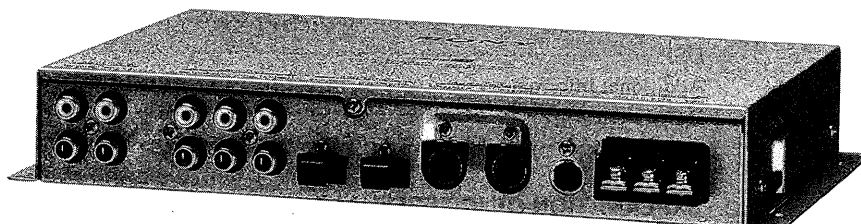


XDP-210EQ

SERVICE MANUAL

US Model



SPECIFICATIONS

Power requirements	12 V DC car battery (negative ground)	Optional equipment	Master unit (which can operate a digital preamplifier)
Current drain	1 A		XR-C900, CDX-C910, CDX-C710 etc.
Frequency response	8 Hz — 20 kHz (FRONT)		CD changer
Signal-to-noise ratio	105 dB (FRONT) (JIS-A)		CDX-91 (equipped with a digital output)
Harmonic distortion	0.005 % (FRONT)		CDX-52, CDX-71, CDX-72, CDX-81, CDX-T60, CDX-T62 etc.
Separation	95 dB at 1 kHz		MD changer
Tone controls	Bass $\pm$ 10 dB at 310 Hz Treble $\pm$ 10 dB at 3.1 kHz		MDX-60
Input/output terminals	BUS input (2) Line input (RCA jack) (2) Line output (RCA jack) (3) Optical digital input (2)		Source selector (compatible with an analog system) XA-C30
Dimensions	Approx. 245 $\times$ 145 $\times$ 40 mm (9 $\frac{3}{4}$ $\times$ 5 $\frac{3}{4}$ $\times$ 1 $\frac{5}{8}$ in.) (w/h/d)		Source selector (compatible with a digital system) XA-U40D
Mass	Approx. 1.2 kg (2 lb. 10 oz.)		TV tuner XT-U400V etc.
Supplied accessories	BUS cable (2 m) (1) Mounting screw (4)		Power amplifier XM- Series
Optional accessories	BUS cable (supplied with RCA pin cord) RC-61 (1 m), RC-62 (2 m) RCA pin cord RC-63 (1 m), RC-64 (2 m), RC-65 (5 m) Optical cable RC-97 (2 m)		Speakers XS- Series

Design and specifications subject to change without notice.

DIGITAL SIGNAL PROCESSOR
SONY[®]

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NOTE

- After having repaired or replaced the IC703 (EEPROM) always be sure to set the Master Unit (XR-C900, CDX-C910, CDX-C710 etc.) in test mode and reset (initialize) the IC703 (EEPROM).
- How to Reset (initialize)
Set in test mode with the Master Unit (XR-C900, CDX-C910, CDX-C710 etc.) . Press the Master Unit (XR-C900, CDX-C910, CDX-C710 etc.) 「MUTE」 key to reset (initialize) the IC703 (EEPROM).

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.

Registering an equalizer curve onto each disc

— Disc Sound Memory (DSM)
(CD/MD changer or CD/MD player with program memory function)

Once you have registered the desired equalizer curve and the sound characteristics (bass, treble and subwoofer level) onto the discs, you can enjoy the same equalizer curve every time you play them. You can register up to 200 discs.

- 1 Play the desired disc.
- 2 Select the equalizer curve, and adjust the sound characteristics.
- 3 Press **(SHIFT)**, then press **(PLAY MODE)** repeatedly until "DSM SET" appears.

CD1 SCHUBERT
DSM set

- 4 Press **(ENTER)** momentarily.

DSM +Enter+

When the DSM setting is complete, the display will go back to the normal playback mode.

Changing the stored equalizer curve

Play the disc whose equalizer curve you want to change, and follow the "Setting and storing the equalizer curve".

Erasing the stored equalizer curve

- 1 Press **(SHIFT)**, then press **(PLAY MODE)** repeatedly until "DSM SET" appears.

- 2 Press **(ENTER)** for two seconds.

DSM +Delete+

Additional Information

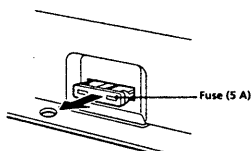
Precautions

- If your car was parked in direct sunlight resulting in a considerable rise in temperature inside the car, allow the unit to cool off before switching on.
- If no power is being supplied to the unit, check the connections first. If everything is in order, check the fuse.
- For safety reasons, keep your car audio volume moderate so that you can still hear sounds outside your car.
- If you connect this unit to the XDP-U50D and XDP-U50DMK2, this unit will not work.

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

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.



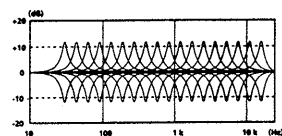
Warning

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.

Frequency response

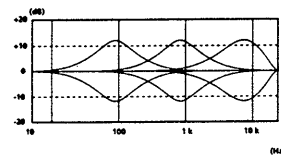
Front Equalizer (± 12 dB)

$f_0 = 30, 45, 62, 90, 130, 190, 270, 400, 580, 840, 1.2k, 1.7k, 2.5k, 3.6k, 5.2k, 7.5k, 11k, 16kHz$



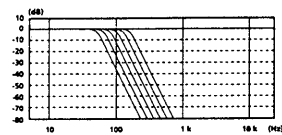
Rear Equalizer (± 12 dB)

$f_0 = 90, 840, 7.5kHz$



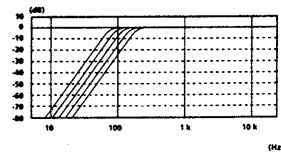
Low Pass Filter (-36 dB/oct)

$f_0 = 50, 62, 78, 99, 125, 157 Hz$



High Pass Filter (-24 dB/oct)

$f_0 = 78, 99, 125, 157, 198 Hz$



Installation

Precaution

- This unit is designed for negative ground 12 V DC operation only.
- Avoid installing the unit where:
 - it would be subject to high temperatures such as from direct sunlight or hot air from the heater.
 - it would be exposed to rain or moisture.
 - it would be subject to dust or dirt.
- If the unit is placed too close to the car radio or the TV tuner, interference may occur. In this case, separate the unit from the car radio or TV tuner.
- The unit has a digital volume control system. Do not turn down the volume of the master unit too much as doing so may cause the sound quality to deteriorate.
- For safety reasons, keep your car audio volume moderate so that you can still hear sounds outside your car.

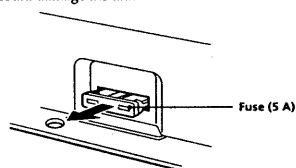
If you have any questions or problems concerning your unit that are not covered in this manual, please consult your nearest Sony dealer.

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.



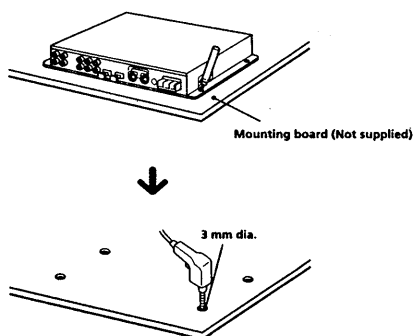
Before installation

- Choose the mounting location carefully so that the unit will not interfere with the normal driving functions of the driver.
- Mount the unit either under a seat or inside the trunk space.

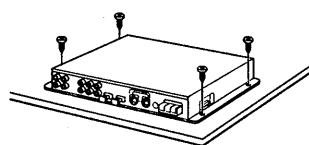
Installing with the supplied screws

Prepare a sound mounting board with enough thickness (more than 14 mm (9/16 in.)) to install the unit securely.

- 1 Place the unit directly onto the mounting board and mark the four bolt holes, then drill the holes (3 mm (1/8 in.) dia.).



- 2 Secure the unit to the board with the supplied screws.

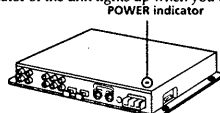


Note

If you connect this unit to the XDP-UI50D and XDP-UI50DMK2, this unit will not work.

After installation and connection

Make sure that the POWER indicator of the unit lights up when you turn on the master unit.



Connection

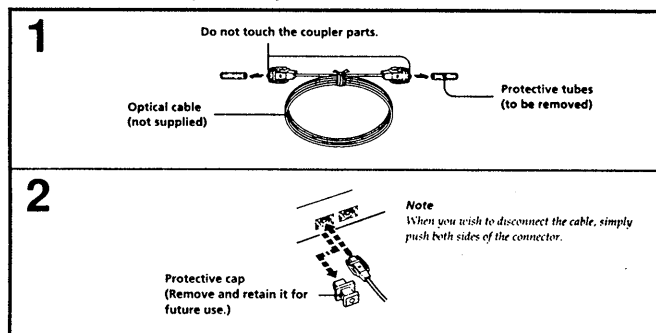
Caution

- Before making any connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the +12 V power supply lead only after all the other leads have been connected.
- Be sure to press the reset button of the master unit after all the connections have been completed.
- If your car is equipped with a computer system for navigation or some other purpose, Do not to 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.

Note on the use with an extra power amplifier

This unit has a digital volume control system. If you turn down the volume of the master unit too much, the output sound may be distorted. To prevent this from happening, turn up the volume of the master unit to a moderate level (if the power amplifier has an input level control) and turn down the input level of the power amplifier.

Connection of the optional optical cable (RC-97 etc.)



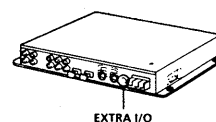
Notes on the optical cable

Observe the following when connecting the cable.

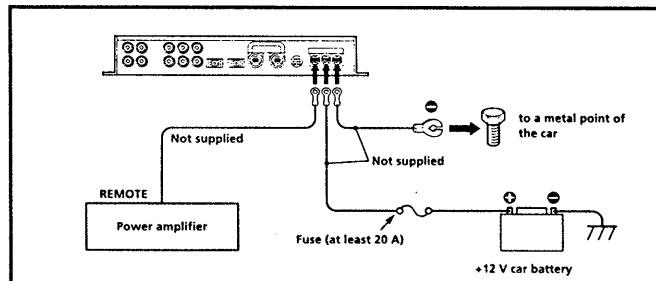
- Make sure that the connector is plugged in firmly with the catches on either side of the connector being fully inserted into the socket.
- Do not forcibly bend the cable too much so that the bent part (arc) becomes less than 5 cm (2 in.) in radius. If you do so, sound may not be reproduced.
- Make sure that the cable does not get squeezed or constricted in any way by objects around it.
- Never let the coupler parts of the connectors get scratched or become contaminated with dirt.
- When using the optical cable, avoid routing it in places where there could be a considerable rise in temperature.

