

SRP-V316/V324/V332/V340

SERVICE MANUAL

J Model
AEP Model
UK Model
E Model

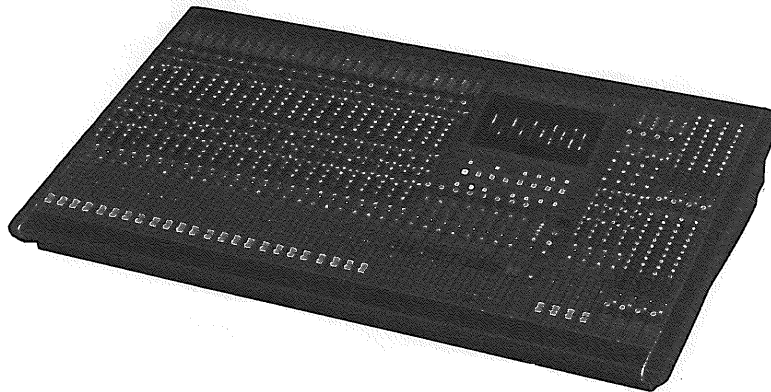


Photo : SRP-V324

AUDIO MIXING CONSOLE

オーディオミキシングコンソール

SONY®

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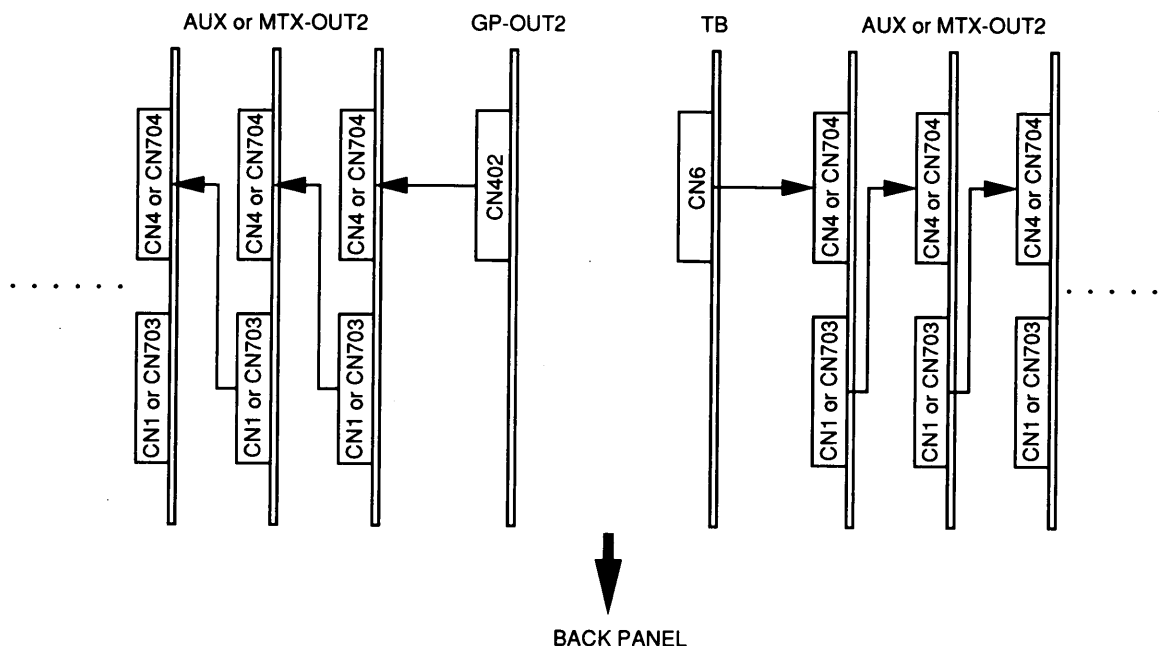
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SECTION 1. SERVICE NOTE

Connection Method of 8P Connectors Across Boards

Connection of 8P connectors across AUX, MTX-OUT2, GP-OUT2, and TB boards is different between right side and left side of MASTER module, as shown below.



SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK Δ OR DOTTED LINE WITH MARK Δ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE Δ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COM- POSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

1. サービスノート

基板間の 8P コネクタ接続方法

AUX、MTX-OUT2、GP-OUT2、TB 基板間の 8P コネクタの接続は、MASTER モジュールの右側と左側では異なり下図のようになります。

サービス、点検時には次のことにご注意ください。

1. 注意事項をお守りください。
サービスのとき特に注意を要する個所については、キャビネット、シャーシ、部品などにラベルや捺印で注意事項を表示しています。これらの注意書き及び取扱説明書等の注意事項を必ずお守り下さい。
2. 指定部品のご使用を
セットの部品は難燃性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は、使用されていたものと同じ特性の部品を使用して下さい。特に回路図、部品表に Δ 印で指定されている安全上重要な部品は必ず指定のものをご使用下さい。
3. 部品の取付けや配線の引きまわしは
もとどおりに
安全上、チューブやテープなどの絶縁材料を使用したり、プリント基板から浮かして取付けた部品があります。また内部配線は引きまわしやクランパによって発熱部品や高圧部品に接近しないよう配慮されていますので、これらは必ずもとどおりにして下さい。
4. サービス後は安全点検を
サービスのために取外したネジ、部品、配線がもとどおりになっているか、またサービスした個所の周辺を劣化させてしまったところがないかなどを点検し、安全性が確保されていることを確認して下さい。
5. チップ部品交換時の注意
 - 取外した部品は再使用しないで下さい。
 - タンタルコンデンサのマイナス側は熱に弱いので交換時は注意して下さい。
6. フレキシブルプリント基板の取扱いについて
 - コテ先温度を 270℃前後にして行なって下さい。
 - 同一パターンに何度もコテ先を当てないで下さい。
(3 回以内)
 - パターンに力が加わらないよう注意して下さい。

SECTION 2. ELECTRICAL ADJUSTMENTS

Adjusting the level of MN-IN1 board

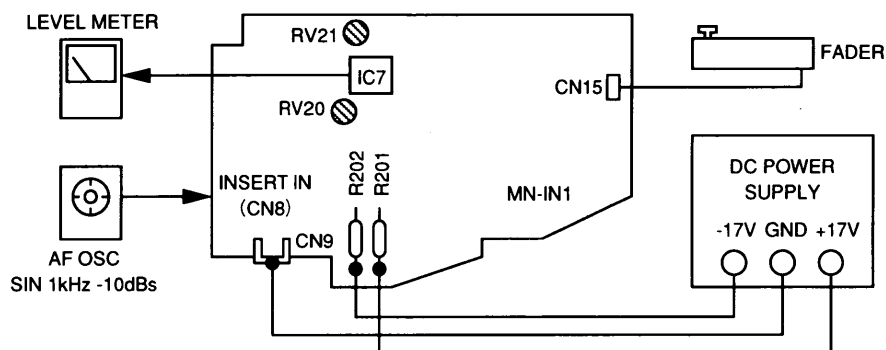
Make an adjustment if PAN control (RV1) was replaced.

[Devices required]

Level meter, Low frequency oscillator, DC power supply, Fader
(use by removing from MN-IN assembly)

[Connection]

【接続】



[VR, SW setting]

PAN control (RV1): Center

Fader : Max.

[Adjusting method]

Adjust RV20 so that the signal level at IC7 pin1 becomes +7dBs,
and RV21 so that the signal level at IC7 pin7 becomes +7dBs.

*Note: The power of +17V and -17V must be both supplied
simultaneously.

2. 電気調整要項

MN-IN1 基板レベル調整

PAN ボリューム (RV1) を交換した場合、調整を行います。

【使用機器】

レベルメーター、低周波発振器、直流電源、フェーダー (MN-IN ASSY から取り外して使用)

【VR, SW の設定】

PAN ボリューム (RV1) : センター

フェーダー : MAX

【調整方法】

IC7 1 番ピンの信号レベルが +7dBs になるよう RV20 を、IC7 7 番ピンの信号レベルが +7dBs になるよう RV21 を調整します。

※注意

電源は必ず +17V、-17V 両方を同時に供給してください。

Adjusting the level of ST-IN board

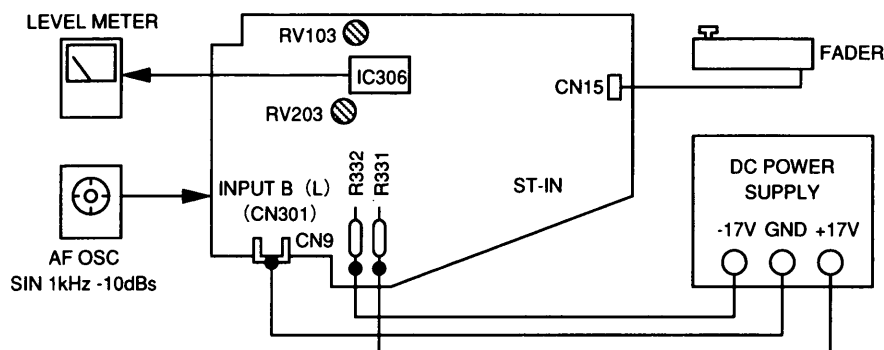
Make an adjustment if BALANCE control (RV302) was replaced.

[Devices required]

Level meter, Low frequency oscillator, DC power supply, Fader
(use by removing from ST-IN assembly)

[Connection]

【接続】



[VR, SW setting]

Balance control (RV302) : Center
Fader : Max.
B switch (SW301) : ON
L+R switch (SW303) : ON
Other SW : OFF

[Adjusting method]

Adjust RV103 so that the signal level at IC306 pin7 becomes +6dBs, and RV203 so that the signal level at IC306 pin1 becomes +6dBs.

*Note: The power of +17V and -17V must be both supplied simultaneously.

ST-IN 基板レベル調整

BALANCE ボリューム (RV302) を交換した場合、調整を行います。

【使用機器】

レベルメーター、低周波発振器、直流電源、フェーダー (ST-IN ASSY から取り外して使用)

【VR, SW の設定】

BALANCE ボリューム (RV302) : センター
フェーダー : MAX
B スイッチ (SW301) : ON
L+R スイッチ (SW303) : ON
その他のスイッチ : OFF

【調整方法】

IC306 7 番ピンの信号レベルが +6dBs になるよう RV103 を、IC306 1 番ピンの信号レベルが +6dBs になるよう RV203 を調整します。

※注意

電源は必ず +17V, -17V 両方を同時に供給してください。

Adjusting the balance of ST-OUT board

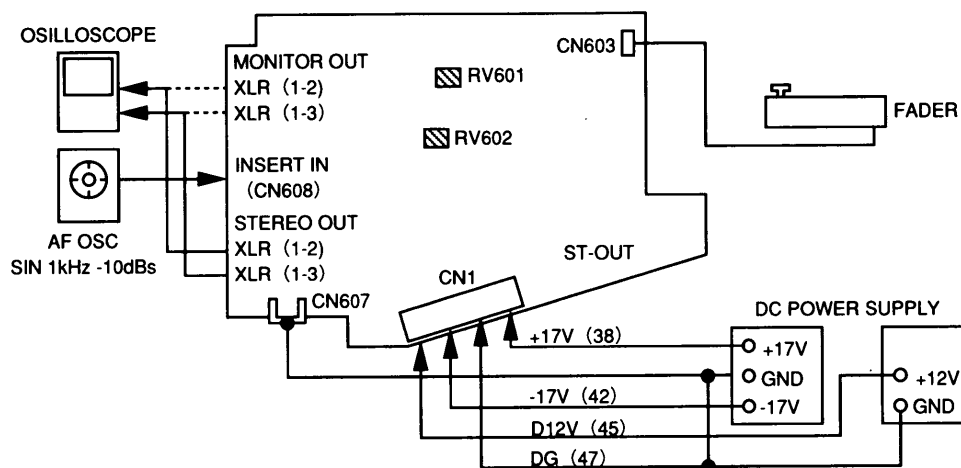
Adjust the STEREO OUT (RV601) if a resistor (* marking in schematic diagram) around IC602 was replaced, or the MONITOR OUT (RV602) if a resistor (* marking in schematic diagram) around IC603 was replaced.

[Devices required]

Oscilloscope, Low frequency oscillator, DC power supply, Fader (use by removing from Master assembly)

[Connection]

【接続】



[VR, SW setting]

Fader: Max.

[Adjusting method]

Adjust RV601 for STEREO OUT, and RV602 for MONITOR OUT so that the signals across XLR type connector pins 2 and 1, and across pins 3 and 1 are of reverse phases and on almost same level.

*Note: The power of +17V and -17V must be both supplied simultaneously.

ST-OUT 基板バランス調整

IC602 周辺の抵抗（回路図 * 印）を交換した場合は STEREO OUT (RV601), IC603 周辺の抵抗（回路図 * 印）を交換した場合は MONITOR OUT (RV602) の調整を行います。

【使用機器】

オシロスコープ、低周波発振器、直流電源、フェーダー (MASTER ASSY から取り外して使用)

【VR, SW の設定】

フェーダー：MAX

【調整方法】

XLR タイプコネクタの 2 番-1 番ピン間と、3 番-1 番ピン間の信号が逆位相でレベルがほぼ同じになるよう STEREO OUT は RV601 を、MONITOR OUT は RV602 を調整します。

※注意

電源は必ず +17V, -17V 両方を同時に供給してください。

Adjusting the balance of GP-OUT1 board

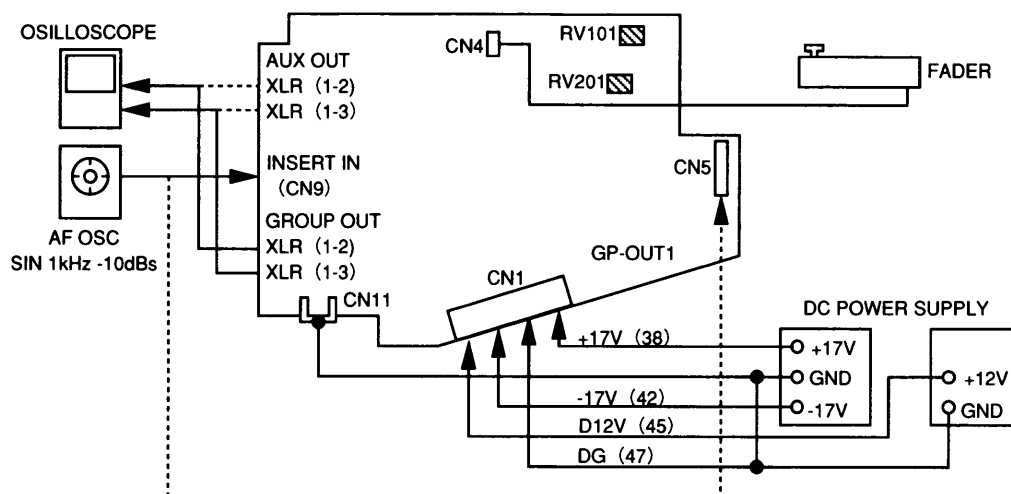
Adjust the GROUP OUT (RV101) if a resistor (* marking in schematic diagram) around IC104 was replaced, or the AUX OUT (RV201) if a resistor (* marking in schematic diagram) around IC202 was replaced.

[Devices required]

Oscilloscope, Low frequency oscillator, DC power supply, Fader (use by removing from Master assembly)

[Connection]

【接続】



[VR, SW setting]

Fader: Max.

[GROUP OUT adjusting method]

Connect a low frequency oscillator to the INSERT IN, then adjust RV101 so that the signals across the GROUP OUT XLR type connector pins 2 and 1, and across pins 3 and 1 are of reverse phases and on almost same level.

[AUX OUT adjusting method]

Connect a low frequency oscillator to the CN5 pins 9 and 8 (GND), then adjust RV201 so that the signals across the AUX OUT XLR type connector pins 2 and 1, and across pins 3 and 1 are of reverse phases and on almost same level.

*Note: The power of +17V and -17V must be both supplied simultaneously.

GP-OUT1 基板バランス調整

IC104 周辺の抵抗 (回路図 * 印) を交換した場合は GROUP OUT (RV101), IC202 周辺の抵抗 (回路図 * 印) を交換した場合は AUX OUT (RV201) の調整を行います。

【使用機器】

オシロスコープ, 低周波発振器, 直流電源, フェーダー (MASTER ASSY から取り外して使用)

【VR, SW の設定】

フェーダー : MAX

【GROUP OUT 調整方法】

INSERT IN へ低周波発振器を接続し, GROUP OUT XLR タイプコネクタの 2 番-1 番ピン間と, 3 番-1 番ピン間の信号が逆位相でレベルがほぼ同じになるよう RV101 を調整します。

【AUX OUT 調整方法】

CN5 9 番-8 番 (GND) ピン間へ低周波発振器を接続し, AUX OUT XLR タイプコネクタの 2 番-1 番ピン間と, 3 番-1 番ピン間の信号レベルがほぼ同じになるよう RV201 を調整します。

※注意

電源は必ず +17V, -17V 両方を同時に供給してください。

Adjusting the balance of MTX-OUT 1 & 2 board

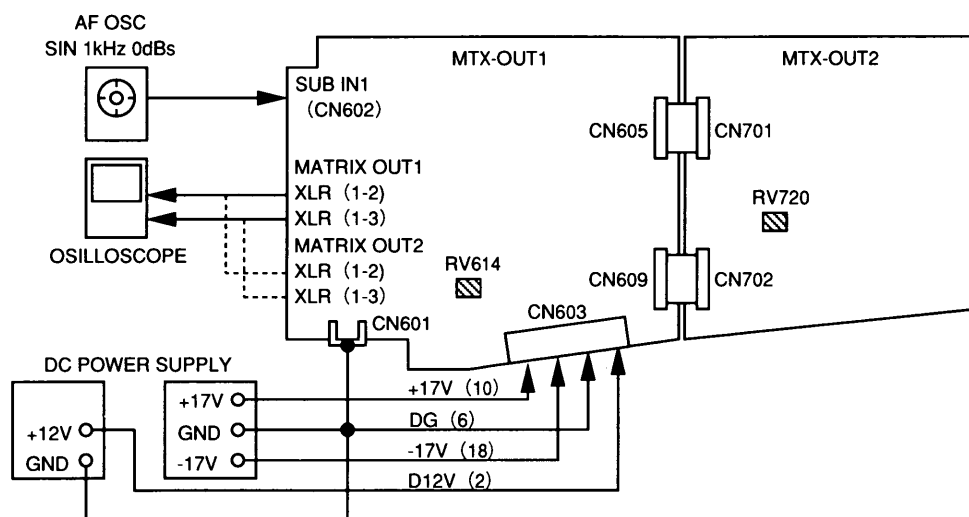
Adjust the MATRIX OUT1 (RV614) if a resistor (* marking in schematic diagram) around IC608 on the MTX-OUT1 board was replaced, or the MATRIX OUT2 (RV720) if a resistor (* marking in schematic diagram) around IC704 on the MTX-OUT2 board was replaced.

