply	Low boost	0 – 10 dB (40 Hz) (Front/Rear)
Inputs	RCA pin jacks	Low boost and cut	0 – 10 dB (7 – 40 Hz) (Subwoofer)
Outputs	Speaker terminals	Power requirements	12 V DC car battery (negative ground)
Speaker impedance	2 – 8 Ω (F/Rch), 1** – 8 Ω (Subwoofer) 4 – 8 Ω (when used as a bridging amplifier, F/Rch)	Power supply voltage	10.5 – 16 V
Maximum outputs (Front/Rear + Subwoofer)	150 watts × 4 + 500 watts × 1 (at 4 Ω) 360 watts × 2 + 500 watts × 1 (at 4 Ω)	Current drain	at rated output: 81 A (4Ω HI-VOLTAGE mode) Remote input: 1.5 mA
Rated outputs (supply voltage at 14.4 V*, 20 Hz – 20 kHz)		Dimensions	Approx. 637 × 83.5 × 260 (303 with cover) mm (w/h/d) (25 1/8 × 3 3/8 × 10 1/4 in.) not incl. projecting parts and controls
Front/Rear:	75 watts × 4 (0.04 % THD, at 4 Ω) 90 watts × 4 (0.1 % THD, at 2 Ω) 180 watts × 2 (0.1 % THD, at 4 Ω)	Mass	Approx. 9.5 kg (20 lb. 15 oz.) not incl. accessories
Subwoofer:	Hi-voltage 220 watts (0.04 % THD, at 4Ω) Hi-voltage 280 watts (0.1 % THD, at 2 Ω) Hi-current 280 watts (0.1 % THD, at 1 Ω)	Supplied accessories	Mounting screws (4) Terminal cover (1) Hexagonal wrench 3 mm (1/8 in) (1)
Frequency response	5 Hz – 100 kHz (± 3 dB)	* NFB ON	
Harmonic distortion	0.005 % or less (at 1kHz, 4 Ω*)	** HI-CURRENT only	
Input level adjustment range	0.2 – 4.0 V		
High-pass filter (× 1/× 10)	50 – 400 Hz/500 Hz – 4 kHz, –12 dB/oct		
Low-pass filter (× 1/× 10)	50 – 400 Hz/500 Hz – 4 kHz, –12 dB/oct 50 – 200 Hz, –12 dB/oct (Subwoofer)		

Design and specifications are subject to change without notice.

STEREO POWER AMPLIFIER

SONY®



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Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

SECTION 1

SERVICE NOTE

Clearing the Protector During Repairs

- **OVER CURRENT** : Detects overcurrent during output.
- **OFF SET** : Detects DC offset at the speaker terminal.

1. Clearing the **OVER CURRENT** protector

- When the position of the **MODE** switch (S801/power board) is set to **HI-CURRENT** :
Cut the jumper wire JW230 of the amplifier board.

2. Clearing the **OFF SET** protector

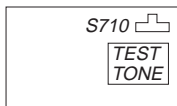
- Cut the jumper wire JW307 of the amplifier board.

3. **TEST TONE** Function

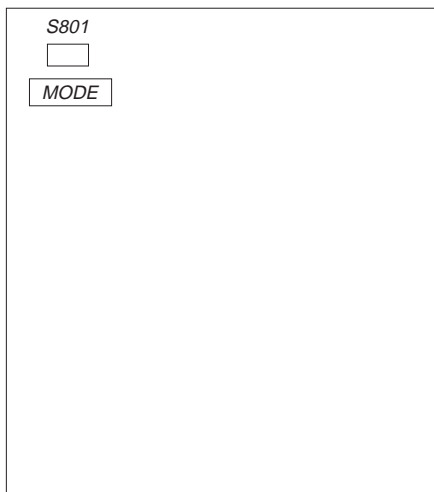
- ① Press the **TEST TONE** button (S710/SUB2 board) with the power ON. The amplifier is normal if sound is produced from the speaker.
- ② If no sound
 - : Problem causer by incorrect connection of the power supply system or speaker system.
 - : The signals input by the RCA cable before the amplifier system are abnormal.

Adjustment Location

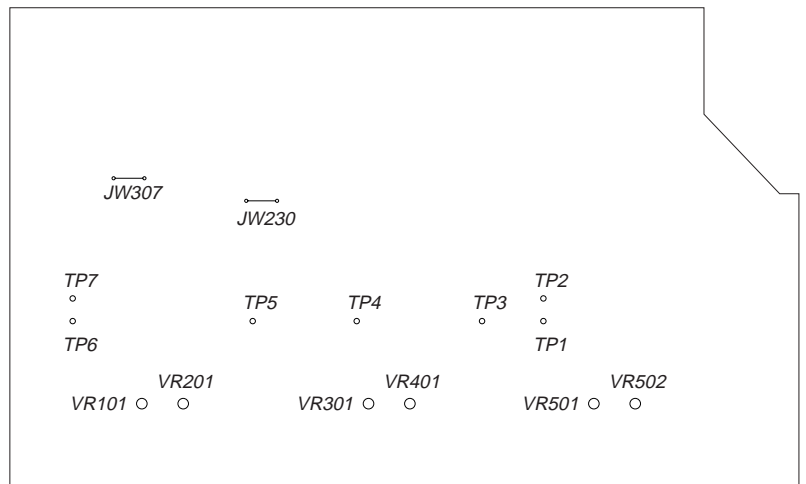
- SUB 2 BOARD - (Component side)



- POWER BOARD - (Component side)



- AMPLIFIER BOARD - (Component side)



Connections

Precautions

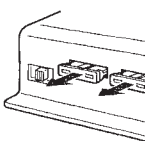
- This unit is designed for negative ground 12 V DC operation only.
- Use front/rear speakers with an impedance of 2 to 8 ohms (4 to 8 ohms when used as a bridging amplifier).
- Use a subwoofer with suitable impedance.
 - HI-CURRENT mode: 2 to 2 Ω
 - HI-VOLTAGE mode: 2 to 8 Ω
- Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers.
- Avoid installing the unit in areas subject to:
 - high temperatures such as from direct sunlight or hot air from the heater
 - rain or moisture
 - dust or dirt.
- If your car is parked in direct sunlight and there is a considerable rise in temperature inside the car, allow the unit to cool down before use.
- Be sure to install the unit horizontally so that the air duct of the cooling fan or its fin will not be covered with carpet etc.
- The cooling fan operates when the temperature inside the unit rises to a certain level. It is not a malfunction if the cooling fan does not operate when you turn on the power.
- If this unit is placed too close to the car radio or antenna, interference may occur. In this case, relocate the amplifier away from the car radio or antenna.
- If no power is being supplied to the master unit, check the connections.
- This power amplifier employs a protection circuit* to protect the transistors and speakers if the amplifier malfunctions. Do not attempt to test the protection circuit by covering the heat sink or connecting improper loads.
- Do not use the unit on a weak battery as its optimum performance depends on a good power supply.
- For safety reasons, keep your car audio volume moderate so that you can still hear sounds outside your car.

Fuse Replacement

If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In such a case, consult your nearest Sony dealer.

Warning

- When replacing the fuse, be sure to use one matching the amperage stated above the fuse holder. Never use a fuse with an amperage rating exceeding the one supplied with the unit as this could damage the unit.
- If all four fuses are not used, the performance is limited, and the power may not be activated.



* Protection circuit

This amplifier is provided with a protection circuit that activates in the following cases:

- when the unit is overheated
- when a DC current is generated
- when the speaker terminals are short circuited.

 The color of the POWERPROTECTOR indicator will change from green to amber, and the unit will shut down. If this happens, turn off the connected equipment, take out the cassette tape or disc, and determine the cause of the malfunction. If the amplifier has overheated, wait until the unit cools down before use.

If you have any questions or problems concerning your unit that are not covered in this manual, please consult your nearest Sony dealer.

Caution

- Before making any connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Be sure to use speakers with an adequate power rating. If you use small capacity speakers, they may be damaged.
- Do not connect the ⊕ terminal of the speaker system to the car chassis, and do not connect the ⊕ terminal of the right speaker with that of the left speaker.
- Install the input and output cords away from the power supply lead as running them close together can generate some interference noise.
- This unit is a high-power amplifier. Therefore, it may not perform to its full potential if used with the speaker cords supplied with the car.
- If your car is equipped with a computer system for navigation or some other purpose, do not remove the ground wire from the car battery. If you disconnect the wire, the computer memory may be erased. To avoid short circuits when making connections, disconnect the +12 V power supply lead until all the other leads have been connected.

Connexions

Précautions

- Cet appareil est conçu pour fonctionner uniquement sur courant continu de 12 volts avec masse négative.
- Utilisez des haut-parleurs d'une impédance de 2 à 8 ohms (4 à 8 ohms lors de l'utilisation comme amplificateur en pont).
- Utilisez un subwoofer d'une impédance appropriée.
 - Mode HI-CURRENT: 1 à 2 Ω
 - Mode HI-VOLTAGE: 2 à 8 Ω
- Ne raccordez pas de haut-parleurs actifs (avec amplificateur intégré) aux bornes de haut-parleurs de cet appareil; ils pourraient être endommagés.
- N'installez pas l'appareil à un endroit exposé à:
 - de hautes températures comme sous le rayonnement direct du soleil ou près d'un conduit de chauffage
 - la pluie ou à l'humidité
 - de la poussière ou à des saletés.
- Si votre voiture était garée en plein soleil et que la température a considérablement augmenté à l'intérieur, laissez refroidir l'appareil avant de l'utiliser.
- Veillez à installer l'appareil horizontalement de façon à ce que le conduit d'air du ventilateur de refroidissement ou ses ailettes ne soit pas recouvert par le tapis de sol, etc.
- Le ventilateur fonctionne lorsque la température interne de l'appareil atteint un certain niveau. Ce n'est pas anormal que le ventilateur ne fonctionne pas à la mise sous tension.
- Si cet appareil est placé trop près de l'autoradio et de l'antenne, il se peut que des interférences se produisent. Dans ce cas, éloignez l'amplificateur de l'autoradio ou de l'antenne.
- Si l'appareil principal n'est pas alimenté, vérifiez les connexions.
- Cet amplificateur de puissance intègre un circuit de protection* destiné à protéger les transistors et les haut-parleurs en cas de dysfonctionnement de l'amplificateur. N'essayez pas de tester le circuit de protection en recouvrant le dissipateur de chaleur ou en connectant des charges inappropriées.
- N'utilisez pas l'appareil sur une batterie faible, car sa performance maximale dépend d'une bonne alimentation en électricité.
- Pour des raisons de sécurité, écoutez l'autoradio à un volume modéré afin d'entendre les bruits extérieurs.

Remplacement du fusible

Si le fusible saute, vérifiez les connexions du fil d'alimentation et remplacez le fusible. S'il saute de nouveau, un mauvais circuit interne peut en être la cause. Dans ce cas, consultez votre concessionnaire Sony.

Avertissement

- En cas de remplacement du fusible, veillez à utiliser un fusible dont l'intensité correspond à celle inscrite sur le porte-fusible. N'utilisez jamais de fusible dont l'intensité dépasse celle du fusible fourni avec l'appareil, car vous risqueriez d'endommager l'appareil.
- Si les quatre fusibles ne sont pas utilisés, les performances s'en trouvent limitées et il se peut que le système ne puisse être mis sous tension.

* Circuit de protection

Cet amplificateur est équipé d'un circuit de protection qui s'active dans les cas suivants:

- Surchauffe de l'appareil
- Production d'un courant continu
- Court-circuit aux bornes des haut-parleurs.

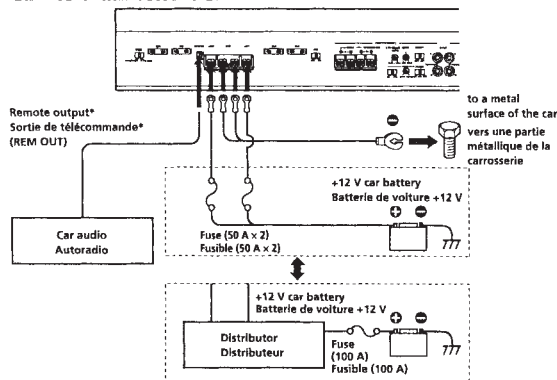
 La couleur du témoin POWERPROTECTOR passe du vert à l'ambre et l'appareil s'éteint. Si le cas se présente, coupez l'alimentation de l'appareil raccorder et éjectez la cassette ou le disque compact avant d'examiner la cause de la défaillance. Si l'amplificateur est trop chaud, attendez qu'il refroidisse.

Pour toute question ou problème qui ne serait pas traité dans ce manuel, consultez votre concessionnaire Sony.

Attention

- Avant d'effectuer les connexions, débranchez le fil de masse de la borne de la batterie pour éviter un court-circuit.
- Utilisez des haut-parleurs d'une capacité adéquate. Si vous utilisez des haut-parleurs de faible capacité, ils risquent d'être endommagés.
- Ne raccordez pas la borne ⊕ des haut-parleurs à la carrosserie de la voiture ni la borne ⊕ du haut-parleur droit à celle du haut-parleur gauche.
- Éloignez les cordons d'entrée et de sortie du fil d'alimentation électrique pour éviter que des interférences ne se produisent.
- Cet appareil est un amplificateur de haute puissance et il peut ne pas atteindre sa puissance maximale si les cordons de haut-parleurs originaux de la voiture lui sont raccordés.
- Si votre voiture est équipée d'un ordinateur de bord pour la navigation ou à toute autre fin, ne débranchez pas le fil de masse de la batterie de la voiture. Si vous débranchez ce fil, toute la mémoire de l'ordinateur sera effacée. Pour éviter un court-circuit lorsque vous effectuez les branchements, branchez le fil d'alimentation de +12 V uniquement après avoir branché tous les autres fils.

Power Connection Leads Câbles d'alimentation



- * If you have the factory original or some other car audio without a remote output on the amplifier, connect the remote input terminal (REMOTE) to the accessory power supply.
- * Si vous disposez du modèle d'origine ou d'un autre autoradio dont l'amplificateur ne comporte pas de sortie de télécommande, raccordez la borne d'entrée de télécommande (REMOTE) à la prise d'alimentation accessoire.

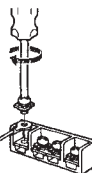
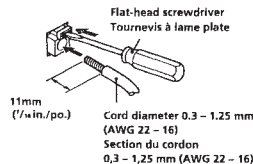
Notes on the power supply

- Connect the +12 V power supply lead only after all the other leads have been connected.
- Be sure to connect the ground lead of the unit securely to a metal surface of the car. A loose connection may cause the amplifier to malfunction.
- Be sure to connect the remote control lead of the car audio to the remote terminal.
- When using a car audio without a remote output on the amplifier, connect the remote input terminal (REMOTE) to the accessory power supply.
- Use the power supply lead with a fuse attached (100 A).
- Place the fuse in the power supply lead as close as possible to the car battery.
- Make sure that the leads to be connected to the +12 V and GND terminals of this unit are larger than 6-gauge (AWG-6) or have a sectional area of more than 13 mm².
- When using the optional RC-46 power amplifier connecting card, consult that manual for proper use.

Remarques sur l'alimentation électrique

- Raccordez le câble d'alimentation +12 V uniquement après avoir réalisé toutes les autres connexions.
- Raccordez correctement le fil de masse de l'appareil à une surface métallique de la voiture. Une connexion lâche peut provoquer un dysfonctionnement de l'amplificateur.
- Veillez à raccorder le fil de télécommande de l'autoradio à la borne de télécommande.
- * Si vous utilisez un autoradio dont l'amplificateur ne comporte pas de sortie de télécommande, raccordez la borne d'entrée de la télécommande (REMOTE) à la prise d'alimentation accessoire.
- Utilisez un câble d'alimentation muni d'un fusible (100 A).
- Fixez le câble d'alimentation le plus près possible de la batterie de voiture.
- Vous devez raccorder des câbles de calibre supérieurs à 6-Jauge (AWG-6) ou d'une section supérieure à 13 mm² aux bornes +12 V et GND.
- Lorsque vous utilisez le cordon de raccordement pour amplificateur RC-46 en option, consultez le manuel pour une utilisation correcte.

Make the terminal connections as illustrated below.



Note
Tighten the screws firmly, but be careful not to apply too much force* as doing so may damage the screws.

* The torque value should be less than 1 N•m.

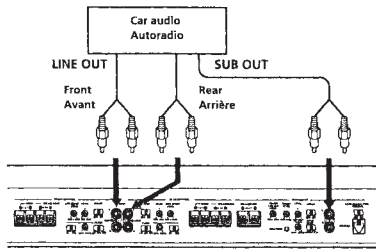
Remarque
Ne serrez pas trop fort la vis car vous pourriez l'endommager.

* Le couple de serrage devrait être inférieur à 1 N•m.

Input Connections/Connexions d'entrée

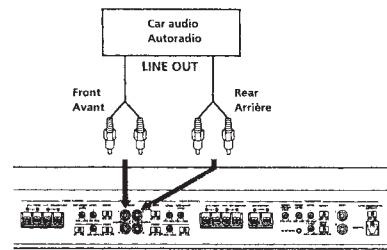
Line Input Connection (with Speaker Connection 1) Connexion d'entrée de ligne (avec connexion de haut-parleur 1)

A



Line Input Connection (with Speaker Connection 1) Connexion d'entrée de ligne (avec connexion de haut-parleur 1)

B

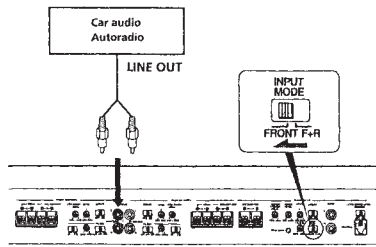


Note
Make sure to set the INPUT MODE select switch to either "FRONT" or "F+R" (refer to "Location and Function of Controls".)

Remarque
Réglez le sélecteur INPUT MODE sur "FRONT" ou "F+R" (voir "Emplacement et fonction des commandes").

Line Input Connection (with Speaker Connection 1) Connexion d'entrée de ligne (avec connexion de haut-parleur 1)

C

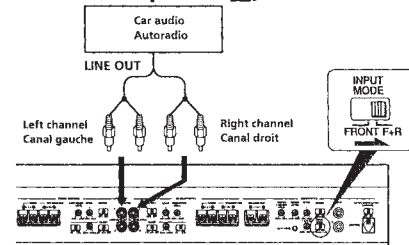


Note
Make sure that the line output from the car audio is connected to the jack marked "FRONT INPUT" on the unit. In this system, the signals from FRONT INPUT are filtered through each circuit and output to the subwoofer and rear speaker.

Remarque
Assurez-vous que la sortie de ligne de l'autoradio est raccordée à la prise "FRONT INPUT" de l'appareil. Dans ce système, les signaux de FRONT INPUT sont filtrés par chaque circuit et sortie vers le subwoofer et le haut-parleur arrière.

Line Input Connection (with Speaker Connection 2) Connexion d'entrée de ligne (avec connexion de haut-parleur 2)

D



Note
The INPUT MODE select switch must be set to "F+R" (refer to "Location and Function of Controls").

Remarque
Le sélecteur INPUT MODE doit être réglé sur "F+R" (voir "Emplacement et fonction des commandes").

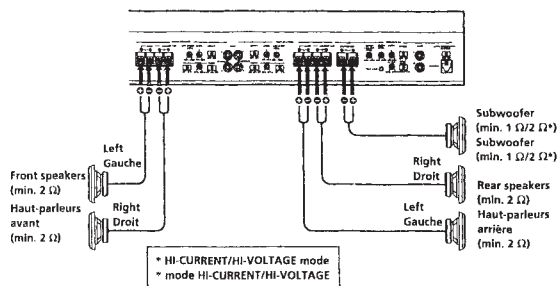
Speaker Connections/Raccordement de haut-parleurs

5-Speaker System (with Input Connection A, B or C) Système à 5 haut-parleurs (avec connexion d'entrée A, B ou C)

1

For details on the settings of switches and controls, refer to "Location and Function of Controls".

Pour plus de détails sur les réglages des commutateurs et commandes, reportez-vous à "Emplacement et fonction des commandes".

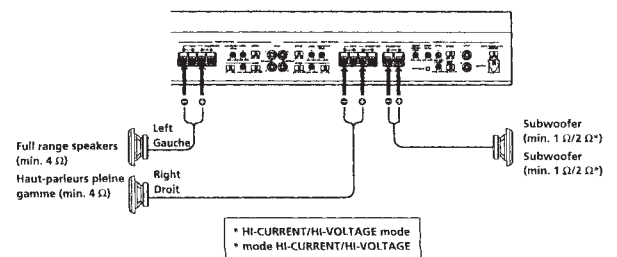


3-Speaker System (with Input Connection D) Système à 3 haut-parleurs (avec connexion d'entrée D)

2

For details on the settings of switches and controls, refer to "Location and Function of Controls".

Pour plus de détails sur les réglages des commutateurs et commandes, reportez-vous à "Emplacement et fonction des commandes".



Features

- Maximum power output of 150 watts x 4 + 500 watts (at 4 ohms).
- Features a 2 channel-input / 5 channel-output function that makes it possible to carry a 2-way multi system even with a single line output from the car stereo.
- Built-in variable filter corresponds to a wide range, from 50 Hz to 400 Hz/500 Hz to 4 kHz. (x 1 / x 10 switch)
- Built-in variable LPF (Low-pass filter), HPF (High-pass filter) and low boost circuit.
- The DIRECT switch can be used to bypass the low-pass filter, high-pass filter or low boost circuit.
- Possible to switch between HI-CURRENT mode (1 - 2 Ω) and HI-VOLTAGE mode (2 - 4 Ω) for subwoofer.
- Negative Feed Back (ON/OFF) switchable.
- Independent voltage amplifier power supply.

- Protection circuit and indicator are provided.
- Pulse power supply* for stable, regulated output power.
- Pulse power supply**
This unit has a built-in power regulator which converts the power supplied by the DC 12 V car battery into high speed pulses using a semiconductor switch. These pulses are stepped up by the built-in pulse transformer and separated into both positive and negative power supplies before being converted into direct current again. This is to regulate fluctuating voltage from the car battery. This light weight power supply system provides a highly efficient power supply with a low impedance output.