About EXTRA I/O jack

Do not connect any cables or code to this jack. This is a diagnostic test access jack for technicians.



Power connection leads



Notes on the power supply

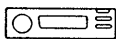
- Connect the +12 V power supply lead only after all the other leads have been connected.
- When you connect the power supply lead (connected to the +12V terminal) directly to the car battery, make sure that a fuse whose value should be at least 20 A is placed as close to the car battery as possible on the leads and that the leads must be larger than 16-Gauge (AWG-16) or with the sectional area of more than 1.25 mm².
- Be sure to connect the ground lead of the unit securely to a metal point of the car. A loose connection may cause a malfunction of the amplifier.
- Be sure to connect the remote control lead of the power amplifier to either the AMP REM OUT of the unit or the AMP REM lead of the master unit which is compatible with the Sony DSP system.

Connection of the power amplifier

Equipment used in the illustration



RCA pin cord



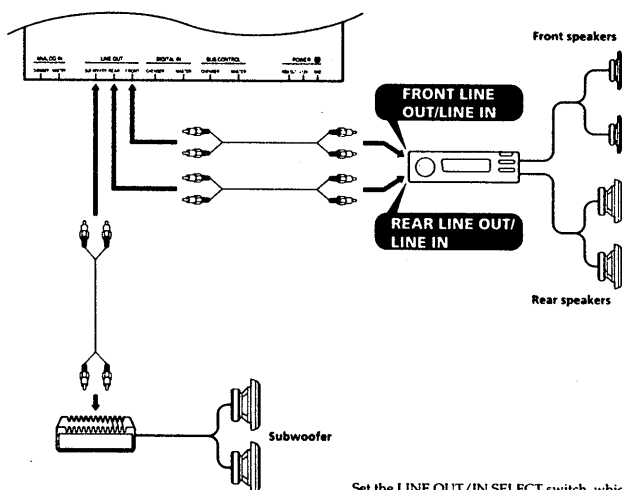
Master unit (which can operate a digital preamplifier)



Power amplifier

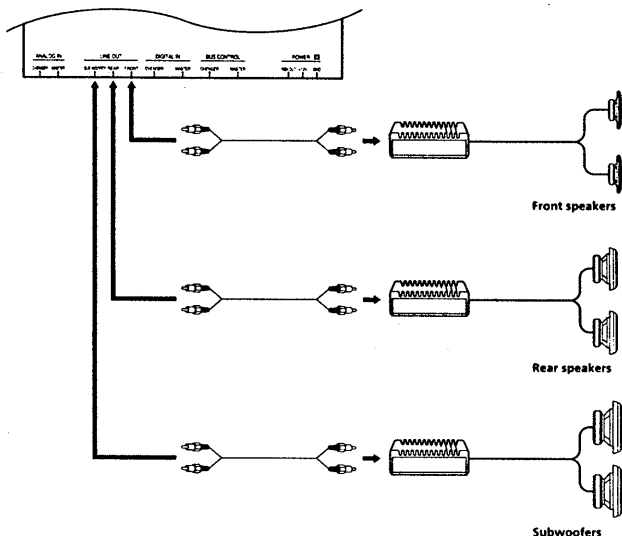
If you need some extra connecting cables or cords, you can find them in the Sony audio accessory lineup. For the equipment to be connected to the unit, refer to "Optional equipment".

For the built-in amplifier of the master unit



Set the LINE OUT/IN SELECT switch, which is on the underside of the master unit, to position ②.

For the optional power amplifier

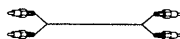


Connection

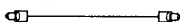
Equipment used in the connections illustration examples



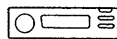
BUS cable



RCA pin cord



Optical cable



Master unit (which can operate a digital preamplifier)



CD/MD changer (equipped with an analog output)



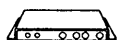
CD changer (equipped with a digital output)



Source selector (compatible with an analog system)



Source selector (compatible with a digital system)



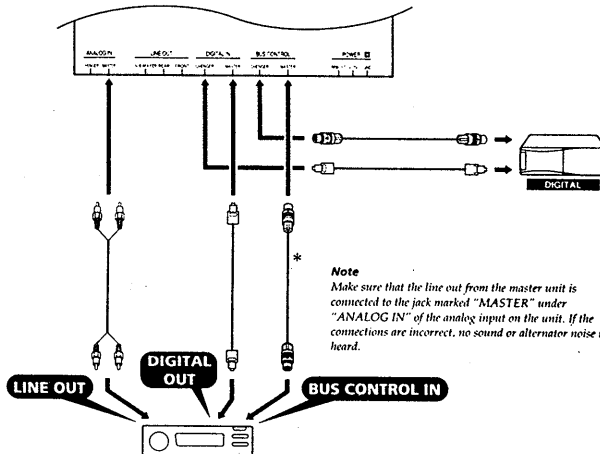
TV tuner

If you need some extra connecting cables or cords, you can find them in the Sony audio accessory lineup. For the equipment to be connected to the unit, refer to "Optional equipment".

Expand connections (illustration example numbers)

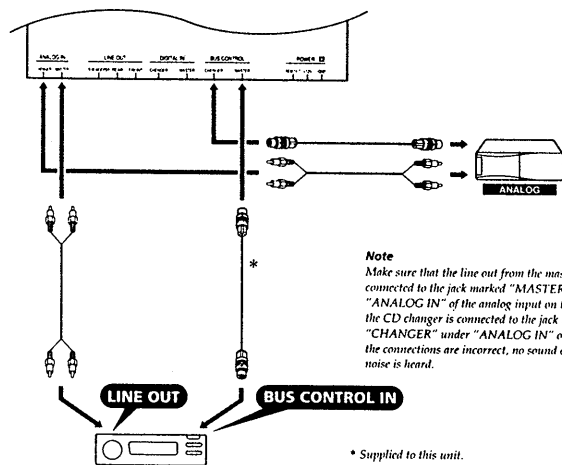
	1	2	3	4	5	6	7	8
CD/MD changer (analog)		○		○			○	○
CD changer (digital)	○				○	○		○
TV tuner			○	○	○			
Source selector							○	○
Source selector						○		○

Example 1 With a CD changer (digital)



* Supplied to this unit.
For the other connecting cables and cords, use the ones supplied to the other units or the separately sold ones.

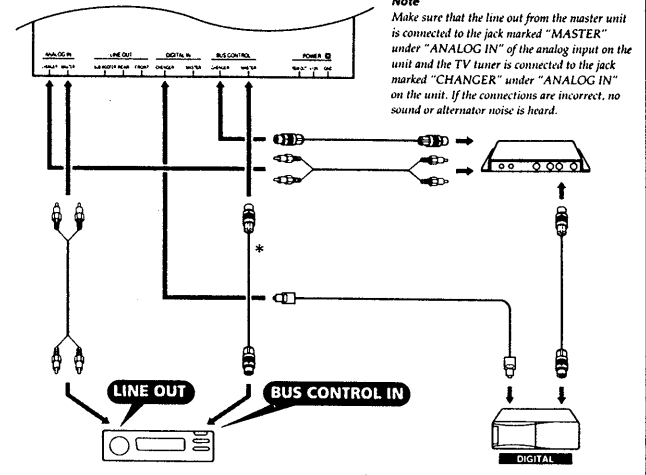
Example 2 With a CD/MD changer (analog)



Note
Make sure that the line out from the master unit is connected to the jack marked "MASTER" under "ANALOG IN" of the analog input on the unit and the CD changer is connected to the jack marked "CHANGER" under "ANALOG IN" on the unit. If the connections are incorrect, no sound or alternator noise is heard.

* Supplied to this unit.
For the other connecting cables and cords, use the ones supplied to the other units or the separately sold ones.

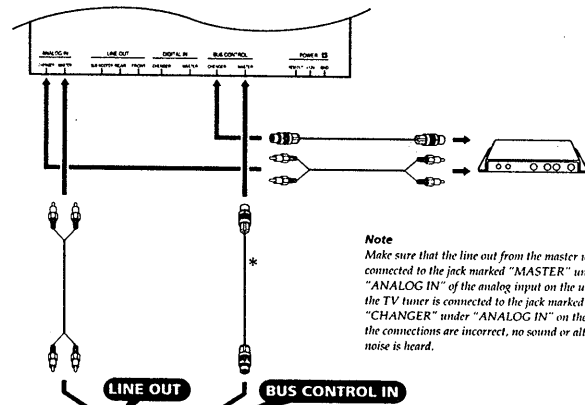
Example 5 With a TV tuner and a CD changer (digital)



Note
Make sure that the line out from the master unit is connected to the jack marked "MASTER" under "ANALOG IN" of the analog input on the unit and the TV tuner is connected to the jack marked "CHANGER" under "ANALOG IN" on the unit. If the connections are incorrect, no sound or alternator noise is heard.

* Supplied to this unit.
For the other connecting cables and cords, use the ones supplied to the other units or the separately sold ones.

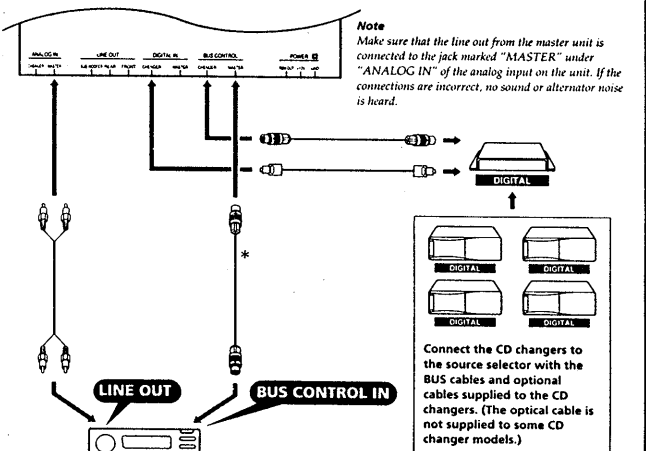
Example 3 With a TV tuner



Note
Make sure that the line out from the master unit is connected to the jack marked "MASTER" under "ANALOG IN" of the analog input on the unit and the TV tuner is connected to the jack marked "CHANGER" under "ANALOG IN" on the unit. If the connections are incorrect, no sound or alternator noise is heard.

* Supplied to this unit.
For the other connecting cables and cords, use the ones supplied to the other units or the separately sold ones.