[Devices required]

Oscilloscope, Low frequency oscillator, DC power supply

[Connection]

【接続】



[VR, SW setting]

SUB1 controls (RV601, RV701) : Max.

MASTER controls (RV613, RV713) : Max.

[Adjusting method]

Adjust RV614 for MATRIX OUT1, and RV720 for MATRIX OUT2 so that the signals across XLR type connector pins 2 and 1, and across pins 3 and 1 are of reverse phases and on almost same level.

*Note: The power of +17V and -17V must be both supplied simultaneously.

MTX-OUT1/2 基板バランス調整

MTX-OUT1 IC608 周辺の抵抗（回路図*印）を交換した場合は MATRIX OUT1 (RV614), MTX-OUT2 IC704 周辺の抵抗（回路図*印）を交換した場合は MATRIX OUT2 (RV720) の調整を行います。

【使用機器】

オシロスコープ, 低周波発振器, 直流電源

【VR, SW の設定】

SUB1 ボリューム (RV601, RV701) : MAX

MASTER ボリューム (RV613, RV713) : MAX

【調整方法】

XLR タイプコネクタの 2 番-1 番ピン間と, 3 番-1 番ピン間の信号が逆位相でレベルがほぼ同じになるよう MATRIX OUT1 は RV614 を, MATRIX OUT2 は RV720 を調整します。

※注意

電源は必ず +17V, -17V 両方を同時に供給してください。

SECTION 3. DIAGRAMS

3. ダイアグラム

3-1. IC PIN FUNCTION DESCRIPTION

CPU BOARD IC205 (HD6475208P10)

Pin No.	Pin Name	I/O	Description
1	EXTAL	I	A crystal oscillator connection pins.
2	XTAL	O	
4	IRQ0	I	CPU mount SW ON interrupt pin. At SW ON, it goes low to read ON/OFF of switches.
5	IRQ1	I	SW ON interrupt pin for modules mounted on GP-OUT2 and left side of MASTER module. At SW ON, it goes low to read ON/OFF of switches.
6	IRQ2	I	SW ON interrupt pin for modules mounted on TB and right side of MASTER module. At SW ON, it goes low to read ON/OFF of switches.
7	P1-4	I	EEPROM (IC204) writing completion monitoring pin.
9	RD	O	At low, memory read status
10	WR	O	At low, memory write status
11	VCC	I	Power supply pin (+5V)
12-14	MD0-2	I	CPU operation mode setting pin
15	RES	I	Reset pin. At low, it resets IC.
16	NMI	I	Supply voltage monitoring pin. At low, it writes current operation status to EEPROM.
17	VSS	I	GND pin
18-25	D0-D7	I/O	Data bus
26-38	A0-A12	O	Address bus
42	VCC	I	Power supply pin (+5V)
43-45	P5-0 - P5-2	O	Signal level reading channel selection pins
46-48	P5-3 - P5-5	O	Serial data transmitting channel selection pins
49	P5-6	O	Transmitted serial data loading pin
50	P5-7	O	Received serial data loading pin
51	VSS	I	GND pin
52	AVSS	I	GND pin for CPU built-in A/D converter
53	AN0	I	GROUP, AUX, MATRIX output signal level reading pin (VU response)
54	AN1	I	GROUP, AUX, MATRIX output signal level reading pin (PEAK response)
55	AN2	I	ST output signal level reading pin (VU response)
56	AN3	I	ST output signal level reading pin (PEAK response)
57	AVCC	I	Power supply pin (+5V) for CPU built-in A/D converter
58	TXD2	O	Serial data transmission pin (clock sync type)
59	RXD2	I	Serial data reception pin (clock sync type)
60	SCK2	O	Clock pin for serial data transmission/reception
61	TXD1	O	Serial data transmission pin (for MIDI pin)
62	RXD2	I	Serial data reception pin (for MIDI pin)
63	P7-5	O	Meter mound LED OFF pin. At high, it turns off LED.
64	VSS	I	GND pin

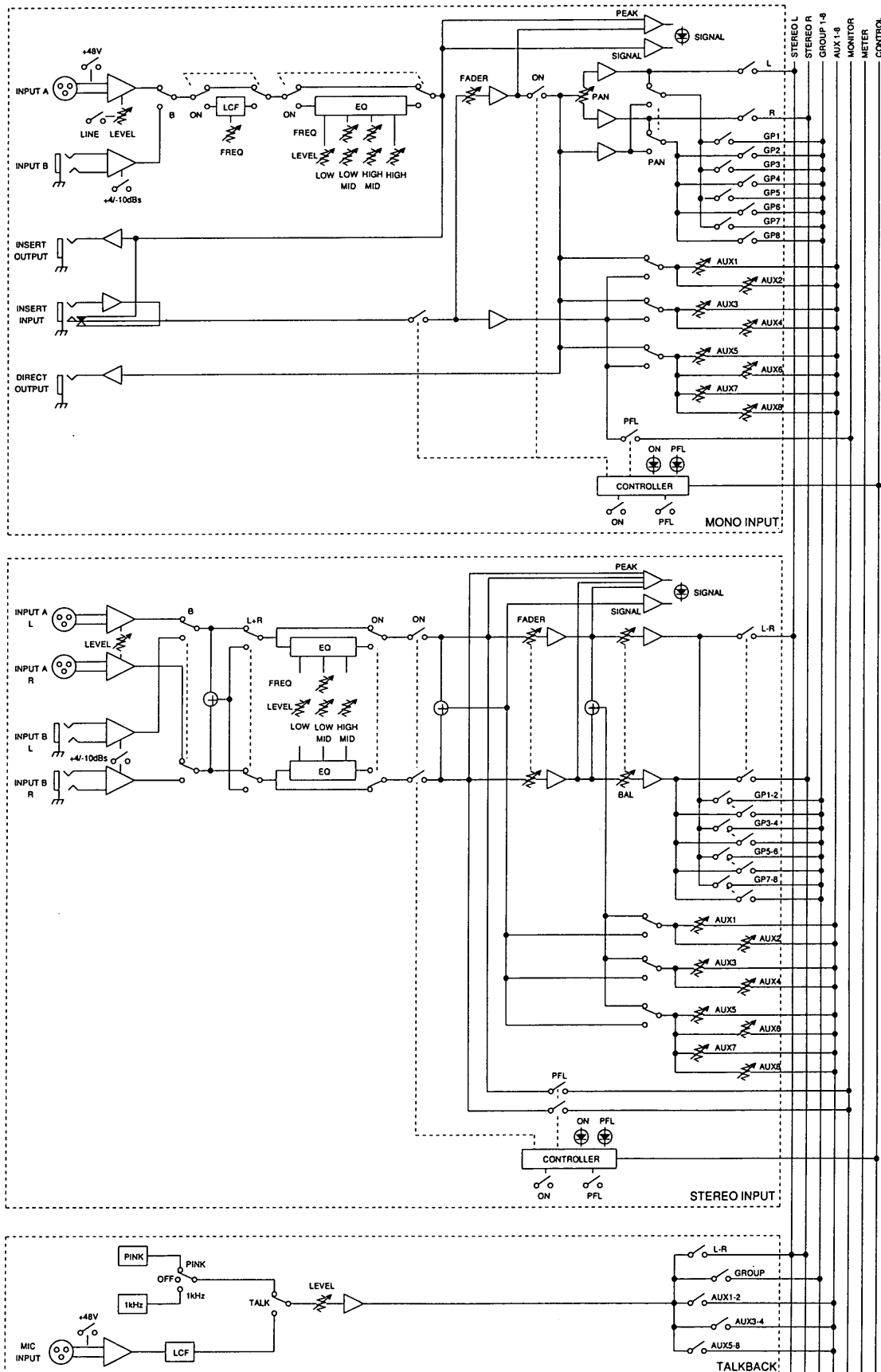
3-1. IC ピン端子説明

CPU 基板 IC205 (HD6475208P10)

端子番号	端子名	入力／出力	端子説明
1	EXTAL	入力	水晶発振子接続端子
2	XTAL	出力	
4	IRQ0	入力	CPU MOUNT SWオン割り込み端子 SWオンでLOWになりSWのオン／オフを読み取る
5	IRQ1	入力	GP-OUT2及びMASTERモジュール左側に装着されたモジュールのSWオン割り込み端子 SWオンでLOWになりSWのオン／オフを読み取る
6	IRQ2	入力	TB及びMASTERモジュール右側に装着されたモジュールのSWオン割り込み端子 SWオンでLOWになりSWのオン／オフを読み取る
7	P1-4	入力	EEPROM (IC204) の書き込み完了監視用端子
9	RD	出力	LOWでメモリー読み出し状態
10	WR	出力	LOWでメモリー書き込み状態
11	VCC	入力	電源端子 (+5V)
12-14	MD0-2	入力	CPU動作モード設定端子
15	RES	入力	リセット端子 LOWでリセット
16	NMI	入力	電源電圧監視端子 LOWでEEPROMに現在の動作状態を書き込む
17	VSS	入力	GND端子
18-25	D0-D7	入出力	データバス
26-38	A0-A12	出力	アドレスバス
42	VCC	入力	電源端子 (+5V)
43-45	P5-0 - P5-2	出力	信号レベル読み取りチャンネル選択端子
46-48	P5-3 - P5-5	出力	シリアルデータ送信チャンネル選択端子
49	P5-6	出力	送信シリアルデータロード端子
50	P5-7	出力	受信シリアルデータロード端子
51	VSS	入力	GND端子
52	AVSS	入力	CPU内蔵A/Dコンバーター用GND端子
53	AN0	入力	GROUP,AUX,MATRIX出力信号レベル読み取り端子 (VU応答)
54	AN1	入力	GROUP,AUX,MATRIX出力信号レベル読み取り端子 (PEAK応答)
55	AN2	入力	ST出力信号レベル読み取り端子 (VU応答)
56	AN3	入力	ST出力信号レベル読み取り端子 (PEAK応答)
57	AVCC	入力	CPU内蔵A/Dコンバーター用電源端子 (+5V)
58	TXD2	出力	シリアルデータ送信端子 (クロック同期式)
59	RXD2	入力	シリアルデータ受信端子 (クロック同期式)
60	SCK2	出力	シリアルデータ送受信用クロック端子
61	TXD1	出力	シリアルデータ送信端子 (MIDI端子用)
62	RXD2	入力	シリアルデータ受信端子 (MIDI端子用)
63	P7-5	出力	METER M't LED消灯端子 HIで消灯
64	VSS	入力	GND端子

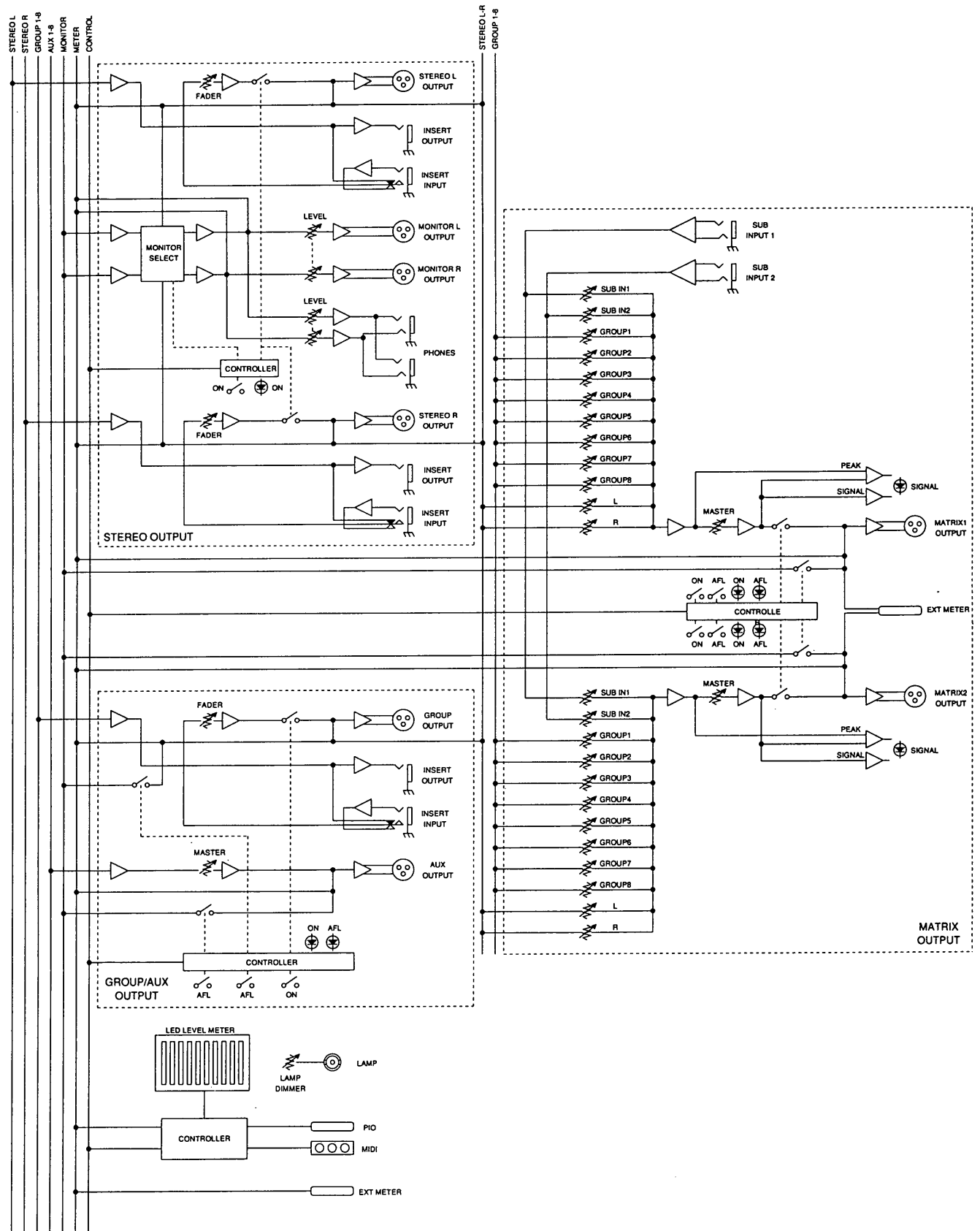
3-2. BLOCK DIAGRAM (1)

3-2. ブロックダイアグラム (1)



3-3. BLOCK DIAGRAM (2)

3-3. ブロックダイアグラム (2)





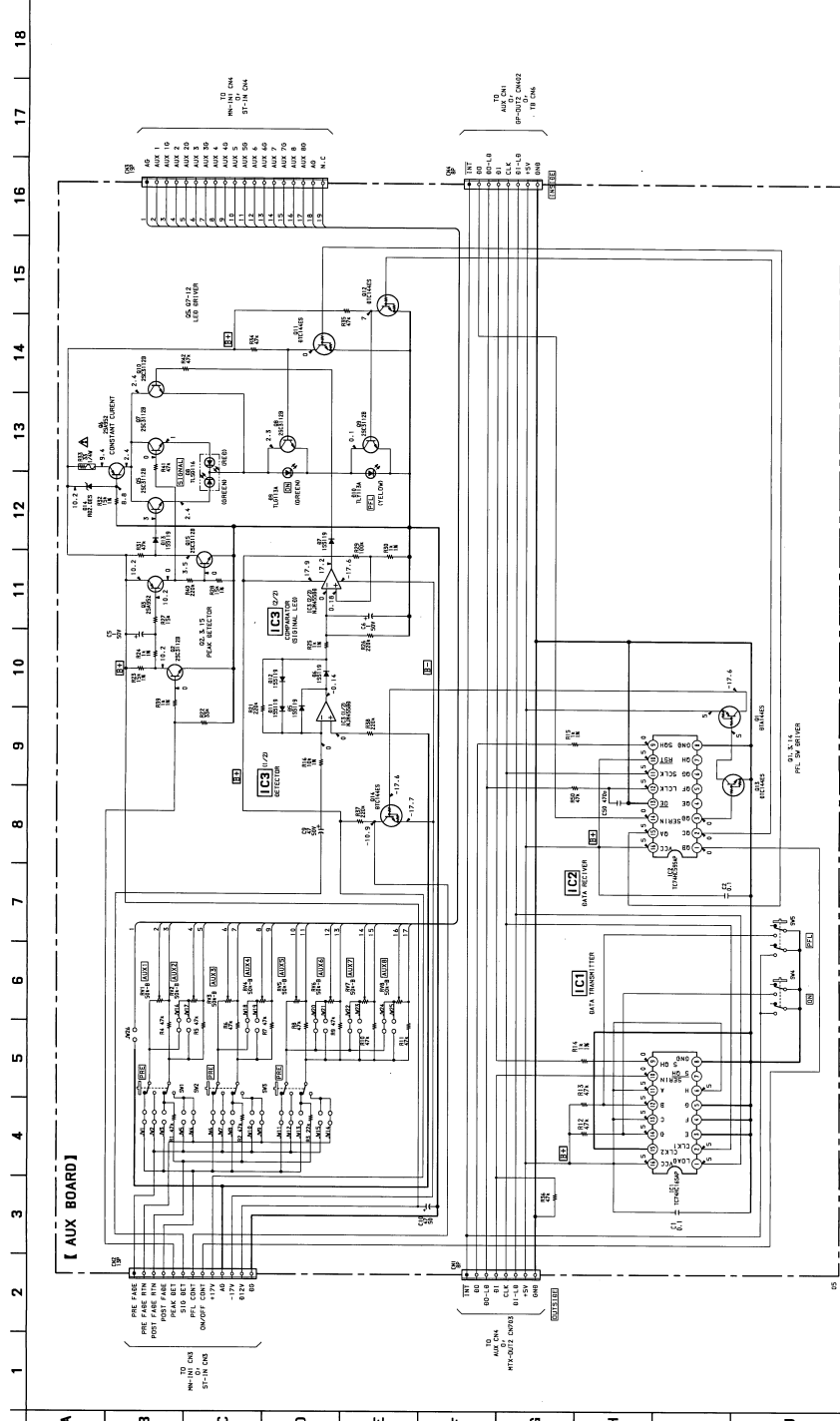
Note on Printed Wiring Board:

- ○ — : parts extracted from
- ■ : Pattern from the side

プリント図ノート

- ○ —— : 部品面側取付のリード線。
- ■■■■ : 見ている面側のボタン。

3-5. SCHEMATIC DIAGRAM - AUX Board -
3-5. 回路図 - AUX 基板 -



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF : μpF 50 W or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified

-  : fusible resistor.
-  : panel designation.
-  : B+ Line.
-  : B- Line.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.	Note: Les composants identifiés par une marque Δ ou traités pointillés avec la marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
--	---

- ケミコン、 tantalum を除くコンデンサで、耐圧 50V 以下のものは、その耐圧を省略。単位はすべて μF (p は pF)。
- 抵抗は表示しないものは 1W 以上を示す。単位はすべて Ω 。
- % は割合を示す。
- $\square\square\square\square$: ヒューズ記号。
- $\square\square\square\square$: パネル表示名称。
- $\square\square$: B-ライン。

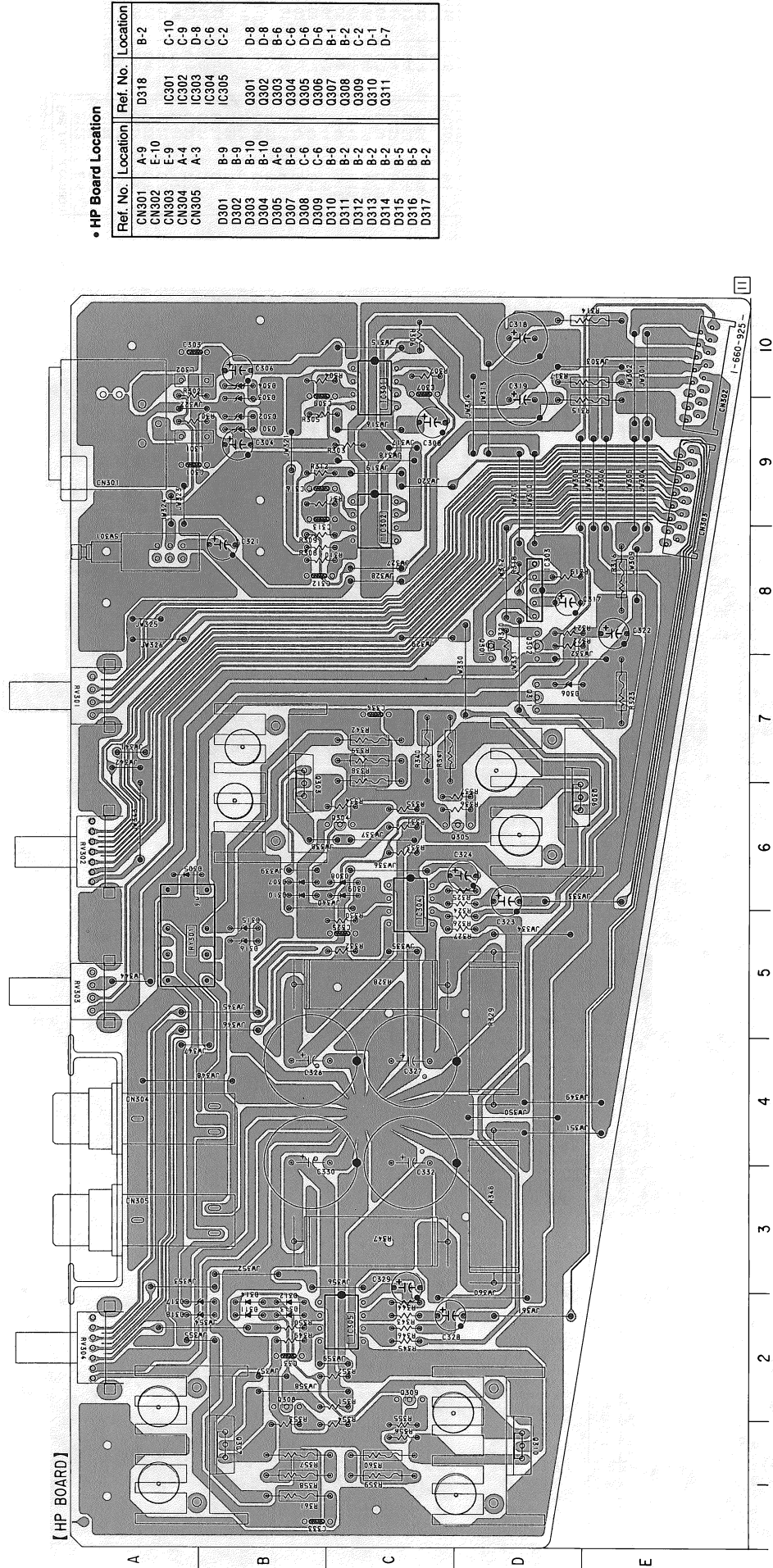
△印の部品、または△印付きの点線で囲まれた部品は、安全性を維持するために、重要な部品です。従って交換時は、必ず指定の部品を使用して下さい。



は、安全性を維持するために、重要な部品です。

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3-7. PRINTED WIRING BOARD - HP Board -
3-7. プリント図 - HP 基板 -



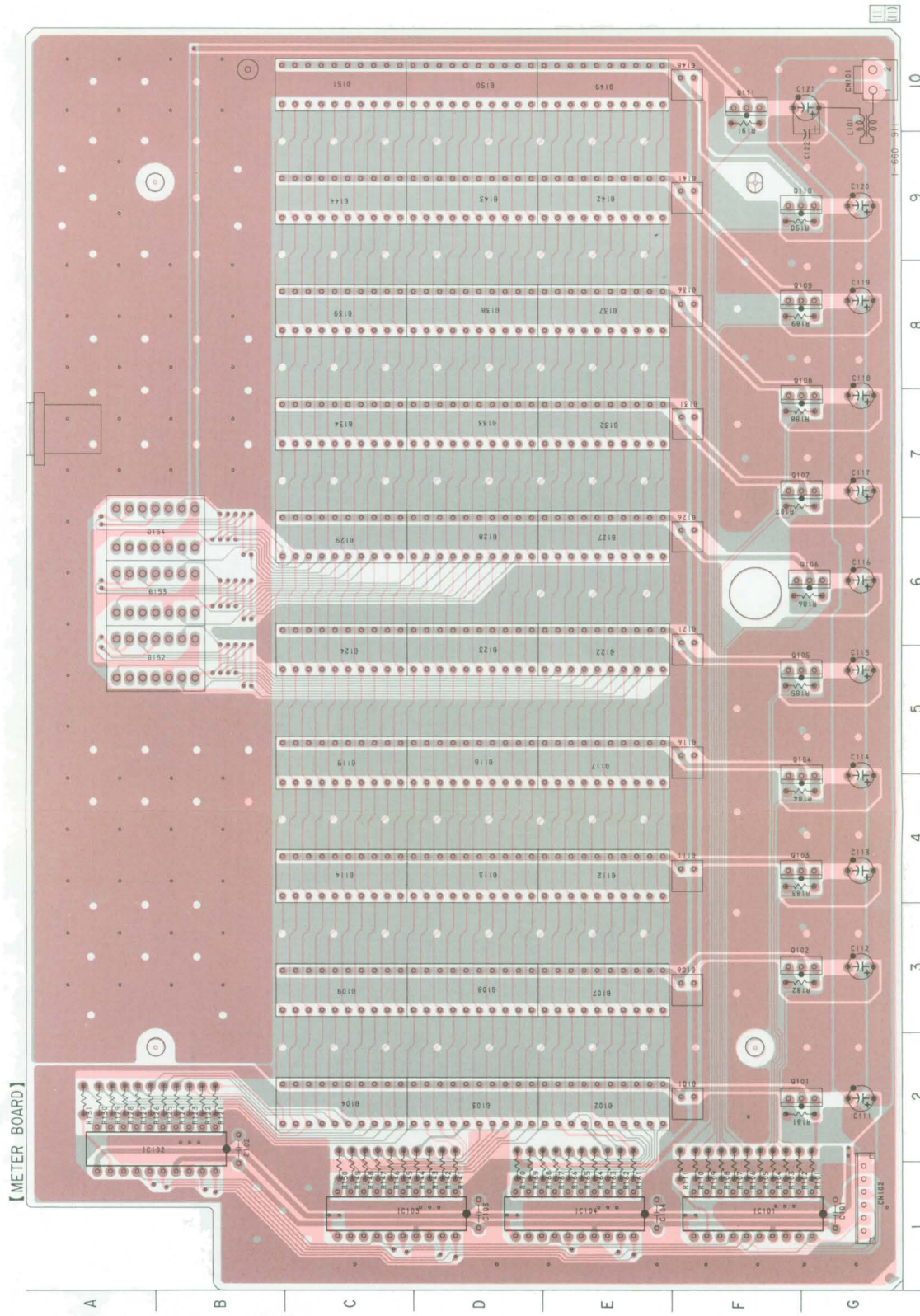
Note on Printed Wiring Board:

- : parts extracted from the component side
- : Pattern from the side which enables seeing.

プリント図ノート

- : 部品面取付のリード線。
- : 見えている面側のパターン。

3-8. PRINTED WIRING BOARD - METER Board -
3-8. プリント図-METER基板-



• METER BOARD Location

Ref. No.	Location	Ref. No.	Location
Q101	F-2	D122	E-5
Q102	F-3	D123	D-5
Q103	F-4	D124	C-5
Q104	F-5	D125	F-6
Q105	F-6	D126	E-6
Q106	G-6	D127	D-6
Q107	F-7	D128	C-6
Q108	F-7	D129	F-7
Q109	F-8	D130	E-7
Q110	F-9	D131	D-7
Q111	F-10	D132	C-7
CN101	G-10	D133	F-8
CN102	G-1	D134	E-8
D101	F-2	D135	D-8
D102	E-2	D136	C-8
D103	D-2	D137	F-9
D104	C-2	D138	E-9
D105	F-3	D139	D-9
D106	E-3	D140	C-9
D107	D-3	D141	F-10
D108	C-3	D142	E-10
D109	F-4	D143	D-10
D110	E-4	D144	C-10
D111	D-4	D145	F-11
D112	C-4	D146	E-11
D113	F-5	D147	D-11
D114	E-5	D148	C-11
D115	D-5	D149	F-12
D116	C-5	D150	E-12
D117	F-6	D151	D-12
D118	E-6	D152	C-12
D119	D-6	D153	F-13
D120	C-6	D154	E-13
D121	F-7	D155	D-13

Note on Printed Wiring Board:

- : parts extracted from the component side.
- : Pattern of the rear side.
- : Pattern from the side which enables seeing.

プリント図ノート

- : 部品面側取りのリード線。
- : 裏面のパターン。
- : 見ている面側のパターン。

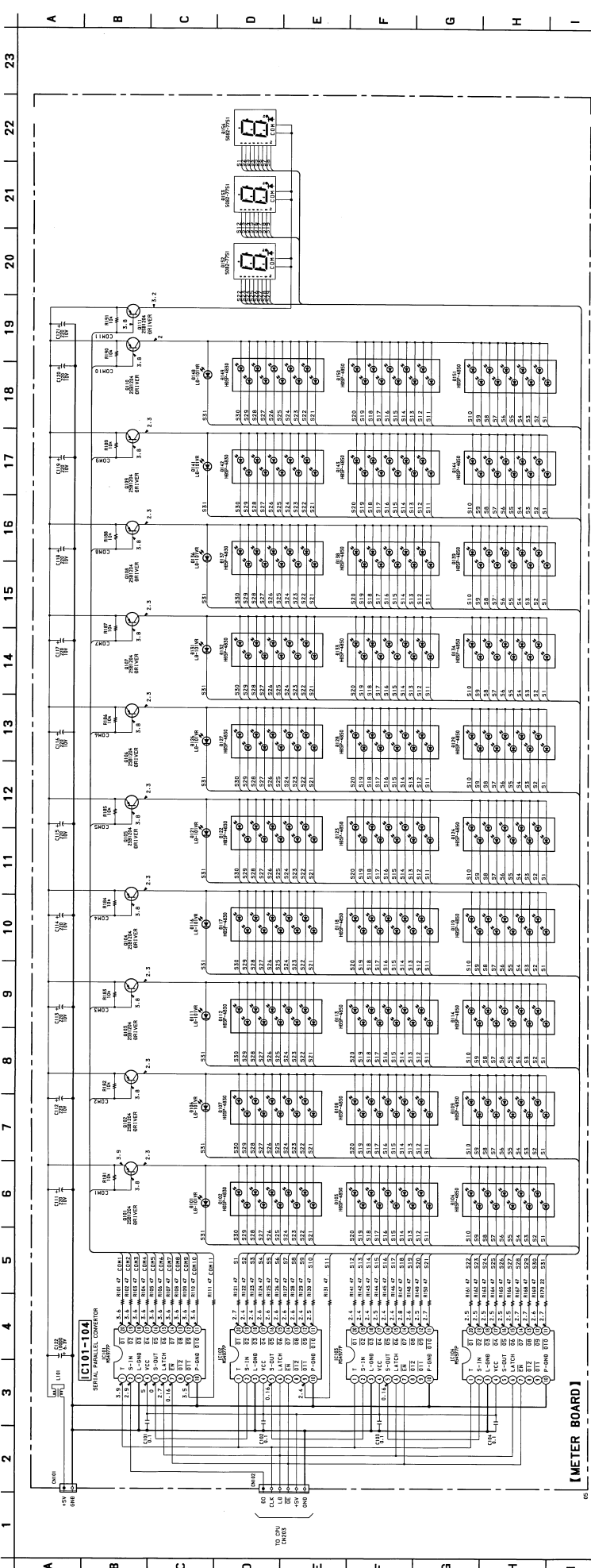
Note on Schematic Diagram:

- All dimensions are in μm unless otherwise noted. μF μF 50 W or less are not indicated except for electrolytic and tantalum.
- All resistors are in Ω and $\text{k}\Omega$ or less unless otherwise noted.
- **[B-1]** : B+ライン
- **[B-2]** : B+ライン

回路図ノート

- ケミコン、 tantalumを除くコンデンサで、 耐圧50V以下のもの
- 50 W or less are not indicated except for electrolytic and tantalum.
- 抵抗は除く50 W以下のものを示す。 単位はすべて Ω 。
- %は許容率を示す。
- **[B-1]** : B+ライン
- **[B-2]** : B+ライン

3-9. SCHEMATIC DIAGRAM - METER Board -
3-9. 回路図 - METER 基板 -





Note: The components identified with mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified	Note: Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié
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- Δ は計算差を示す。
- H_2O : ヒューズ抵抗。
- $\square$: バナネル表示名称。
- $\square +$: B+ライン。
- $\square -$: B-ライン。

△印の部品、または△印付きの点線で囲まれた部品は、安全性を維持するために、重要な部品です。

3-11. PRINTED WIRING BOARD - TB Board -
3-11. プリント図- TB 基板 -

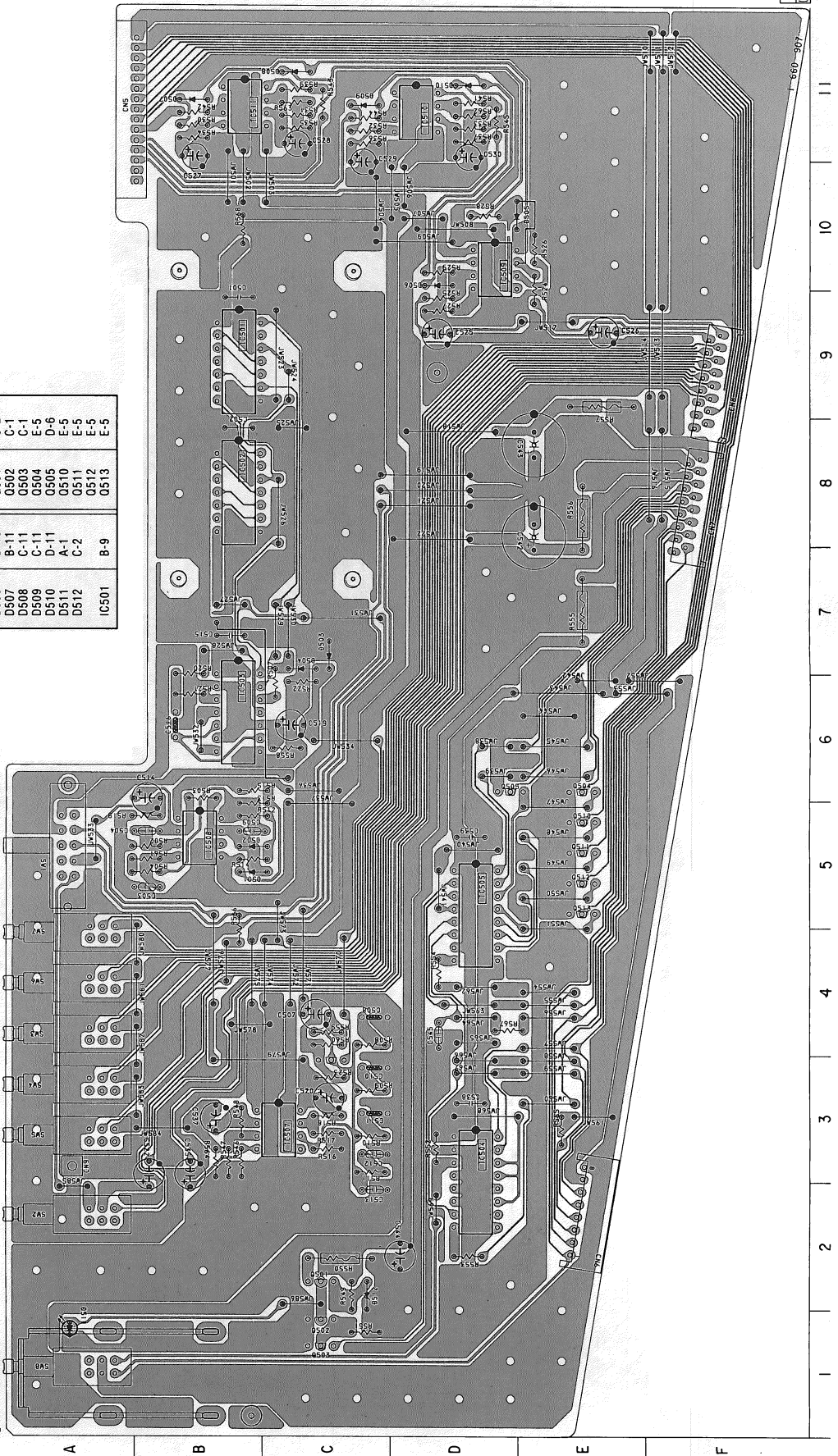
• TB BOARD Location

Ref. No.	Location	Ref. No.	Location
CN5	A-11	IC502	B-8
CN6	E-2	IC503	B-6
CN7	F-8	IC504	D-3
CN8	F-9	IC505	D-5
		IC507	C-3
D501	B-5	IC508	B-5
D502	B-5	IC509	D-10
D503	C-7	IC510	D-11
D504	C-7	IC511	B-11
D505	D-10		
D506	D-10	O501	C-2
D507	B-11	O502	C-1
D508	C-11	O503	C-1
D509	C-11	O504	E-5
D510	D-11	O505	D-6
D511	A-1	O510	E-5
D512	C-2	O511	E-5
		O512	E-5
IC501	B-9	O513	E-5