Caractéristiques

- Puissance de sortie maximale de 150 watts x 4 + 500 watts (à 4 ohms).
- Intègre une fonction d'entrée à 2 canaux/sortie à 5 canaux compatible avec un multisystème à 2 voies même avec une sortie de ligne signal via la stéréo.
- Le filtre variable intégré correspond à une large plage allant de 50 Hz à 400 Hz/500 Hz à 4 kHz (commutateur x 1 / x 10).
- Filtre passe-bas (LPF), filtre passe-haut (HPF) variables et circuit d'amplification des graves intégrés.
- Le commutateur DIRECT peut être utilisé pour contourner le filtre passe-bas, le filtre passe-haut, et pour le circuit d'égalisation, afin d'optimiser la qualité sonore.
- Il est possible de commuter le mode HI-CURRENT (1 - 2 Ω) et le mode HI-VOLTAGE (2 - 4 Ω) pour le subwoofer.
- Rétro-action négative (ON/OFF) commutable.
- Alimentation indépendante de l'amplificateur de tension.

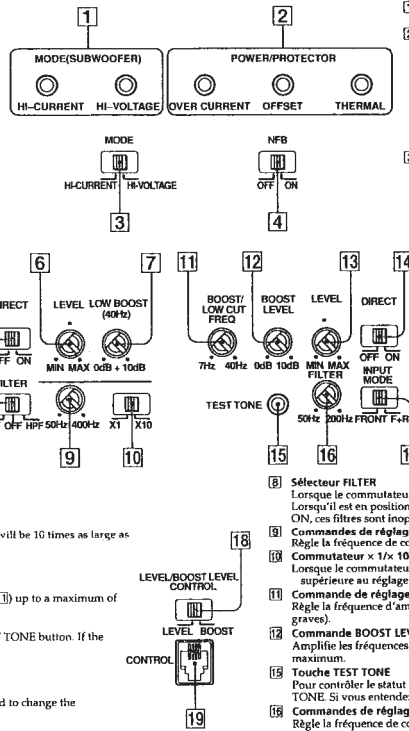
- Circuit de protection et indicateur fournis.
- Alimentation électrique par impulsions* pour une puissance de sortie stable, régulée.
- Alimentation électrique par impulsions**
Cet appareil est équipé d'un régulateur de puissance intégré qui convertit la puissance fournie par une batterie de voiture de 12 V CC en impulsions ultra-rapides au moyen d'un commutateur à semi-conducteur. Ces impulsions sont amplifiées par le transformateur d'impulsions intégré et séparées en alimentation positive et négative avant d'être reconverties en courant continu. Ce processus permet de compenser les fluctuations de tension provenant de la batterie de la voiture. Ce système d'alimentation de faible poids assure une alimentation électrique très efficace pour une sortie d'impédance faible.

Location and Function of Controls

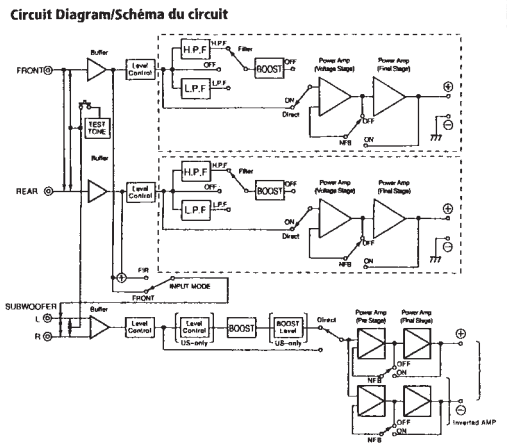
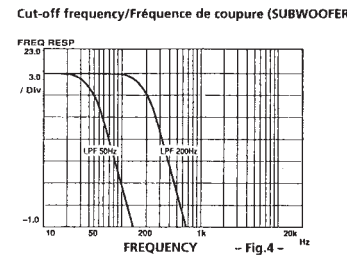
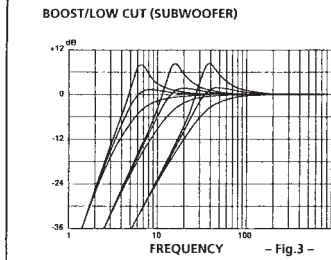
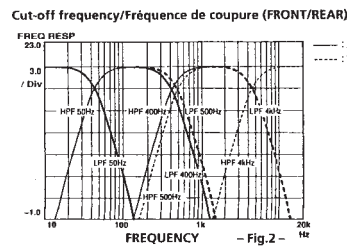
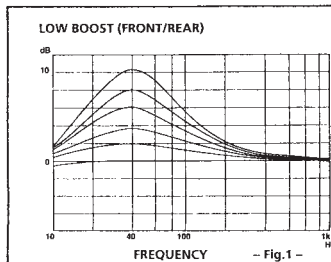
- MODE (Subwoofer) indicator**
Indicates HI-CURRENT mode or HI-VOLTAGE mode.
- POWER/PROTECTOR indicator**
OVER CURRENT lights up in green during normal operation. The color will change from green to amber when receiving a powerful signal.
OFFSET lights up green during normal operation. The color will change from green to amber when the voltage going out to the Speaker terminal or the Pin Jack is too high.
THERMAL lights up in green during normal operation. The color will change from green to amber when the temperature rises to an unsafe level. The color will return to green when the temperature returns to normal.
- MODE (HI-CURRENT/HI-VOLTAGE) switch**
In HI-CURRENT mode the speaker impedance is 1 to 2 Ω. This mode sends a signal via parallel circuits for a powerful sound.
In HI-VOLTAGE mode the speaker impedance is 2 to 4 Ω. In this mode you can enjoy clear sound with the dynamic range.
- NFB switch**
When the NFB (Negative Feed Back) switch is set to ON, the NFB circuits are effective at reducing the distortion produced by the amplifier.
Tip
The NFB circuits are effective at reducing the static characteristic distortion produced by the amplifier, but are susceptible to the effect of sound loudness from the reverse electromotive force produced by the speakers.
- DIRECT switch**
When the DIRECT switch is set to ON, the signal will not go through the low-pass filter, high-pass filter, or low boost circuit.
- LEVEL adjustment control**
The input level can be adjusted with this control when using source equipment made by other manufacturers. Turn it to MAX when the output level of the car audio seems low. To reduce noise, turn the LEVEL control (gain) of the amplifier to MIN and the volume of the car audio up.
- LOW BOOST level control (See Fig.1)**
Turn this control to boost the frequencies around 40 Hz to a maximum of 10 dB.
- FILTER select switch**
When the switch is in the LPF position, the filter is set to low-pass. When in the HPF position, the filter is set to high-pass. When the DIRECT switch is set to ON, these filters do not work.
- Cut-off frequency adjustment control (FRONT/REAR) (See Fig.2)**
Sets the cut-off frequency for the low-pass or high-pass filters (50 - 400 Hz).
- 1/x 10 switch**
When the 1/x 10 switch is set to x 10, the established cut-off frequency (⑨) will be 10 times as large as the x 1 setting.
- BOOST/LOW CUT FREQ (Subsonic Filter) adjustment control (See Fig.3)**
Sets the boost frequency (7 - 40 Hz) for BOOST LEVEL (low boost level) control.
- BOOST LEVEL (Low boost level) control**
Amplifies the frequencies set by BOOST/LOW CUT FREQ adjustment control (⑪) up to a maximum of 10dB.
- TEST TONE button**
To check the system's status, activate the built in transmitter then press the TEST TONE button. If the tone is heard, the unit is functioning normally.
- Cut-off frequency adjustment control (SUBWOOFER) (See Fig.4)**
Sets the cut-off frequency for the subwoofer (50 - 200 Hz).
- INPUT MODE select switch**
When no input lead is connected to SUBWOOFER INPUT, the switch can be used to change the SUBWOOFER OUTPUT as follows:
FRONT : Outputs the signal that has been input to the FRONT and REAR input jacks.
F+R : Outputs the signal that has been input to the FRONT and REAR input jacks.
- Subwoofer LEVEL/BOOST LEVEL CONTROL select switch (US model only)**
Selects LEVEL or BOOST to adjust the level or the boost level of the subwoofer from the connected subwoofer level controller. For details on the optional Subwoofer level controller, consult your nearest Sony dealer.
- Subwoofer LEVEL/BOOST LEVEL CONTROL connecting terminal (US model only)**
Connects the optional subwoofer controller to this terminal.

Note
If you do not use the high-pass filter and low-pass filter, set the DIRECT switch to ON for more enjoyable high quality sound.

Emplacement et fonction des commandes



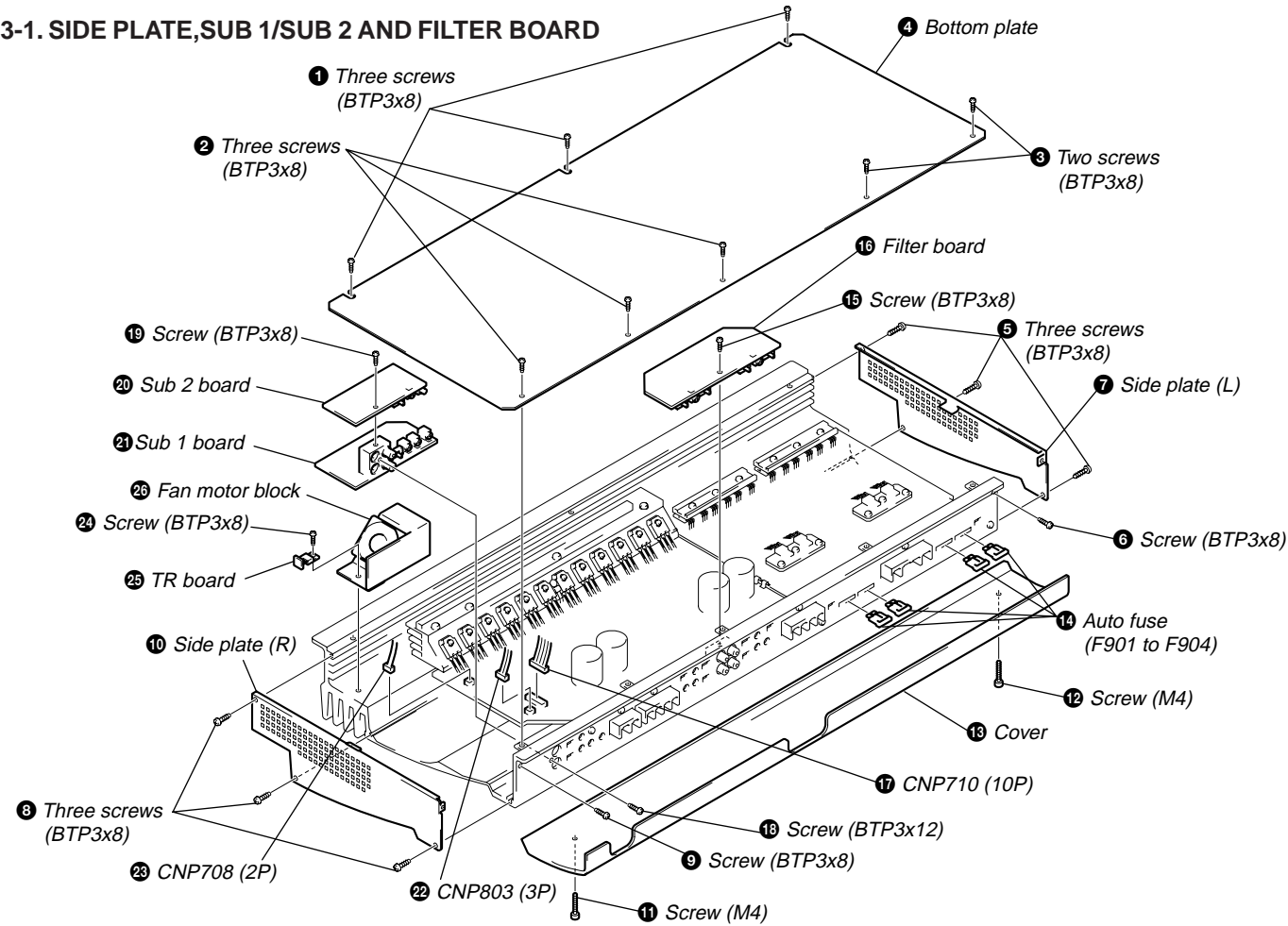
- Indicateur MODE**
L'indicateur signale le mode activé : HI-CURRENT ou HI-VOLTAGE.
- Indicateur POWER/PROTECTOR**
OVER CURRENT s'allume en vert en cours de fonctionnement normal. La couleur passe du vert à l'ambre lors de la réception d'un signal puissant.
OFFSET s'allume en vert en cours de fonctionnement normal. La couleur passe du vert à l'ambre lorsque la tension transmise via la borne de haut-parleurs ou la prise à broche est trop élevée.
THERMAL s'allume en vert en cours de fonctionnement normal. La couleur passe du vert à l'ambre lorsque la température dépasse le niveau de sécurité. La couleur repasse au vert dès que la température est revenue à un niveau normal.
- Commutateur de MODE (HI-CURRENT/HI-VOLTAGE)**
En mode HI-CURRENT, l'impédance de haut-parleur est de 1 à 2 Ω. Ce mode transmet un signal via des circuits parallèles pour créer un son de forte amplitude.
En mode HI-VOLTAGE, l'impédance de haut-parleur est de 2 à 4 Ω. Ce mode vous permet d'obtenir un son clair dans la plage dynamique.
- Commutateur NFB**
Lorsque le commutateur NFB (rétroaction négative) est réglé sur ON, les circuits NFB réduisent efficacement les distorsions produites par l'amplificateur.
Conseil
Les circuits NFB réduisent efficacement les distorsions statiques produites par l'amplificateur, mais sont sensibles aux effets d'altération du son causés par la force électromotrice inverse produite par les haut-parleurs.
- Commutateur DIRECT**
Lorsque le commutateur DIRECT est réglé sur ON, le signal ne passe pas par le filtre passe-bas, le filtre passe-haut et le circuit d'égalisation.
- Commande de réglage LEVEL**
Le niveau d'entrée peut se régler avec cette commande lors de l'utilisation d'équipements source d'autres fabricants. Mettez-le sur MAX lorsque le niveau de sortie de l'installation audio paraît faible. Pour réduire les parasites, tournez la commande LEVEL (gain) de l'amplificateur sur MIN et augmentez le volume sur l'autoradio.
- Commande de niveau LOW BOOST (Voir Fig.1)**
Tournez cette commande pour amplifier les fréquences autour de 40 Hz à un maximum de 10 dB.
- Sélecteur FILTER**
Lorsque le commutateur est en position LPF, le filtre est mis sur passe-bas. Lorsqu'il est en position HPF, le filtre est mis sur passe-haut. Lorsque le commutateur DIRECT est réglé sur ON, ces filtres sont inopérants.
- Commandes de réglage de la fréquence de coupure (FRONT/REAR) (Voir Fig.2)**
Règle la fréquence de coupure (50 - 400 Hz) des filtres passe-bas ou passe-haut.
- Commutateur x 1/x 10**
Lorsque le commutateur x 1/x 10 est réglé sur x 10, la fréquence de coupure réglée (⑨) est dix fois supérieure au réglage x 1.
- Commande de réglage BOOST/LOW CUT FREQ. (filtre subsonique) (Voir Fig.3)**
Règle la fréquence d'amplification (7 - 40 Hz) pour la commande BOOST LEVEL (niveau d'amplification des graves).
- Commande BOOST LEVEL (niveau d'amplification des graves)**
Amplifie les fréquences réglées à l'aide de la commande BOOST/LOW CUT FREQ. (⑪) de 10 dB au maximum.
- Touche TEST TONE**
Pour contrôler le statut du système, activez le transmetteur intégré et appuyez ensuite sur la touche TEST TONE. Si vous entendez une tonalité, c'est que l'appareil fonctionne normalement.
- Commandes de réglage de la fréquence de coupure (SUBWOOFER) (Voir Fig.4)**
Règle la fréquence de coupure (50 - 200 Hz) des subwoofers.
- SÉLECTEUR INPUT MODE**
Si aucun fil d'entrée n'est raccordé à SUBWOOFER INPUT, le sélecteur peut être utilisé pour changer SUBWOOFER OUTPUT comme suit.
FRONT : Sortie du signal entré via la prise d'entrée FRONT.
F+R : Sortie du signal entré via les prises d'entrée FRONT et REAR.
- Sélecteur subwoofer LEVEL/BOOST LEVEL CONTROL (modèle pour les USA uniquement)**
Si la commande de niveau de subwoofer en option est raccordée à cette borne, vous pouvez régler le niveau du subwoofer. Pour plus de détails sur la commande de niveau de subwoofer en option, consultez votre revendeur Sony.
- Borne de connexion Subwoofer LEVEL/BOOST LEVEL CONTROL (modèle pour les USA uniquement)**
Branche la commande de subwoofer en option sur cette borne.
Remarque
Si vous n'utilisez pas le filtre passe-haut et le filtre passe-bas réglez le commutateur DIRECT sur ON pour exploiter pleinement la qualité sonore.



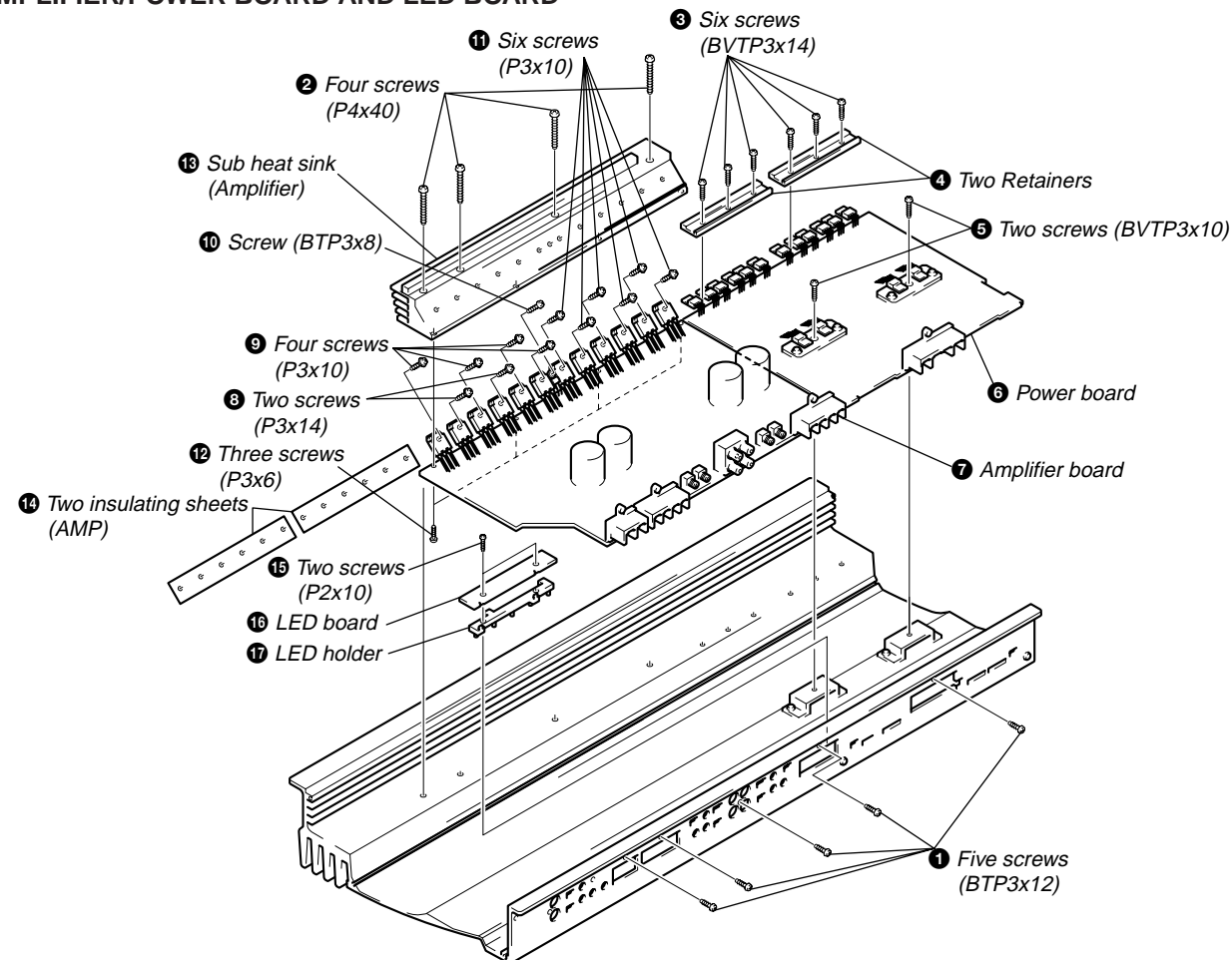
SECTION 3 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

3-1. SIDE PLATE, SUB 1/SUB 2 AND FILTER BOARD



3-2. AMPLIFIER/POWER BOARD AND LED BOARD



SECTION 4 ELECTRICAL ADJUSTMENT

IDLING CURRENT ADJUSTMENT

- Perform adjustments in the **HI-VOLTAGE** mode.

- Adjustment point
Semi-fixed resistors VR101, VR201, VR301, VR401, VR501, VR502 of amplifier board
 - Precautions on adjustments
 - Set the RCA input terminal to open.
 - Apply a voltage of 14.4V between the +12V terminal, REMOTE terminal, and GND terminal.
 - Rotate the above semi-fixed resistors completely in the counter-clockwise direction while observing the component side.
 - Check that the voltage at the adjustment point becomes 0 mV in step 2.
 - Fine adjustments may be required according to the characteristics of the MOS-FET used.
 - When adjusting the idling current
 - Rotating the semi-fixed resistor in the clockwise direction:
Increases the idling current
 - Rotating the semi-fixed resistor in the counterclockwise direction:
Decreases the idling current
- *Take note that rotating excessively in the clockwise direction will increase the idling current suddenly.

- Approximate adjustment values
Adjust as follows so that the following voltages become **1.2 to 0.3 mV** around 0.7 mV .