Example 6 With several CD changers (digital)

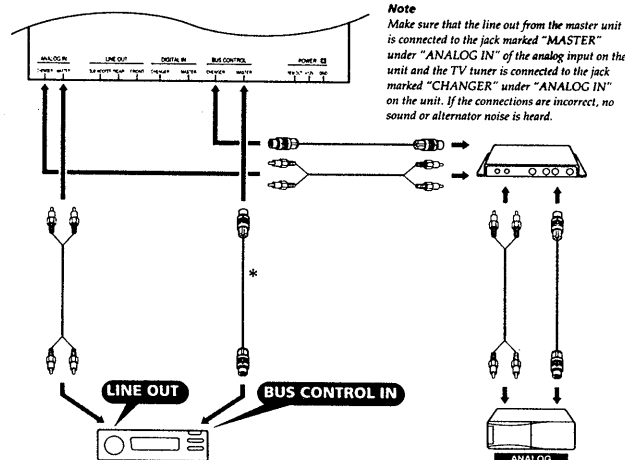


Note
Make sure that the line out from the master unit is connected to the jack marked "MASTER" under "ANALOG IN" of the analog input on the unit. If the connections are incorrect, no sound or alternator noise is heard.

Connect the CD changers to the source selector with the BUS cables and optional cables supplied to the CD changers. (The optical cable is not supplied to some CD changer models.)

* Supplied to this unit.
For the other connecting cables and cords, use the ones supplied to the other units or the separately sold ones.

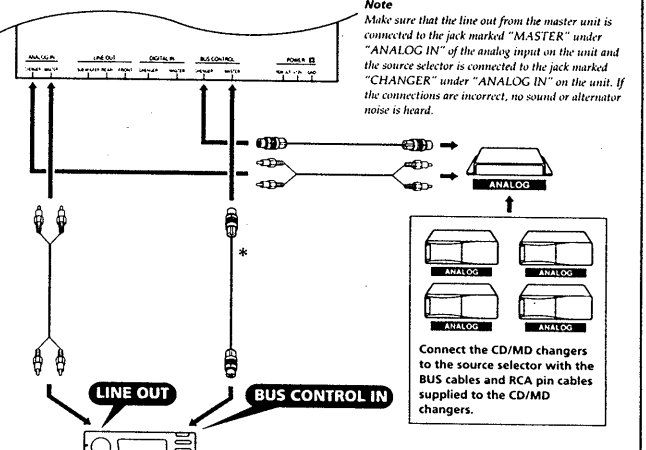
Example 4 With a TV tuner and a CD/MD changer (analog)



Note
Make sure that the line out from the master unit is connected to the jack marked "MASTER" under "ANALOG IN" of the analog input on the unit and the TV tuner is connected to the jack marked "CHANGER" under "ANALOG IN" on the unit. If the connections are incorrect, no sound or alternator noise is heard.

* Supplied to this unit.
For the other connecting cables and cords, use the ones supplied to the other units or the separately sold ones.

Example 7 With several CD/MD changers (analog)



Note
Make sure that the line out from the master unit is connected to the jack marked "MASTER" under "ANALOG IN" of the analog input on the unit and the source selector is connected to the jack marked "CHANGER" under "ANALOG IN" on the unit. If the connections are incorrect, no sound or alternator noise is heard.

Connect the CD/MD changers to the source selector with the BUS cables and RCA pin cables supplied to the CD/MD changers.

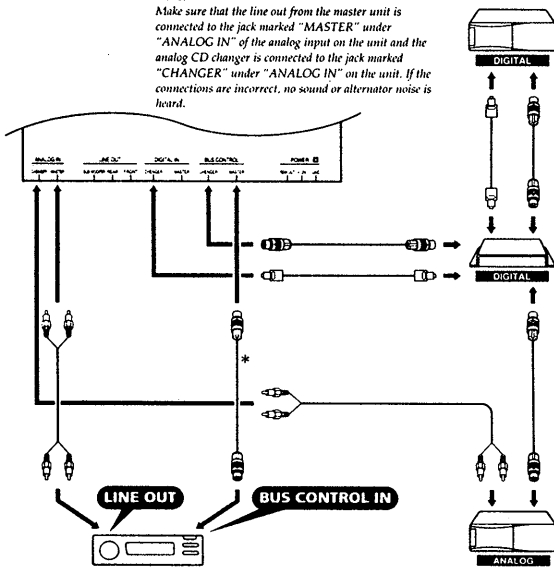
* Supplied to this unit.
For the other connecting cables and cords, use the ones supplied to the other units or the separately sold ones.

Example 8 With two CD changers (analog and digital)

With a digital selector

Note

Make sure that the line out from the master unit is connected to the jack marked "MASTER" under "ANALOG IN" of the analog input on the unit and the analog CD changer is connected to the jack marked "CHANGER" under "ANALOG IN" on the unit. If the connections are incorrect, no sound or alternator noise is heard.

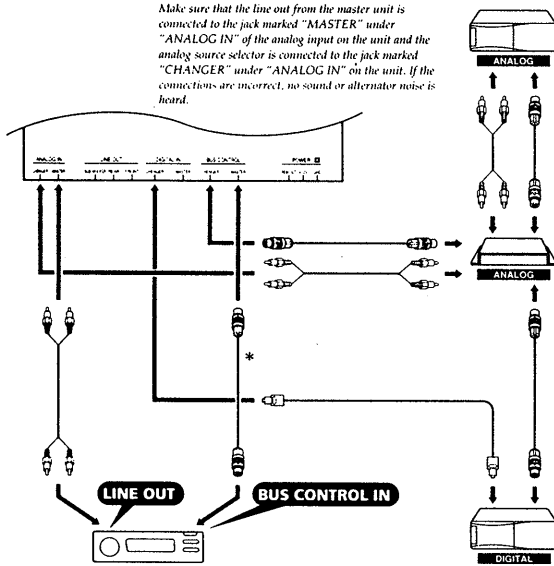


* Supplied to this unit.
For the other connecting cables and cords, use the ones supplied to the other units or the separately sold ones.

With an analog selector

Note

Make sure that the line out from the master unit is connected to the jack marked "MASTER" under "ANALOG IN" of the analog input on the unit and the analog source selector is connected to the jack marked "CHANGER" under "ANALOG IN" on the unit. If the connections are incorrect, no sound or alternator noise is heard.



* Supplied to this unit.
For the other connecting cables and cords, use the ones supplied to the other units or the separately sold ones.

SECTION 2

EXPLANATION OF IC TERMINALS

IC502 TC9332F (Digital Signal Processor)

IC503 TC9332F (Digital Signal Processor)

Pin No.	Pin name	I/O	Description
1 – 3	NC	–	Not used. (Open)
4	V _{DD}	–	Power supply terminal. (+5V)
5	V _{SS}	–	Power supply terminal. (Ground)
6 – 11	NC	–	not used. (Open)
12	V _{SSR}	–	Power terminal for internal delay RAM (DLRAM). (Ground)
13	V _{DDR}	–	Power terminal for internal delay RAM (DLRAM). (+5V)
14	V _{SS}	–	Power supply terminal. (Ground)
15	SD02	O	Output terminal for serial data.
16	SD01	O	Output terminal for serial data.
17	SD00	O	Output terminal for serial data.
18	SDI1	I	Input terminal for serial data.
19	SDI0	I	Input terminal for serial data.
20	LR	O	Output terminal for LR clock. (1fs) (Not used in this unit)
21	WCK	O	Output terminal for Word clock. (2fs) (Not used in this unit)
22	FS32	O	Output terminal for Bit clock. (32fs) (Not used in this unit)
23	FS64	O	Output terminal for Bit clock. (64fs) (Not used in this unit)
24	EBC0	I	Output terminal for Bit clock.
25	EBCI1	I	Output terminal for Bit clock.
26	EBCI0	I	Output terminal for Bit clock.
27	ELR0	I	Input terminal for LR clock.
28	ELRI1	I	Input terminal for LR clock.
29	ELRI0	I	Input terminal for LR clock.
30	SYNC	I	Input terminal for synchronization signal.
31	V _{DD}	–	Power supply terminal. (+5V)
32	X1	I	Input terminal for crystal oscillation radiator / terminal for external clock. (Ground connection for this unit)
33	X0	O	Terminal for crystal oscillation radiator. (Not used in this unit)
34	V _{SS}	–	Power supply terminal. (Ground)
35	CKSL	I	Switching terminal for oscillation clock. “L”: 384fs, “H”: 512fs (V _{DD} connection for this unit)
36	PLOFF	I	Switching terminal for X’tal oscillation mode/VCO oscillation mode. “L”: Built-in VCO oscillation mode, “H”: X’tal oscillation mode. (Ground connection for this unit)
37	PD	O	Output terminal for data with comparison phase.
38	V _{SSA}	–	Analog power supply terminal. (Ground)
39	AMPO	O	Amplifier output terminal for low-pass filter.
40	AMPI	I	Amplifier input terminal for low-pass filter.

Pin No.	Pin name	I/O	Description
41	ADDA	–	Analog power supply terminal. (+5V)
42 – 44	NC	–	Not used. (V _{DD} connection for this unit)
45	RST	I	Input terminal for reset signal.
46	CS	I	Input terminal for chip select.
47	IFCD	I	Selection terminal for command or data input mode from microcomputer. “H”: Command , “L”: Data
48	IFDI	I	Input terminal for microcomputer data.
49	IFDO	O	Data out put terminal for data bus.
50	IFCK	I	Shift clock input terminal for microcomputer data.
51	ACK	O	Acknowledge signal output terminal for microcomputer.
52	V _{SS}	–	Power supply terminal. (Ground)
53 – 60	NC	–	Not used. (Open)