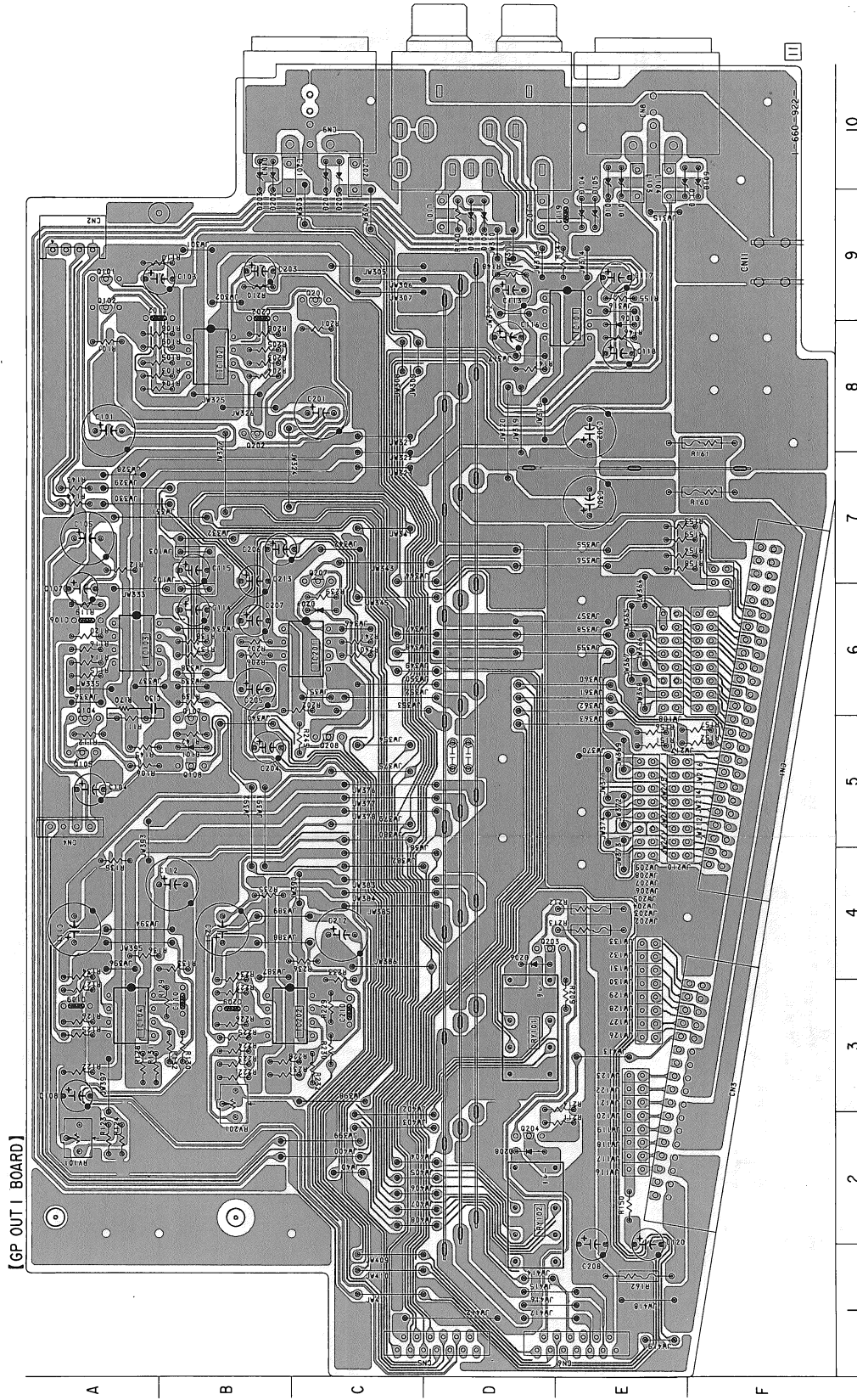
Note on Printed Wiring Board:
• — : parts extracted from the component side.
• — : Pattern from the side which enables seeing.

プリント図ノート
• — : 部品面取付のリード線。
• — : 見ている面側のパターン。

【TB BOARD】



3-12. PRINTED WIRING BOARD - GP-OUT1 Board -
3-12. プリント図—GP-OUT1 基板—



• GP-OUT1 BOARD Location

Ref. No.	Location
CN1	F-5
CN2	A-9
CN3	F-3
CN4	A-5
CN5	D-1
CN6	E-1
CN8	E-10
CN9	C-10
CN10	B-10
CN11	F-9
D101	B-5
D102	D-9
D103	D-9
D104	E-9
D105	E-9
D106	E-8
D107	E-10
D108	E-10
D109	F-10
D110	E-10
D201	C-6
D202	B-10
D203	B-10
D204	C-10
D205	C-10
D206	D-4
D208	D-2
IC101	E-9
IC102	B-8
IC103	A-6
IC104	A-3
IC201	C-6
IC202	B-3
Q101	A-9
Q102	A-9
Q104	A-5
Q105	A-5
Q107	B-5
Q108	B-5
Q201	C-9
Q202	B-8
Q203	D-4
Q204	D-2
Q207	C-7
Q208	C-5

Note on Printed Wiring Board:

- ○ : parts extracted from the component side.
- — : Pattern from the side which enables seeing.

- プリント図ノート
- ○ : 部品面側取付のリード線。
 - — : 見ている面側のパターン。

Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. μF μF tantalum.
- Resistor values are in Ω and $1/\text{W}$ or less unless otherwise specified.
- Capacitor values are in μF unless otherwise specified.
- Capacitor values are in μF unless otherwise specified.
- Capacitor values are in μF unless otherwise specified.

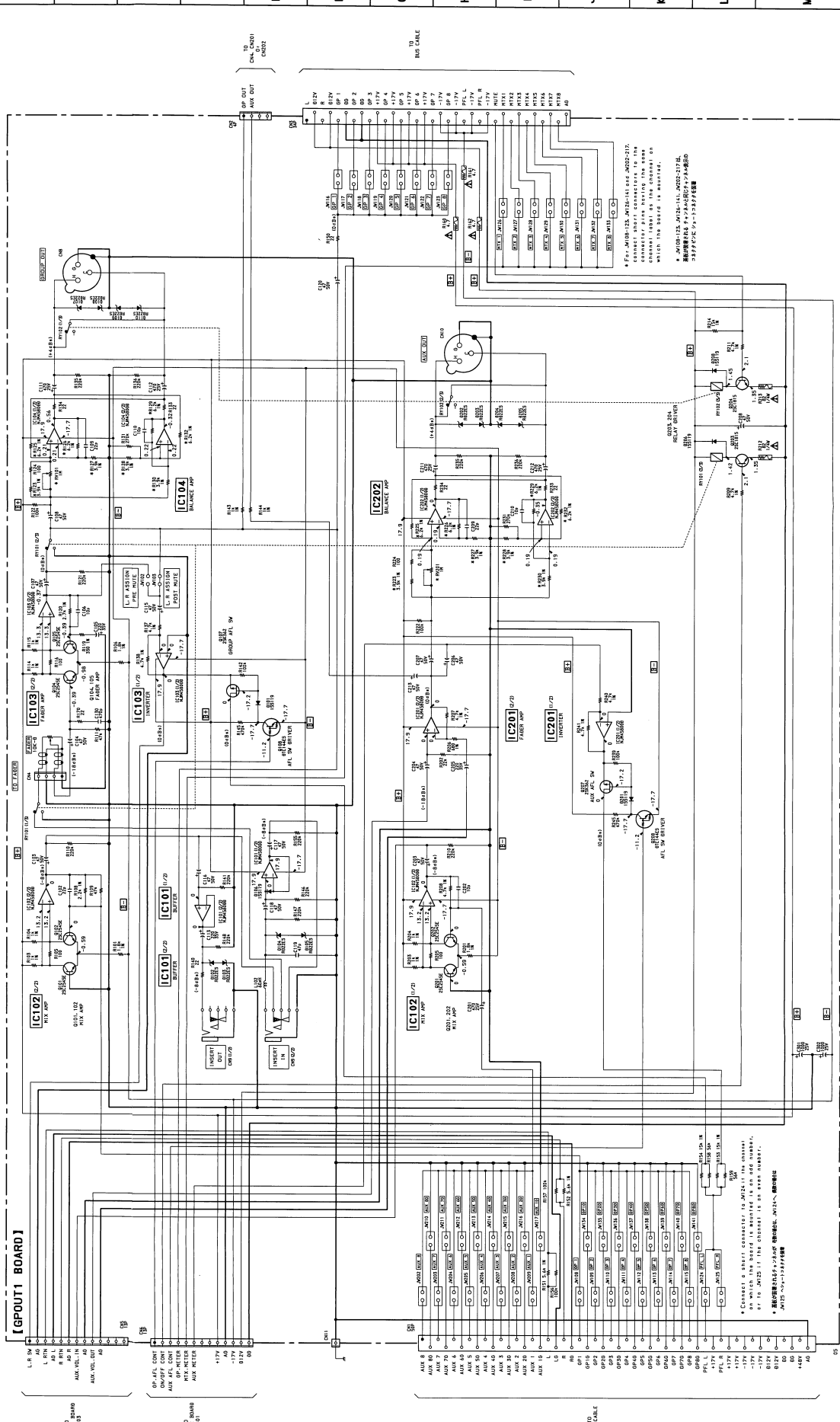
Note:

Components identified by mark Δ or dotted line with mark Δ are critical for safety. Components identified by mark Δ are critical for safety. Components identified by mark Δ are critical for safety.

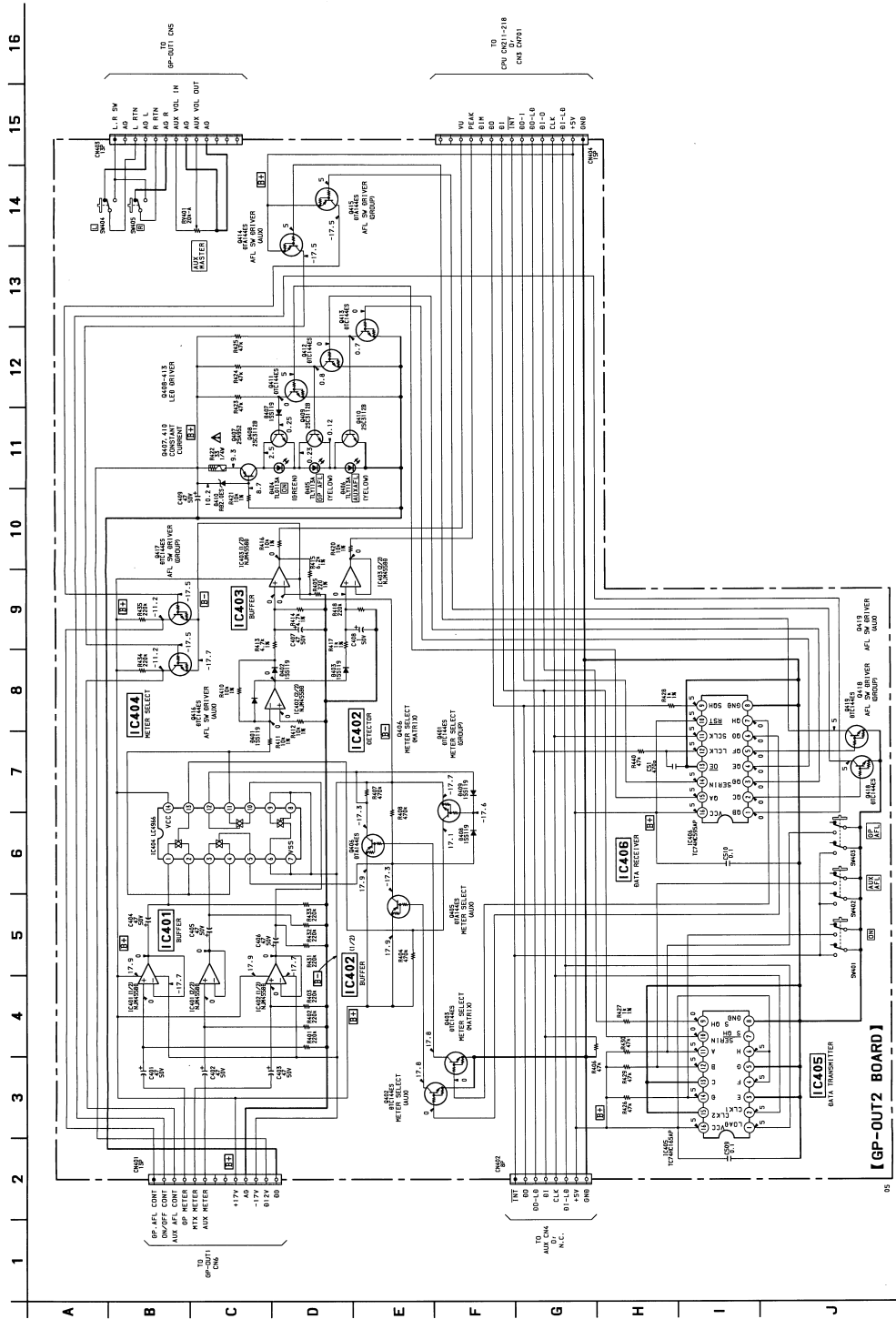
回路図ノート

- コンデンサの容量は、 μF で示す。ただし、 $1/\text{W}$ 以下またはそれ以下の容量は、 μF で示す。
- 抵抗値は、 Ω と $1/\text{W}$ 以下またはそれ以下の抵抗値は、 Ω で示す。
- 抵抗値は、 Ω と $1/\text{W}$ 以下またはそれ以下の抵抗値は、 Ω で示す。
- 抵抗値は、 Ω と $1/\text{W}$ 以下またはそれ以下の抵抗値は、 Ω で示す。
- 抵抗値は、 Ω と $1/\text{W}$ 以下またはそれ以下の抵抗値は、 Ω で示す。

3-13. SCHEMATIC DIAGRAM - GP-OUT1 Board -
3-13. 回路図—GP-OUT1 基板—



3-14. SCHEMATIC DIAGRAM – GP-OUT2 Board –
3-14. 回路図—GP-OUT2 基板—



Note on Schematic Diagram:

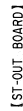
- All capacitors are in μF unless otherwise noted. pF : μF 50 W or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}$ W or less unless otherwise specified.
- : fusible resistor.
- : panel designation.
- : B+ Line.
- : B- Line.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.	Note: Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
--	--

圖 1-1-1

- * ケミコン、 tantalum を除くコンデンサで、耐圧 50V 以下のものは、その耐圧を省略。単位はすべて μF (μ は μF)。
 * 抵抗で表示のないものは $1/4\text{W}$ 以下を示す。単位はすべて Ω 。
 * % は割合を示す。
 * $\square\square\square\square$: ヒューズ抵抗。
 * $\square\square\square\square$: パネル表示名称。
 * $\square\square\square$: B+ライン。
 * $\square\square$: B+ライン。
 * $\square\square$: B+ライン。

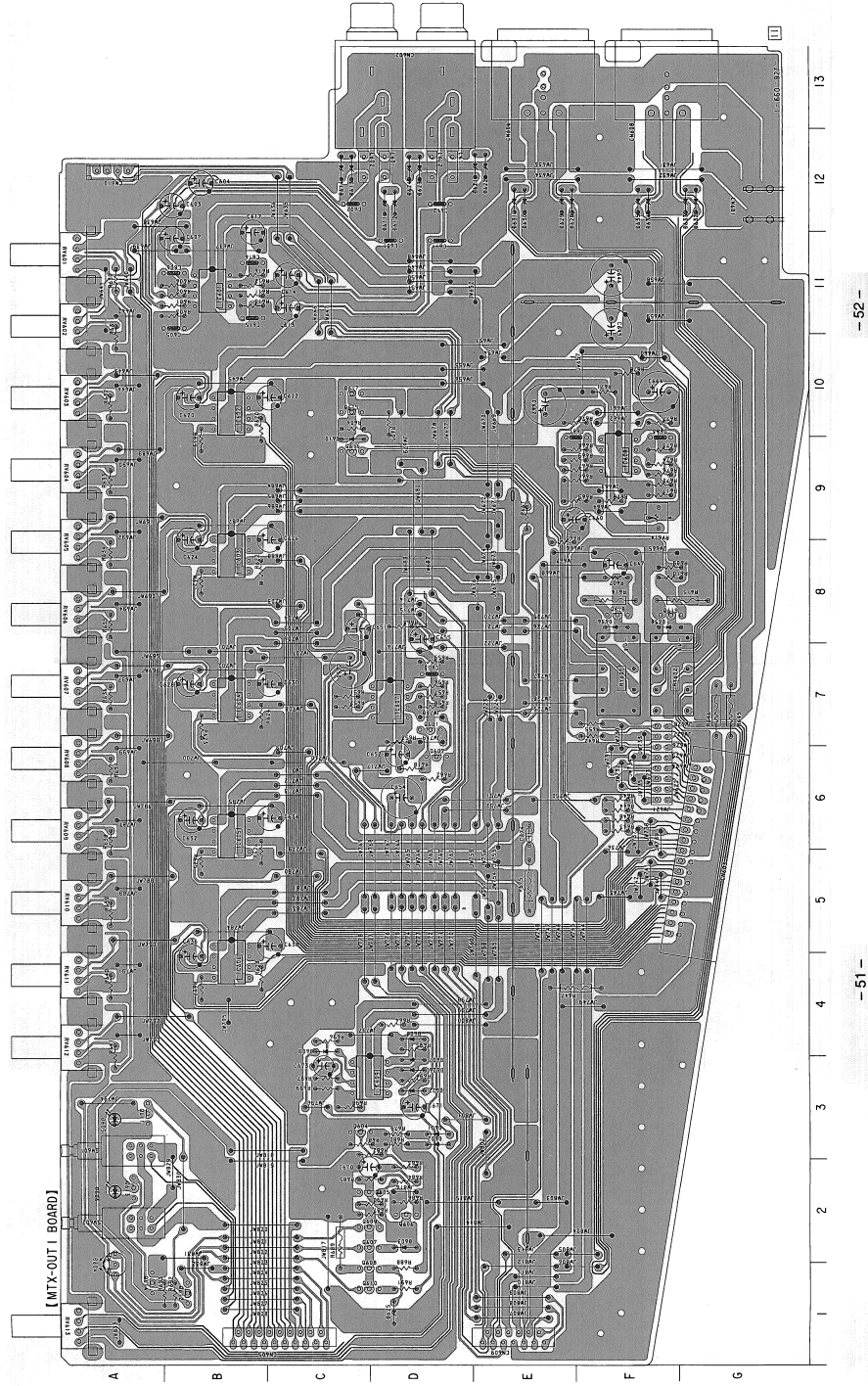
△印の部品、または△印付きの点線で囲まれた部品は、安全性を維持するために、重要な部品です。従って交換時は必ず指定の部品を使用して下さい。