[FL channel]:

Voltage between TP7 and TP6: Use VR101 of the amplifier board

[FR channel]:

Voltage between TP7 and TP5: Use VR201 of the amplifier board

[RL channel]:

Voltage between TP7 and TP4: Use VR301 of the amplifier board

[RR channel]:

Voltage between TP7 and TP3: Use VR401 of the amplifier board

[SUBWOOFER Channels]:

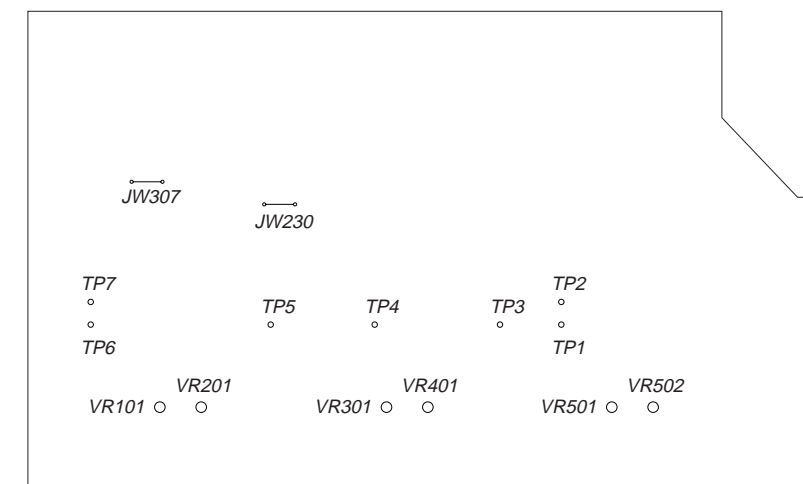
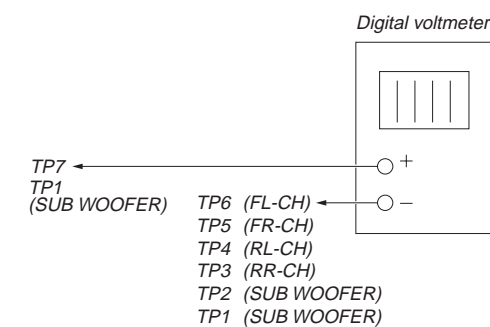
First, adjust so that the voltage between TP1 and TP2 becomes **1.2 to 0.3 mV** around 0.7 mV using VR501 of the amplifier board.

Next, adjust so that the voltage between TP1 and TP2 becomes **2.4 to 0.6 mV** around 1.4 mV using VR502 of the amplifier board."

Adjustment Location

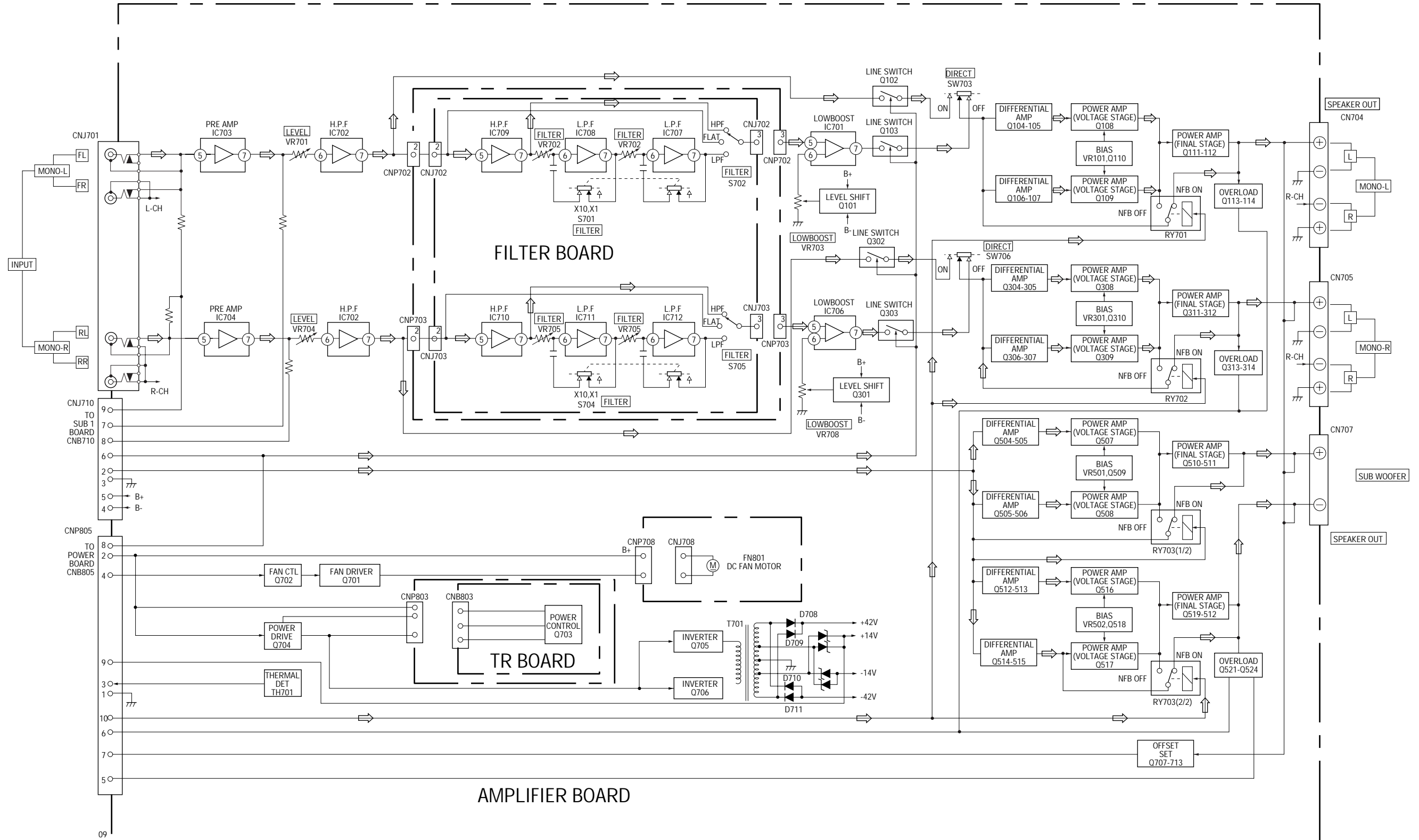
– AMPLIFIER BOARD – (Component side)

Connection :



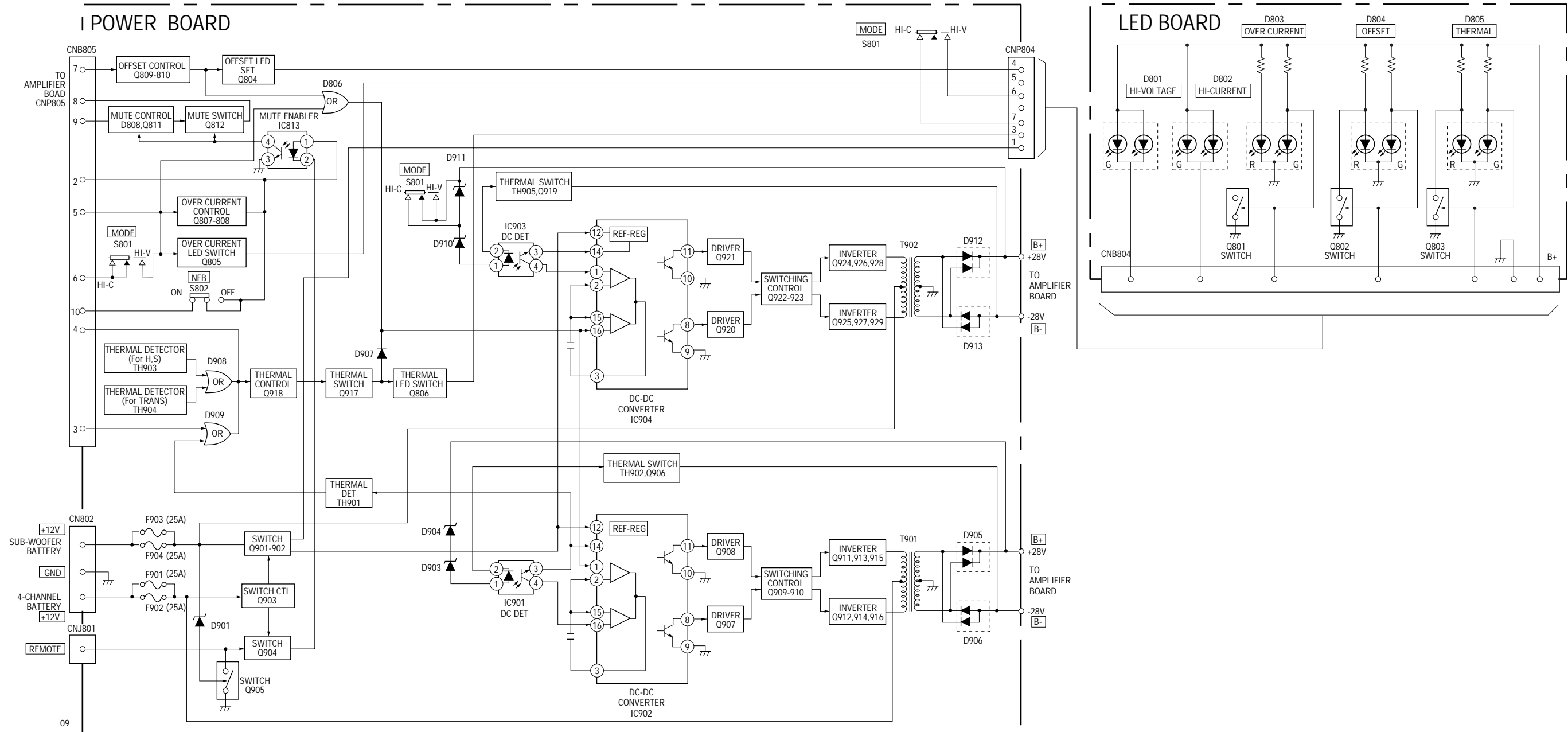
SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM – AMPLIFIER SECTION –

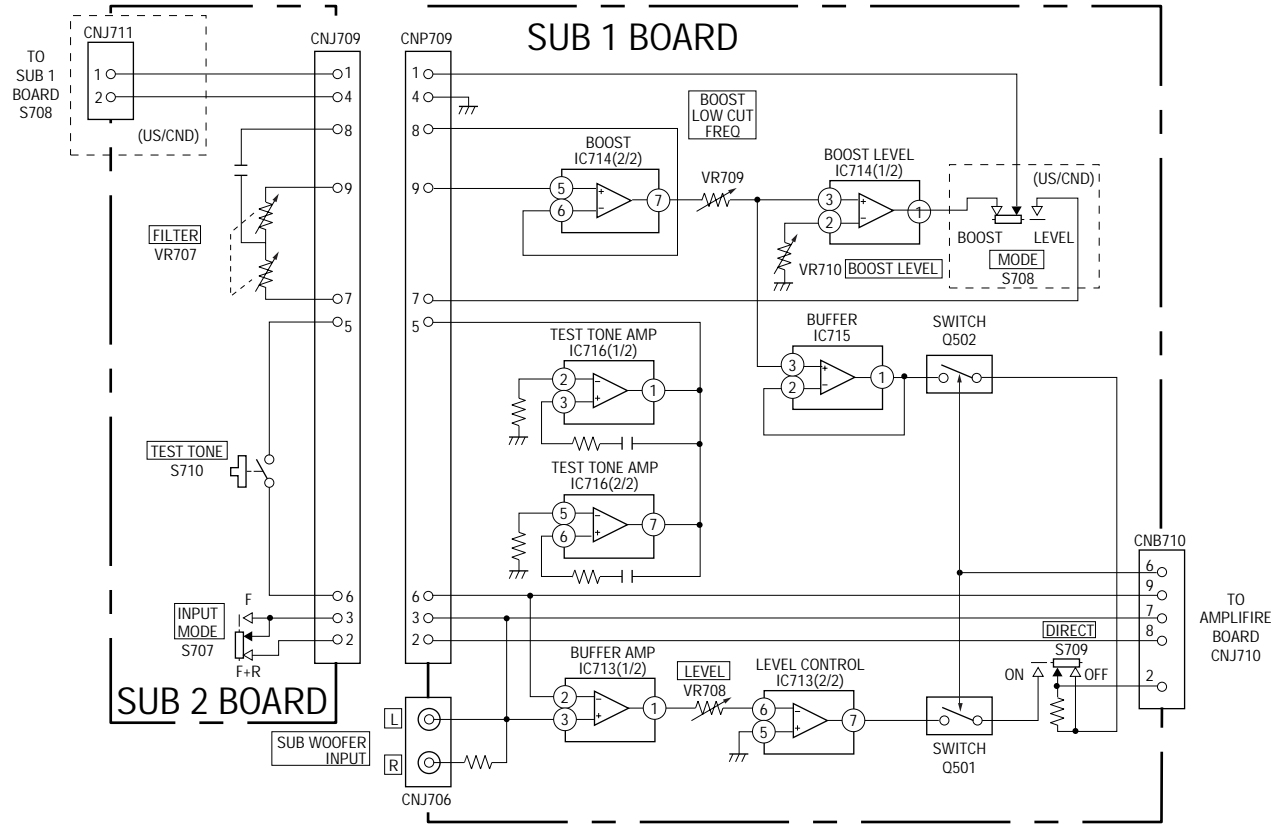


• Signal path
⇒ : Audio

5-2. BLOCK DIAGRAM – POWER SECTION –



5-3. BLOCK DIAGRAM – SUB 1/SUB 2 SECTION –



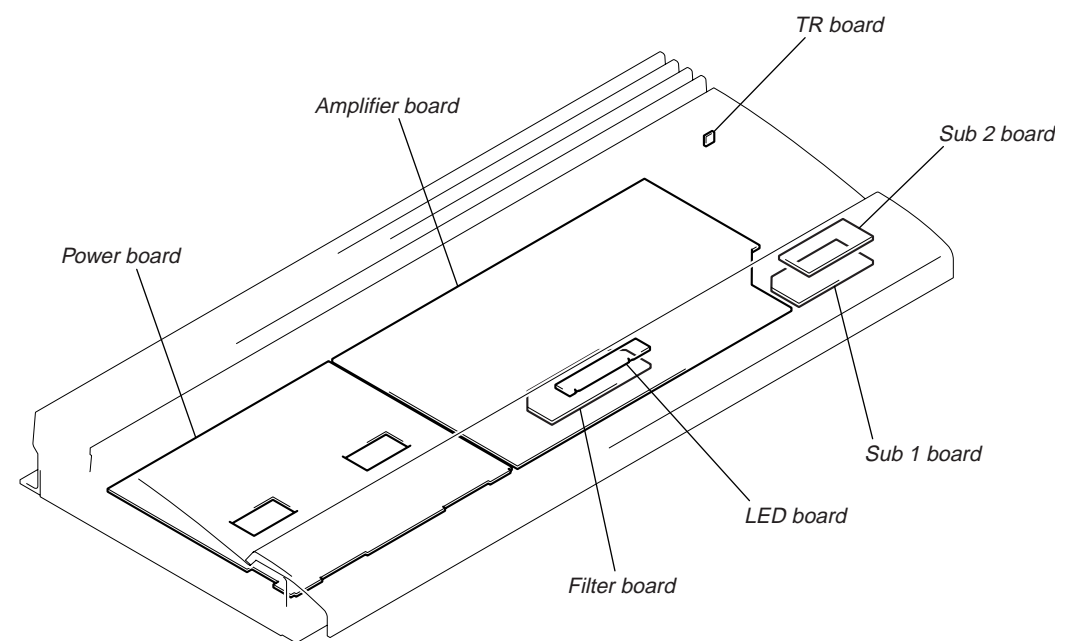
09

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
 (In addition to this, the necessary note is printed in each block.)

- For schematic diagrams.**
- Note:**
- All capacitors are in μF unless otherwise noted. pF : μpF 50 WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
 - [] : panel designation.
 - [B+] : B+ Line.
 - Power voltage is dc 14.4V and fed with regulated dc power supply from +12V and REMOTE terminals.
 - Voltages and waveforms are dc with respect to ground under no-signal conditions.
 - no mark: POWER ON
 - * : Impossible to measure
 - Voltages are taken with a VOM (Input impedance $10\text{M}\Omega$). Voltage variations may be noted due to normal production tolerances.
 - Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
 - Circled numbers refer to waveforms.
 - Signal path.
 - [] : AUDIO

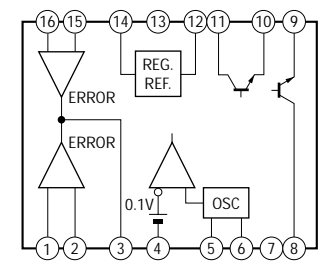
- For printed wiring boards.**
- Note:**
- [] : parts extracted from the component side.

• CIRCUIT BOARDS LOCATION



5-4. IC BLOCK DIAGRAM

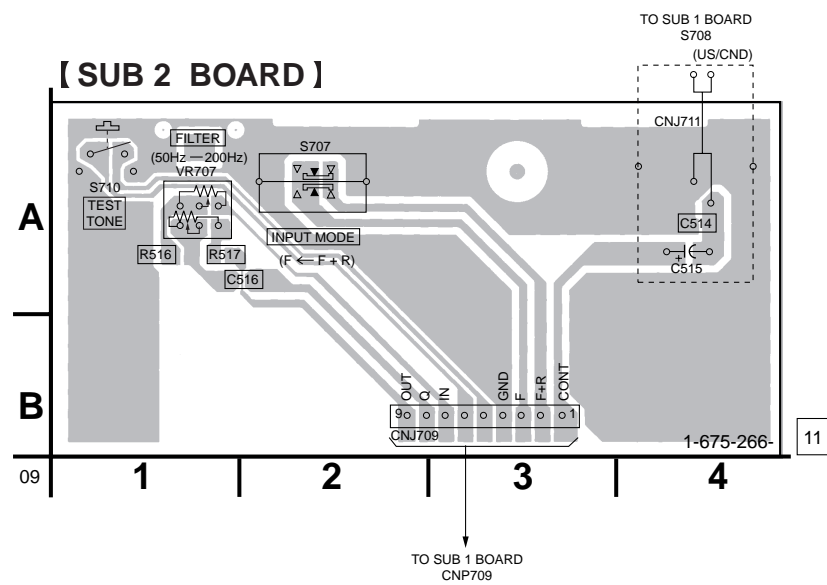
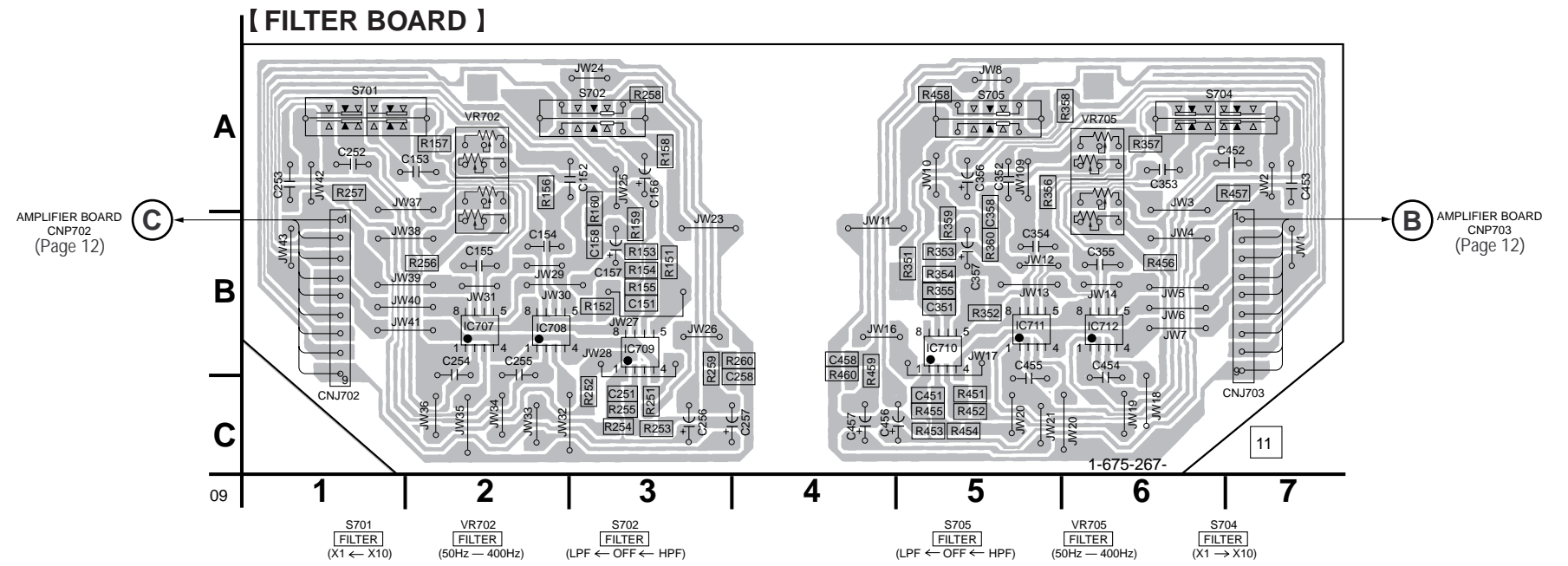
- POWER section
- IC902, 904 $\mu\text{PC494G2}$