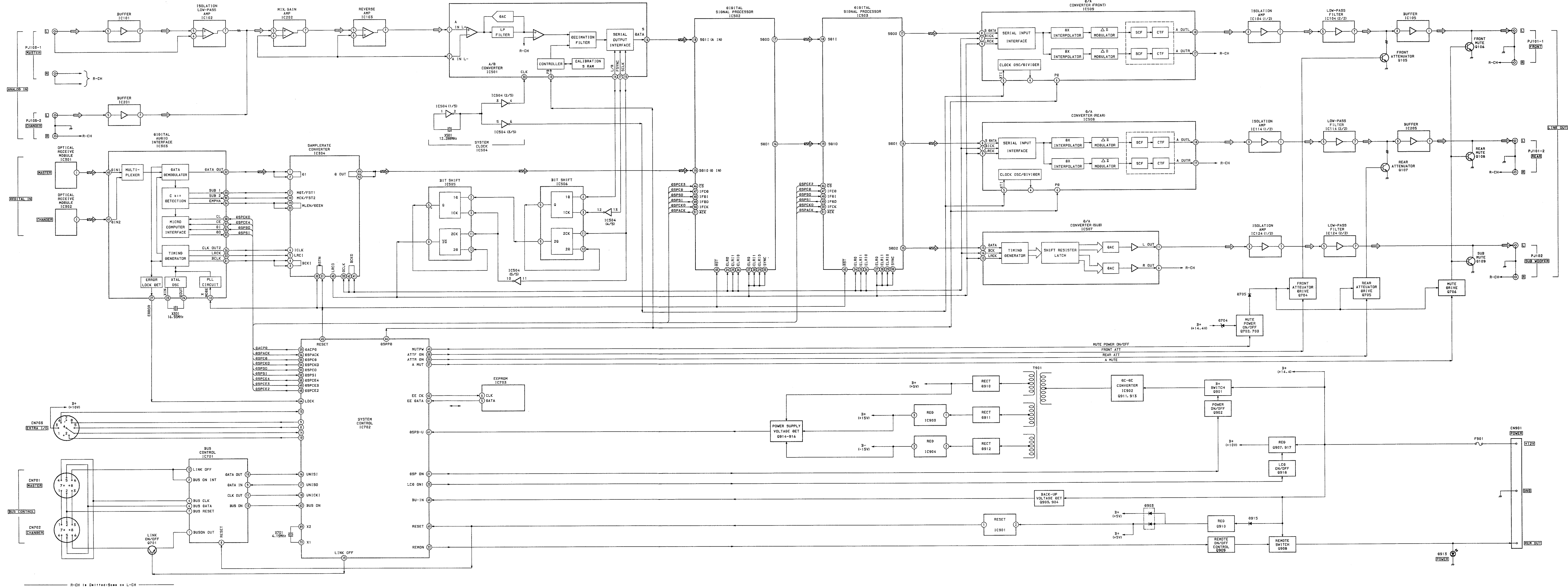
IC702 μ PD78056 (SYSTEM CONTROL)

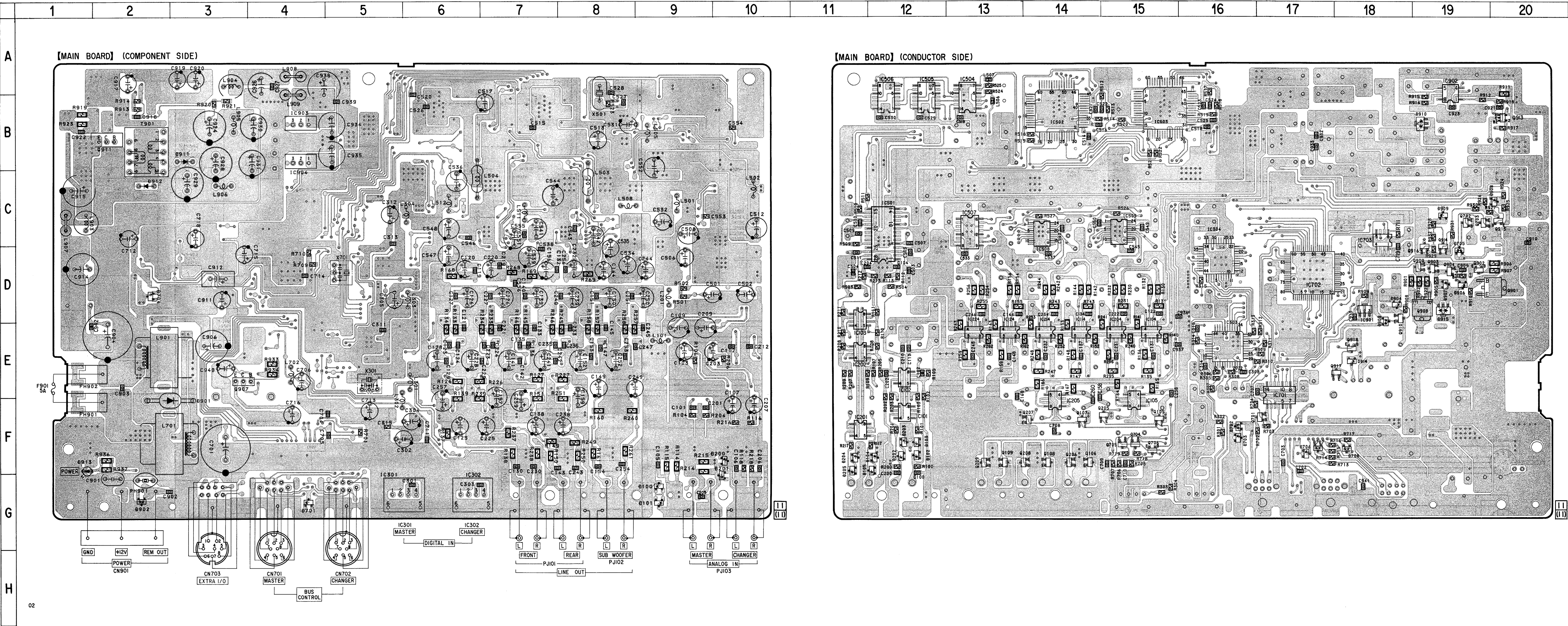
Pin No.	Pin name	I/O	Description
1 – 3	NC	–	Not used. (Open)
4	AV _{ss}	–	Power supply (Ground)
5, 6	NC	–	Not used. (Open)
7	AVREF1	–	Reference voltage for D/A converter.
8	SIN	I	Serial data input from commander.
9	SOUT	O	Serial data output to commander.
10	CTL1	O	Control output for commander.
11–13	NC	–	Not used. (Open)
14	CTL2	O	Control output for commander.
15	CTL3	O	Control output for commander.
16	UNISI	I	Input terminal for UNI-LINK serial communication data.
17	UNISO	O	Output terminal for UNI-LINK serial communication data.
18	UNICKI	I	Input terminal for UNI-LINK serial communication clock.
19	LINK OFF	O	LINK ON/OFF control output.
20	NC	–	Not used. (Open)
21	DSPON	O	DSP IC power supply ON/OFF control output. (DC/DC converter power drive) H : ON
22	REMON	O	AMP remote control output.
23	LCDON1	O	Commander power supply ON/OFF control output. H : ON
24–32	NC	–	Not used. (Open)
33	V _{ss}	–	Power supply. (Ground)
34–36	NC	–	Not used. (Open)
37	A-MUT	O	Output terminal for analog muting control.
38	ATTFO	O	Output terminal for front analog attenuation control.
39	ATTRON	O	Output terminal for rear analog attenuation control.
40	MUTPW	O	Output terminal for analog muting power supply control.
41	EEDATA	I/O	Serial data input/output to EEPROM.
42	EECK	O	Serial clock output to EEPROM.
43	NC	–	Not used. (Open)
44	DSPPD	O	Output terminal for A/D converter IC reset control.
45	DSPRST	O	Output terminal for DSP converter IC reset control.
46, 47	NC	–	Not used. (Open)
48	DSPCE2	O	Output terminal for DSP IC (IC503) communication authorization.
49	DSPCE3	O	Output terminal for DSP IC (IC502) communication authorization.
50	DSPCE4	O	Output terminal for digital receiver IC (IC303) communication authorization.
51	NC	–	Not used. (Open)
52	DSPSI	I	Input terminal for DSP IC serial communication data.
53	DSPSO	I	Output terminal for DSP IC serial communication data.
54	DSPCKO	I	Output terminal for DSP IC serial communication clock.
55	DSPCD	O	Output terminal for the DSP IC serial communication commands/data control.
56	DSPACK	I	Input terminal for DSP IC serial communication acknowledgment.
57, 58	NC	–	Not used. (Open)
59	DACPD	O	Output terminal for A/D converter IC reset control.
60	RESET	I	Input terminal for reset.

Pin No.	Pin name	I/O	Description
61	DSPB•U	I	Input terminal for detection of abnormal voltage in the DSP IC power supply.
62	BUSON	I	Input terminal for UNI-LINK communication authorization.
63	BU•IN	I	Input terminal for detection of abnormal voltage in the backup power supply.
64	LOCK	I	Input terminal for detection of digital audio lock.
65–67	NC	–	Not used. (Open)
68	V _{DD}	–	Power supply. (+5V)
69	X2	O	Main system clock oscillation. (4.19MHz)
70	X1	I	Main system clock oscillation. (4.19MHz)
71	IC (V _{PP})	–	Ground connection for this unit.
72	NC	–	Not used. (Open)
73	XT1	–	Ground connection for this unit.
74	AV _{DD}	–	Analog power supply terminal. (+5V)
75	AVREF	–	Input terminal for the A/D converter reference voltage. (+5V)
76–80	NC	–	Not used. (Open)

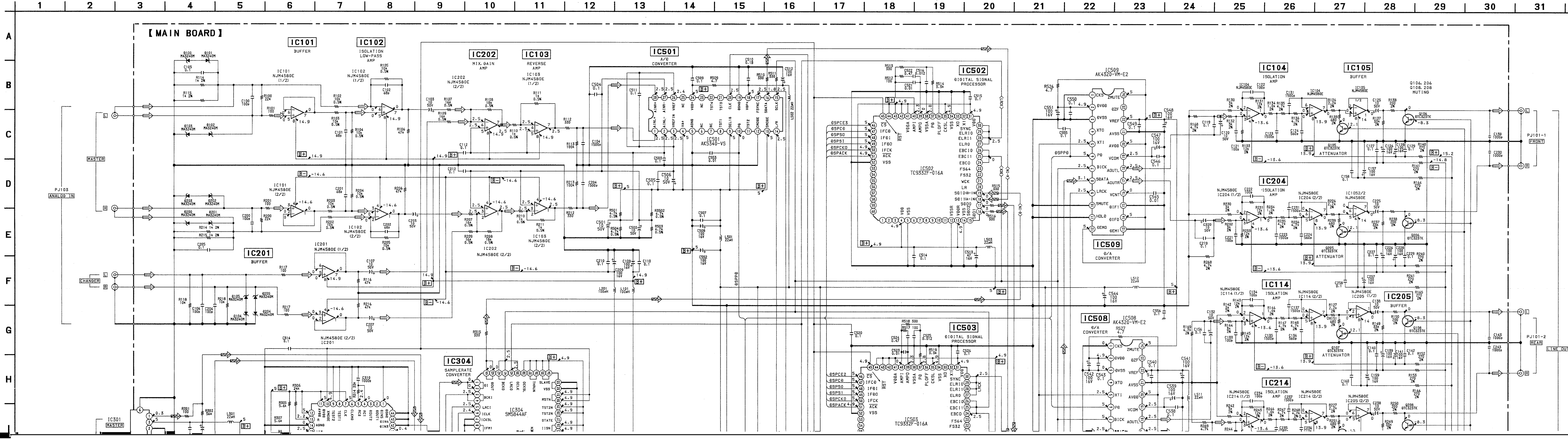
SECTION 3 DIAGRAMS

3-1. BLOCK DIAGRAM

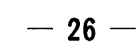




3-3. SCHEMATIC DIAGRAM ● Refer to page 25 for IC Block Diagrams.