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3

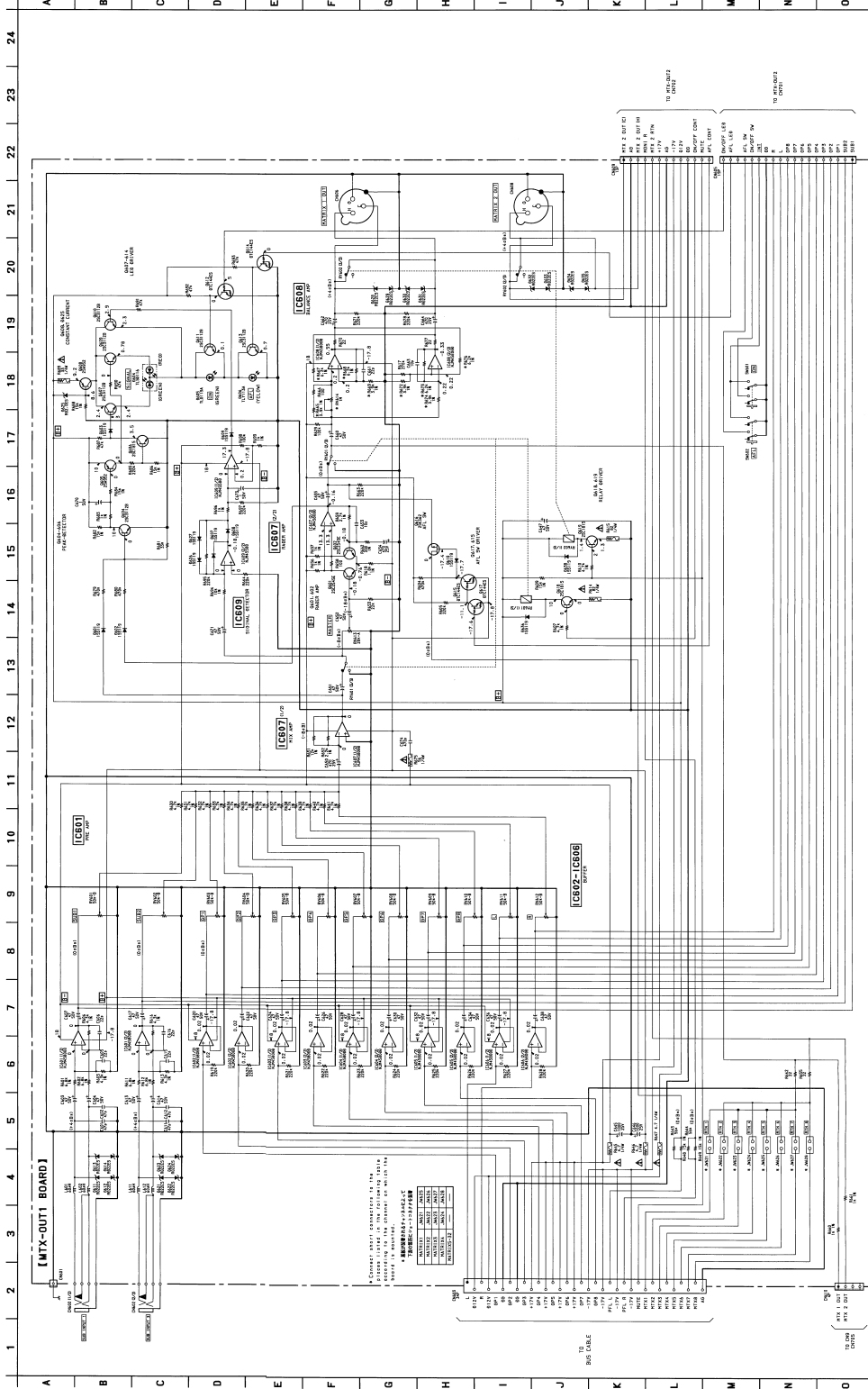
3-18. PRINTED WIRING BOARD - MTX-OUT1 Board -
3-18. プリント図—MTX-OUT1 基板—



• MTX-OUT1 BOARD Location			
Ref. No.	Location	Ref. No.	Location
CH601	G-12	IC501	B-11
CH602	D-13	IC502	B-10
CH603	G-5	IC503	B-7
CH604	E-13	IC504	B-6
CH605	E-13	IC505	B-6
CH606	F-13	IC506	B-4
CH607	F-13	IC507	D-7
CH608	F-13	IC508	F-9
CH609	A-12	IC509	C-3
CH610	D-3	IC510	C-3
D601	D-3	D601	D-7
D602	D-2	D602	D-6
D603	D-2	D603	D-6
D604	A-1	D604	C-3
D605	A-1	D605	C-3
D606	A-2	D606	D-2
D607	D-3	D607	D-2
D608	D-3	D608	C-1
D609	C-4	D609	C-2
D610	C-9	D610	C-1
D611	D-12	D611	B-1
D612	D-12	D612	B-1
D613	C-12	D613	A-2
D614	A-2	D614	A-1
D615	E-12	D615	C-10
D616	E-12	D616	C-9
D617	D-12	D617	F-8
D618	D-12	D618	F-8
D619	D-12	D619	F-8
D620	D-3	D620	D-3
D621	D-3	D621	D-3
D622	E-12	D622	E-12
D623	E-12	D623	E-12
D624	D-12	D624	D-12
D625	D-12	D625	D-12
D626	D-3	D626	D-3
D627	D-3	D627	D-3
D628	E-12	D628	E-12
D629	E-12	D629	E-12
D630	E-12	D630	E-12
D631	E-12	D631	E-12
D632	G-12	D632	G-12
D633	G-12	D633	G-12

Note on Printed Wiring Board:
• : parts extracted from the component side.
• : Pattern from the side which enables seeing
Printed Wiring Board
• : 部品抽出側のリード線。
• : 部品抽出側のパターン。

3-18. SCHEMATIC DIAGRAM - MTX-OUT1 Board -
3-18. 回路図 - MTX-OUT1 基板 -

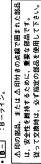


Note on Schematic Diagram:
• All components are shown in their actual values.
• All resistors are in Ω and μ or less unless otherwise specified.
• All capacitors are in μ or less unless otherwise specified.
• All dimensions are in mm and $\frac{1}{16}$ or less unless otherwise specified.
• All components are shown in their actual values.
• All resistors are in Ω and μ or less unless otherwise specified.
• All capacitors are in μ or less unless otherwise specified.
• All dimensions are in mm and $\frac{1}{16}$ or less unless otherwise specified.

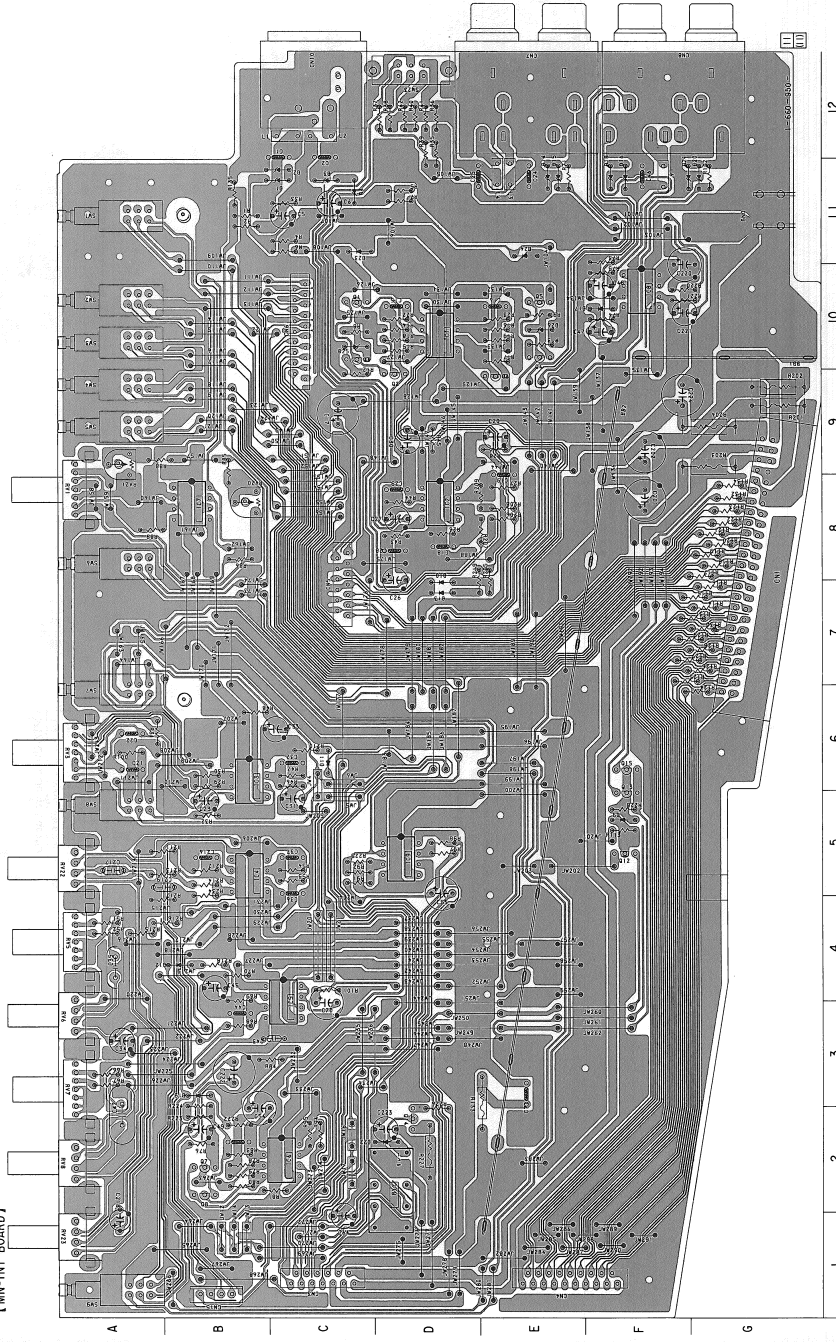
Note:
• All components are shown in their actual values.
• All resistors are in Ω and μ or less unless otherwise specified.
• All capacitors are in μ or less unless otherwise specified.
• All dimensions are in mm and $\frac{1}{16}$ or less unless otherwise specified.

Note:
• All components are shown in their actual values.
• All resistors are in Ω and μ or less unless otherwise specified.
• All capacitors are in μ or less unless otherwise specified.
• All dimensions are in mm and $\frac{1}{16}$ or less unless otherwise specified.

Note:
• All components are shown in their actual values.
• All resistors are in Ω and μ or less unless otherwise specified.
• All capacitors are in μ or less unless otherwise specified.
• All dimensions are in mm and $\frac{1}{16}$ or less unless otherwise specified.

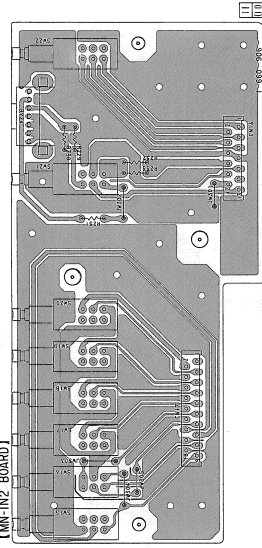


【 MN-IN1 BOARD 】



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【 MN-IN2 BOARD 】

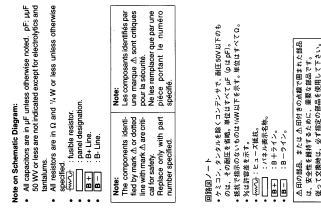


• MN-IN1 BOARD Location			
Ref. No.	Location	Ref. No.	Location
CN1	G-8	D23	C-11
CN2	E-1	D24	E-11
CN4	E-1	D25	C-10
CN5	C-7	D26	E-10
CN6	E-10	IC1	D-10
CN7	E-10	IC2	D-8
CN8	F-12	IC3	B-6
CN9	G-11	IC4	B-6
CN10	B-1	IC5	C-3
CN15	B-1	IC6	C-2
D1	C-11	IC7	B-6
D2	C-11	IC8	F-10
D3	C-11	IC9	D-5
D4	F-11	O1	C-10
D9	D-7	O2	D-9
D10	D-7	O3	C-10
D11	C-6	O4	C-10
D12	D-7	O5	E-10
D13	D-7	O6	E-9
D14	E-11	O7	B-2
D15	F-11	O8	B-2
D16	F-11	O9	F-5
D17	F-10	O12	D-2
D18	B-3	O14	F-6
D19	B-3	O15	F-6
D20	G-11		
D21	G-11		
D22	G-2		

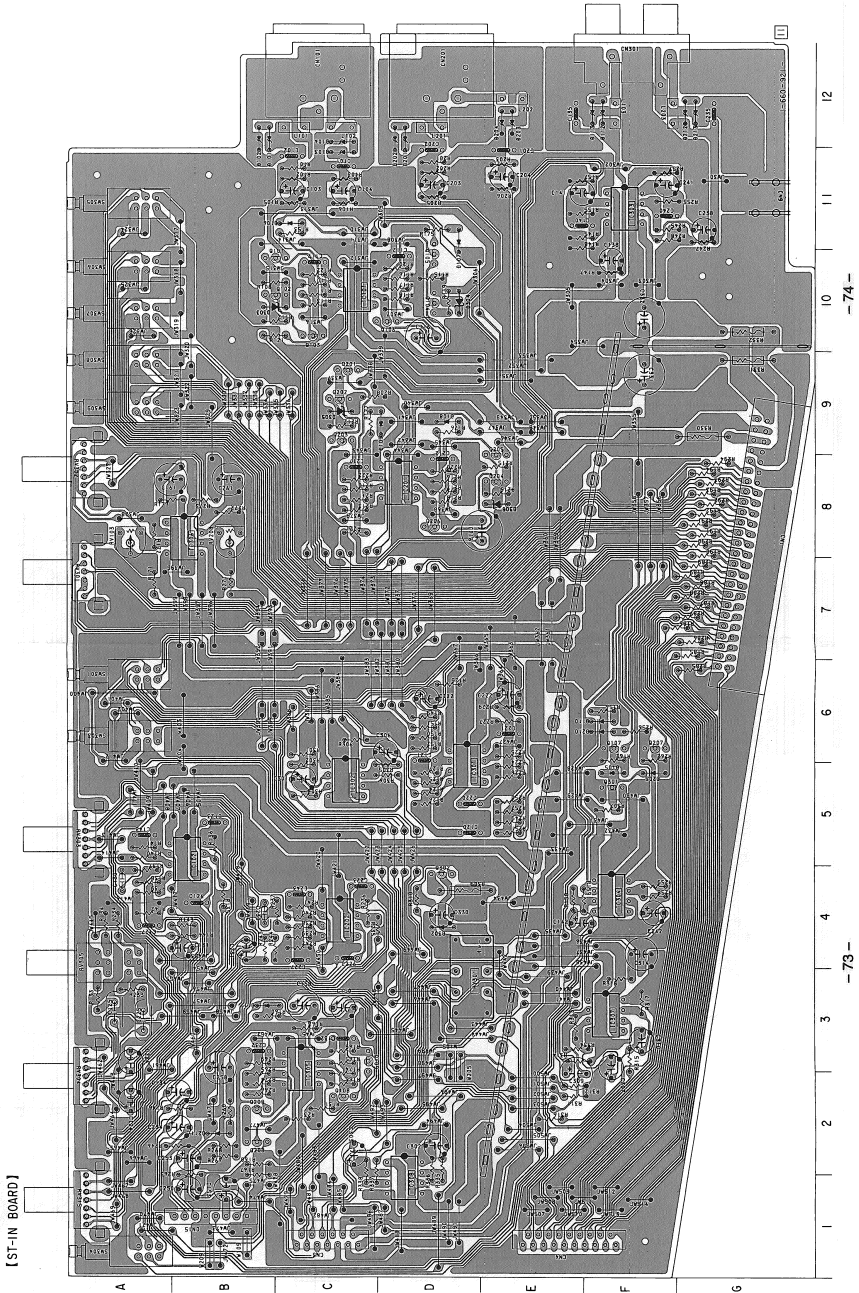
Note on Printed Wiring Board:
 • : parts extracted from the component side.
 • : Pattern from the side which installed wiring.