5-5. PRINTED WIRING BOARD – FILTER/SUB 1/SUB 2 SECTION –

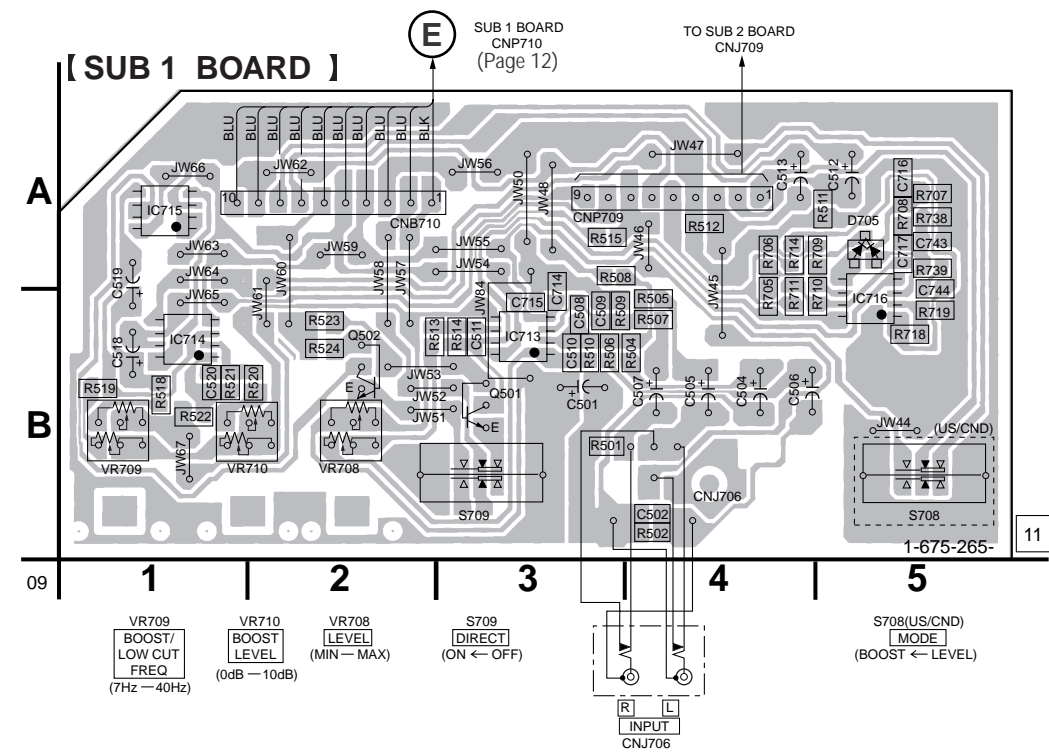
• Semiconductor Location

Ref. No.	Location
IC707	B-2
IC708	B-2
IC709	B-3
IC710	B-5
IC711	B-5
IC712	B-6



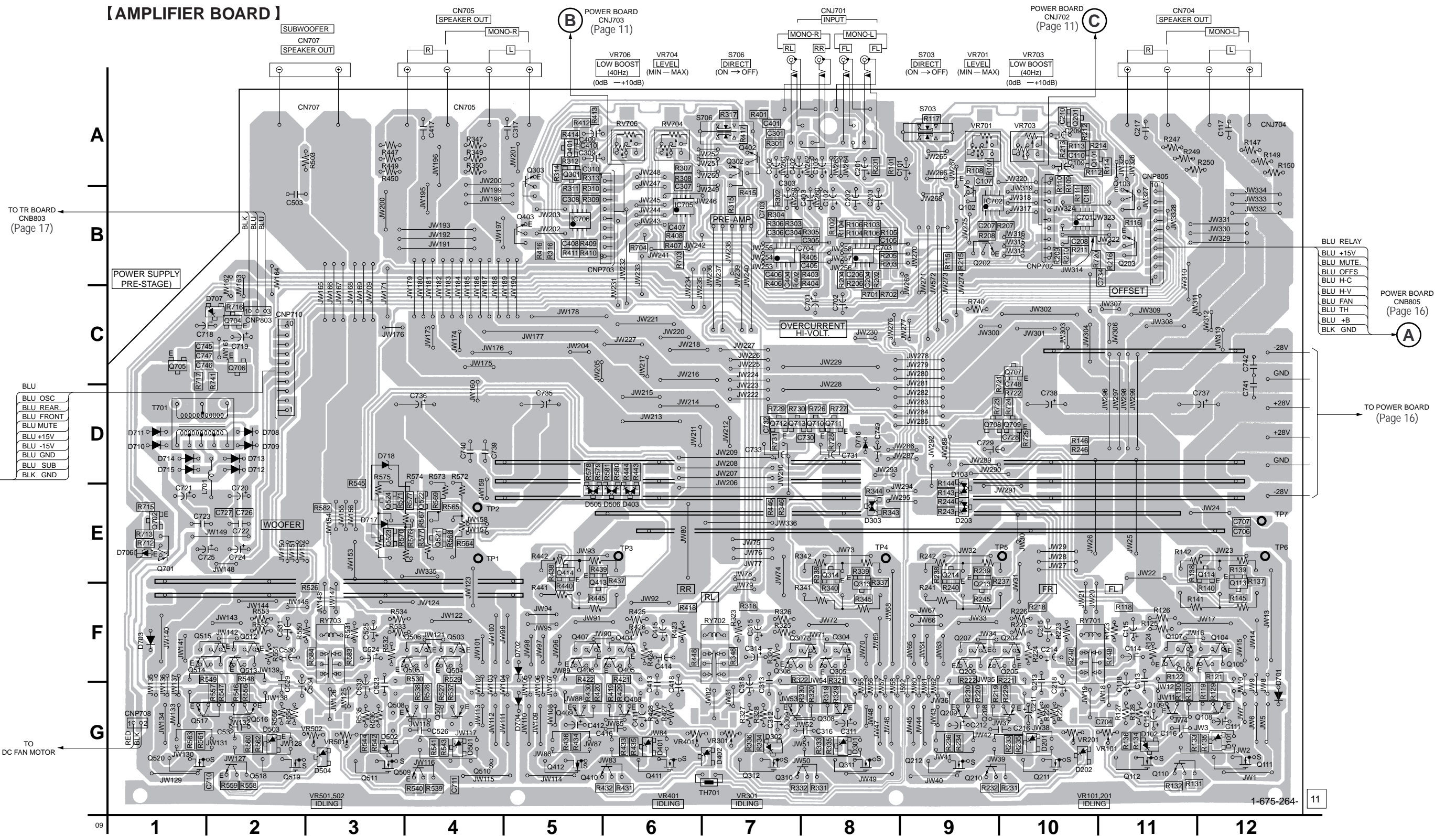
• Semiconductor Location

Ref. No.	Location
D705	A-5
IC713	B-3
IC714	B-1
IC715	A-1
IC716	B-5
Q501	B-3
Q502	B-2



5-6. PRINTED WIRING BOARD - AMPLIFIER SECTION -

[AMPLIFIER BOARD]



TO TR BOARD
CNB803
(Page 17)

POWER SUPPLY
PRE-STAGE)

BLU
BLU OSC
BLU REAR
BLU FRONT
BLU MUTE
BLU +15V
BLU -15V
BLU GND
BLU SUB
BLK GND

SUB 1 BOARD
CNB710
(Page 11)

TO
DC FAN MOTOR

POWER BOARD
CNJ703
(Page 11)

POWER BOARD
CNJ702
(Page 11)

BLU RELAY
BLU +15V
BLU MUTE
BLU OFFS
BLU H-C
BLU H-V
BLU FAN
BLU TH
BLU +B
BLK GND

POWER BOARD
CNB805
(Page 16)

TO POWER BOARD
(Page 16)

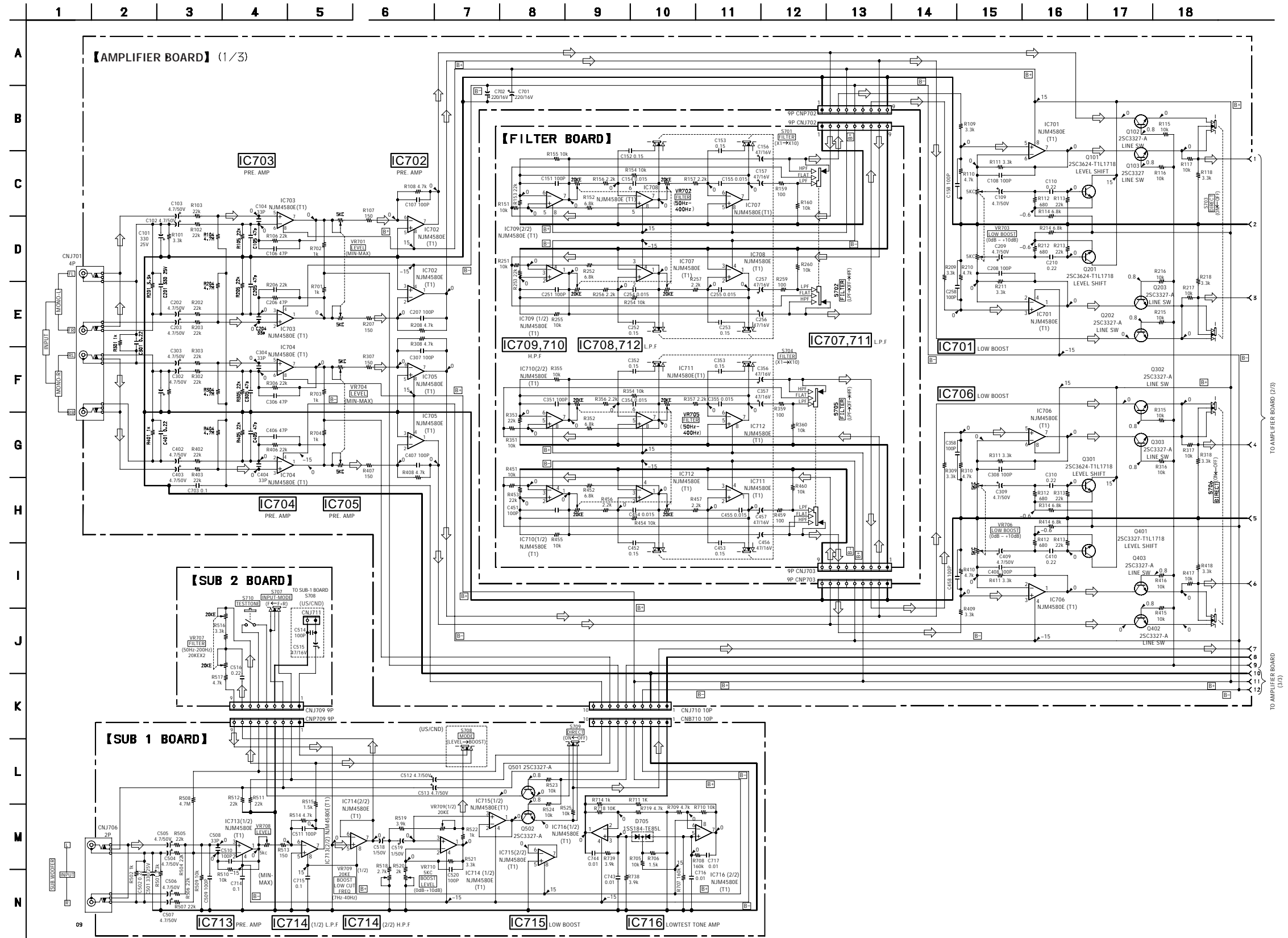
1-675-264-11

5-7. SCHEMATIC DIAGRAM – AMPLIFIER (1/3)/FILTER/SUB 1/SUB 2 SECTION –

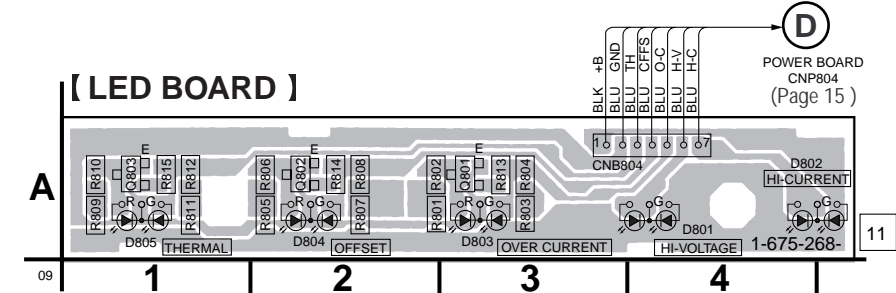
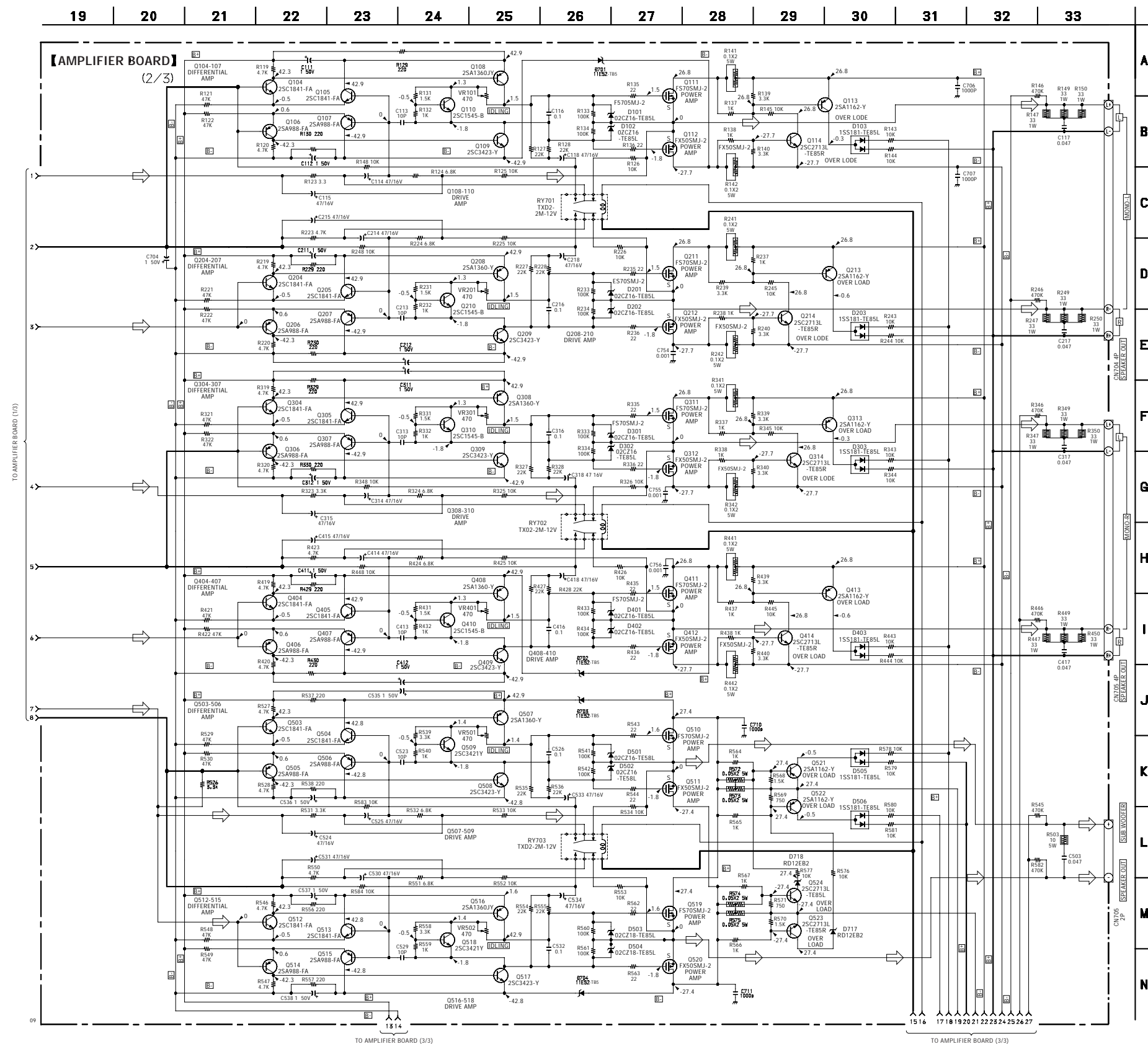
• See page 10 for IC Block Diagram.

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D101	G-12	Q211	G-10
D102	G-11	Q212	G-9
D103	D-9	Q213	E-9
D201	G-10	Q214	E-9
D202	G-10	Q301	A-5
D203	E-9	Q302	A-7
D301	G-8	Q303	A-5
D302	G-7	Q304	F-8
D303	E-8	Q305	F-8
D401	G-6	Q306	F-7
D402	G-7	Q307	F-7
D403	E-6	Q308	G-8
D501	G-4	Q309	G-7
D502	G-3	Q310	G-7
D503	G-2	Q311	G-8
D504	G-3	Q312	G-7
D505	E-5	Q313	E-8
D506	E-6	Q314	E-8
D701	G-12	Q401	A-5
D702	F-5	Q402	A-7
D703	F-1	Q403	B-5
D704	G-5	Q404	F-6
D706	E-1	Q405	F-6
D707	C-2	Q406	F-5
D708	D-2	Q407	F-5
D709	D-2	Q408	G-6
D710	D-1	Q409	G-5
D711	D-1	Q410	G-6
D712	D-2	Q411	G-6
D713	D-2	Q412	G-5
D714	D-1	Q413	E-5
D715	D-1	Q414	E-5
D716	D-8	Q503	F-4
D717	E-3	Q504	F-4
D718	D-3	Q505	F-4
		Q506	F-4
IC701	B-10	Q507	G-4
IC702	B-9	Q508	G-4
IC703	B-8	Q509	G-4
IC704	B-7	Q510	G-4
IC705	B-6	Q511	G-3
IC706	B-5	Q512	F-2
		Q513	F-2
Q101	A-10	Q514	F-1
Q102	B-9	Q515	F-1
Q103	B-11	Q516	G-2
Q104	F-12	Q517	G-1
Q105	F-12	Q518	G-2
Q106	F-11	Q519	G-2
Q107	F-11	Q520	G-1
Q108	G-12	Q521	E-4
Q109	G-11	Q522	E-4
Q110	G-11	Q523	E-3
Q111	G-12	Q524	E-3
Q112	G-11	Q701	E-1
Q113	E-12	Q702	E-1
Q114	E-12	Q704	C-2
Q201	A-10	Q705	C-1
Q202	B-9	Q706	C-2
Q203	B-11	Q707	C-10
Q204	F-10	Q708	D-9
Q205	F-10	Q709	D-10
Q206	F-9	Q710	D-8
Q207	F-9	Q711	D-8
Q208	G-10	Q712	D-7
Q209	G-9	Q713	D-7
Q210	G-9		



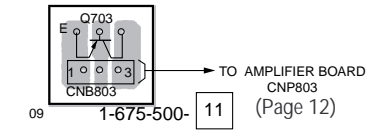
5-8. SCHEMATIC DIAGRAM/PRINTED WIRING BOARD – AMPLIFIER (2/3)/LED/TR SECTION – • See page 10 for IC Block Diagram.



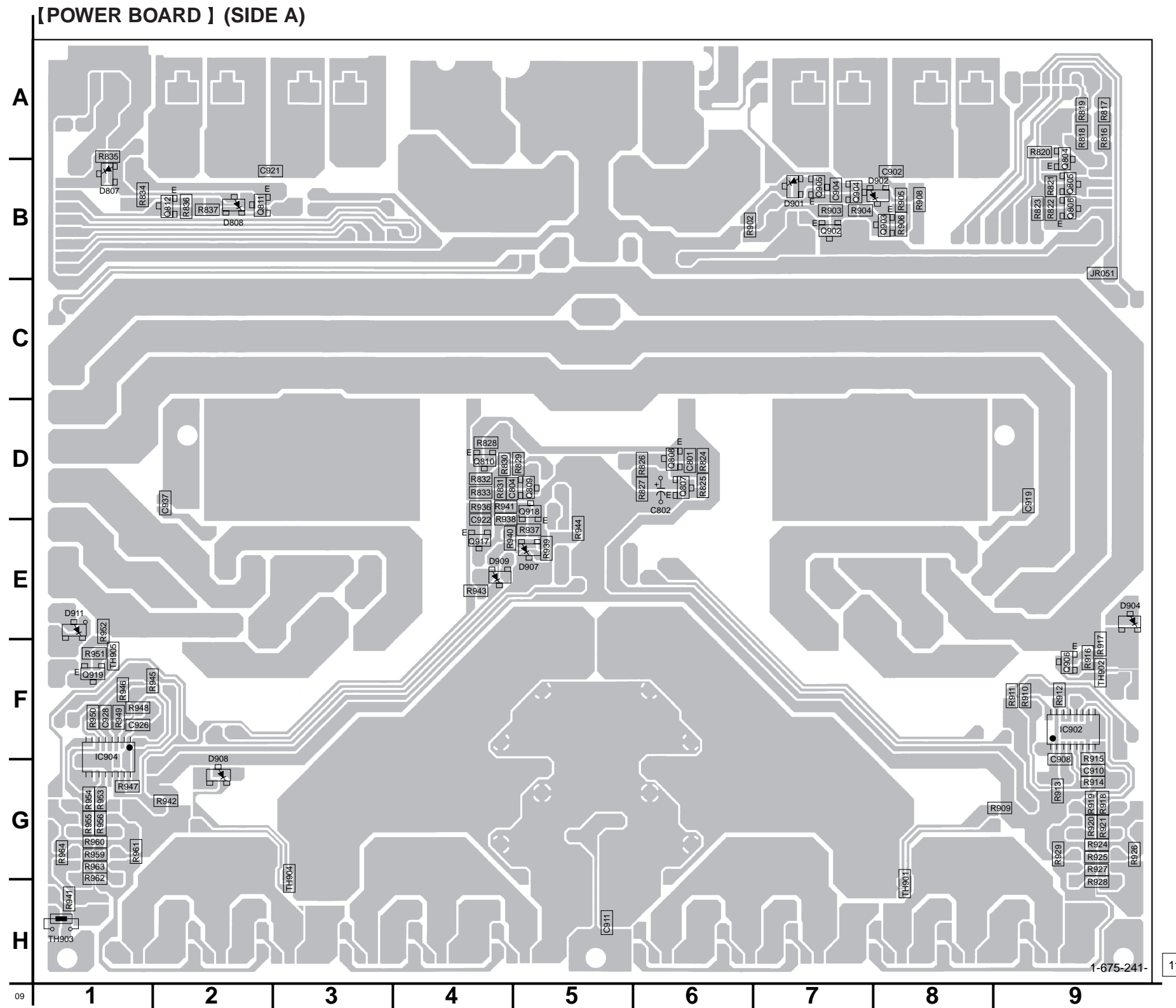
• Semiconductor Location

Ref. No.	Location
D801	A-4
D802	A-4
D803	A-3
D804	A-2
D805	A-1
Q801	A-3
Q802	A-2
Q803	A-1

[TR BOARD]