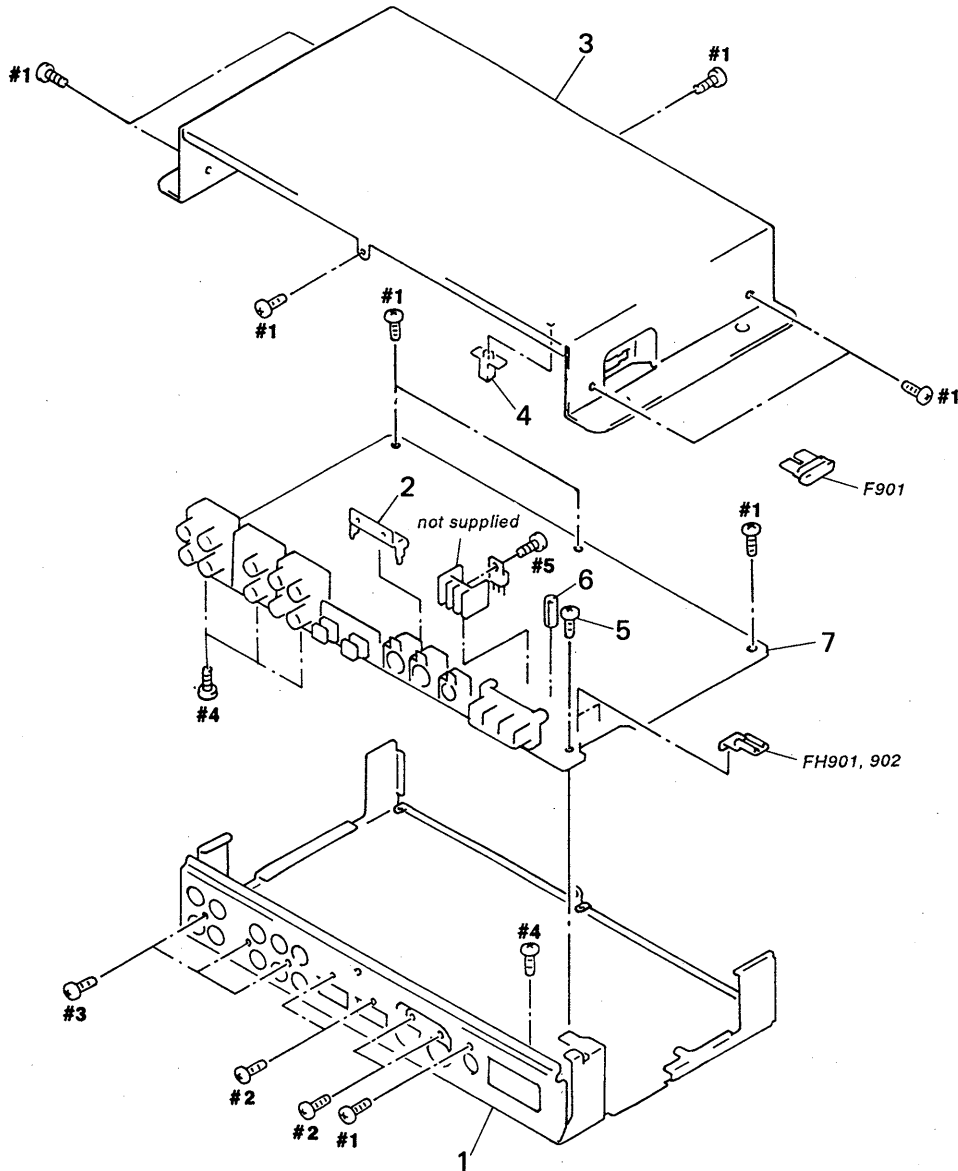
IC303 LC8903Q



SECTION 4 EXPLODE VIEW

NOTE :

- -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.
- 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.



Ref. No.	Part No.	Description	Remark
* 1	3-932-733-01	CASE (LOWER)	
* 2	3-932-734-01	COVER (CONNECTOR)	
* 3	3-932-732-01	CASE (UPPER)	
* 4	3-932-735-01	PLATE (LED), LIGHT GUIDE	
5	3-344-501-01	SCREW (+PTT 3X6),GROUND POINT	

Ref. No.	Part No.	Description	Remark
* 6	4-937-336-02	HOLDER, LED	
* 7	A-3309-096-A	MAIN BOARD, COMPLETE	
F901	1-532-796-11	FUSE (BRAD TYPE) (AUTO FUSE) (5A)	
FH901	1-537-479-11	TERMINAL (FUSE)	
FH902	1-537-479-11	TERMINAL (FUSE)	

SECTION 5 ELECTRICAL PARTS LIST

NOTE :

- 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.
- RESISTORS
All resistors are in ohms
METAL : Metal-film resistor
METAL OXIDE :Metal oxide-film resistor
F : nonflammable
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

● 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

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

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
*	A-3309-096-A	MAIN BOARD, COMPLETE *****				C138	1-126-048-81	ELECT	10uF	20%	50V
						C139	1-126-009-81	ELECT	100uF	20%	16V
						C140	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
*	3-932-734-01	COVER (CONNECTOR)				C141	1-126-009-81	ELECT	100uF	20%	16V
*	4-937-336-02	HOLDER, LED				C142	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
	7-685-146-11	SCREW +P 3X8 TYPE2 NON-SLIT									
	7-682-548-04	SCREW +PTT 3X8 (S)									
		< CAPACITOR >									
C100	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	C143	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C101	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	C144	1-126-048-81	ELECT	10uF	20%	50V
C102	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	C145	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C103	1-126-048-81	ELECT	10uF	20%	50V	C146	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C104	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V	C147	1-163-020-00	CERAMIC CHIP	0.0082uF	10%	50V
C105	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C148	1-162-587-11	CERAMIC CHIP	0.039uF	10%	25V
C106	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	C149	1-126-048-81	ELECT	10uF	20%	50V
C107	1-126-048-81	ELECT	10uF	20%	50V	C150	1-126-009-81	ELECT	100uF	20%	16V
C109	1-126-009-81	ELECT	100uF	20%	16V	C151	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C110	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	C152	1-126-009-81	ELECT	100uF	20%	16V
C112	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C153	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C119	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	C154	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C120	1-126-048-81	ELECT	10uF	20%	50V	C156	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C121	1-104-527-11	FILM CHIP	100PF	5%	50V	C157	1-126-009-81	ELECT	100uF	20%	16V
C122	1-104-527-11	FILM CHIP	100PF	5%	50V	C158	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C123	1-104-541-11	FILM CHIP	0.0015uF	5%	50V	C159	1-126-009-81	ELECT	100uF	20%	16V
C124	1-104-536-11	FILM CHIP	560PF	5%	50V	C160	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C125	1-126-048-81	ELECT	10uF	20%	50V	C200	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C126	1-126-009-81	ELECT	100uF	20%	16V	C201	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C127	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	C202	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C128	1-126-009-81	ELECT	100uF	20%	16V	C203	1-126-048-81	ELECT	10uF	20%	50V
C129	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	C204	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C130	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V	C205	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C131	1-104-541-11	FILM CHIP	0.0015uF	5%	50V	C206	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C132	1-126-048-81	ELECT	10uF	20%	50V	C207	1-126-048-81	ELECT	10uF	20%	50V
C133	1-104-527-11	FILM CHIP	100PF	5%	50V	C209	1-126-009-81	ELECT	100uF	20%	16V
C134	1-104-527-11	FILM CHIP	100PF	5%	50V	C210	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C135	1-104-541-11	FILM CHIP	0.0015uF	5%	50V	C212	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C136	1-104-536-11	FILM CHIP	560PF	5%	50V	C219	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C137	1-104-541-11	FILM CHIP	0.0015uF	5%	50V	C220	1-126-048-81	ELECT	10uF	20%	50V
						C221	1-104-527-11	FILM CHIP	100PF	5%	50V
						C222	1-104-527-11	FILM CHIP	100PF	5%	50V
						C223	1-104-541-11	FILM CHIP	0.0015uF	5%	50V

Ref. No.	Part No.	Description		Remark
C224	1-104-536-11	FILM CHIP	560PF	5% 50V
C225	1-126-048-81	ELECT	10uF	20% 50V
C226	1-126-009-81	ELECT	100uF	20% 16V
C227	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C228	1-126-009-81	ELECT	100uF	20% 16V
C229	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C230	1-163-275-11	CERAMIC CHIP	0.001uF	5% 50V
C231	1-104-541-11	FILM CHIP	0.0015uF	5% 50V
C232	1-126-048-81	ELECT	10uF	20% 50V
C233	1-104-527-11	FILM CHIP	100PF	5% 50V
C234	1-104-527-11	FILM CHIP	100PF	5% 50V
C235	1-104-541-11	FILM CHIP	0.0015uF	5% 50V
C236	1-104-536-11	FILM CHIP	560PF	5% 50V
C237	1-104-541-11	FILM CHIP	0.0015uF	5% 50V
C238	1-126-048-81	ELECT	10uF	20% 50V
C239	1-126-009-81	ELECT	100uF	20% 16V
C240	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C241	1-126-009-81	ELECT	100uF	20% 16V
C242	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C243	1-163-275-11	CERAMIC CHIP	0.001uF	5% 50V
C244	1-126-048-81	ELECT	10uF	20% 50V
C245	1-163-037-11	CERAMIC CHIP	0.022uF	10% 25V
C246	1-163-037-11	CERAMIC CHIP	0.022uF	10% 25V
C247	1-163-020-00	CERAMIC CHIP	0.0082uF	10% 50V
C248	1-162-587-11	CERAMIC CHIP	0.039uF	10% 25V
C249	1-126-048-81	ELECT	10uF	20% 50V
C250	1-126-009-81	ELECT	100uF	20% 16V
C251	1-163-077-00	CERAMIC CHIP	0.1uF	5% 50V
C252	1-126-009-81	ELECT	100uF	20% 16V
C253	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C254	1-163-275-11	CERAMIC CHIP	0.001uF	5% 50V
C256	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C257	1-126-009-81	ELECT	100uF	20% 16V
C258	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C259	1-126-009-81	ELECT	100uF	20% 16V
C260	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C301	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C302	1-126-008-51	ELECT	47uF	20% 16V
C303	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C304	1-126-008-51	ELECT	47uF	20% 16V
C305	1-126-008-51	ELECT	47uF	20% 16V
C308	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C310	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V
C311	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C312	1-126-008-51	ELECT	47uF	20% 16V
C313	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C314	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C315	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C501	1-126-048-81	ELECT	10uF	20% 50V
C502	1-126-048-81	ELECT	10uF	20% 50V
C503	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C504	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V