プリント図ノート
 • : 部品取付面のリード面。
 • : 配線が施された面のパターン。

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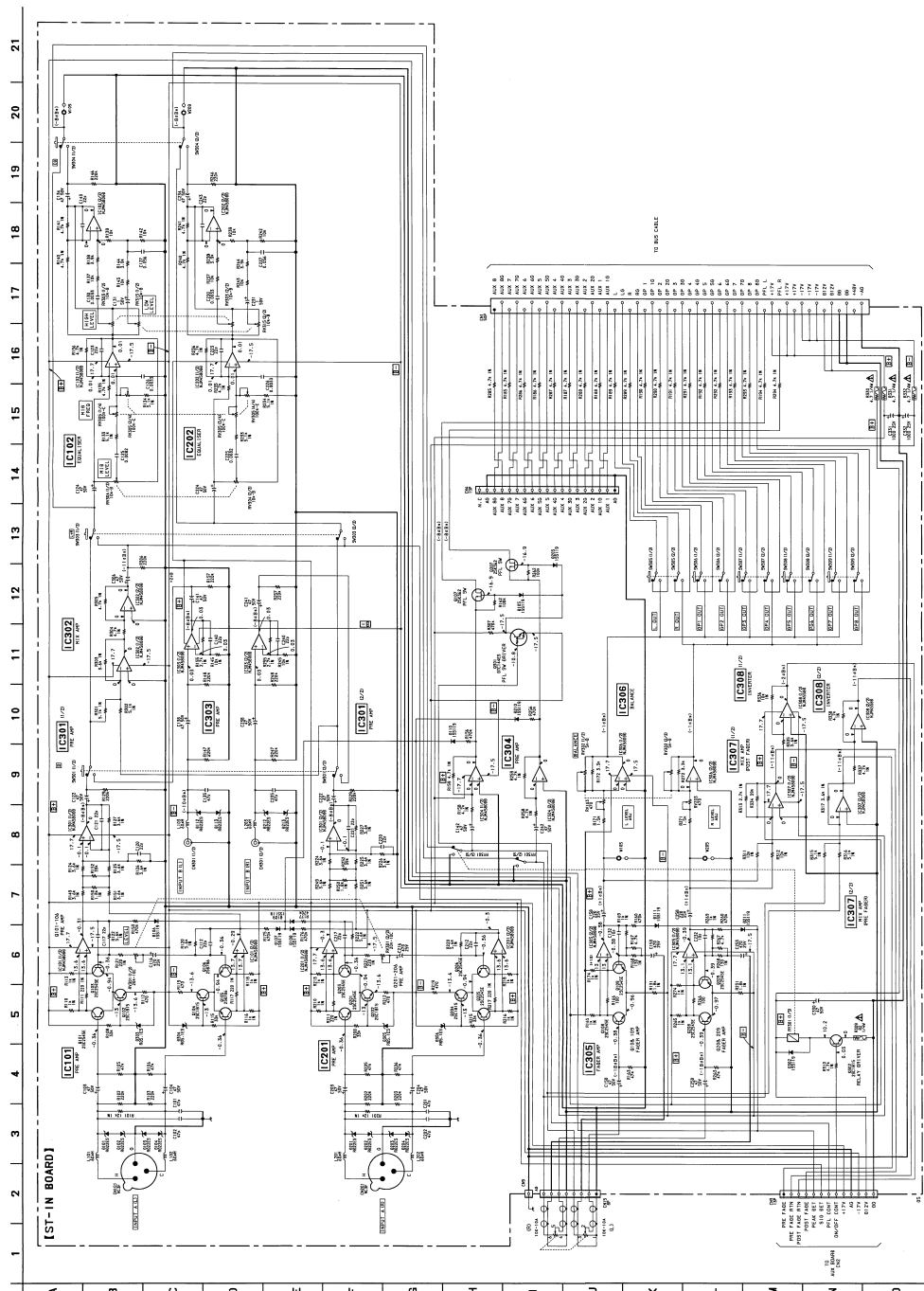


3-24. PRINTED WIRING BOARD - ST-IN Board -
3-24. プリント図—ST-IN基板—



* ST-IN BOARD Location			
Ref. No.	Location	Ref. No.	
CN1	G-8	IC101	G-10
CN2	E-1	IC102	D-8
CN3	E-1	IC201	D-8
CN4	E-1	IC202	C-4
CN5	G-11	IC301	C-4
CN6	C-12	IC302	C-5
CN7	D-12	IC303	F-11
CN8	F-12	IC304	C-3
CN9	B-12	IC305	C-3
CN10	B-12	IC306	B-8
CN11	C-11	IC307	D-1
CN12	C-11	IC308	D-1
CN13	C-12	IC309	C-10
CN14	C-12	IC310	C-10
CN15	C-11	IC311	D-11
CN16	C-11	IC312	C-10
CN17	D-11	IC313	C-10
CN18	D-11	IC314	D-10
CN19	D-11	IC315	D-10
CN20	F-6	IC316	D-10
CN21	F-6	IC317	C-3
CN22	F-6	IC318	C-3
CN23	F-12	IC319	C-3
CN24	F-12	IC320	C-3
CN25	D-11	IC321	C-9
CN26	D-11	IC322	C-9
CN27	F-12	IC323	C-9
CN28	F-12	IC324	C-9
CN29	F-12	IC325	C-9
CN30	F-12	IC326	C-9
CN31	F-12	IC327	C-9
CN32	F-12	IC328	C-9
CN33	F-12	IC329	C-9
CN34	F-12	IC330	C-9
CN35	F-12	IC331	C-9
CN36	F-12	IC332	C-9
CN37	F-12	IC333	C-9
CN38	F-12	IC334	C-9
CN39	F-12	IC335	C-9
CN40	F-12	IC336	C-9
CN41	F-12	IC337	C-9
CN42	F-12	IC338	C-9
CN43	F-12	IC339	C-9
CN44	F-12	IC340	C-9
CN45	F-12	IC341	C-9
CN46	F-12	IC342	C-9
CN47	F-12	IC343	C-9
CN48	F-12	IC344	C-9
CN49	F-12	IC345	C-9
CN50	F-12	IC346	C-9
CN51	F-12	IC347	C-9
CN52	F-12	IC348	C-9
CN53	F-12	IC349	C-9
CN54	F-12	IC350	C-9
CN55	F-12	IC351	C-9
CN56	F-12	IC352	C-9
CN57	F-12	IC353	C-9
CN58	F-12	IC354	C-9
CN59	F-12	IC355	C-9
CN60	F-12	IC356	C-9
CN61	F-12	IC357	C-9
CN62	F-12	IC358	C-9
CN63	F-12	IC359	C-9
CN64	F-12	IC360	C-9
CN65	F-12	IC361	C-9
CN66	F-12	IC362	C-9
CN67	F-12	IC363	C-9
CN68	F-12	IC364	C-9
CN69	F-12	IC365	C-9
CN70	F-12	IC366	C-9
CN71	F-12	IC367	C-9
CN72	F-12	IC368	C-9
CN73	F-12	IC369	C-9
CN74	F-12	IC370	C-9
CN75	F-12	IC371	C-9
CN76	F-12	IC372	C-9
CN77	F-12	IC373	C-9
CN78	F-12	IC374	C-9
CN79	F-12	IC375	C-9
CN80	F-12	IC376	C-9
CN81	F-12	IC377	C-9
CN82	F-12	IC378	C-9
CN83	F-12	IC379	C-9
CN84	F-12	IC380	C-9
CN85	F-12	IC381	C-9
CN86	F-12	IC382	C-9
CN87	F-12	IC383	C-9
CN88	F-12	IC384	C-9
CN89	F-12	IC385	C-9
CN90	F-12	IC386	C-9
CN91	F-12	IC387	C-9
CN92	F-12	IC388	C-9
CN93	F-12	IC389	C-9
CN94	F-12	IC390	C-9
CN95	F-12	IC391	C-9
CN96	F-12	IC392	C-9
CN97	F-12	IC393	C-9
CN98	F-12	IC394	C-9
CN99	F-12	IC395	C-9
CN100	F-12	IC396	C-9
CN101	F-12	IC397	C-9
CN102	F-12	IC398	C-9
CN103	F-12	IC399	C-9
CN104	F-12	IC400	C-9
CN105	F-12	IC401	C-9
CN106	F-12	IC402	C-9
CN107	F-12	IC403	C-9
CN108	F-12	IC404	C-9
CN109	F-12	IC405	C-9
CN110	F-12	IC406	C-9
CN111	F-12	IC407	C-9
CN112	F-12	IC408	C-9
CN113	F-12	IC409	C-9
CN114	F-12	IC410	C-9
CN115	F-12	IC411	C-9
CN116	F-12	IC412	C-9
CN117	F-12	IC413	C-9
CN118	F-12	IC414	C-9
CN119	F-12	IC415	C-9
CN120	F-12	IC416	C-9
CN121	F-12	IC417	C-9
CN122	F-12	IC418	C-9
CN123	F-12	IC419	C-9
CN124	F-12	IC420	C-9
CN125	F-12	IC421	C-9
CN126	F-12	IC422	C-9
CN127	F-12	IC423	C-9
CN128	F-12	IC424	C-9
CN129	F-12	IC425	C-9
CN130	F-12	IC426	C-9
CN131	F-12	IC427	C-9
CN132	F-12	IC428	C-9
CN133	F-12	IC429	C-9
CN134	F-12	IC430	C-9
CN135	F-12	IC431	C-9
CN136	F-12	IC432	C-9
CN137	F-12	IC433	C-9
CN138	F-12	IC434	C-9
CN139	F-12	IC435	C-9
CN140	F-12	IC436	C-9
CN141	F-12	IC437	C-9
CN142	F-12	IC438	C-9
CN143	F-12	IC439	C-9
CN144	F-12	IC440	C-9
CN145	F-12	IC441	C-9
CN146	F-12	IC442	C-9
CN147	F-12	IC443	C-9
CN148	F-12	IC444	C-9
CN149	F-12	IC445	C-9
CN150	F-12	IC446	C-9
CN151	F-12	IC447	C-9
CN152	F-12	IC448	C-9
CN153	F-12	IC449	C-9
CN154	F-12	IC450	C-9
CN155	F-12	IC451	C-9
CN156	F-12	IC452	C-9
CN157	F-12	IC453	C-9
CN158	F-12	IC454	C-9
CN159	F-12	IC455	C-9
CN160	F-12	IC456	C-9
CN161	F-12	IC457	C-9
CN162	F-12	IC458	C-9
CN163	F-12	IC459	C-9
CN164	F-12	IC460	C-9
CN165	F-12	IC461	C-9
CN166	F-12	IC462	C-9
CN167	F-12	IC463	C-9
CN168	F-12	IC464	C-9
CN169	F-12	IC465	C-9
CN170	F-12	IC466	C-9
CN171	F-12	IC467	C-9
CN172	F-12	IC468	C-9
CN173	F-12	IC469	C-9
CN174	F-12	IC470	C-9
CN175	F-12	IC471	C-9
CN176	F-12	IC472	C-9
CN177	F-12	IC473	C-9
CN178	F-12	IC474	C-9
CN179	F-12	IC475	C-9
CN180	F-12	IC476	C-9
CN181	F-12	IC477	C-9
CN182	F-12	IC478	C-9
CN183	F-12	IC479	C-9
CN184	F-12	IC480	C-9
CN185	F-12	IC481	C-9
CN186	F-12	IC482	C-9
CN187	F-12	IC483	C-9
CN188	F-12	IC484	C-9
CN189	F-12	IC485	C-9
CN190	F-12	IC486	C-9
CN191	F-12	IC487	C-9
CN192	F-12	IC488	C-9
CN193	F-12	IC489	C-9
CN194	F-12	IC490	C-9
CN195	F-12	IC491	C-9
CN196	F-12	IC492	C-9
CN197	F-12	IC493	C-9
CN198	F-12	IC494	C-9
CN199	F-12	IC495	C-9
CN200	F-12	IC496	C-9
CN201	F-12	IC497	C-9
CN202	F-12	IC498	C-9
CN203	F-12	IC499	C-9
CN204	F-12	IC500	C-9
CN205	F-12	IC501	C-9
CN206	F-12	IC502	C-9
CN207	F-12	IC503	C-9
CN208	F-12	IC504	C-9
CN209	F-12	IC505	C-9
CN210	F-12	IC506	C-9
CN211	F-12	IC507	C-9
CN212	F-12	IC508	C-9
CN213	F-12	IC509	C-9
CN214	F-12	IC510	C-9
CN215	F-12	IC511	C-9
CN216	F-12	IC512	C-9
CN217	F-12	IC513	C-9
CN218	F-12	IC514	C-9
CN219	F-12	IC515	C-9
CN220	F-12	IC516	C-9
CN221	F-12	IC517	C-9
CN222	F-12	IC518	C-9
CN223	F-12	IC519	C-9
CN224	F-12	IC520	C-9
CN225	F-12	IC521	C-9
CN226	F-12	IC522	C-9
CN227	F-12	IC523	C-9
CN228	F-12	IC524	C-9
CN229	F-12	IC525	C-9
CN230	F-12	IC526	C-9
CN231	F-12	IC527	C-9
CN232	F-12	IC528	C-9
CN233	F-12	IC529	C-9
CN234	F-12	IC530	C-9
CN235	F-12	IC531	C-9
CN236	F-12	IC532	C-9
CN237	F-12	IC533	C-9
CN238	F-12	IC534	C-9
CN239	F-12	IC535	C-9
CN240	F-12	IC536	C-9
CN241	F-12	IC537	C-9
CN242	F-12	IC538	C-9
CN243	F-12	IC539	C-9
CN244	F-12	IC540	C-9
CN245	F-12	IC541	C-9
CN246	F-12	IC542	C-9
CN247	F-12	IC543	C-9
CN248	F-12	IC544	C-9
CN249	F-12	IC545	C-9
CN250	F-12	IC546	C-9
CN251	F-12	IC547	C-9
CN252	F-12	IC548	C-9
CN253	F-12	IC549	C-9
CN254	F-12	IC550	C-9
CN255	F-12	IC551	C-9
CN256	F-12	IC552	C-9
CN257	F-12	IC553	C-9
CN258	F-12	IC554	C-9
CN259	F-12	IC555	C-9
CN260	F-12	IC556	C-9
CN261	F-12	IC557	C-9
CN262	F-12	IC558	C-9
CN263	F-12	IC559	C-9
CN264	F-12	IC560	C-9
CN265	F-12	IC561	C-9
CN266	F-12	IC562	C-9
CN267	F-12	IC563	C-9
CN268	F-12	IC564	C-9
CN269	F-12	IC565	C-9
CN270	F-12	IC566	C-9
CN271	F-12	IC567	C-9
CN272	F-12	IC568	C-9
CN273	F-12	IC569	C-9
CN274	F-12	IC570	C-9
CN275	F-12	IC571	C-9
CN276	F-12	IC572	C-9
CN277	F-12	IC573	C-9
CN278	F-12	IC574	C-9
CN279	F-12	IC575	C-9
CN280	F-12	IC576	C-9
CN281	F-12	IC577	C-9
CN282	F-12	IC578	C-9
CN283	F-12	IC579	C-9
CN284	F-12	IC580	C-9
CN285	F-12	IC581	C-9
CN286	F-12	IC582	C-9
CN287	F-12	IC583	C-9
CN288	F-12	IC584	C-9
CN289	F-12	IC585	C-9
CN290	F-12	IC586	C-9
CN291	F-12	IC587	C-9
CN292	F-12	IC588	C-9
CN293	F-12	IC589	C-9
CN294	F-12	IC590	C-9
CN295	F-12	IC591	C-9
CN296	F-12	IC592	C-9
CN297	F-12	IC593	C-9
CN298	F-12	IC594	C-9
CN299	F-12	IC595	C-9
CN300	F-12	IC596	C-9
CN301	F-12	IC597	C-9
CN302	F-12	IC598	C-9
CN303	F-12	IC599	C-9
CN304	F-12	IC600	C-9
CN305	F-12	IC601	C-9
CN306	F-12	IC602	C-9
CN307	F-12	IC603	C-9
CN308	F-12	IC604	C-9
CN309	F-12	IC605	C-9
CN310	F-12	IC606	C-9
CN311	F-12	IC607	C-9
CN312	F-12	IC608	C-9
CN313	F-12	IC609	C-9
CN314	F-12	IC610	C-9
CN315	F-12	IC611	C-9
CN316	F-12	IC612	C-9
CN317	F-12	IC613	C-9
CN318	F-12	IC614	C-9
CN319	F-12	IC615	C-9
CN320	F-12	IC616	C-9
CN321	F-12	IC617	C-9
CN322	F-12	IC618	C-9
CN323	F-12	IC619	C-9
CN324	F-12	IC620	C-9
CN325	F-12	IC621	C-9
CN326	F-12	IC622	C-9
CN327	F-12	IC623	C-9
CN328	F-12	IC624	C-9
CN329	F-12	IC625	C-9
CN330	F-12	IC626	C-9
CN331	F-12	IC627	C-9
CN332	F-12	IC628	C-9
CN333	F-12	IC629	C-9
CN334	F-12	IC630	C-9
CN335	F-12	IC631	C-9
CN336	F-12	IC632	C-9
CN			

3-25. SCHEMATIC DIAGRAM - ST-IN Board -
3-25. 回路圖—ST-IN 基板—



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\text{F} \times 10^{-6}$ and 50 W or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}$ W or less unless otherwise specified.
- $\frac{1}{2}\text{W}$: half resistor.
-  : panel designation.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.	Note: Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
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目録 ノート

- * ケミコン、タンタルを除くコンデンサで、额定50V以下のも
のほ、その製造を質問。単位はすべて μF (μはバツ)。
- * 添付で表示のないものは100Ω以下を示す。単位はすべて Ω 。
- * $\times$ は許容率を示す。
- * $\frac{\square}{\square}$: ヒューズ抵抗。
 $\frac{\square}{\square}$: バイポーラ型素子。

△印の製品、または△印付きの包装で囲まれた製品は、安全性を維持するために、重要な製品です。買って交換品は、必ず同社の製品を交換して下さい。

Note on Printed Wiring Board:
parts extracted from the component side.
Pattern of the top side
Pattern from the side which enables seeing.