5-9. PRINTED WIRING BOARD – POWER SECTION –



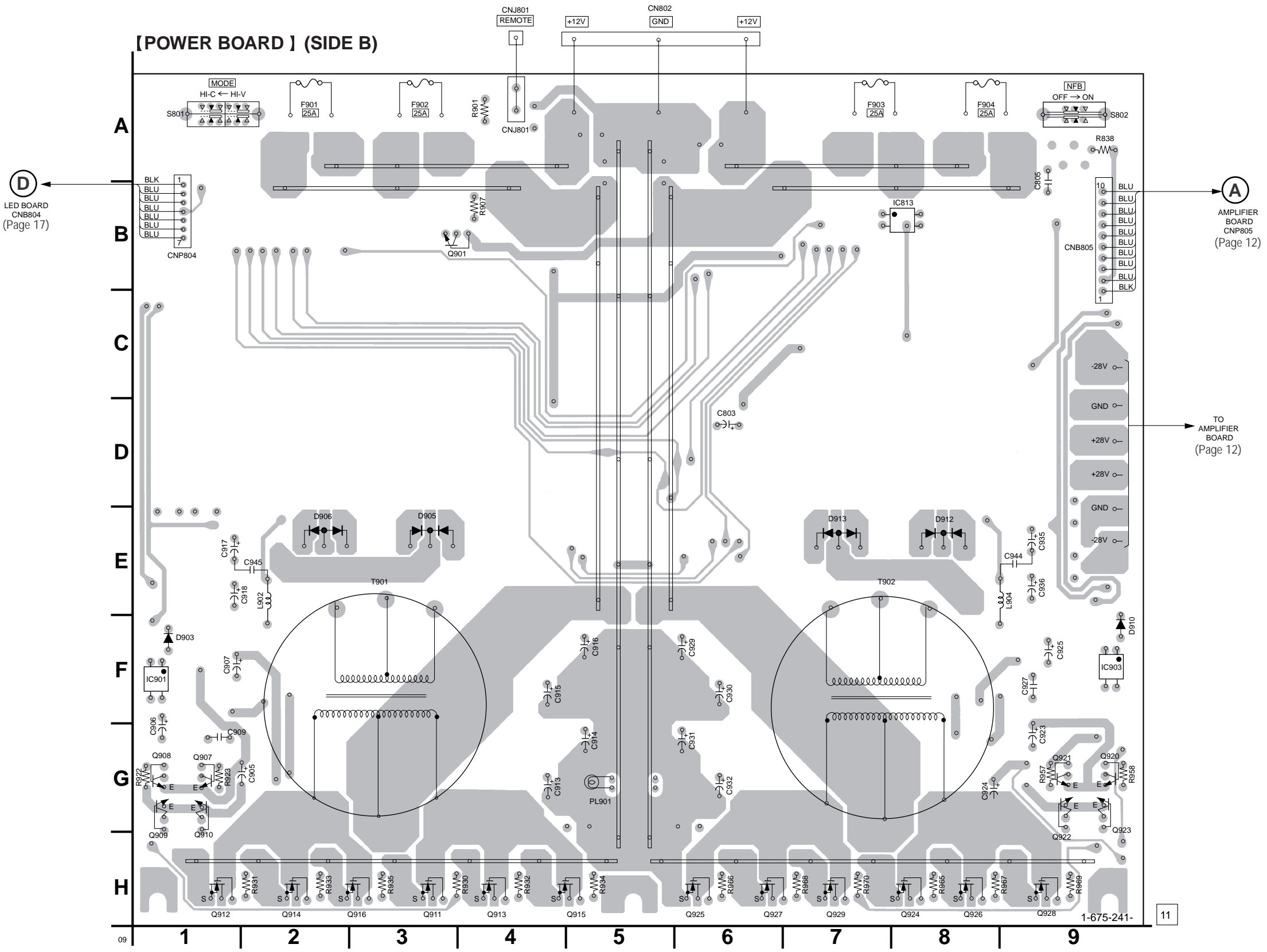
• Semiconductor Location

Ref. No.	Location
D903	F-9
D905	E-7
D906	E-8
D910	F-1
D912	E-2
D913	E-3
IC813	B-3
IC901	F-9
IC903	F-1
Q901	B-7
Q907	G-9
Q908	G-9
Q909	G-9
Q910	G-9
Q911	H-7
Q912	H-9
Q913	H-6
Q914	H-8
Q915	H-6
Q916	H-8
Q920	G-1
Q921	G-1
Q922	G-1
Q923	G-1
Q924	H-3
Q925	H-4
Q926	H-2
Q927	H-4
Q928	H-1
Q929	H-3

• Semiconductor Location

Ref. No.	Location
D806	E-5
D807	B-1
D808	B-2
D901	B-7
D902	B-7
D904	E-9
D907	E-5
D908	G-2
D909	E-4
D911	E-1
IC902	F-9
IC904	F-1
Q804	B-9
Q805	B-9
Q806	B-9
Q807	D-6
Q808	D-6
Q809	D-5
Q810	D-4
Q811	B-2
Q812	B-2
Q902	B-7
Q903	B-8
Q904	B-7
Q905	B-7
Q906	F-9
Q917	E-4
Q918	D-5
Q919	F-1

[POWER BOARD] (SIDE B)



D
LED BOARD
CNB804
(Page 17)

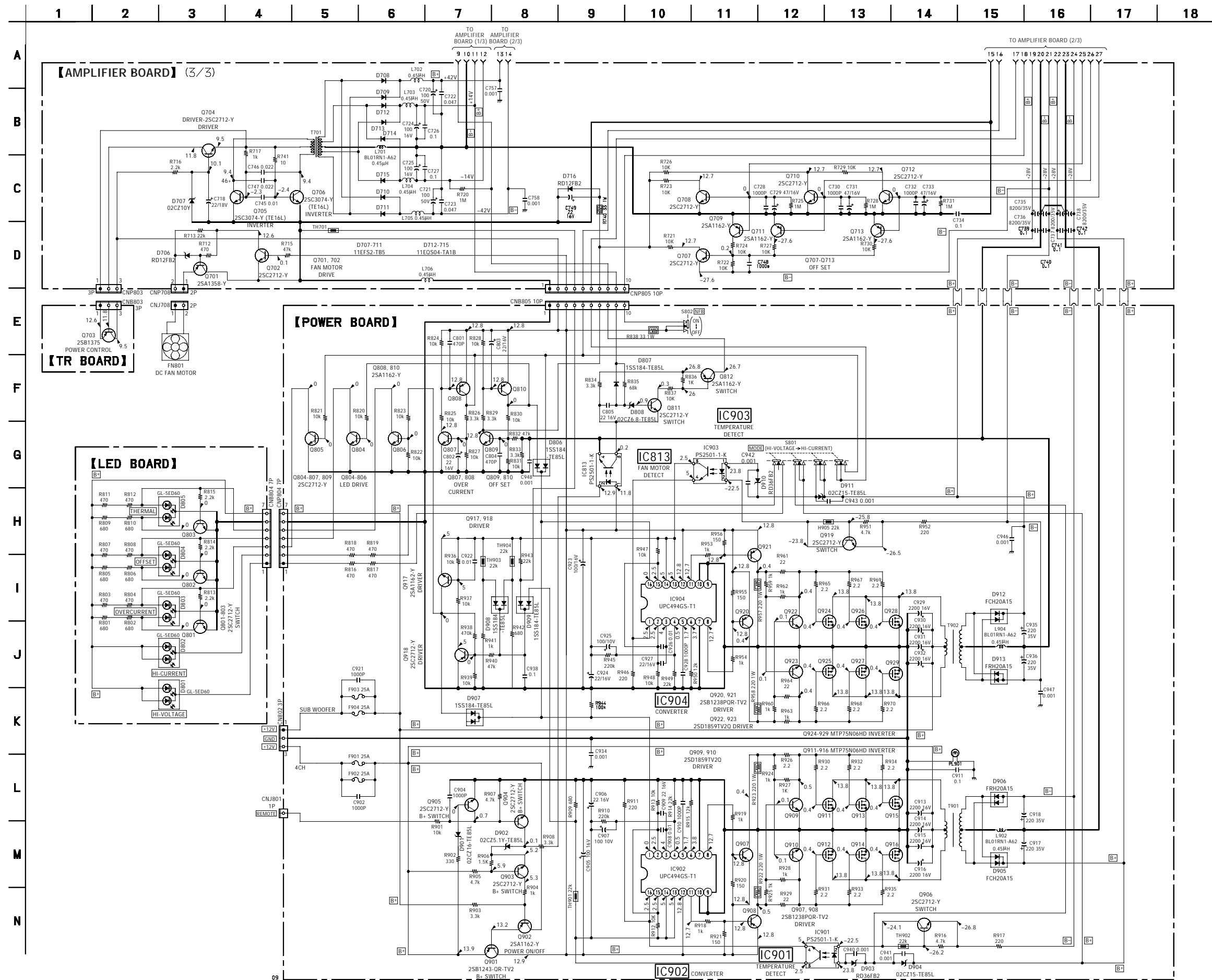
A
AMPLIFIER BOARD
CNP805
(Page 12)

TO AMPLIFIER BOARD
(Page 12)

1-675-241-

11

5-10. SCHEMATIC DIAGRAM – POWER/AMPLIFIER (3/3)/TR/LED SECTION –
• See page 10 for IC Block Diagram.



SECTION 6 EXPLODED VIEWS

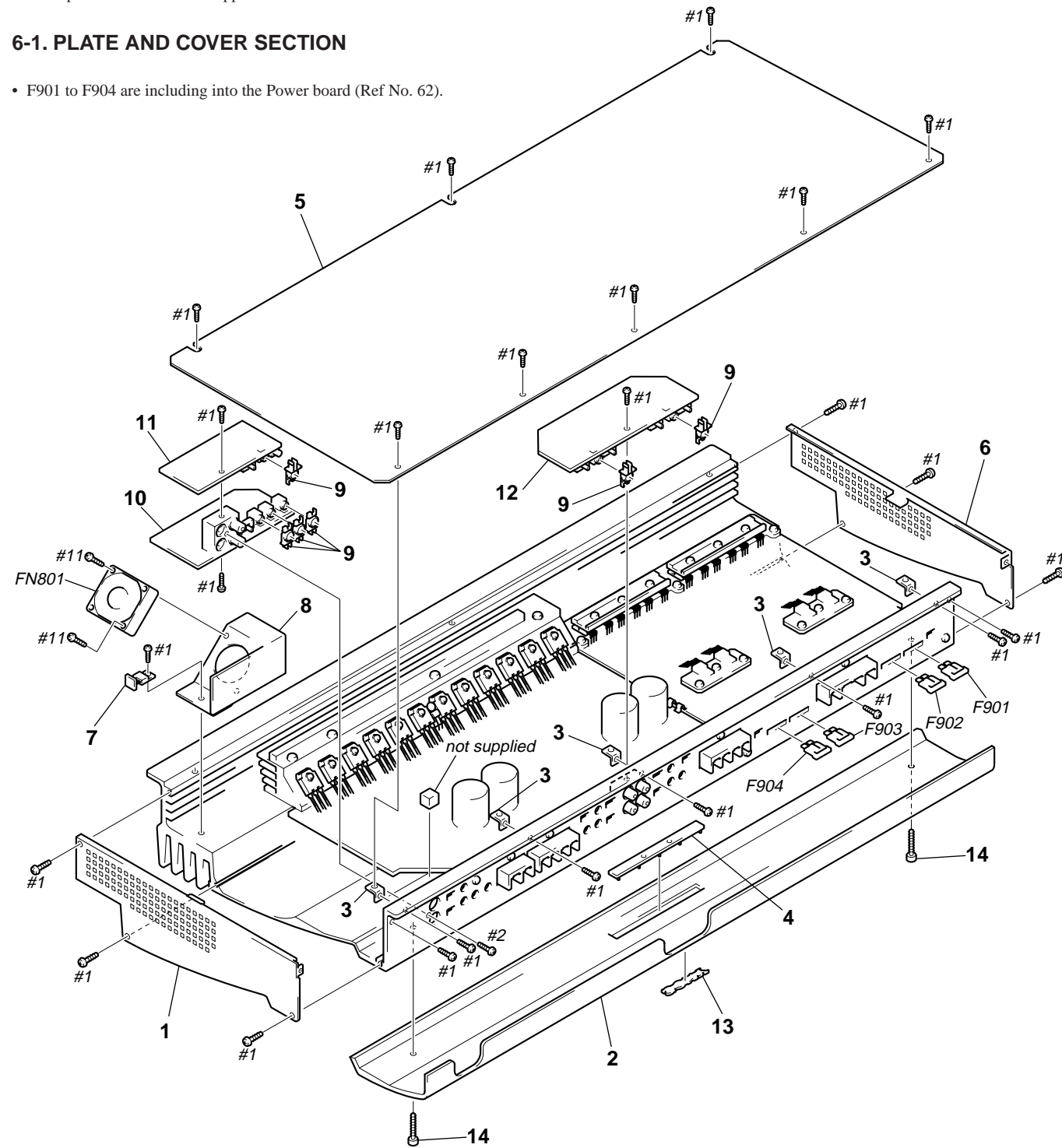
NOTE:

- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
CND : Canadian model

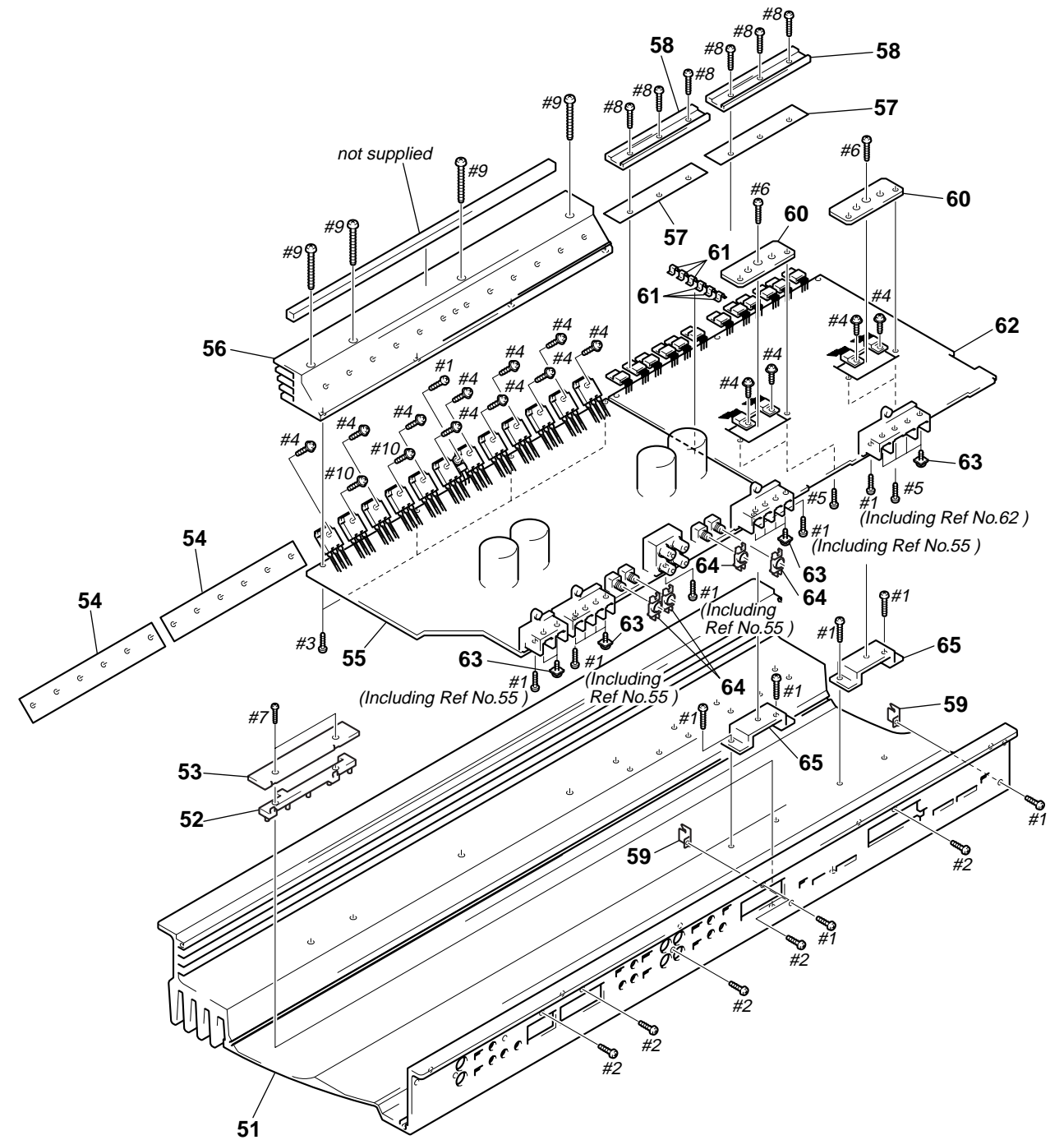
6-1. PLATE AND COVER SECTION

- F901 to F904 are including into the Power board (Ref No. 62).



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 1	3-039-168-01	PANEL (R), SIDE		* 11	1-675-266-11	SUB2 BOARD	
? 2	3-039-219-01	HEATSINK (COVER)		* 12	1-675-267-11	FILTER BOARD	
* 3	3-039-173-01	PLATE (BKT), BOTTOM		13	3-704-177-11	EMBLEM (No. 7), SONY	
* 4	3-039-170-01	LENS(COVER)		14	3-040-933-01	BOLT, M4 HEXAGON HOLE	
* 5	3-039-216-01	PLATE, BOTTOM		F901	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
* 6	3-039-167-01	PANEL (L), SIDE		F902	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
* 7	1-675-500-11	TR BOARD		F903	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
* 8	3-039-217-01	BRACKET (FAN)		F904	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
* 9	3-039-172-01	HOLDER, VOL		FN801	1-763-419-11	MOTOR, DC FAN	
* 10	1-675-265-11	SUB1 BOARD					

6-2. BOARD AND HEAT SINK SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 51	3-039-225-01	HEAT SINK (US,CND)		* 59	3-039-200-01	BRACKET (PWB)	
* 51	3-039-225-11	HEAT SINK (AEP,UK,E)		* 60	3-039-179-01	HEAT SINK, SPACER	
52	3-039-171-01	HOLDER, LED		* 61	3-039-180-01	BAR(PC-PC), BUS	
* 53	1-675-268-11	LED BOARD		* 62	A-3317-936-A	POWER BOARD, COMPLETE	
* 54	3-039-184-01	SHEET (AMP), INSULATING		63	3-912-431-01	SCREW (P)	
* 55	A-3317-937-A	AMPLIFIER BOARD, COMPLETE		* 64	3-039-172-01	HOLDER, VOL	
* 56	3-039-218-01	HEAT SINK (AMPLIFIER), SUB		* 65	3-039-178-01	HEAT SINK (RECTIFIER), SUB	
* 57	3-039-183-01	SHEET (POWER), INSULATING					
* 58	3-033-321-01	RETAINER					

SECTION 7 ELECTRICAL PARTS LIST

AMPLIFIER

Note:

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F : nonflammable
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA..., uPB...: μ PB...,
uPC...: μ PC..., uPD...: μ PD...
- CAPACITORS
uF : μ F
- COILS
uH : μ H
- Abbreviation
CND : Canadian model

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-3317-937-A	AMPLIFIER BOARD, COMPLETE *****		C305	1-163-243-11	CERAMIC CHIP 47PF	5% 50V
		< CAPACITOR >		C306	1-163-243-11	CERAMIC CHIP 47PF	5% 50V
				C307	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C101	1-126-025-11	ELECT 330uF 20%	25V	C308	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C102	1-126-047-81	ELECT 4.7uF 20%	50V	C309	1-126-047-81	ELECT 4.7uF	20% 50V
C103	1-126-047-81	ELECT 4.7uF 20%	50V	C310	1-164-222-11	CERAMIC CHIP 0.22uF	25V
C104	1-163-239-11	CERAMIC CHIP 33PF	5% 50V	C311	1-126-044-11	ELECT 1uF	20% 50V
C105	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C312	1-126-044-11	ELECT 1uF	20% 50V
C106	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C313	1-102-508-11	CERAMIC 10PF	0.5PF 50V
C107	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C314	1-126-008-51	ELECT 47uF	20% 16V
C108	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C315	1-126-008-51	ELECT 47uF	20% 16V
C109	1-126-047-81	ELECT 4.7uF 20%	50V	C316	1-136-165-00	FILM 0.1uF	5% 50V
C110	1-164-222-11	CERAMIC CHIP 0.22uF	25V	C317	1-136-161-00	FILM 0.047uF	5% 50V
C111	1-126-044-11	ELECT 1uF 20%	50V	C318	1-126-008-51	ELECT 47uF	20% 16V
C112	1-126-044-11	ELECT 1uF 20%	50V	C358	1-163-251-91	CERAMIC CHIP 100PF	50V
C113	1-102-508-11	CERAMIC 10PF	0.5PF 50V	C401	1-164-222-11	CERAMIC CHIP 0.22uF	25V
C114	1-126-008-51	ELECT 47uF 20%	16V	C402	1-126-047-81	ELECT 4.7uF	20% 50V
C115	1-126-008-51	ELECT 47uF 20%	16V	C403	1-126-047-81	ELECT 4.7uF	20% 50V
C116	1-136-165-00	FILM 0.1uF 5%	50V	C404	1-163-239-11	CERAMIC CHIP 33PF	5% 50V
C117	1-136-161-00	FILM 0.047uF 5%	50V	C405	1-163-243-11	CERAMIC CHIP 47PF	5% 50V
C118	1-126-008-51	ELECT 47uF 20%	16V	C406	1-163-243-11	CERAMIC CHIP 47PF	5% 50V
C158	1-163-251-91	CERAMIC CHIP 100PF	50V	C407	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C201	1-126-025-11	ELECT 330uF 20%	25V	C408	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C202	1-126-047-81	ELECT 4.7uF 20%	50V	C409	1-126-047-81	ELECT 4.7uF	20% 50V
C203	1-126-047-81	ELECT 4.7uF 20%	50V	C410	1-164-222-11	CERAMIC CHIP 0.22uF	25V
C204	1-163-239-11	CERAMIC CHIP 33PF	5% 50V	C411	1-126-044-11	ELECT 1uF	20% 50V
C205	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C412	1-126-044-11	ELECT 1uF	20% 50V
C206	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C413	1-102-508-11	CERAMIC 10PF	0.5PF 50V
C207	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C414	1-126-008-51	ELECT 47uF	20% 16V
C208	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C415	1-126-008-51	ELECT 47uF	20% 16V
C209	1-126-047-81	ELECT 4.7uF 20%	50V	C416	1-136-165-00	FILM 0.1uF	5% 50V
C210	1-164-222-11	CERAMIC CHIP 0.22uF	25V	C417	1-136-161-00	FILM 0.047uF	5% 50V
C211	1-126-044-11	ELECT 1uF 20%	50V	C418	1-126-008-51	ELECT 47uF	20% 16V
C212	1-126-044-11	ELECT 1uF 20%	50V	C458	1-163-251-91	CERAMIC CHIP 100PF	50V
C213	1-102-508-11	CERAMIC 10PF	0.5PF 50V	C503	1-136-161-00	FILM 0.047uF	5% 50V
C214	1-126-008-51	ELECT 47uF 20%	16V	C523	1-102-508-11	CERAMIC 10PF	0.5PF 50V
C215	1-126-008-51	ELECT 47uF 20%	16V	C524	1-126-008-51	ELECT 47uF	20% 16V
C216	1-136-165-00	FILM 0.1uF 5%	50V	C525	1-126-008-51	ELECT 47uF	20% 16V
C217	1-136-161-00	FILM 0.047uF 5%	50V	C526	1-136-165-00	FILM 0.1uF	5% 50V
C218	1-126-008-51	ELECT 47uF 20%	16V	C529	1-102-508-11	CERAMIC 10PF	0.5PF 50V
C258	1-163-251-91	CERAMIC CHIP 100PF	50V	C530	1-126-008-51	ELECT 47uF	20% 16V
C301	1-164-222-11	CERAMIC CHIP 0.22uF	25V	C531	1-126-008-51	ELECT 47uF	20% 16V
C302	1-126-047-81	ELECT 4.7uF 20%	50V	C532	1-136-165-00	FILM 0.1uF	5% 50V
C303	1-126-047-81	ELECT 4.7uF 20%	50V	C533	1-126-008-51	ELECT 47uF	20% 16V
C304	1-163-239-11	CERAMIC CHIP 33PF	5% 50V	C534	1-126-008-51	ELECT 47uF	20% 16V
				C535	1-126-044-11	ELECT 1uF	50V