Ref. No.	Part No.	Description		Remark
C505	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C506	1-126-048-81	ELECT	10uF	20% 50V
C507	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C508	1-126-009-81	ELECT	100uF	20% 16V
C509	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C510	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C511	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C512	1-126-009-81	ELECT	100uF	20% 16V
C513	1-126-008-51	ELECT	47uF	20% 16V
C514	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C515	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C516	1-163-022-00	CERAMIC CHIP	0.012uF	10% 50V
C517	1-126-008-51	ELECT	47uF	20% 16V
C518	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C519	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C520	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C521	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C521	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C522	1-164-005-11	CERAMIC CHIP	0.47uF	25V
C523	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C524	1-164-005-11	CERAMIC CHIP	0.47uF	25V
C525	1-163-022-00	CERAMIC CHIP	0.012uF	10% 50V
C526	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C527	1-163-235-11	CERAMIC CHIP	22PF	5% 50V
C528	1-163-235-11	CERAMIC CHIP	22PF	5% 50V
C529	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C530	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C531	1-126-008-51	ELECT	47uF	20% 16V
C532	1-126-008-51	ELECT	47uF	20% 16V
C533	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C534	1-126-008-51	ELECT	47uF	20% 16V
C535	1-126-008-51	ELECT	47uF	20% 16V
C536	1-126-009-81	ELECT	100uF	20% 16V
C537	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C538	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C539	1-126-009-81	ELECT	100uF	20% 16V
C540	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C541	1-126-009-81	ELECT	100uF	20% 16V
C542	1-126-009-81	ELECT	100uF	20% 16V
C543	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C544	1-126-009-81	ELECT	100uF	20% 16V
C545	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C546	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C547	1-126-009-81	ELECT	100uF	20% 16V
C548	1-126-009-81	ELECT	100uF	20% 16V
C549	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V
C550	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C551	1-126-009-81	ELECT	100uF	20% 16V
C552	1-126-009-81	ELECT	100uF	20% 16V
C553	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C554	1-165-319-11	CERAMIC CHIP	0.1uF	50V
C555	1-165-319-11	CERAMIC CHIP	0.1uF	50V

MAIN

Ref. No.	Part No.	Description	Remark
C556	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C701	1-126-768-11	ELECT	2200uF 20% 16V
C702	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C703	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C704	1-163-017-00	CERAMIC CHIP	0.0047uF 5% 50V
C705	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
C706	1-126-008-51	ELECT	47uF 20% 16V
C707	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C708	1-164-005-11	CERAMIC CHIP	0.47uF 25V
C709	1-164-005-11	CERAMIC CHIP	0.47uF 25V
C710	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C711	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C712	1-126-008-51	ELECT	47uF 20% 16V
C713	1-126-008-51	ELECT	47uF 20% 16V
C714	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C715	1-126-008-51	ELECT	47uF 20% 16V
C716	1-126-008-51	ELECT	47uF 20% 16V
C718	1-126-008-51	ELECT	47uF 20% 16V
C719	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C901	1-162-806-11	CERAMIC	0.1uF 10% 50V
C902	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C903	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C904	1-126-768-11	ELECT	2200uF 20% 16V
C906	1-126-139-91	ELECT	820uF 20% 16V
C909	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C910	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C911	1-126-048-81	ELECT	10uF 20% 50V
C912	1-125-705-11	CAPACITOR	0.22F 0 5.5V
C913	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C914	1-110-598-91	ELECT	330uF 20% 16V
C915	1-126-139-91	ELECT	820uF 20% 16V
C917	1-126-008-51	ELECT	47uF 20% 16V
C918	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C919	1-126-048-81	ELECT	10uF 20% 50V
C920	1-126-044-11	ELECT	1uF 20% 50V
C921	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
C922	1-163-006-11	CERAMIC CHIP	560PF 10% 50V
C923	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C924	1-126-139-91	ELECT	820uF 20% 16V
C926	1-111-059-11	ELECT	220uF 20% 25V
C927	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C928	1-124-600-00	ELECT	270uF 20% 25V
C929	1-124-600-00	ELECT	270uF 20% 25V
C930	1-111-059-11	ELECT	220uF 20% 25V
C931	1-111-059-11	ELECT	220uF 20% 25V
C932	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C933	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C934	1-111-059-11	ELECT	220uF 20% 25V
C935	1-111-059-11	ELECT	220uF 20% 25V
C936	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
C937	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
C938	1-126-373-11	ELECT	470uF 20% 10V

Ref. No.	Part No.	Description	Remark
C939	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C940	1-126-048-81	ELECT	10uF 20% 50V
C941	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C942	1-136-961-11	FILM	0.047uF 10% 160V
< CONNECTOR >			
CN701	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL MASTER)	
CN702	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL CHANGER)	
CN703	1-580-489-11	SOCKET, CONNECTOR 8P (COMMANDER)	
CN901	1-537-477-41	TERMINAL BOARD (3P) (POWER) (GND/+12V/ REM OUT) (INCLUDING ▲)	
▲	3-912-432-01	SCREW 4X8	
< DIODE >			
D100	8-719-403-02	DIODE MA3240M-TX	
D101	8-719-403-02	DIODE MA3240M-TX	
D102	8-719-403-02	DIODE MA3240M-TX	
D103	8-719-403-02	DIODE MA3240M-TX	
D104	8-719-403-02	DIODE MA3240M-TX	
D105	8-719-403-02	DIODE MA3240M-TX	
D200	8-719-403-02	DIODE MA3240M-TX	
D201	8-719-403-02	DIODE MA3240M-TX	
D202	8-719-403-02	DIODE MA3240M-TX	
D203	8-719-403-02	DIODE MA3240M-TX	
D204	8-719-403-02	DIODE MA3240M-TX	
D205	8-719-403-02	DIODE MA3240M-TX	
D701	8-719-106-09	DIODE RD6.2M-B3	
D702	8-719-056-17	DIODE RD6.2MW-T1B	
D703	8-719-975-40	DIODE RB411D	
D704	8-719-036-58	DIODE MA3030-H(TX)	
D705	8-719-990-36	DIODE DCA010	
D706	8-719-106-09	DIODE RD6.2M-B3	
D707	8-719-056-17	DIODE RD6.2MW-T1B	
D708	8-719-056-17	DIODE RD6.2MW-T1B	
D901	8-719-052-59	DIODE 1N5404TU-15	
D902	8-719-990-36	DIODE DCA010	
D903	8-719-990-36	DIODE DCA010	
D904	8-719-106-09	DIODE RD6.2M-B3	
D906	8-719-106-89	DIODE RD15M-B2	
D907	8-719-106-09	DIODE RD6.2M-B3	
D908	8-719-106-62	DIODE RD11M-B2	
D909	8-719-036-58	DIODE MA3030-H(TX)	
D910	8-719-054-27	DIODE SB10W05P-TC	
D911	8-719-037-70	DIODE 11EFS2-TB5	
D912	8-719-037-70	DIODE 11EFS2-TB5	
D913	8-719-989-83	LED SLR34MG3FN.P (POWER)	
D914	8-719-106-62	DIODE RD11M-B2	
D915	8-719-054-27	DIODE SB10W05P-TC	
< TERMINAL >			
FH901	1-537-479-11	TERMINAL	
FH902	1-537-479-11	TERMINAL	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< IC >							
IC101	8-759-711-82	IC NJM4580E		L512	1-410-513-11	INDUCTOR 22uH	
IC102	8-759-711-82	IC NJM4580E		L701	1-421-359-00	COIL, CHOKE	
IC103	8-759-711-82	IC NJM4580E		L702	1-410-513-11	INDUCTOR 22uH	
IC104	8-759-711-82	IC NJM4580E		L901	1-421-359-00	COIL, CHOKE	
IC105	8-759-711-82	IC NJM4580E		L903	1-414-152-11	COIL, CHOKE 100uH	
IC114	8-759-711-82	IC NJM4580E		L904	1-414-152-11	COIL, CHOKE 100uH	
IC124	8-759-711-82	IC NJM4580E		L905	1-414-189-31	INDUCTOR 100uH	
IC201	8-759-711-82	IC NJM4580E		L906	1-414-189-31	INDUCTOR 100uH	
IC202	8-759-711-82	IC NJM4580E		L907	1-410-397-21	FERRITE BEAD INDUCTOR	
IC204	8-759-711-82	IC NJM4580E		L908	1-410-397-21	FERRITE BEAD INDUCTOR	
IC205	8-759-711-82	IC NJM4580E		L909	1-410-397-21	FERRITE BEAD INDUCTOR	
IC214	8-759-711-82	IC NJM4580E		< PHOTO INTERRUPTER >			
IC224	8-759-711-82	IC NJM4580E		PH901	1-809-148-11	THERMISTOR PTH8L07AR2R0M1B510	
IC301	8-749-923-62	IC TORX-193 (DIGITAL IN MASTER)		< JACK >			
IC302	8-749-923-62	IC TORX-193 (DIGITAL IN CHANGER)		PJ101	1-770-068-41	JACK, PIN 4P (LINE OUT FRONT/REAR)	
IC303	8-759-340-58	IC LC8903Q		PJ102	1-770-068-51	JACK, PIN 2P (LINE OUT SUBWOOFER)	
IC304	8-759-375-46	IC SM5844AF		PJ103	1-770-068-41	JACK, PIN 4P (ANALOG IN MASTER/CHANGER)	
IC501	8-759-331-35	IC AK5340-VS		< TRANSISTOR >			
IC502	8-759-385-59	IC TC9332F-016(BS.K)		Q105	8-729-015-39	TRANSISTOR DTC323TK	
IC503	8-759-385-59	IC TC9332F-016(BS.K)		Q106	8-729-015-39	TRANSISTOR DTC323TK	
IC504	8-759-233-64	IC TC74HCU04AF		Q107	8-729-015-39	TRANSISTOR DTC323TK	
IC505	8-759-232-32	IC TC74HC74AF		Q108	8-729-015-39	TRANSISTOR DTC323TK	
IC506	8-759-232-32	IC TC74HC74AF		Q109	8-729-015-39	TRANSISTOR DTC323TK	
IC507	8-759-148-30	IC uPD6376GS		Q205	8-729-015-39	TRANSISTOR DTC323TK	
IC508	8-759-359-52	IC AK4320VM-E2		Q206	8-729-015-39	TRANSISTOR DTC323TK	
IC509	8-759-359-52	IC AK4320VM-E2		Q207	8-729-015-39	TRANSISTOR DTC323TK	
IC701	8-759-284-87	IC MM1284XFFE		Q208	8-729-015-39	TRANSISTOR DTC323TK	
IC702	8-759-389-00	IC uPD78P058GC-SJ3117-3B9		Q209	8-729-015-39	TRANSISTOR DTC323TK	
IC703	8-759-363-60	IC NM24C16EM8X		Q701	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
IC901	8-759-940-45	IC S-8054HN-CB		Q702	8-729-027-52	TRANSISTOR DTC124EKA-T146	
IC902	8-759-983-97	IC TL5001CPS-TL		Q703	8-729-027-52	TRANSISTOR DTC124EKA-T146	
IC903	8-759-982-36	IC RC78M15FA		Q704	8-729-923-77	TRANSISTOR DTA114WK	
IC904	8-759-701-70	IC NJM79M15FA		Q705	8-729-923-77	TRANSISTOR DTA114WK	
< COIL >				Q706	8-729-923-77	TRANSISTOR DTA114WK	
L101	1-410-521-11	INDUCTOR 100uH		Q901	8-729-822-84	TRANSISTOR 2SB1202FAST	
L201	1-410-521-11	INDUCTOR 100uH		Q902	8-729-027-52	TRANSISTOR DTC124EKA-T146	
L301	1-410-513-11	INDUCTOR 22uH		Q903	8-729-027-52	TRANSISTOR DTC124EKA-T146	
L302	1-410-513-11	INDUCTOR 22uH		Q904	8-729-027-52	TRANSISTOR DTC124EKA-T146	
L303	1-410-513-11	INDUCTOR 22uH		Q907	8-729-804-92	TRANSISTOR 2SD1682-T	
L304	1-410-513-11	INDUCTOR 22uH		Q908	8-729-822-84	TRANSISTOR 2SB1202FAST	
L501	1-410-513-11	INDUCTOR 22uH		Q909	8-729-027-52	TRANSISTOR DTC124EKA-T146	
L502	1-410-513-11	INDUCTOR 22uH		Q910	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L503	1-408-121-00	INDUCTOR 22uH		Q911	8-729-032-70	TRANSISTOR 2SA1289	
L504	1-408-121-00	INDUCTOR 22uH		Q913	8-729-032-68	TRANSISTOR FC153-TL	
L505	1-410-513-11	INDUCTOR 22uH		Q914	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L506	1-550-907-21	BEAD, FERRITE (CHIP)		Q915	8-729-027-52	TRANSISTOR DTC124EKA-T146	
L507	1-550-907-21	BEAD, FERRITE (CHIP)		Q916	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L508	1-410-513-11	INDUCTOR 22uH		Q917	8-729-027-52	TRANSISTOR DTC124EKA-T146	
L511	1-410-513-11	INDUCTOR 22uH					