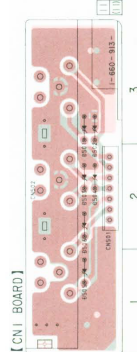
プリント図ノート
部品図面からのプリント線
上側のプリントパターン
見えている面側のパターン。

3-27. PRINTED WIRING BOARDS – CPU Board Section –
3-27. プリント図—CPU基板部—

• CN1 BOARD

Ref. No.	Location
CN301	A-2
CN302	A-2
D501	A-3
D502	A-3
D503	A-2
D504	A-2
D505	A-1
D506	A-2

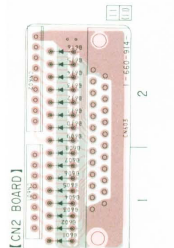
【CN1 BOARD】



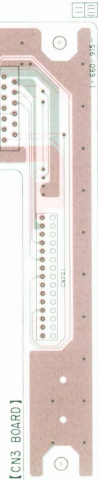
• CN2 BOARD

Ref. No.	Location
CN801	A-1
CN802	A-2
D601	A-1
D602	A-1
D603	A-1
D604	A-1
D605	A-1
D606	A-1
D607	A-1
D608	A-1
D609	A-2
D610	A-2
D611	A-2
D612	A-2
D613	A-2
D614	A-2
D615	A-2
D616	A-2

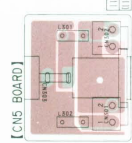
【CN2 BOARD】



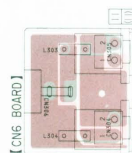
【CN3 BOARD】



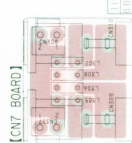
【CN5 BOARD】



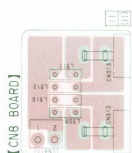
【CN6 BOARD】



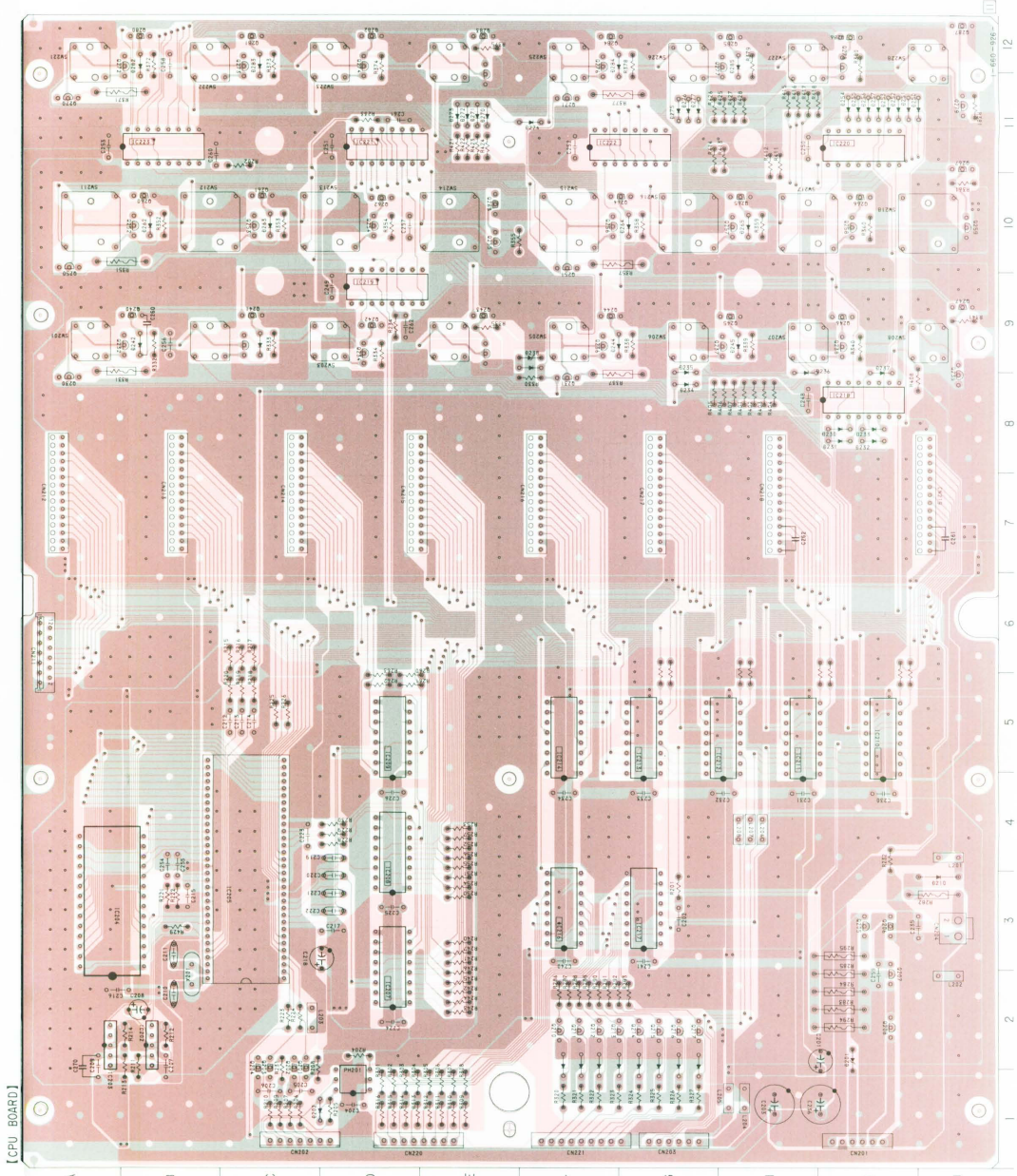
【CN7 BOARD】



【CN8 BOARD】



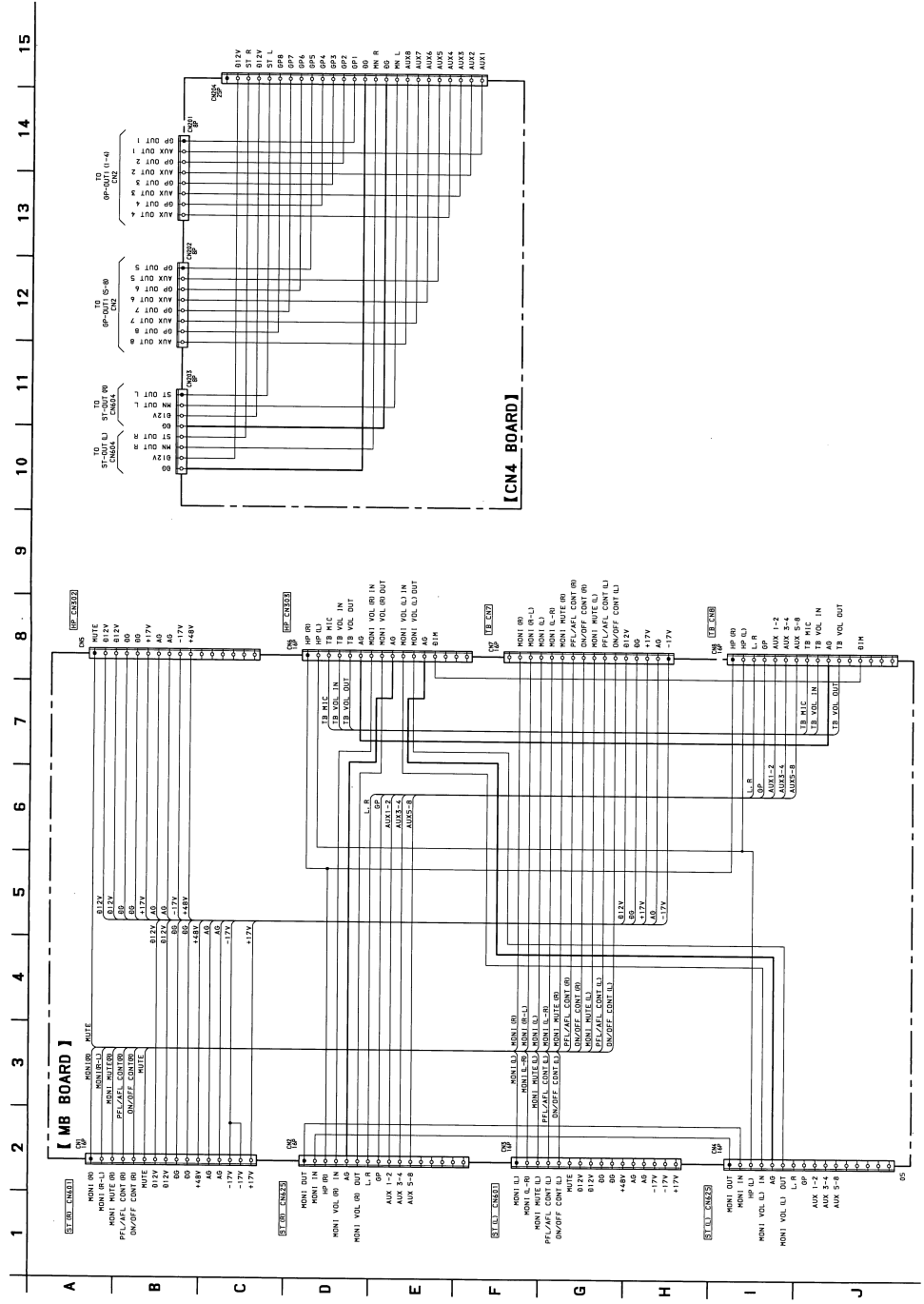
【TR BOARD】



• CPU BOARD Location

Ref. No.	Location	Ref. No.	Location
CN201	I-1	IC223	B-11
CN211	A-6		
CN212	B-7		
CN213	B-7		
CN214	C-7		
CN215	C-7		
CN216	F-7		
CN217	G-7		
CN218	H-7		
CN219	J-7		
D201	I-2		
D202	I-2		
D203	I-2		
D204	I-2		
D205	I-2		
D206	I-2		
D207	I-2		
D208	I-2		
D209	I-2		
D210	I-2		
D211	F-2		
D212	F-2		
D213	F-2		
D214	G-2		
D215	G-2		
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D502	G-2		
D503	G-2		
D504	G-2		
D505	G-2		
D506	G-2		
D507	G-2		
D508	G-2		
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D512	G-2		
D513	G-2		
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D515	G-2		
D516	G-2		
D517	G-2		
D518	G-2		
D519	G-2		
D520	G-2		
D521	G-2		
D522	G-2		
D523	G-2		
D524	G-2		
D525	G-2		
D526	G-2		
D527	G-2		
D528	G-2		
D529	G-2		
D530	G-2		
D531	G-2		
D532	G-2		
D533	G-2		
D534	G-2		
D535	G-2		
D536	G-2		
D537	G-2		
D538	G-2		
D539	G-2		
D540	G-2		
D541	G-2		
D542	G-2		
D543	G-2		
D544	G-2		
D545	G-2		
D546	G-2		
D547	G-2		
D548	G-2		
D549	G-2		
D550	G-2		
D551	G-2		
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D553	G-2		
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D556	G-2		
D557	G-2		
D558	G-2		
D559	G-2		
D560	G-2		
D561	G-2		
D562	G-2		
D563	G-2		
D564	G-2		
D565	G-2		
D566	G-2		
D567	G-2		
D568	G-2		
D569	G-2		
D570	G-2		

3-28. SCHEMATIC DIAGRAM – MB and CN4 Boards –
3-28. 回路図－MB, CN4 基板－



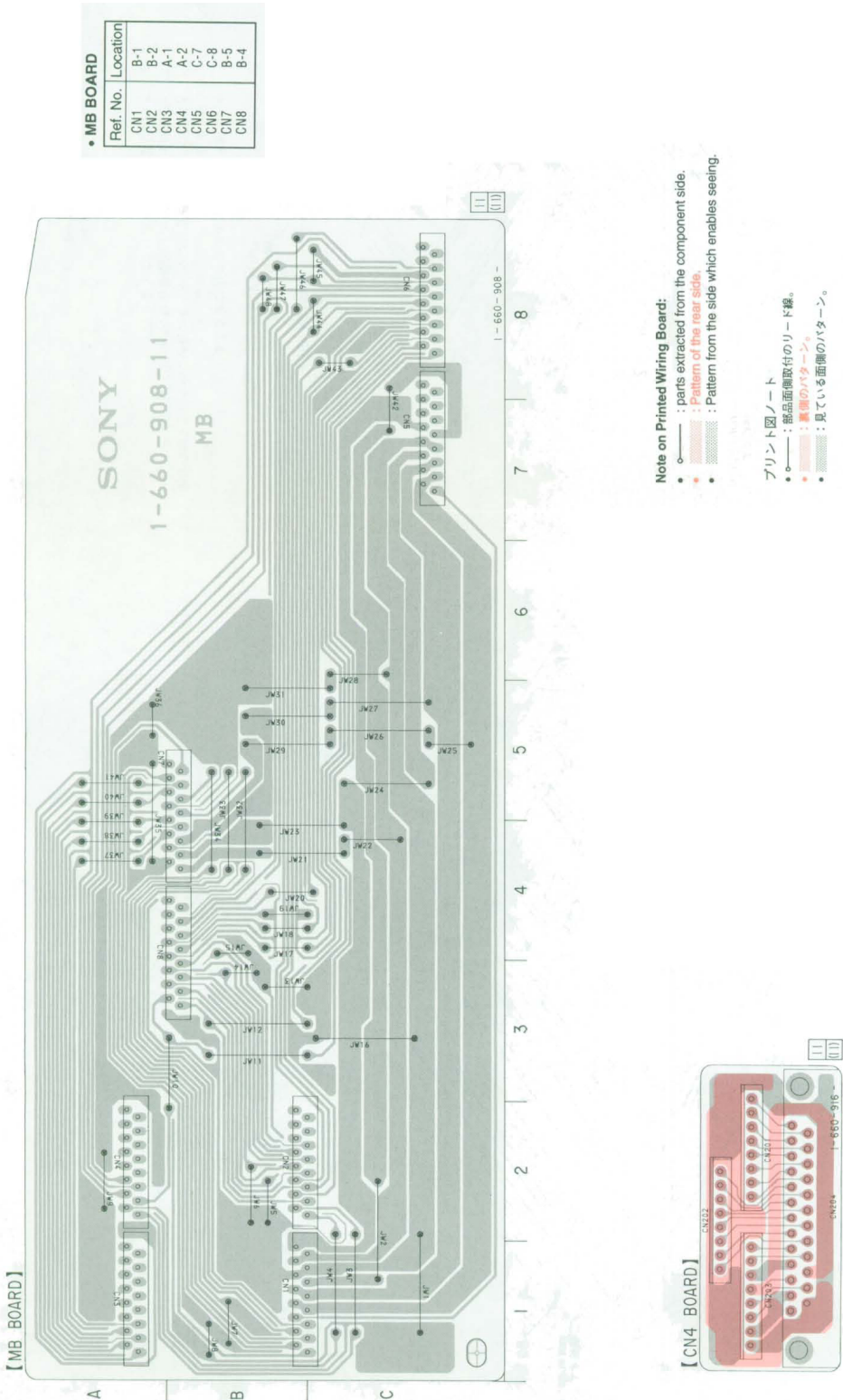
Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. $\text{pF} = 10^{-12}$.
- All resistors are in Ω and $1/\text{W}$ or less unless otherwise specified.
- Q: Q-Link.
- Q: Q-Link.
- Q: Q-Link.

回路図ノート

- タミコン・タンタルを除くコンデンサで、単位50V以下のものは、その電圧を省略。単位はすべて μF (は pF)。
- 抵抗の値の単位は Ω と $1/\text{W}$ 以下を示す。単位はすべて Ω 。
- Q: Q-Link。
- Q: Q-Link。
- Q: Q-Link。

3-29. PRINTED WIRING BOARDS – MB and CN4 Boards –
3-29. プリント図—MB, CN4 基板部—



SECTION 4. EXPLODED VIEWS

4. 分解図

NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.

- Color Indication of Appearance Parts

Example:

KNOB, BALANCE (WHITE) ... (RED)

↑ ↑
Parts Color Cabinet's Color

- 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 the electrical parts list.

【使用上の注意】

- 外装部品色表示

例：バランスツマミ（ホワイト）.....（レッド）

↑ ↑
部品の色を表す。 セットの色を表す。

- *印の部品は常時在庫しておりません。

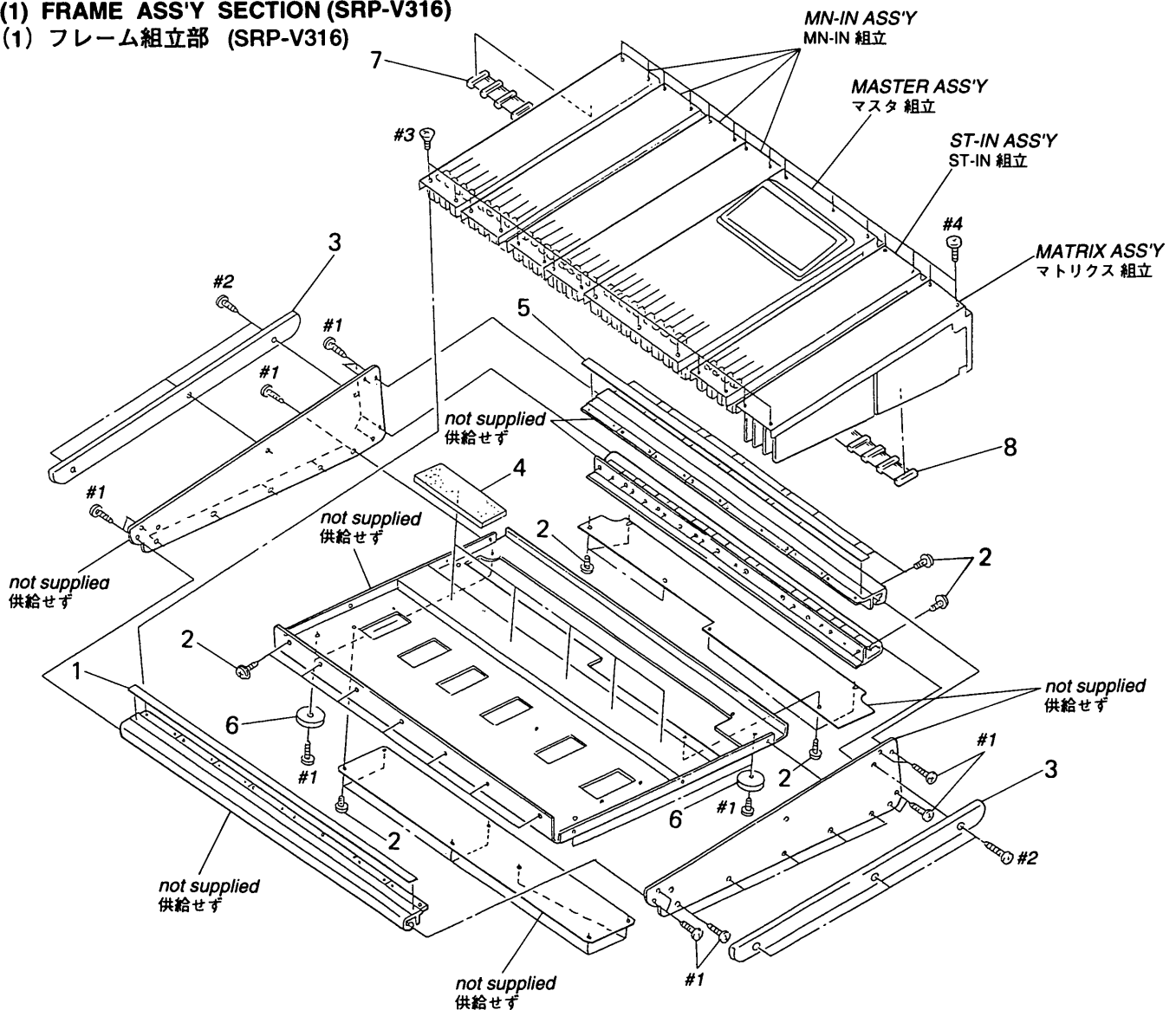
- 分解図中の機構部品で、図面番号のない部品は供給しません。

- -XX、-Xは標準化部品のため、セットに付いている部品と異なる場合があります。

- 付属梱包部は、部品表の最後尾にあります。

(1) FRAME ASS'Y SECTION (SRP-V316)