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Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description	Remark
C536	1-126-044-11	ELECT	1uF	50V	CNP703	1-784-917-11	CONNECTOR, BOARD TO BOARD 9P	
C537	1-126-044-11	ELECT	1uF	50V	* CNP708	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P	
C538	1-126-044-11	ELECT	1uF	50V	* CNP710	1-564-513-11	PLUG, CONNECTOR 10P	
C701	1-126-010-81	ELECT	220uF	20% 16V	* CNP803	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
C702	1-126-010-81	ELECT	220uF	20% 16V	* CNP805	1-564-513-11	PLUG, CONNECTOR 10P	
C703	1-165-319-11	CERAMIC CHIP	0.1uF	50V			< DIODE >	
C704	1-126-044-51	ELECT	1uF	50V				
C706	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V	D101	8-719-025-50	DIODE 02CZ16-TE85L	
C707	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V	D102	8-719-025-50	DIODE 02CZ16-TE85L	
C710	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V	D103	8-719-820-05	DIODE 1SS181-TE85R	
C711	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V	D201	8-719-025-50	DIODE 02CZ16-TE85L	
C718	1-126-006-11	ELECT	22uF	20% 16V	D202	8-719-025-50	DIODE 02CZ16-TE85L	
C719	1-124-997-11	ELECT	470uF	20% 10V	D203	8-719-820-05	DIODE 1SS181-TE85R	
C720	1-126-052-11	ELECT	100uF	20% 50V	D301	8-719-025-50	DIODE 02CZ16-TE85L	
C721	1-126-052-11	ELECT	100uF	20% 50V	D302	8-719-025-50	DIODE 02CZ16-TE85L	
C722	1-136-161-00	FILM	0.047uF	5% 50V	D303	8-719-820-05	DIODE 1SS181-TE85R	
C723	1-136-161-00	FILM	0.047uF	5% 50V	D401	8-719-025-50	DIODE 02CZ16-TE85L	
C724	1-126-009-81	ELECT	100uF	20% 16V	D402	8-719-025-50	DIODE 02CZ16-TE85L	
C725	1-126-009-81	ELECT	100uF	20% 16V	D403	8-719-820-05	DIODE 1SS181-TE85R	
C726	1-165-319-11	CERAMIC CHIP	0.1uF	50V	D501	8-719-025-50	DIODE 02CZ16-TE85L	
C727	1-165-319-11	CERAMIC CHIP	0.1uF	50V	D502	8-719-025-50	DIODE 02CZ16-TE85L	
C728	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V	D503	8-719-025-50	DIODE 02CZ16-TE85L	
C729	1-126-008-51	ELECT	47uF	20% 16V	D504	8-719-025-50	DIODE 02CZ16-TE85L	
C730	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V	D505	8-719-820-05	DIODE 1SS181-TE85R	
C731	1-126-008-51	ELECT	47uF	20% 16V	D506	8-719-820-05	DIODE 1SS181-TE85R	
C732	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V	D701	8-719-200-82	DIODE 11ES2-TB5	
C733	1-126-008-51	ELECT	47uF	20% 16V	D702	8-719-200-82	DIODE 11ES2-TB5	
C734	1-165-319-11	CERAMIC CHIP	0.1uF	50V	D703	8-719-200-82	DIODE 11ES2-TB5	
C735	1-131-730-11	ELECT	8200uF	35V	D704	8-719-200-82	DIODE 11ES2-TB5	
C736	1-131-730-11	ELECT	8200uF	35V	D706	8-719-160-56	DIODE RD12FB2	
C737	1-131-730-11	ELECT	8200uF	35V	D707	8-719-018-77	DIODE 02CZ10Y	
C738	1-131-730-11	ELECT	8200uF	35V	D708	8-719-987-67	DIODE 11EFS2-TB5	
C739	1-136-165-00	FILM	0.1uF	5% 50V	D709	8-719-987-67	DIODE 11EFS2-TB5	
C740	1-136-165-00	FILM	0.1uF	5% 50V	D710	8-719-987-67	DIODE 11EFS2-TB5	
C741	1-136-165-00	FILM	0.1uF	5% 50V	D711	8-719-987-67	DIODE 11EFS2-TB5	
C742	1-136-165-00	FILM	0.1uF	5% 50V	D712	8-719-210-21	DIODE 11EQS04-TA1B	
C745	1-163-021-11	CERAMIC CHIP	0.01uF	10% 50V	D713	8-719-210-21	DIODE 11EQS04-TA1B	
C746	1-163-037-11	CERAMIC CHIP	0.022uF	10% 25V	D714	8-719-210-21	DIODE 11EQS04-TA1B	
C747	1-163-037-11	CERAMIC CHIP	0.022uF	10% 25V	D715	8-719-210-21	DIODE 11EQS04-TA1B	
C748	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V	D716	8-719-160-56	DIODE RD12FB2	
C749	1-126-006-11	ELECT	22uF	20% 16V	D717	8-719-100-65	DIODE RD12EB2	
C754	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V	D718	8-719-100-65	DIODE RD12EB2	
C755	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V			< IC >	
C756	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V	IC701	8-759-711-82	IC NJM4580E(T1)	
C757	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V	IC702	8-759-711-82	IC NJM4580E(T1)	
C758	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V	IC703	8-759-711-82	IC NJM4580E(T1)	
		< CONNECTOR >			IC704	8-759-711-82	IC NJM4580E(T1)	
CN707	1-694-618-11	TERMINAL BOARD 2P (SUB WOOFER (SPEAKER OUT))			IC705	8-759-711-82	IC NJM4580E(T1)	
		< JACK >			IC706	8-759-711-82	IC NJM4580E(T1)	
CNJ701	1-779-078-21	JACK, PIN 4P (INPUT L/R (MONO))					< COIL >	
		< CONNECTOR >			L701	1-410-396-71	INDUCTOR 0.45uH	
CNP702	1-784-917-11	CONNECTOR, BOARD TO BOARD 9P			L702	1-410-396-71	INDUCTOR 0.45uH	
					L703	1-410-396-71	INDUCTOR 0.45uH	
					L704	1-410-396-71	INDUCTOR 0.45uH	
					L705	1-410-396-71	INDUCTOR 0.45uH	

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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
L706	1-410-396-71	INDUCTOR	0.45uH	Q413	8-729-216-21	TRANSISTOR	2SA1162-Y
		< TRANSISTOR >		Q414	8-729-202-17	TRANSISTOR	2SC2713L-TE85R
Q101	8-729-107-43	TRANSISTOR	2SC3624-T1L1718	Q503	8-729-184-53	TRANSISTOR	2SC1841-FA
Q102	8-729-203-48	TRANSISTOR	2SC3327-A	Q504	8-729-184-53	TRANSISTOR	2SC1841-FA
Q103	8-729-203-48	TRANSISTOR	2SC3327-A	Q505	8-729-140-82	TRANSISTOR	2SA988-FA
Q104	8-729-184-53	TRANSISTOR	2SC1841-FA	Q506	8-729-140-82	TRANSISTOR	2SA988-FA
Q105	8-729-184-53	TRANSISTOR	2SC1841-FA	Q507	8-729-209-18	TRANSISTOR	2SA1360-Y
Q106	8-729-140-82	TRANSISTOR	2SA988-FA	Q508	8-729-203-45	TRANSISTOR	2SC3423-Y
Q107	8-729-140-82	TRANSISTOR	2SA988-FA	Q509	8-729-207-82	TRANSISTOR	2SC3421-Y
Q108	8-729-209-18	TRANSISTOR	2SA1360-Y	Q510	8-729-049-52	TRANSISTOR	FS70SMJ-2
Q109	8-729-203-45	TRANSISTOR	2SC3423-Y	Q511	8-729-049-53	TRANSISTOR	FX50SMJ-2
Q110	8-729-954-51	TRANSISTOR	2SC1545-B	Q512	8-729-184-53	TRANSISTOR	2SC1841-FA
Q111	8-729-049-52	TRANSISTOR	FS70SMJ-2	Q513	8-729-184-53	TRANSISTOR	2SC1841-FA
Q112	8-729-049-53	TRANSISTOR	FX50SMJ-2	Q514	8-729-140-82	TRANSISTOR	2SA988-FA
Q113	8-729-216-21	TRANSISTOR	2SA1162-Y	Q515	8-729-140-82	TRANSISTOR	2SA988-FA
Q114	8-729-202-17	TRANSISTOR	2SC2713L-TE85R	Q516	8-729-209-18	TRANSISTOR	2SA1360-Y
Q201	8-729-107-43	TRANSISTOR	2SC3624-T1L1718	Q517	8-729-203-45	TRANSISTOR	2SC3423-Y
Q202	8-729-203-48	TRANSISTOR	2SC3327-A	Q518	8-729-207-82	TRANSISTOR	2SC3421-Y
Q203	8-729-203-48	TRANSISTOR	2SC3327-A	Q519	8-729-049-52	TRANSISTOR	FS70SMJ-2
Q204	8-729-184-53	TRANSISTOR	2SC1841-FA	Q520	8-729-049-53	TRANSISTOR	FX50SMJ-2
Q205	8-729-184-53	TRANSISTOR	2SC1841-FA	Q521	8-729-216-21	TRANSISTOR	2SA1162-Y
Q206	8-729-140-82	TRANSISTOR	2SA988-FA	Q522	8-729-216-21	TRANSISTOR	2SA1162-Y
Q207	8-729-140-82	TRANSISTOR	2SA988-FA	Q523	8-729-230-51	TRANSISTOR	2SC2712YG-TE85R
Q208	8-729-209-18	TRANSISTOR	2SA1360-Y	Q524	8-729-230-51	TRANSISTOR	2SC2712YG-TE85R
Q209	8-729-203-45	TRANSISTOR	2SC3423-Y	Q701	8-729-207-89	TRANSISTOR	2SA1358-Y
Q210	8-729-954-51	TRANSISTOR	2SC1545-B	Q702	8-729-230-49	TRANSISTOR	2SC2712-Y
Q211	8-729-049-52	TRANSISTOR	FS70SMJ-2	Q704	8-729-230-49	TRANSISTOR	2SC2712-Y
Q212	8-729-049-53	TRANSISTOR	FX50SMJ-2	Q705	8-729-205-88	TRANSISTOR	2SC3074-Y(TE16L)
Q213	8-729-216-21	TRANSISTOR	2SA1162-Y	Q706	8-729-205-88	TRANSISTOR	2SC3074-Y(TE16L)
Q214	8-729-202-17	TRANSISTOR	2SC2713L-TE85R	Q707	8-729-230-49	TRANSISTOR	2SC2712-Y
Q301	8-729-107-43	TRANSISTOR	2SC3624-T1L1718	Q708	8-729-230-49	TRANSISTOR	2SC2712-Y
Q302	8-729-203-48	TRANSISTOR	2SC3327-A	Q709	8-729-216-21	TRANSISTOR	2SA1162-Y
Q303	8-729-203-48	TRANSISTOR	2SC3327-A	Q710	8-729-230-49	TRANSISTOR	2SC2712-Y
Q304	8-729-184-53	TRANSISTOR	2SC1841-FA	Q711	8-729-216-21	TRANSISTOR	2SA1162-Y
Q305	8-729-184-53	TRANSISTOR	2SC1841-FA	Q712	8-729-230-49	TRANSISTOR	2SC2712-Y
Q306	8-729-140-82	TRANSISTOR	2SA988-FA	Q713	8-729-216-21	TRANSISTOR	2SA1162-Y
Q307	8-729-140-82	TRANSISTOR	2SA988-FA			< RESISTOR >	
Q308	8-729-209-18	TRANSISTOR	2SA1360-Y	R101	1-216-210-00	RES,CHIP	3.3K 2% 1/8W
Q309	8-729-203-45	TRANSISTOR	2SC3423-Y	R102	1-208-518-61	RES,CHIP	22K 2% 1/10W
Q310	8-729-954-51	TRANSISTOR	2SC1545-B	R103	1-208-518-61	RES,CHIP	22K 2% 1/10W
Q311	8-729-049-52	TRANSISTOR	FS70SMJ-2	R104	1-208-291-11	RES,CHIP	4.7M 5% 1/10W
Q312	8-729-049-53	TRANSISTOR	FX50SMJ-2	R105	1-208-518-61	RES,CHIP	22K 2% 1/10W
Q313	8-729-216-21	TRANSISTOR	2SA1162-Y	R106	1-208-518-61	RES,CHIP	22K 2% 1/10W
Q314	8-729-202-17	TRANSISTOR	2SC2713L-TE85R	R107	1-216-631-11	METAL CHIP	150 0.5% 1/10W
Q401	8-729-107-43	TRANSISTOR	2SC3624-T1L1718	R108	1-208-453-61	RES,CHIP	4.7K 2% 1/10W
Q402	8-729-203-48	TRANSISTOR	2SC3327-A	R109	1-208-449-61	RES,CHIP	3.3K 2% 1/10W
Q403	8-729-203-48	TRANSISTOR	2SC3327-A	R110	1-208-453-61	RES,CHIP	4.7K 2% 1/10W
Q404	8-729-184-53	TRANSISTOR	2SC1841-FA	R111	1-208-449-61	RES,CHIP	3.3K 2% 1/10W
Q405	8-729-184-53	TRANSISTOR	2SC1841-FA	R112	1-216-647-11	METAL CHIP	680 0.5% 1/10W
Q406	8-729-140-82	TRANSISTOR	2SA988-FA	R113	1-208-518-61	RES,CHIP	22K 2% 1/10W
Q407	8-729-140-82	TRANSISTOR	2SA988-FA	R114	1-216-671-11	METAL CHIP	6.8K 0.5% 1/10W
Q408	8-729-209-18	TRANSISTOR	2SA1360-Y	R115	1-208-510-61	RES,CHIP	10K 2% 1/8W
Q409	8-729-203-45	TRANSISTOR	2SC3423-Y	R116	1-208-510-61	RES,CHIP	10K 2% 1/8W
Q410	8-729-954-51	TRANSISTOR	2SC1545-B	R117	1-208-462-61	RES,CHIP	10K 2% 1/10W
Q411	8-729-049-52	TRANSISTOR	FS70SMJ-2	R118	1-208-449-61	RES,CHIP	3.3K 2% 1/10W
Q412	8-729-049-53	TRANSISTOR	FX50SMJ-2	R119	1-208-453-61	RES,CHIP	4.7K 2% 1/10W

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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R120	1-208-453-61	RES,CHIP	4.7K 2% 1/10W	R226	1-249-576-11	CARBON	10K 5% 1/4W
R121	1-216-238-00	RES,CHIP	47K 2% 1/8W	R227	1-249-955-11	CARBON	22K 5% 1/4W
R122	1-216-238-00	RES,CHIP	47K 2% 1/8W	R228	1-249-955-11	CARBON	22K 5% 1/4W
R123	1-249-564-11	CARBON	3.3K 5% 1/4W	R229	1-216-635-11	METAL CHIP	220 0.5% 1/10W
R124	1-249-943-11	CARBON	6.8K 5% 1/4W	R230	1-216-635-11	METAL CHIP	220 0.5% 1/10W
R125	1-249-576-11	CARBON	10K 5% 1/4W	R231	1-208-441-61	RES,CHIP	1.5K 2% 1/10W
R126	1-249-576-11	CARBON	10K 5% 1/4W	R232	1-208-437-61	RES,CHIP	1K 2% 1/10W
R127	1-249-955-11	CARBON	22K 5% 1/4W	R233	1-208-534-61	RES,CHIP	100K 2% 1/10W
R128	1-249-955-11	CARBON	22K 5% 1/4W	R234	1-208-534-61	RES,CHIP	100K 2% 1/10W
R129	1-216-635-11	METAL CHIP	220 0.5% 1/10W	R235	1-211-960-11	RES,CHIP	22 2% 1/10W
R130	1-216-635-11	METAL CHIP	220 0.5% 1/10W	R236	1-211-960-11	RES,CHIP	22 2% 1/10W
R131	1-208-441-61	RES,CHIP	1.5K 2% 1/10W	R237	1-208-437-61	RES,CHIP	1K 2% 1/10W
R132	1-208-437-61	RES,CHIP	1K 2% 1/10W	R238	1-208-437-61	RES,CHIP	1K 2% 1/10W
R133	1-208-534-61	RES,CHIP	100K 2% 1/10W	R239	1-208-449-61	RES,CHIP	3.3K 2% 1/10W
R134	1-208-534-61	RES,CHIP	100K 2% 1/10W	R240	1-208-449-61	RES,CHIP	3.3K 2% 1/10W
R135	1-211-960-11	RES,CHIP	22 2% 1/10W	R241	1-205-991-11	METAL	0.1/0.1 10% 5w F
R136	1-211-960-11	RES,CHIP	22 2% 1/10W	R242	1-205-991-11	METAL	0.1/0.1 10% 5w F
R137	1-208-437-61	RES,CHIP	1K 2% 1/10W	R243	1-208-462-61	RES,CHIP	10K 2% 1/10W
R138	1-208-437-61	RES,CHIP	1K 2% 1/10W	R244	1-208-462-61	RES,CHIP	10K 2% 1/10W
R139	1-208-449-61	RES,CHIP	3.3K 2% 1/10W	R245	1-208-462-61	RES,CHIP	10K 2% 1/10W
R140	1-208-449-61	RES,CHIP	3.3K 2% 1/10W	R246	1-208-550-61	RES,CHIP	470K 2% 1/10W
R141	1-205-991-11	METAL	0.1/0.1 10% 5w F	R247	1-215-860-11	METAL OXIDE	33 5% 1W F
R142	1-205-991-11	METAL	0.1/0.1 10% 5w F	R248	1-208-462-61	RES,CHIP	10K 2% 1/10W
R143	1-208-462-61	RES,CHIP	10K 2% 1/10W	R249	1-215-860-11	METAL OXIDE	33 5% 1W F
R144	1-208-462-61	RES,CHIP	10K 2% 1/10W	R250	1-215-860-11	METAL OXIDE	33 5% 1W F
R145	1-208-462-61	RES,CHIP	10K 2% 1/10W	R301	1-208-486-61	RES,CHIP	1K 2% 1/8W
R146	1-208-550-61	RES,CHIP	470K 2% 1/10W	R302	1-208-518-61	RES,CHIP	22K 2% 1/10W
R147	1-215-860-11	METAL OXIDE	33 5% 1W F	R303	1-208-518-61	RES,CHIP	22K 2% 1/10W
R148	1-208-462-61	RES,CHIP	10K 2% 1/10W	R304	1-208-291-11	RES,CHIP	4.7M 5% 1/10W
R149	1-215-860-11	METAL OXIDE	33 5% 1W F	R305	1-208-518-61	RES,CHIP	22K 2% 1/10W
R150	1-215-860-11	METAL OXIDE	33 5% 1W F	R306	1-208-518-61	RES,CHIP	22K 2% 1/10W
R201	1-216-210-00	RES,CHIP	3.3K 2% 1/8W	R307	1-216-631-11	METAL CHIP	150 0.5% 1/10W
R202	1-208-518-61	RES,CHIP	22K 2% 1/10W	R308	1-208-453-61	RES,CHIP	4.7K 2% 1/10W
R203	1-208-518-61	RES,CHIP	22K 2% 1/10W	R309	1-208-449-61	RES,CHIP	3.3K 2% 1/10W
R204	1-208-291-11	RES,CHIP	4.7M 5% 1/10W	R310	1-208-453-61	RES,CHIP	4.7K 2% 1/10W
R205	1-208-518-61	RES,CHIP	22K 2% 1/10W	R311	1-208-449-61	RES,CHIP	3.3K 2% 1/10W
R206	1-208-518-61	RES,CHIP	22K 2% 1/10W	R312	1-216-647-11	METAL CHIP	680 0.5% 1/10W
R207	1-216-631-11	METAL CHIP	150 0.5% 1/10W	R313	1-208-518-61	RES,CHIP	22K 2% 1/10W
R208	1-208-453-61	RES,CHIP	4.7K 2% 1/10W	R314	1-216-671-11	METAL CHIP	6.8K 0.5% 1/10W
R209	1-208-449-61	RES,CHIP	3.3K 2% 1/10W	R315	1-208-510-61	RES,CHIP	10K 2% 1/8W
R210	1-208-453-61	RES,CHIP	4.7K 2% 1/10W	R316	1-208-510-61	RES,CHIP	10K 2% 1/8W
R211	1-208-449-61	RES,CHIP	3.3K 2% 1/10W	R317	1-208-462-61	RES,CHIP	10K 2% 1/10W
R212	1-216-647-11	METAL CHIP	680 0.5% 1/10W	R318	1-208-449-61	RES,CHIP	3.3K 2% 1/10W
R213	1-208-518-61	RES,CHIP	22K 2% 1/10W	R319	1-208-453-61	RES,CHIP	4.7K 2% 1/10W
R214	1-216-671-11	METAL CHIP	6.8K 0.5% 1/10W	R320	1-208-453-61	RES,CHIP	4.7K 2% 1/10W
R215	1-208-510-61	RES,CHIP	10K 2% 1/8W	R321	1-216-238-00	RES,CHIP	47K 2% 1/8W
R216	1-208-510-61	RES,CHIP	10K 2% 1/8W	R322	1-216-238-00	RES,CHIP	47K 2% 1/8W
R217	1-208-462-61	RES,CHIP	10K 2% 1/10W	R323	1-249-935-11	CARBON	3.3K 5% 1/4W
R218	1-208-449-61	RES,CHIP	3.3K 2% 1/10W	R324	1-249-943-11	CARBON	6.8K 5% 1/4W
R219	1-208-453-61	RES,CHIP	4.7K 2% 1/10W	R325	1-249-576-11	CARBON	10K 5% 1/4W
R220	1-208-453-61	RES,CHIP	4.7K 2% 1/10W	R326	1-249-576-11	CARBON	10K 5% 1/4W
R221	1-216-238-00	RES,CHIP	47K 2% 1/8W	R327	1-249-955-11	CARBON	22K 5% 1/4W
R222	1-216-238-00	RES,CHIP	47K 2% 1/8W	R328	1-249-955-11	CARBON	22K 5% 1/4W
R223	1-249-568-11	CARBON	4.7K 5% 1/4W	R329	1-216-635-11	METAL CHIP	220 0.5% 1/10W
R224	1-249-943-11	CARBON	6.8K 5% 1/4W	R330	1-216-635-11	METAL CHIP	220 0.5% 1/10W
R225	1-249-576-11	CARBON	10K 5% 1/4W	R331	1-208-441-61	RES,CHIP	1.5K 2% 1/10W
				R332	1-208-437-61	RES,CHIP	1K 2% 1/10W