MAIN

Ref. No.	Part No.	Description	Remark
Q918	8-729-027-52	TRANSISTOR DTC124EKA-T146	
		< RESISTOR >	
R100	1-216-081-00	METAL CHIP 22K	5% 1/10W
R101	1-216-025-91	METAL GLAZE 100	5% 1/10W
R102	1-208-462-61	METAL GLAZE 10K	0.5% 1/10W
R103	1-208-462-61	METAL GLAZE 10K	0.5% 1/10W
R104	1-208-462-61	METAL GLAZE 10K	0.5% 1/10W
R105	1-208-462-61	METAL GLAZE 10K	0.5% 1/10W
R106	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R107	1-208-467-61	METAL CHIP 16K	0.5% 1/10W
R108	1-208-468-61	METAL CHIP 18K	0.5% 1/10W
R109	1-208-467-61	METAL CHIP 16K	0.5% 1/10W
R110	1-208-437-61	METAL CHIP 1K	0.5% 1/10W
R111	1-208-437-61	METAL CHIP 1K	0.5% 1/10W
R112	1-216-037-00	METAL CHIP 330	5% 1/10W
R113	1-208-534-61	METAL GLAZE 100K	5% 1/10W
R114	1-208-782-11	METAL GLAZE 1K	2% 1/8W
R115	1-208-782-11	METAL GLAZE 1K	2% 1/8W
R116	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R117	1-216-025-91	METAL GLAZE 100	5% 1/10W
R118	1-216-073-00	METAL CHIP 10K	5% 1/10W
R126	1-216-206-00	METAL GLAZE 2.2K	2% 1/8W
R127	1-216-206-00	METAL GLAZE 2.2K	2% 1/8W
R130	1-208-497-11	METAL GLAZE 3K	2% 1/8W
R131	1-208-512-11	METAL GLAZE 12K	2% 1/8W
R132	1-208-497-11	METAL GLAZE 3K	2% 1/8W
R133	1-208-512-11	METAL GLAZE 12K	2% 1/8W
R134	1-208-782-11	METAL GLAZE 1K	2% 1/8W
R135	1-216-214-00	METAL GLAZE 4.7K	2% 1/8W
R136	1-216-214-00	METAL GLAZE 4.7K	2% 1/8W
R137	1-216-234-00	METAL GLAZE 33K	2% 1/8W
R138	1-208-420-41	METAL GLAZE 200	2% 1/8W
R139	1-216-194-00	METAL CHIP 680	5% 1/8W
R140	1-208-472-41	METAL GLAZE 270	2% 1/8W
R141	1-208-472-41	METAL GLAZE 270	2% 1/8W
R142	1-208-497-11	METAL GLAZE 3K	2% 1/8W
R143	1-208-512-11	METAL GLAZE 12K	2% 1/8W
R144	1-208-497-11	METAL GLAZE 3K	2% 1/8W
R145	1-208-512-11	METAL GLAZE 12K	2% 1/8W
R146	1-208-782-11	METAL GLAZE 1K	2% 1/8W
R147	1-216-214-00	METAL GLAZE 4.7K	2% 1/8W
R148	1-216-214-00	METAL GLAZE 4.7K	2% 1/8W
R149	1-216-234-00	METAL GLAZE 33K	2% 1/8W
R150	1-208-420-41	METAL GLAZE 200	2% 1/8W
R151	1-216-194-00	METAL CHIP 680	5% 1/8W
R152	1-208-472-41	METAL GLAZE 270	2% 1/8W
R153	1-208-472-41	METAL GLAZE 270	2% 1/8W
R154	1-208-492-41	METAL GLAZE 1.8K	2% 1/8W
R155	1-216-222-00	METAL GLAZE 10K	2% 1/8W
R156	1-208-492-41	METAL GLAZE 1.8K	2% 1/8W
R157	1-216-222-00	METAL GLAZE 10K	2% 1/8W

Ref. No.	Part No.	Description	Remark
R158	1-216-222-00	METAL GLAZE 10K	2% 1/8W
R159	1-216-230-00	METAL GLAZE 22K	2% 1/8W
R160	1-216-234-00	METAL GLAZE 33K	2% 1/8W
R161	1-208-420-41	METAL GLAZE 200	2% 1/8W
R162	1-208-472-41	METAL GLAZE 270	2% 1/8W
R163	1-208-472-41	METAL GLAZE 270	2% 1/8W
R164	1-208-472-41	METAL GLAZE 270	2% 1/8W
R165	1-208-472-41	METAL GLAZE 270	2% 1/8W
R166	1-208-472-41	METAL GLAZE 270	2% 1/8W
R167	1-208-472-41	METAL GLAZE 270	2% 1/8W
R168	1-216-214-00	METAL GLAZE 4.7K	2% 1/8W
R169	1-216-214-00	METAL GLAZE 4.7K	2% 1/8W
R200	1-216-081-00	METAL CHIP 22K	5% 1/10W
R201	1-216-025-91	METAL GLAZE 100	5% 1/10W
R202	1-208-462-61	METAL GLAZE 10K	0.5% 1/10W
R203	1-208-462-61	METAL GLAZE 10K	0.5% 1/10W
R204	1-208-462-61	METAL GLAZE 10K	0.5% 1/10W
R205	1-208-462-61	METAL GLAZE 10K	0.5% 1/10W
R206	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R207	1-208-467-61	METAL CHIP 16K	0.5% 1/10W
R208	1-208-468-61	METAL CHIP 18K	0.5% 1/10W
R209	1-208-467-61	METAL CHIP 16K	0.5% 1/10W
R210	1-208-437-61	METAL CHIP 1K	0.5% 1/10W
R211	1-208-437-61	METAL CHIP 1K	0.5% 1/10W
R212	1-216-037-00	METAL CHIP 330	5% 1/10W
R213	1-208-534-61	METAL GLAZE 100K	5% 1/10W
R214	1-208-782-11	METAL GLAZE 1K	2% 1/8W
R215	1-208-782-11	METAL GLAZE 1K	2% 1/8W
R216	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R217	1-216-025-91	METAL GLAZE 100	5% 1/10W
R218	1-216-073-00	METAL CHIP 10K	5% 1/10W
R226	1-216-206-00	METAL GLAZE 2.2K	2% 1/8W
R227	1-216-206-00	METAL GLAZE 2.2K	2% 1/8W
R230	1-208-497-11	METAL GLAZE 3K	2% 1/8W
R231	1-208-512-11	METAL GLAZE 12K	2% 1/8W
R232	1-208-497-11	METAL GLAZE 3K	2% 1/8W
R233	1-208-512-11	METAL GLAZE 12K	2% 1/8W
R234	1-208-782-11	METAL GLAZE 1K	2% 1/8W
R235	1-216-214-00	METAL GLAZE 4.7K	2% 1/8W
R236	1-216-214-00	METAL GLAZE 4.7K	2% 1/8W
R237	1-216-234-00	METAL GLAZE 33K	2% 1/8W
R238	1-208-420-41	METAL GLAZE 200	2% 1/8W
R239	1-216-194-00	METAL CHIP 680	5% 1/8W
R240	1-208-472-41	METAL GLAZE 270	2% 1/8W
R241	1-208-472-41	METAL GLAZE 270	2% 1/8W
R242	1-208-497-11	METAL GLAZE 3K	2% 1/8W
R243	1-208-512-11	METAL GLAZE 12K	2% 1/8W
R244	1-208-497-11	METAL GLAZE 3K	2% 1/8W
R245	1-208-512-11	METAL GLAZE 12K	2% 1/8W
R246	1-208-782-11	METAL GLAZE 1K	2% 1/8W
R247	1-216-214-00	METAL GLAZE 4.7K	2% 1/8W