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Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description		Remark
R333	1-208-534-61	RES,CHIP	100K	2%	1/10W	R440	1-208-449-61	RES,CHIP	3.3K 2% 1/10W
R334	1-208-534-61	RES,CHIP	100K	2%	1/10W	R441	1-205-991-11	METAL	0.1/0.1 10% 5w F
R335	1-211-960-11	RES,CHIP	22	2%	1/10W	R442	1-205-991-11	METAL	0.1/0.1 10% 5w F
R336	1-211-960-11	RES,CHIP	22	2%	1/10W	R443	1-208-462-61	RES,CHIP	10K 2% 1/10W
R337	1-208-437-61	RES,CHIP	1K	2%	1/10W	R444	1-208-462-61	RES,CHIP	10K 2% 1/10W
R338	1-208-437-61	RES,CHIP	1K	2%	1/10W	R445	1-208-462-61	RES,CHIP	10K 2% 1/10W
R339	1-208-449-61	RES,CHIP	3.3K	2%	1/10W	R446	1-208-550-61	RES,CHIP	470K 2% 1/10W
R340	1-208-449-61	RES,CHIP	3.3K	2%	1/10W	R447	1-215-860-11	METAL OXIDE	33 5% 1W F
R341	1-205-991-11	METAL	0.1/0.1	10%	5w F	R448	1-208-462-61	RES,CHIP	10K 2% 1/10W
R342	1-205-991-11	METAL	0.1/0.1	10%	5w F	R449	1-215-860-11	METAL OXIDE	33 5% 1W F
R343	1-208-462-61	RES,CHIP	10K	2%	1/10W	R450	1-215-860-11	METAL OXIDE	33 5% 1W F
R344	1-208-462-61	RES,CHIP	10K	2%	1/10W	R503	1-217-784-11	FUSIBLE	10 5% 5W F
R345	1-208-462-61	RES,CHIP	10K	2%	1/10W	R526	1-208-449-61	RES,CHIP	3.3K 2% 1/10W
R346	1-208-550-61	RES,CHIP	470K	2%	1/10W	R527	1-208-453-61	RES,CHIP	4.7K 2% 1/10W
R347	1-215-860-11	METAL OXIDE	33	5%	1W F	R528	1-208-453-61	RES,CHIP	4.7K 2% 1/10W
R348	1-208-462-61	RES,CHIP	10K	2%	1/10W	R529	1-216-238-00	RES,CHIP	47K 2% 1/8W
R349	1-215-860-11	METAL OXIDE	33	5%	1W F	R530	1-216-238-00	RES,CHIP	47K 2% 1/8W
R350	1-215-860-11	METAL OXIDE	33	5%	1W F	R531	1-249-564-91	CARBON	3.3K 5% 1/4W
R401	1-208-486-61	RES,CHIP	1K	2%	1/8W	R532	1-249-943-11	CARBON	6.8K 5% 1/4W
R402	1-208-518-61	RES,CHIP	22K	2%	1/10W	R533	1-249-576-11	CARBON	10K 5% 1/4W
R403	1-208-518-61	RES,CHIP	22K	2%	1/10W	R534	1-249-576-11	CARBON	10K 5% 1/4W
R404	1-208-291-11	RES,CHIP	4.7M	5%	1/10W	R535	1-249-955-11	CARBON	22K 5% 1/4W
R405	1-208-518-61	RES,CHIP	22K	2%	1/10W	R536	1-249-955-11	CARBON	22K 5% 1/4W
R406	1-208-518-61	RES,CHIP	22K	2%	1/10W	R537	1-216-635-11	METAL CHIP	220 0.5% 1/10W
R407	1-216-631-11	METAL CHIP	150	0.5%	1/10W	R538	1-216-635-11	METAL CHIP	220 0.5% 1/10W
R408	1-208-453-61	RES,CHIP	4.7K	2%	1/10W	R539	1-208-449-61	RES,CHIP	3.3K 2% 1/10W
R409	1-208-449-61	RES,CHIP	3.3K	2%	1/10W	R540	1-208-437-61	RES,CHIP	1K 2% 1/10W
R410	1-208-453-61	RES,CHIP	4.7K	2%	1/10W	R541	1-208-534-61	RES,CHIP	100K 2% 1/10W
R411	1-208-449-61	RES,CHIP	3.3K	2%	1/10W	R542	1-208-534-61	RES,CHIP	100K 2% 1/10W
R412	1-216-647-11	METAL CHIP	680	0.5%	1/10W	R543	1-211-960-11	RES,CHIP	22 2% 1/10W
R413	1-208-518-61	RES,CHIP	22K	2%	1/10W	R544	1-211-960-11	RES,CHIP	22 2% 1/10W
R414	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W	R545	1-208-550-61	RES,CHIP	470K 2% 1/10W
R415	1-208-510-61	RES,CHIP	10K	2%	1/8W	R546	1-208-453-61	RES,CHIP	4.7K 2% 1/10W
R416	1-208-510-61	RES,CHIP	10K	2%	1/8W	R547	1-208-453-61	RES,CHIP	4.7K 2% 1/10W
R417	1-208-462-61	RES,CHIP	10K	2%	1/10W	R548	1-216-238-00	RES,CHIP	47K 2% 1/8W
R418	1-208-449-61	RES,CHIP	3.3K	2%	1/10W	R549	1-216-238-00	RES,CHIP	47K 2% 1/8W
R419	1-208-453-61	RES,CHIP	4.7K	2%	1/10W	R550	1-249-568-11	CARBON	4.7K 5% 1/4W
R420	1-208-453-61	RES,CHIP	4.7K	2%	1/10W	R551	1-249-943-11	CARBON	6.8K 5% 1/4W
R421	1-216-238-00	RES,CHIP	47K	2%	1/8W	R552	1-249-576-11	CARBON	10K 5% 1/4W
R422	1-216-238-00	RES,CHIP	47K	2%	1/8W	R553	1-249-576-11	CARBON	10K 5% 1/4W
R423	1-249-568-11	CARBON	4.7K	5%	1/4W	R554	1-249-955-11	CARBON	22K 5% 1/4W
R424	1-249-943-11	CARBON	6.8K	5%	1/4W	R555	1-249-955-11	CARBON	22K 5% 1/4W
R425	1-249-576-11	CARBON	10K	5%	1/4W	R556	1-216-635-11	METAL CHIP	220 0.5% 1/10W
R426	1-249-576-11	CARBON	10K	5%	1/4W	R557	1-216-635-11	METAL CHIP	220 0.5% 1/10W
R427	1-249-955-11	CARBON	22K	5%	1/4W	R558	1-208-449-61	RES,CHIP	3.3K 2% 1/10W
R428	1-249-955-11	CARBON	22K	5%	1/4W	R559	1-208-437-61	RES,CHIP	1K 2% 1/10W
R429	1-216-635-11	METAL CHIP	220	0.5%	1/10W	R560	1-208-534-61	RES,CHIP	100K 2% 1/10W
R430	1-216-635-11	METAL CHIP	220	0.5%	1/10W	R561	1-208-534-61	RES,CHIP	100K 2% 1/10W
R431	1-208-441-61	RES,CHIP	1.5K	2%	1/10W	R562	1-211-960-11	RES,CHIP	22 2% 1/10W
R432	1-208-437-61	RES,CHIP	1K	2%	1/10W	R563	1-211-960-11	RES,CHIP	22 2% 1/10W
R433	1-208-534-61	RES,CHIP	100K	2%	1/10W	R564	1-208-437-61	RES,CHIP	1K 2% 1/10W
R434	1-208-534-61	RES,CHIP	100K	2%	1/10W	R565	1-208-437-61	RES,CHIP	1K 2% 1/10W
R435	1-211-960-11	RES,CHIP	22	2%	1/10W	R566	1-208-437-61	RES,CHIP	1K 2% 1/10W
R436	1-211-960-11	RES,CHIP	22	2%	1/10W	R567	1-208-437-61	RES,CHIP	1K 2% 1/10W
R437	1-208-437-61	RES,CHIP	1K	2%	1/10W	R568	1-208-441-61	RES,CHIP	1.5K 2% 1/10W
R438	1-208-437-61	RES,CHIP	1K	2%	1/10W	R569	1-208-434-61	RES,CHIP	750 2% 1/10W
R439	1-208-449-61	RES,CHIP	3.3K	2%	1/10W				

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Ref. No.	Part No.	Description			Remark
R570	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R571	1-208-434-61	RES,CHIP	750	2%	1/10W
R572	1-242-800-11	METAL	0.05/0.05		5w F
R573	1-242-800-11	METAL	0.05/0.05		5w F
R574	1-242-800-11	METAL	0.05/0.05		5w F
R575	1-242-800-11	METAL	0.05/0.05		5w F
R576	1-208-462-61	RES,CHIP	10K	2%	1/10W
R577	1-208-462-61	RES,CHIP	10K	2%	1/10W
R578	1-208-462-61	RES,CHIP	10K	2%	1/10W
R579	1-208-462-61	RES,CHIP	10K	2%	1/10W
R580	1-208-462-61	RES,CHIP	10K	2%	1/10W
R581	1-208-462-61	RES,CHIP	10K	2%	1/10W
R582	1-208-550-61	RES,CHIP	470K	2%	1/10W
R583	1-208-462-61	RES,CHIP	10K	2%	1/10W
R584	1-208-462-61	RES,CHIP	10K	2%	1/10W
R701	1-208-437-61	RES,CHIP	1K	2%	1/10W
R702	1-208-437-61	RES,CHIP	1K	2%	1/10W
R703	1-208-437-61	RES,CHIP	1K	2%	1/10W
R704	1-208-437-61	RES,CHIP	1K	2%	1/10W
R712	1-208-774-11	RES,CHIP	470	2%	1/10W
R713	1-208-518-61	RES,CHIP	22K	2%	1/10W
R715	1-208-526-61	RES,CHIP	47K	2%	1/10W
R716	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R717	1-208-486-61	RES,CHIP	1K	2%	1/8W
R720	1-208-558-61	RES,CHIP	1M	2%	1/10W
R721	1-208-462-61	RES,CHIP	10K	2%	1/10W
R722	1-208-462-61	RES,CHIP	10K	2%	1/10W
R723	1-208-462-61	RES,CHIP	10K	2%	1/10W
R724	1-208-462-61	RES,CHIP	10K	2%	1/10W
R725	1-208-558-61	RES,CHIP	1M	2%	1/10W
R726	1-208-462-61	RES,CHIP	10K	2%	1/10W
R727	1-208-462-61	RES,CHIP	10K	2%	1/10W
R728	1-208-558-61	RES,CHIP	1M	2%	1/10W
R729	1-208-462-61	RES,CHIP	10K	2%	1/10W
R730	1-208-462-61	RES,CHIP	10K	2%	1/10W
R731	1-208-558-61	RES,CHIP	1M	2%	1/10W
R740	1-215-860-11	METAL OXIDE	33	5%	1W F
R741	1-208-486-61	RES,CHIP	1K	2%	1/8W
R874	1-216-121-00	RES,CHIP	1M	5%	1/10W
R877	1-216-121-00	RES,CHIP	1M	5%	1/10W
R882	1-216-121-00	RES,CHIP	1M	5%	1/10W
< RELAY >					
RY701	1-755-353-11	RELAY			
RY702	1-755-353-11	RELAY			
RY703	1-755-353-11	RELAY			
< SWITCH >					
S703	1-692-721-11	SWITCH, SLIDE (DIRECT, ON/OFF)			
S706	1-692-721-11	SWITCH, SLIDE (DIRECT, ON/OFF)			
< TRANSFORMER >					
T701	1-435-149-11	TRANSFORMER, DC-DC CONVERTER			
< THERMISTOR >					
TH701	1-809-664-51	THERMISTOR, POSITIVE			

Ref. No.	Part No.	Description			Remark
< VARIABLE RESISTOR >					
VR101	1-241-760-11	RES, ADJ, CERMET 470 (IDLING)			
VR201	1-241-760-11	RES, ADJ, CERMET 470 (IDLING)			
VR301	1-241-760-11	RES, ADJ, CERMET 470 (IDLING)			
VR401	1-241-760-11	RES, ADJ, CERMET 470 (IDLING)			
VR501	1-241-760-11	RES, ADJ, CERMET 470 (IDLING)			
VR502	1-241-760-11	RES, ADJ, CERMET 470 (IDLING)			
VR701	1-225-648-11	RES, VAR 5K/5K (LEVEL/MIN-MAX)			
VR703	1-225-648-11	RES, VAR 5K/5K (LOW BOOST/0dB+10dB)			
VR704	1-225-648-11	RES, VAR 5K/5K (LEVEL/MIN-MAX)			
VR706	1-225-648-11	RES, VAR 5K/5K (LOW BOOST/0dB+10dB)			

*	1-675-267-11	FILTER (5CH) BOARD			

< CAPACITOR >					
C151	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C152	1-136-167-00	FILM	0.15uF	5%	50V
C153	1-136-167-00	FILM	0.15uF	5%	50V
C154	1-136-155-00	FILM	0.015uF	5%	50V
C155	1-136-155-00	FILM	0.015uF	5%	50V
C156	1-126-008-51	ELECT	47uF	20%	16V
C157	1-126-008-51	ELECT	47uF	20%	16V
C251	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C252	1-136-167-00	FILM	0.15uF	5%	50V
C253	1-136-167-00	FILM	0.15uF	5%	50V
C254	1-136-155-00	FILM	0.015uF	5%	50V
C255	1-136-155-00	FILM	0.015uF	5%	50V
C256	1-126-008-51	ELECT	47uF	20%	16V
C257	1-126-008-51	ELECT	47uF	20%	16V
C351	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C352	1-136-167-00	FILM	0.15uF	5%	50V
C353	1-136-167-00	FILM	0.15uF	5%	50V
C354	1-136-155-00	FILM	0.015uF	5%	50V
C355	1-136-155-00	FILM	0.015uF	5%	50V
C356	1-126-008-51	ELECT	47uF	20%	16V
C357	1-126-008-51	ELECT	47uF	20%	16V
C451	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C452	1-136-167-00	FILM	0.15uF	5%	50V
C453	1-136-167-00	FILM	0.15uF	5%	50V
C454	1-136-155-00	FILM	0.015uF	5%	50V
C455	1-136-155-00	FILM	0.015uF	5%	50V
C456	1-126-008-51	ELECT	47uF	20%	16V
C457	1-126-008-51	ELECT	47uF	20%	16V
C750	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C751	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C752	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C753	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
< JACK >					
CNJ702	1-784-916-11	CONNECTOR, BOARD TO BOARD 9P			
CNJ703	1-784-916-11	CONNECTOR, BOARD TO BOARD 9P			
< IC >					
IC707	8-759-711-82	IC NJM4580E(T1)			

FILTER

LED

POWER

Ref. No.	Part No.	Description	Remark
IC708	8-759-711-82	IC NJM4580E(T1)	
IC709	8-759-711-82	IC NJM4580E(T1)	
IC710	8-759-711-82	IC NJM4580E(T1)	
IC711	8-759-711-82	IC NJM4580E(T1)	
IC712	8-759-711-82	IC NJM4580E(T1)	
< RESISTOR >			
R151	1-208-462-61	RES,CHIP 10K	2% 1/10W
R152	1-216-671-11	METAL CHIP 6.8K	0.5% 1/10W
R153	1-208-518-61	RES,CHIP 22K	2% 1/10W
R154	1-208-462-61	RES,CHIP 10K	2% 1/10W
R155	1-208-462-61	RES,CHIP 10K	2% 1/10W
R156	1-216-057-61	RES,CHIP 2.2K	5% 1/10W
R157	1-216-057-61	RES,CHIP 2.2K	5% 1/10W
R158	1-208-462-61	RES,CHIP 10K	2% 1/10W
R160	1-208-462-61	RES,CHIP 10K	2% 1/10W
R251	1-208-462-61	RES,CHIP 10K	2% 1/10W
R252	1-216-671-11	METAL CHIP 6.8K	0.5% 1/10W
R253	1-208-518-61	RES,CHIP 22K	2% 1/10W
R254	1-208-462-61	RES,CHIP 10K	2% 1/10W
R255	1-208-462-61	RES,CHIP 10K	2% 1/10W
R256	1-216-057-61	RES,CHIP 2.2K	5% 1/10W
R257	1-216-057-61	RES,CHIP 2.2K	5% 1/10W
R258	1-208-462-61	RES,CHIP 10K	2% 1/10W
R260	1-208-462-61	RES,CHIP 10K	2% 1/10W
R351	1-208-462-61	RES,CHIP 10K	2% 1/10W
R352	1-216-671-11	METAL CHIP 6.8K	0.5% 1/10W
R353	1-208-518-61	RES,CHIP 22K	2% 1/10W
R354	1-208-462-61	RES,CHIP 10K	2% 1/10W
R355	1-208-462-61	RES,CHIP 10K	2% 1/10W
R356	1-216-057-61	RES,CHIP 2.2K	5% 1/10W
R357	1-216-057-61	RES,CHIP 2.2K	5% 1/10W
R358	1-208-462-61	RES,CHIP 10K	2% 1/10W
R360	1-208-462-61	RES,CHIP 10K	2% 1/10W
R451	1-208-462-61	RES,CHIP 10K	2% 1/10W
R452	1-216-671-11	METAL CHIP 6.8K	0.5% 1/10W
R453	1-208-518-61	RES,CHIP 22K	2% 1/10W
R454	1-208-462-61	RES,CHIP 10K	2% 1/10W
R455	1-208-462-61	RES,CHIP 10K	2% 1/10W
R456	1-216-057-61	RES,CHIP 2.2K	5% 1/10W
R457	1-216-057-61	RES,CHIP 2.2K	5% 1/10W
R458	1-208-462-61	RES,CHIP 10K	2% 1/10W
R460	1-208-462-61	RES,CHIP 10K	2% 1/10W
< SWITCH >			
S701	1-571-658-11	SWITCH, SLIDE (FILTER, X1/X10)	
S702	1-762-191-11	SWITCH, SLIDE (FILTER, LPF/OFF/HPF)	
S704	1-571-658-11	SWITCH, SLIDE (FILTER, X1/X10)	
S705	1-762-191-11	SWITCH, SLIDE (FILTER, LPF/OFF/HPF)	
< VARIABLE RESISTOR >			
VR702	1-225-921-11	RES, VAR 20K/20K/20K/20K (FILTER/50Hz-400Hz)	
VR705	1-225-921-11	RES, VAR 20K/20K/20K/20K (FILTER/50Hz-400Hz)	

Ref. No.	Part No.	Description	Remark
*	1-675-268-11	LED (5CH) BOARD *****	
< DIODE >			
D801	8-719-076-62	DIODE GL-5ED60 (HI-VOLTAGE)	
D802	8-719-076-62	DIODE GL-5ED60 (HI-CURRENT)	
D803	8-719-076-62	DIODE GL-5ED60 (OVER CURRENT)	
D804	8-719-076-62	DIODE GL-5ED60 (OFFSET)	
D805	8-719-076-62	DIODE GL-5ED60 (THERMAL)	
< TRANSISTOR >			
Q801	8-729-230-49	TRANSISTOR 2SC2712-Y	
Q802	8-729-230-49	TRANSISTOR 2SC2712-Y	
Q803	8-729-230-49	TRANSISTOR 2SC2712-Y	
< RESISTOR >			
R801	1-216-194-00	METAL CHIP 680	5% 1/8W
R802	1-216-194-00	METAL CHIP 680	5% 1/8W
R803	1-216-190-00	RES,CHIP 470	2% 1/8W
R804	1-216-190-00	RES,CHIP 470	2% 1/8W
R805	1-216-194-00	METAL CHIP 680	5% 1/8W
R806	1-216-194-00	METAL CHIP 680	5% 1/8W
R807	1-216-190-00	RES,CHIP 470	2% 1/8W
R808	1-216-190-00	RES,CHIP 470	2% 1/8W
R809	1-216-194-00	METAL CHIP 680	5% 1/8W
R810	1-216-194-00	METAL CHIP 680	5% 1/8W
R811	1-216-190-00	RES,CHIP 470	2% 1/8W
R812	1-216-190-00	RES,CHIP 470	2% 1/8W
R813	1-216-057-00	METAL CHIP 2.2K	5% 1/10W
R814	1-216-057-00	METAL CHIP 2.2K	5% 1/10W
R815	1-216-057-00	METAL CHIP 2.2K	5% 1/10W

*	A-3317-936-A	POWER BOARD, COMPLETE *****	
< CAPACITOR >			
C801	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C802	1-126-006-11	ELECT 22uF	20% 16V
C803	1-126-006-11	ELECT 22uF	20% 16V
C804	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C805	1-107-715-11	ELECT 22uF	20% 16V
C902	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C904	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C905	1-126-009-81	ELECT 100uF	20% 16V
C906	1-126-006-11	ELECT 22uF	20% 16V
C907	1-124-994-11	ELECT 100uF	20% 10V
C908	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V
C909	1-107-715-11	ELECT 22uF	20% 16V
C910	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C911	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C913	1-131-731-11	ELECT 2200uF	16V
C914	1-131-731-11	ELECT 2200uF	16V
C915	1-131-731-11	ELECT 2200uF	16V
C916	1-131-731-11	ELECT 2200uF	16V
C917	1-104-829-11	ELECT 220uF	20% 35V
C918	1-104-829-11	ELECT 220uF	20% 35V

POWER

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C921	1-163-141-00	CERAMIC CHIP	0.001uF 5%	50V	F903	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE)(25A)
C922	1-163-021-11	CERAMIC CHIP	0.01uF 10%	50V	F904	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE)(25A)
C923	1-126-009-81	ELECT	100uF 20%	16V			
C924	1-126-006-11	ELECT	22uF 20%	16V		< IC >	
C925	1-124-994-11	ELECT	100uF 20%	10V			
C926	1-163-021-11	CERAMIC CHIP	0.01uF 10%	50V	IC813	8-719-156-72	PHOTO COUPLER PS2501-1-K
C927	1-107-715-11	ELECT	22uF 20%	16V	IC901	8-719-156-72	PHOTO COUPLER PS2501-1-K
C928	1-163-141-00	CERAMIC CHIP	0.001uF 5%	50V	IC902	8-759-144-88	IC uPC494GS-T1
C929	1-131-731-11	ELECT	2200uF	16V	IC903	8-719-156-72	PHOTO COUPLER PS2501-1-K
C930	1-131-731-11	ELECT	2200uF	16V	IC904	8-759-144-88	IC uPC494GS-T1
C931	1-131-731-11	ELECT	2200uF	16V		< COIL >	
C932	1-131-731-11	ELECT	2200uF	16V	L902	1-410-396-71	INDUCTOR 0.45uH
C934	1-163-009-11	CERAMIC CHIP	0.001uF 10%	50V	L904	1-410-396-71	INDUCTOR 0.45uH
C935	1-104-829-11	ELECT	220uF 20%	35V		< PILOT LAMP >	
C936	1-104-829-11	ELECT	220uF 20%	35V			
C938	1-164-004-11	CERAMIC CHIP	0.1uF 10%	25V	PL901	1-518-540-00	LAMP, PILOT
C940	1-163-009-11	CERAMIC CHIP	0.001uF 10%	50V		< TRANSISTOR >	
C941	1-163-009-11	CERAMIC CHIP	0.001uF 10%	50V			
C942	1-163-009-11	CERAMIC CHIP	0.001uF 10%	50V	Q804	8-729-230-49	TRANSISTOR 2SC2712-Y
C943	1-163-009-11	CERAMIC CHIP	0.001uF 10%	50V	Q805	8-729-230-49	TRANSISTOR 2SC2712-Y
C944	1-163-009-11	CERAMIC CHIP	0.001uF 10%	50V	Q806	8-729-230-49	TRANSISTOR 2SC2712-Y
C945	1-163-009-11	CERAMIC CHIP	0.001uF 10%	50V	Q807	8-729-230-49	TRANSISTOR 2SC2712-Y
C946	1-163-009-11	CERAMIC CHIP	0.001uF 10%	50V	Q808	8-729-216-21	TRANSISTOR 2SA1162-Y
C947	1-163-009-11	CERAMIC CHIP	0.001uF 10%	50V			
C948	1-163-009-11	CERAMIC CHIP	0.001uF 10%	50V	Q809	8-729-230-49	TRANSISTOR 2SC2712-Y
		< CONNECTOR >			Q810	8-729-216-21	TRANSISTOR 2SA1162-Y
CN802	1-694-620-11	TERMINAL BOARD 3P (+12V, GND, +12V)			Q811	8-729-230-49	TRANSISTOR 2SC2712-Y
		< JACK >			Q812	8-729-216-21	TRANSISTOR 2SA1162-Y
CNJ801	1-793-279-11	CONNECTOR 1P (REMOTE)			Q901	8-729-046-13	TRANSISTOR 2SB1243-QR-TV2
		< CONNECTOR >					
* CNP804	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P			Q902	8-729-216-21	TRANSISTOR 2SA1162-Y
		< DIODE >			Q903	8-729-230-49	TRANSISTOR 2SC2712-Y
D806	8-719-801-78	DIODE 1SS184-TE85L			Q904	8-729-230-49	TRANSISTOR 2SC2712-Y
D807	8-719-801-78	DIODE 1SS184-TE85L			Q905	8-729-230-49	TRANSISTOR 2SC2712-Y
D808	8-719-025-34	DIODE 02CZ6.8-TE85L			Q906	8-729-230-49	TRANSISTOR 2SC2712-Y
D901	8-719-025-50	DIODE 02CZ16-TE85L			Q907	8-729-048-66	TRANSISTOR 2SB1238PQR-TV2
D902	8-719-043-82	DIODE 02CZ5.1Y-TE85L			Q908	8-729-048-66	TRANSISTOR 2SB1238PQR-TV2
D903	8-719-160-90	DIODE RD36FB2			Q909	8-729-032-94	TRANSISTOR 2SD1859TV2Q
D904	8-719-025-49	DIODE 02CZ15-TE85L			Q910	8-729-032-94	TRANSISTOR 2SD1859TV2Q
D905	8-719-076-60	DIODE FCH20A15			Q911	8-729-035-83	TRANSISTOR MTP75N06HD
D906	8-719-076-61	DIODE FRH20A15					
D907	8-719-801-78	DIODE 1SS184-TE85L			Q912	8-729-035-83	TRANSISTOR MTP75N06HD
D908	8-719-801-78	DIODE 1SS184-TE85L			Q913	8-729-035-83	TRANSISTOR MTP75N06HD
D909	8-719-801-78	DIODE 1SS184-TE85L			Q914	8-729-035-83	TRANSISTOR MTP75N06HD
D910	8-719-160-90	DIODE RD36FB2			Q915	8-729-035-83	TRANSISTOR MTP75N06HD
D911	8-719-025-49	DIODE 02CZ15-TE85L			Q916	8-729-035-83	TRANSISTOR MTP75N06HD
D912	8-719-076-60	DIODE FCH20A15					
D913	8-719-076-61	DIODE FRH20A15			Q917	8-729-216-21	TRANSISTOR 2SA1162-Y
		< FUSE >			Q918	8-729-230-49	TRANSISTOR 2SC2712-Y
F901	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE)(25A)			Q919	8-729-230-49	TRANSISTOR 2SC2712-Y
F902	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE)(25A)			Q920	8-729-048-66	TRANSISTOR 2SB1238PQR-TV2
					Q921	8-729-048-66	TRANSISTOR 2SB1238PQR-TV2
					Q922	8-729-032-94	TRANSISTOR 2SD1859TV2Q
					Q923	8-729-032-94	TRANSISTOR 2SD1859TV2Q
					Q924	8-729-035-83	TRANSISTOR MTP75N06HD
					Q925	8-729-035-83	TRANSISTOR MTP75N06HD
					Q926	8-729-035-83	TRANSISTOR MTP75N06HD
					Q927	8-729-035-83	TRANSISTOR MTP75N06HD
					Q928	8-729-035-83	TRANSISTOR MTP75N06HD
					Q929	8-729-035-83	TRANSISTOR MTP75N06HD

POWER

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< RESISTOR >				R933	1-220-852-11	CARBON	2.2 5% 1/4W
R816	1-216-190-00	RES,CHIP	470 2% 1/8W	R934	1-220-852-11	CARBON	2.2 5% 1/4W
R817	1-216-190-00	RES,CHIP	470 2% 1/8W	R935	1-220-852-11	CARBON	2.2 5% 1/4W
R818	1-216-190-00	RES,CHIP	470 2% 1/8W	R936	1-208-462-61	RES,CHIP	10K 2% 1/10W
R819	1-216-190-00	RES,CHIP	470 2% 1/8W	R937	1-208-462-61	RES,CHIP	10K 2% 1/10W
R820	1-208-462-61	RES,CHIP	10K 2% 1/10W	R938	1-208-550-61	RES,CHIP	470K 2% 1/10W
R821	1-208-462-61	RES,CHIP	10K 2% 1/10W	R939	1-208-462-61	RES,CHIP	10K 2% 1/10W
R822	1-208-462-61	RES,CHIP	10K 2% 1/10W	R940	1-208-526-61	RES,CHIP	47K 2% 1/10W
R823	1-208-462-61	RES,CHIP	10K 2% 1/10W	R941	1-208-437-61	RES,CHIP	1K 2% 1/10W
R824	1-208-462-61	RES,CHIP	10K 2% 1/10W	R942	1-208-433-61	RES,CHIP	680 2% 1/10W
R825	1-208-462-61	RES,CHIP	10K 2% 1/10W	R943	1-208-518-61	RES,CHIP	22K 2% 1/10W
R826	1-216-210-00	RES,CHIP	3.3K 2% 1/8W	R944	1-208-534-61	RES,CHIP	100K 2% 1/10W
R827	1-208-462-61	RES,CHIP	10K 2% 1/10W	R945	1-218-760-11	RES,CHIP	220K 2% 1/10W
R828	1-208-462-61	RES,CHIP	10K 2% 1/10W	R946	1-216-635-11	METAL CHIP	220 0.5% 1/10W
R829	1-216-210-00	RES,CHIP	3.3K 2% 1/8W	R947	1-208-462-61	RES,CHIP	10K 2% 1/10W
R830	1-208-462-61	RES,CHIP	10K 2% 1/10W	R948	1-208-462-61	RES,CHIP	10K 2% 1/10W
R831	1-208-462-61	RES,CHIP	10K 2% 1/10W	R949	1-208-518-61	RES,CHIP	22K 2% 1/10W
R832	1-208-526-61	RES,CHIP	47K 2% 1/10W	R950	1-216-677-11	METAL CHIP	12K 0.5% 1/10W
R833	1-216-210-00	RES,CHIP	3.3K 2% 1/8W	R951	1-208-453-61	RES,CHIP	4.7K 2% 1/10W
R834	1-216-234-00	RES,CHIP	33K 2% 1/8W	R952	1-216-635-11	METAL CHIP	220 0.5% 1/10W
R835	1-208-826-11	RES,CHIP	68K 2% 1/10W	R953	1-208-437-61	RES,CHIP	1K 2% 1/10W
R836	1-208-437-61	RES,CHIP	1K 2% 1/10W	R954	1-208-437-61	RES,CHIP	1K 2% 1/10W
R837	1-208-510-61	RES,CHIP	10K 2% 1/8W	R955	1-216-631-11	METAL CHIP	150 0.5% 1/10W
R838	1-215-860-11	METAL OXIDE	33 5% 1W F	R956	1-216-631-11	METAL CHIP	150 0.5% 1/10W
R901	1-249-576-11	CARBON	10K 5% 1/4W	R957	1-215-865-11	METAL OXIDE	220 5% 1W F
R902	1-208-474-61	RES,CHIP	330 2% 1/8W	R958	1-215-865-11	METAL OXIDE	220 5% 1W F
R903	1-216-210-00	RES,CHIP	3.3K 2% 1/8W	R959	1-208-437-61	RES,CHIP	1K 2% 1/10W
R904	1-208-486-61	RES,CHIP	1K 2% 1/8W	R960	1-208-437-61	RES,CHIP	1K 2% 1/10W
R905	1-216-214-00	RES,CHIP	4.7K 2% 1/8W	R961	1-208-397-61	RES,CHIP	22 2% 1/8W
R906	1-208-441-61	RES,CHIP	1.5K 2% 1/10W	R962	1-208-437-61	RES,CHIP	1K 2% 1/10W
R907	1-249-568-11	CARBON	4.7K 5% 1/4W	R963	1-208-437-61	RES,CHIP	1K 2% 1/10W
R908	1-216-210-00	RES,CHIP	3.3K 2% 1/8W	R964	1-208-397-61	RES,CHIP	22 2% 1/8W
R909	1-208-433-61	RES,CHIP	680 2% 1/10W	R965	1-220-852-11	CARBON	2.2 5% 1/4W
R910	1-218-760-11	RES,CHIP	220K 2% 1/10W	R966	1-220-852-11	CARBON	2.2 5% 1/4W
R911	1-216-635-11	METAL CHIP	220 0.5% 1/10W	R967	1-220-852-11	CARBON	2.2 5% 1/4W
R912	1-208-462-61	RES,CHIP	10K 2% 1/10W	R968	1-220-852-11	CARBON	2.2 5% 1/4W
R913	1-208-462-61	RES,CHIP	10K 2% 1/10W	R969	1-220-852-11	CARBON	2.2 5% 1/4W
R914	1-208-518-61	RES,CHIP	22K 2% 1/10W	R970	1-220-852-11	CARBON	2.2 5% 1/4W
R915	1-216-677-11	METAL CHIP	12K 0.5% 1/10W	< SWITCH >			
R916	1-208-453-61	RES,CHIP	4.7K 2% 1/10W	S801	1-571-658-11	SWITCH, SLIDE (MODE, HI-C/HI-V)	
R917	1-216-635-11	METAL CHIP	220 0.5% 1/10W	S802	1-692-721-11	SWITCH, SLIDE (NFB, ON/OFF)	
R918	1-208-437-61	RES,CHIP	1K 2% 1/10W	< TRANSFORMER >			
R919	1-208-437-61	RES,CHIP	1K 2% 1/10W	T901	1-435-148-11	TRANSFORMER, DC-DC CONVERTER	
R920	1-216-631-11	METAL CHIP	150 0.5% 1/10W	T902	1-435-148-11	TRANSFORMER, DC-DC CONVERTER	
R921	1-216-631-11	METAL CHIP	150 0.5% 1/10W	< THERMISTOR >			
R922	1-215-865-11	METAL OXIDE	220 5% 1W F	TH901	1-810-506-11	THERMISTOR NTH5G39B223K01	
R923	1-215-865-11	METAL OXIDE	220 5% 1W F	TH902	1-810-506-11	THERMISTOR NTH5G39B223K01	
R924	1-208-437-61	RES,CHIP	1K 2% 1/10W	TH903	1-810-506-11	THERMISTOR NTH5G39B223K01	
R925	1-208-437-61	RES,CHIP	1K 2% 1/10W	TH904	1-810-506-11	THERMISTOR NTH5G39B223K01	
R926	1-208-397-61	RES,CHIP	22 2% 1/8W	TH905	1-810-506-11	THERMISTOR NTH5G39B223K01	
R927	1-208-437-61	RES,CHIP	1K 2% 1/10W	*****			
R928	1-208-437-61	RES,CHIP	1K 2% 1/10W				
R929	1-208-397-61	RES,CHIP	22 2% 1/8W				
R930	1-220-852-11	CARBON	2.2 5% 1/4W				
R931	1-220-852-11	CARBON	2.2 5% 1/4W				
R932	1-220-852-11	CARBON	2.2 5% 1/4W				

SUB 1

SUB 2

Ref. No.	Part No.	Description	Remark
*	1-675-265-11	SUB 1 (5CH) BOARD *****	
		< CAPACITOR >	
C501	1-126-025-11	ELECT 330uF	20% 25V
C502	1-164-222-11	CERAMIC CHIP 0.22uF	25V
C504	1-126-047-81	ELECT 4.7uF	20% 50V
C505	1-126-047-81	ELECT 4.7uF	20% 50V
C506	1-126-047-81	ELECT 4.7uF	20% 50V
C507	1-126-047-81	ELECT 4.7uF	20% 50V
C508	1-163-239-11	CERAMIC CHIP 33PF	5% 50V
C509	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C510	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C511	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C512	1-126-047-81	ELECT 4.7uF	20% 50V
C513	1-126-047-81	ELECT 4.7uF	20% 50V
C518	1-126-044-11	ELECT 1uF	20% 50V
C519	1-126-044-11	ELECT 1uF	20% 50V
C520	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C714	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C715	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C716	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V
C717	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V
C743	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V
C744	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V
		< JACK >	
CNJ706	1-770-068-91	JACK, PIN 2P (INPUT)	
		< CONNECTOR >	
CNP709	1-784-917-11	CONNECTOR, BOARD TO BOARD 9P	
		< DIODE >	
D705	8-719-801-78	DIODE 1SS184-TE85L	
		< IC >	
IC713	8-759-711-82	IC NJM4580E(T1)	
IC714	8-759-711-82	IC NJM4580E(T1)	
IC715	8-759-711-82	IC NJM4580E(T1)	
IC716	8-759-711-82	IC NJM4580E(T1)	
		< TRANSISTOR >	
Q501	8-729-203-48	TRANSISTOR 2SC3327-A	
Q502	8-729-203-48	TRANSISTOR 2SC3327-A	
		< RESISTOR >	
R501	1-216-210-00	RES,CHIP 3.3K	2% 1/8W
R502	1-208-486-61	RES,CHIP 1K	2% 1/8W
R504	1-208-518-61	RES,CHIP 22K	2% 1/10W
R505	1-208-518-61	RES,CHIP 22K	2% 1/10W
R506	1-208-518-61	RES,CHIP 22K	2% 1/10W
R507	1-208-518-61	RES,CHIP 22K	2% 1/10W
R508	1-208-291-11	RES,CHIP 4.7M	5% 1/10W
R509	1-208-462-61	RES,CHIP 10K	2% 1/10W
R510	1-208-462-61	RES,CHIP 10K	2% 1/10W
R511	1-208-518-61	RES,CHIP 22K	2% 1/10W

Ref. No.	Part No.	Description	Remark
R512	1-208-518-61	RES,CHIP 22K	2% 1/10W
R513	1-216-631-11	METAL CHIP 150	0.5% 1/10W
R514	1-208-453-61	RES,CHIP 4.7K	2% 1/10W
R515	1-208-441-61	RES,CHIP 1.5K	2% 1/10W
R518	1-216-661-11	METAL CHIP 2.7K	0.5% 1/10W
R519	1-216-665-11	METAL CHIP 3.9K	0.5% 1/10W
R520	1-208-789-11	RES,CHIP 2K	2% 1/10W
R521	1-208-449-61	RES,CHIP 3.3K	2% 1/10W
R522	1-208-437-61	RES,CHIP 1K	2% 1/10W
R523	1-208-510-61	RES,CHIP 10K	2% 1/8W
R524	1-208-510-61	RES,CHIP 10K	2% 1/8W
R525	1-208-462-61	RES,CHIP 10K	2% 1/10W
R705	1-208-462-61	RES,CHIP 10K	2% 1/10W
R706	1-208-441-61	RES,CHIP 1.5K	2% 1/10W
R707	1-208-539-11	RES,CHIP 160K	2% 1/10W
R708	1-208-539-11	RES,CHIP 160K	2% 1/10W
R709	1-208-453-61	RES,CHIP 4.7K	2% 1/10W
R710	1-208-462-61	RES,CHIP 10K	2% 1/10W
R711	1-208-437-61	RES,CHIP 1K	2% 1/10W
R714	1-208-437-61	RES,CHIP 1K	2% 1/10W
R718	1-208-462-61	RES,CHIP 10K	2% 1/10W
R719	1-208-453-61	RES,CHIP 4.7K	2% 1/10W
R738	1-216-665-11	METAL CHIP 3.9K	0.5% 1/10W
R739	1-216-665-11	METAL CHIP 3.9K	0.5% 1/10W
		< SWITCH >	
S708	1-692-721-11	SWITCH, SLIDE (MODE, LEVEL/BOOST) (US/CND)	
S709	1-692-721-11	SWITCH, SLIDE (DIRECT, ON/OFF)	
		< VARIABLE RESISTOR >	
VR708	1-225-648-11	RES, VAR 5K/5K (LEVEL, MIN/MAX)	
VR709	1-225-923-11	RES, VAR 20K/20K (BOOST LOW CUT FREQ/7Hz-40Hz)	
VR710	1-225-648-11	RES, VAR 5K/5K (BOOST LEVEL/0dB-+10dB)	

*	1-675-266-11	SUB 2 (5CH) BOARD *****	
		< CAPACITOR >	
C514	1-163-251-11	CERAMIC CHIP 100PF	5% 50V (US/CND)
C515	1-126-008-51	ELECT 47uF	20% 16V (US/CND)
C516	1-164-222-11	CERAMIC CHIP 0.22uF	25V
		< JACK >	
CNJ709	1-784-916-11	CONNECTOR, BOARD TO BOARD 9P	
CNJ711	1-566-865-21	JACK, MODULAR (US/CND)	
		< RESISTOR >	
R516	1-208-449-61	RES,CHIP 3.3K	2% 1/10W
R517	1-208-453-61	RES,CHIP 4.7K	2% 1/10W
		< SWITCH >	
S707	1-692-721-11	SWITCH, SLIDE (INPUT MODE/F←→F+R)	

Ref. No.	Part No.	Description	Remark
S710	1-771-802-11	SWITCH (TEST TONE) < VARIABLE RESISTOR >	
VR707	1-225-922-11	RES, VAR 20K/20K (FILTER/50Hz-200Hz)	

*	1-675-500-11	TR BOARD ***** < TRANSISTOR >	
Q703	8-729-141-83	TRANSISTOR 2SB1375	

MISCELLANEOUS *****			
F901	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
F902	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
F903	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
F904	1-576-256-11	FUSE (BLADE TYPE) (AUTO FUSE) (25A)	
FN801	1-763-419-11	MOTOR, DC FAN	

ACCESSORIES *****			
3-867-642-11		MANUAL, INSTRUCTION (ENGLISH,FRENCH)	
3-867-642-21		MANUAL, INSTRUCTION (GERMAN,ITALIAN)(AEP,UK,E)	
3-867-642-31		MANUAL, INSTRUCTION (SPANISH,PORTUGUESE)(AEP,UK,E)	
3-867-642-41		MANUAL, INSTRUCTION (DUTCH,SWEDISH)(AEP,UK,E)	
3-867-642-51		MANUAL, INSTRUCTION (RUSSIAN)(AEP,UK,E)	

HARDWARE LIST *****			
#1	7-685-546-19	SCREW (+BTP3X8) TYPE2 N-S	
#2	7-685-548-19	SCREW (+BTP3X12) TYPE2 N-S	
#3	7-685-145-19	SCREW (+P3X6) TYPE2 NON-SLIT	
#4	7-685-147-11	SCREW (+P3X10) TYPE2 NON-SLIT	
#5	7-685-146-19	SCREW (+P3X8) TYPE2 NON-SLIT	
#6	7-685-647-79	SCREW (+BVTP3X10) TYPE2 IT-3	
#7	7-685-106-11	SCREW (+P2X10) TYPE2 NON-SLIT	
#8	7-685-649-79	SCREW (+BVTP3X14) TYPE2 IT-3	
#9	7-685-168-11	SCREW (+P4X40) TYPE2 NON-SLIT	
#10	7-685-149-11	SCREW (+P3X14) TYPE2 NON-SLIT	
#11	7-685-795-01	SCREW +PTT2.6X12 (S)	