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description		Remark
R248	1-216-214-00	METAL GLAZE	4.7K	2% 1/8W	R524	1-216-037-00	METAL CHIP	330	5% 1/10W
R249	1-216-234-00	METAL GLAZE	33K	2% 1/8W	R525	1-216-037-00	METAL CHIP	330	5% 1/10W
R250	1-208-420-41	METAL GLAZE	200	2% 1/8W	R526	1-216-308-00	METAL CHIP	4.7	5% 1/10W
R251	1-216-194-00	METAL CHIP	680	5% 1/8W					
R252	1-208-472-41	METAL GLAZE	270	2% 1/8W	R527	1-216-308-00	METAL CHIP	4.7	5% 1/10W
					R701	1-216-089-91	METAL GLAZE	47K	5% 1/10W
R253	1-208-472-41	METAL GLAZE	270	2% 1/8W	R702	1-216-025-91	METAL GLAZE	100	5% 1/10W
R254	1-208-492-41	METAL GLAZE	1.8K	2% 1/8W	R703	1-216-089-91	METAL GLAZE	47K	5% 1/10W
R255	1-216-222-00	METAL GLAZE	10K	2% 1/8W	R704	1-216-089-91	METAL GLAZE	47K	5% 1/10W
R256	1-208-492-41	METAL GLAZE	1.8K	2% 1/8W					
R257	1-216-222-00	METAL GLAZE	10K	2% 1/8W	R706	1-216-085-00	METAL CHIP	33K	5% 1/10W
					R707	1-216-085-00	METAL CHIP	33K	5% 1/10W
R258	1-216-222-00	METAL GLAZE	10K	2% 1/8W	R708	1-216-085-00	METAL CHIP	33K	5% 1/10W
R259	1-216-230-00	METAL GLAZE	22K	2% 1/8W	R709	1-216-089-91	METAL GLAZE	47K	5% 1/10W
R260	1-216-234-00	METAL GLAZE	33K	2% 1/8W	R710	1-216-089-91	METAL GLAZE	47K	5% 1/10W
R261	1-208-420-41	METAL GLAZE	200	2% 1/8W					
R262	1-208-472-41	METAL GLAZE	270	2% 1/8W	R711	1-216-089-91	METAL GLAZE	47K	5% 1/10W
					R713	1-216-049-91	METAL GLAZE	1K	5% 1/10W
R263	1-208-472-41	METAL GLAZE	270	2% 1/8W	R714	1-216-049-91	METAL GLAZE	1K	5% 1/10W
R268	1-216-214-00	METAL GLAZE	4.7K	2% 1/8W	R715	1-216-049-91	METAL GLAZE	1K	5% 1/10W
R269	1-216-214-00	METAL GLAZE	4.7K	2% 1/8W	R716	1-216-049-91	METAL GLAZE	1K	5% 1/10W
R301	1-216-025-91	METAL GLAZE	100	5% 1/10W					
R302	1-216-091-00	METAL CHIP	56K	5% 1/10W	R717	1-216-049-91	METAL GLAZE	1K	5% 1/10W
					R718	1-216-049-91	METAL GLAZE	1K	5% 1/10W
R303	1-216-025-91	METAL GLAZE	100	5% 1/10W	R719	1-216-049-91	METAL GLAZE	1K	5% 1/10W
R304	1-216-091-00	METAL CHIP	56K	5% 1/10W	R901	1-208-497-11	METAL GLAZE	3K	2% 1/8W
R305	1-216-067-00	METAL CHIP	5.6K	5% 1/10W	R902	1-208-497-11	METAL GLAZE	3K	2% 1/8W
R306	1-216-082-00	METAL GLAZE	24K	5% 1/10W					
R307	1-216-067-00	METAL CHIP	5.6K	5% 1/10W	R904	1-216-089-91	METAL GLAZE	47K	5% 1/10W
					R905	1-216-073-00	METAL CHIP	10K	5% 1/10W
R308	1-216-029-00	METAL CHIP	150	5% 1/10W	R906	1-208-488-11	METAL GLAZE	1.2K	2% 1/8W
R309	1-216-027-00	METAL CHIP	120	5% 1/10W	R907	1-208-488-11	METAL GLAZE	1.2K	2% 1/8W
R310	1-216-121-91	METAL GLAZE	1M	5% 1/10W	R908	1-216-081-00	METAL CHIP	22K	5% 1/10W
R311	1-216-037-00	METAL CHIP	330	5% 1/10W					
R312	1-216-037-00	METAL CHIP	330	5% 1/10W	R909	1-216-089-91	METAL GLAZE	47K	5% 1/10W
					R910	1-216-073-00	METAL CHIP	10K	5% 1/10W
R313	1-216-037-00	METAL CHIP	330	5% 1/10W	R911	1-208-472-41	METAL GLAZE	270	2% 1/8W
R314	1-216-085-00	METAL CHIP	33K	5% 1/10W	R912	1-216-049-91	METAL GLAZE	1K	5% 1/10W
R315	1-216-037-00	METAL CHIP	330	5% 1/10W	R913	1-216-057-00	METAL CHIP	2.2K	5% 1/10W
R501	1-216-453-61	METAL CHIP	4.7K	0.5% 1/10W					
R502	1-216-453-61	METAL CHIP	4.7K	0.5% 1/10W	R914	1-216-105-91	METAL GLAZE	220K	5% 1/10W
					R915	1-216-096-00	METAL GLAZE	91K	5% 1/10W
R503	1-216-453-61	METAL CHIP	4.7K	0.5% 1/10W	R916	1-216-097-91	METAL GLAZE	100K	5% 1/10W
R504	1-216-453-61	METAL CHIP	4.7K	0.5% 1/10W	R917	1-216-057-00	METAL CHIP	2.2K	5% 1/10W
R509	1-216-308-00	METAL CHIP	4.7	5% 1/10W	R918	1-216-081-00	METAL CHIP	22K	5% 1/10W
R510	1-216-037-00	METAL CHIP	330	5% 1/10W					
R511	1-216-037-00	METAL CHIP	330	5% 1/10W	R919	1-216-186-00	METAL GLAZE	330	2% 1/8W
					R920	1-208-467-61	METAL GLAZE	16K	0.5% 1/10W
R512	1-216-025-91	METAL GLAZE	100	5% 1/10W	R921	1-208-451-61	METAL CHIP	3.9K	0.5% 1/10W
R513	1-216-037-00	METAL CHIP	330	5% 1/10W	R922	1-208-497-11	METAL GLAZE	3K	2% 1/8W
R514	1-216-061-00	METAL CHIP	3.3K	5% 1/10W	R923	1-216-186-00	METAL GLAZE	330	2% 1/8W
R515	1-216-037-00	METAL CHIP	330	5% 1/10W					
R516	1-216-037-00	METAL CHIP	330	5% 1/10W	R924	1-216-073-00	METAL CHIP	10K	5% 1/10W
					R925	1-216-073-00	METAL CHIP	10K	5% 1/10W
R517	1-216-025-91	METAL GLAZE	100	5% 1/10W	R926	1-216-085-00	METAL CHIP	33K	5% 1/10W
R518	1-216-037-00	METAL CHIP	330	5% 1/10W	R927	1-216-073-00	METAL CHIP	10K	5% 1/10W
R519	1-216-061-00	METAL CHIP	3.3K	5% 1/10W	R928	1-216-057-00	METAL CHIP	2.2K	5% 1/10W
R520	1-216-037-00	METAL CHIP	330	5% 1/10W					
R521	1-216-037-00	METAL CHIP	330	5% 1/10W	R929	1-216-081-00	METAL CHIP	22K	5% 1/10W
					R930	1-216-085-00	METAL CHIP	33K	5% 1/10W
R522	1-216-037-00	METAL CHIP	330	5% 1/10W	R931	1-216-077-00	METAL CHIP	15K	5% 1/10W
R523	1-216-121-91	METAL GLAZE	1M	5% 1/10W	R932	1-216-073-00	METAL CHIP	10K	5% 1/10W

MAIN

Ref. No.	Part No.	Description	Remark
R933	1-208-782-11	METAL GLAZE 1K	2% 1/8W
R934	1-208-782-11	METAL GLAZE 1K	2% 1/8W
R936	1-208-497-11	METAL GLAZE 3K	2% 1/8W
R937	1-208-497-11	METAL GLAZE 3K	2% 1/8W

< TRANSFORMER >

T901	1-427-942-11	TRANSFORMER, DC-DC CONVERTER
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< VIBRATOR >

X301	1-760-307-11	VIBRATOR, CERAMIC (16.93MHz)
X501	1-567-907-11	VIBRATOR, CRYSTAL (12.288MHz)
X701	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz)

MISCELLANEOUS

F901	1-532-796-11	FUSE (BRADE TYPE) (AUTO FUSE) (5A)
FH901	1-537-479-11	TERMINAL (FUSE)
FH902	1-537-479-11	TERMINAL (FUSE)

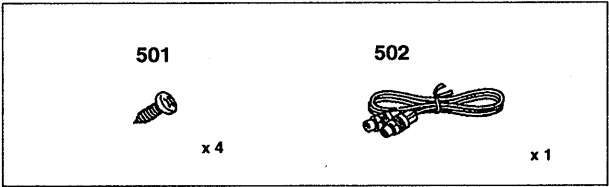
HARDWARE LIST

#1	7-682-547-04	SCREW +PTT 3X6 (S)
#2	7-621-770-67	SCREW +PTT 2.6X6 (S)
#3	7-685-646-79	SCREW +P 3X8 TYPE2 NON-SLIT
#4	7-685-146-11	SCREW +P 3X8 TYPE2 NON-SLIT
#5	7-682-548-04	SCREW +PTT 3X8 (S)

ACCESSORIES & PACKING MATERIALS

3-810-860-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH)
3-856-153-11	MANUAL, INSTRUCTION (ENGLISH)

MOUNTING HARDWARE



501	3-367-410-01	SCREW (DIA. 5X15), TAPPING
502	1-590-519-11	CORD (WITH CONNECTOR) (BUS CONTROL)