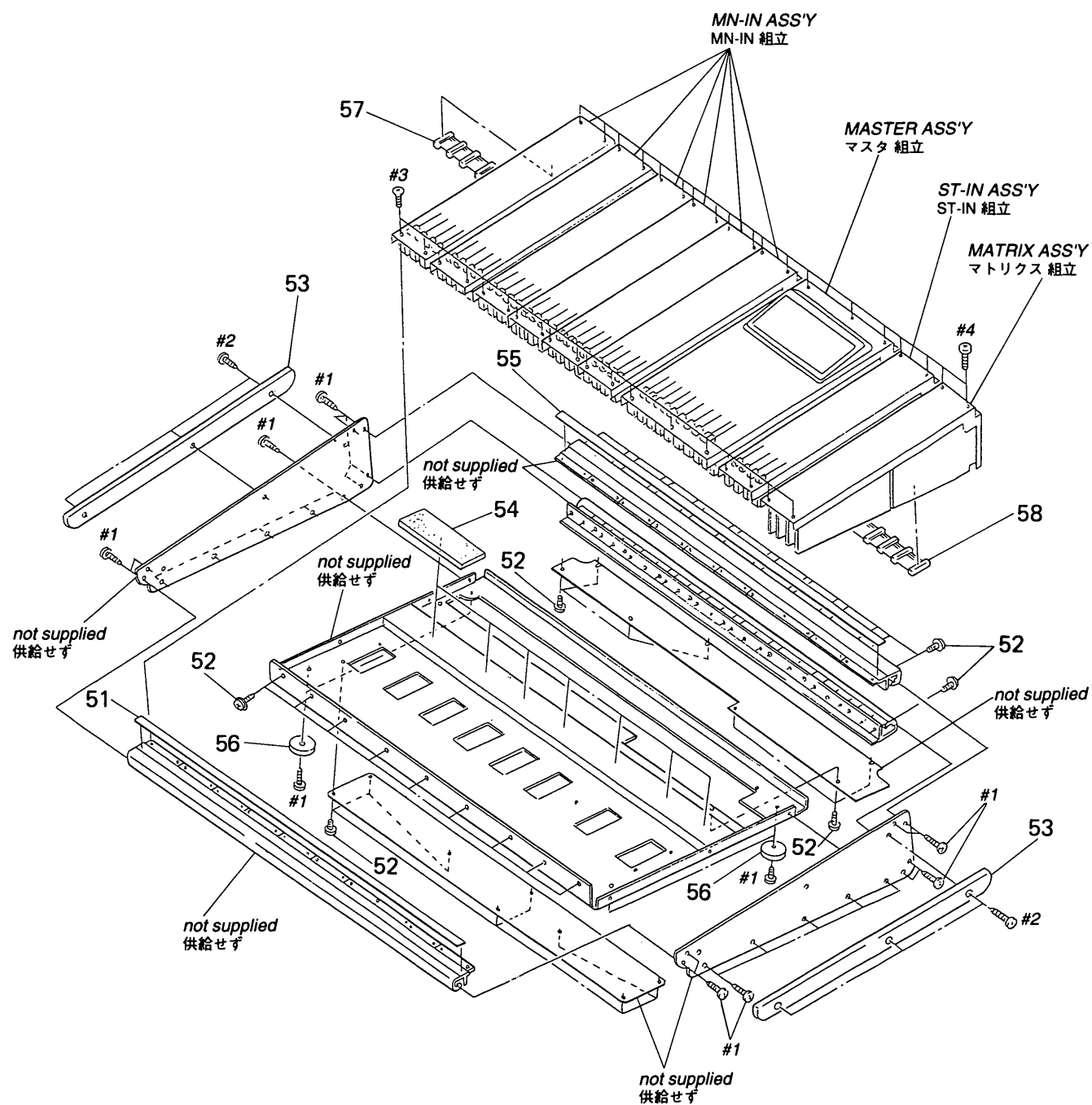
(1) フレーム組立部 (SRP-V316)



Ref. No.	Part No.	Description	Remark
* 1	2-344-823-11	PLATE (16), CHANNEL INDICATION	
2	3-704-366-01	SCREW (CASE) (M3X8)	
* 3	2-344-566-01	HANDLE	
* 4	2-344-787-01	CUSHION	

Ref. No.	Part No.	Description	Remark
* 5	2-344-823-01	PLATE (16), CHANNEL INDICATION	
6	X-4945-465-1	FOOT ASSY	
7	1-777-452-11	CABLE (WITH CONNECTOR)	
8	1-777-067-11	CABLE (WITH CONNECTOR)	

(2) FRAM ASS'Y SECTION (SRP-V324)
 (2) フレーム組立部 (SRP-V324)

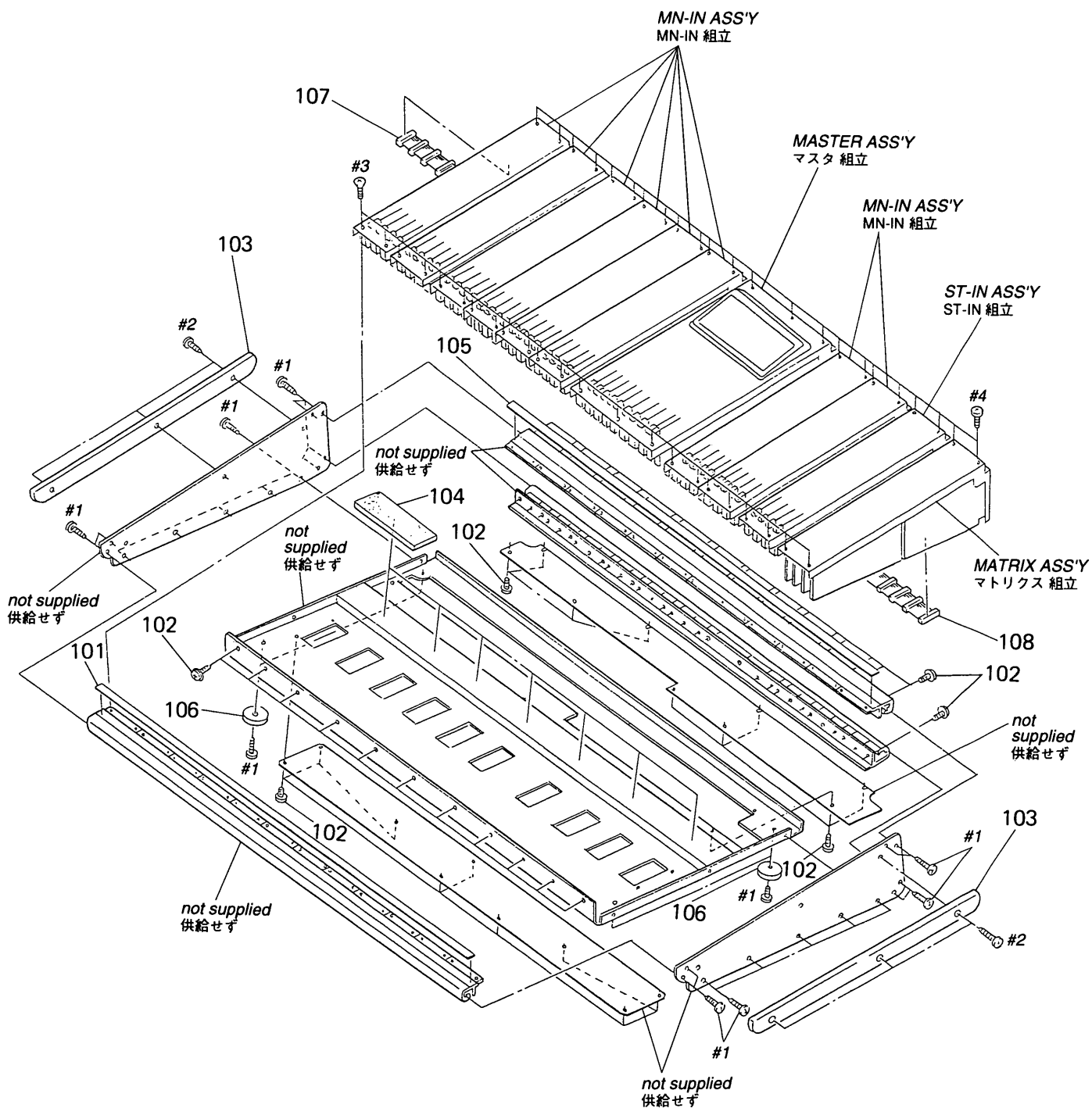


Ref. No.	Part No.	Description	Remark
* 51	2-344-824-11	PLATE (24), CHANNEL INDICATION	
* 52	3-704-366-01	SCREW (CASE) (M3X8)	
* 53	2-344-566-01	HANDLE	
* 54	2-344-787-01	CUSHION	

Ref. No.	Part No.	Description	Remark
* 55	2-344-824-01	PLATE (24), CHANNEL INDICATION	
56	X-4945-465-1	FOOT ASSY	
57	1-777-066-11	CABLE (WITH CONNECTOR)	
58	1-777-067-11	CABLE (WITH CONNECTOR)	

(3) FRAME ASS'Y SECTION (SRP-V332)

(3) フレーム組立部 (SRP-V332)

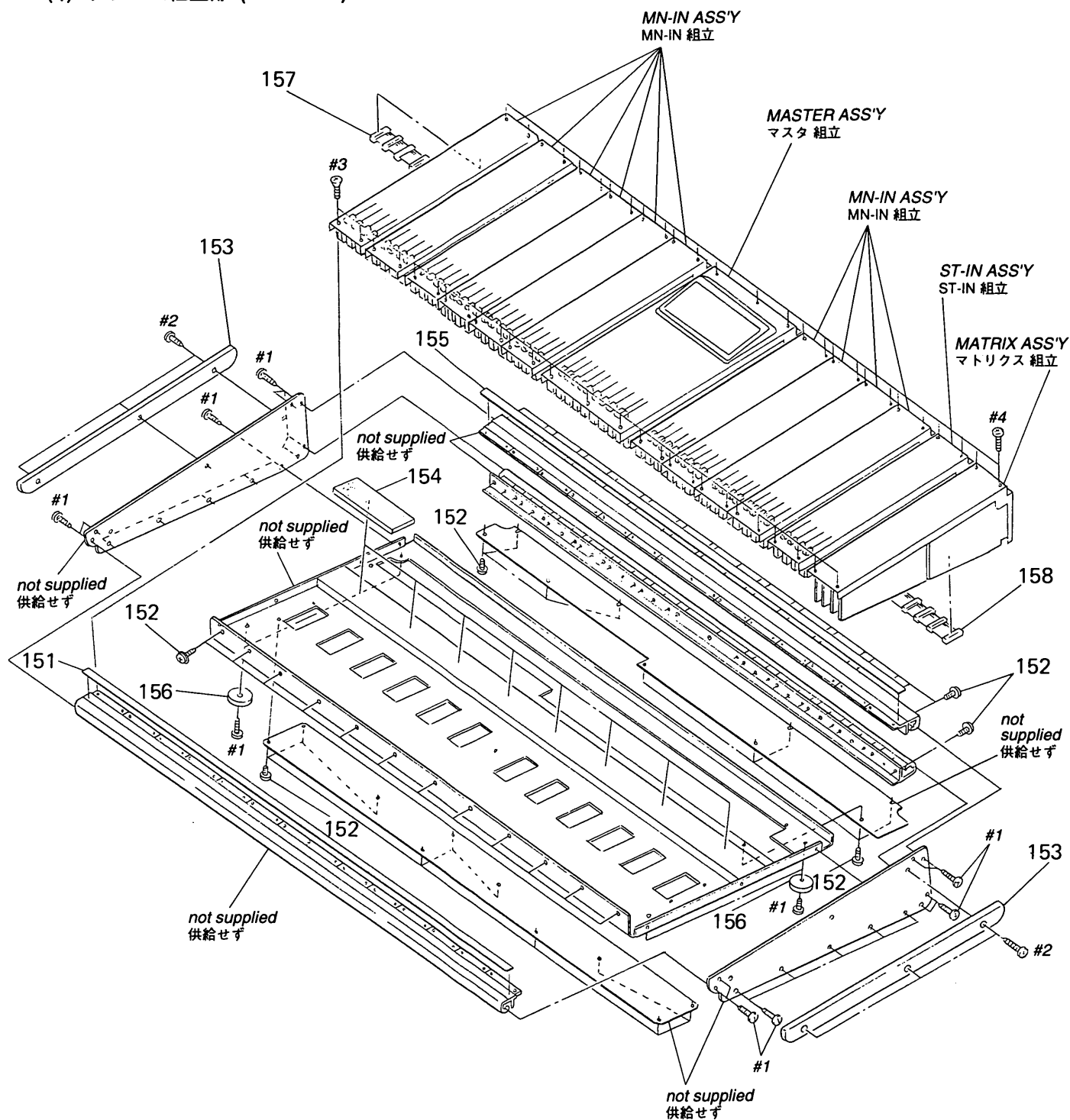


Ref. No.	Part No.	Description	Remark
* 101	2-344-825-11	PLATE (32), CHANNEL INDICATION	
102	3-704-366-01	SCREW (CASE) (M3X8)	
* 103	2-344-566-01	HANDLE	
* 104	2-344-787-01	CUSHION	

Ref. No.	Part No.	Description	Remark
* 105	2-344-825-01	PLATE (32), CHANNEL INDICATION	
106	X-4945-465-1	FOOT ASSY	
107	1-777-453-11	CABLE (WITH CONNECTOR)	
108	1-777-454-11	CABLE (WITH CONNECTOR)	

(4) FRAME ASS'Y SECTION (SRP-V340)

(4) フレーム組立部 (SRP-V340)

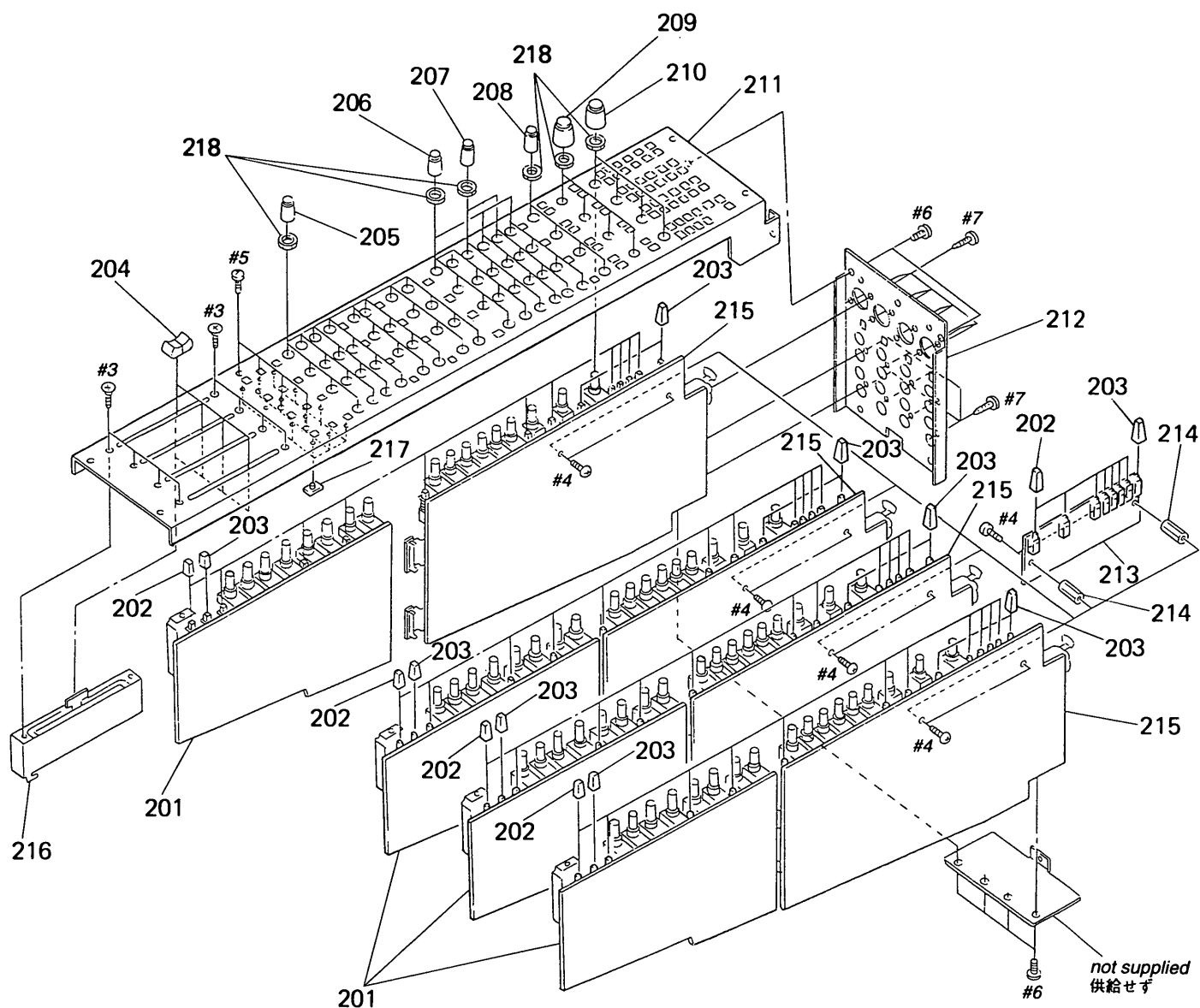


Ref. No.	Part No.	Description	Remark
* 151	2-344-826-11	PLATE (40), CHANNEL INDICATION	
152	3-704-366-01	SCREW (CASE) (M3X8)	
* 153	2-344-566-01	HANDLE	
* 154	2-344-787-01	CUSHION	

Ref. No.	Part No.	Description	Remark
* 155	2-344-826-01	PLATE (40), CHANNEL INDICATION	
156	X-4945-465-1	FOOT ASSY	
157	1-777-455-11	CABLE (WITH CONNECTOR)	
158	1-777-456-11	CABLE (WITH CONNECTOR)	

(5) MN-IN ASS'Y SECTION

(5) MN-IN 組立部

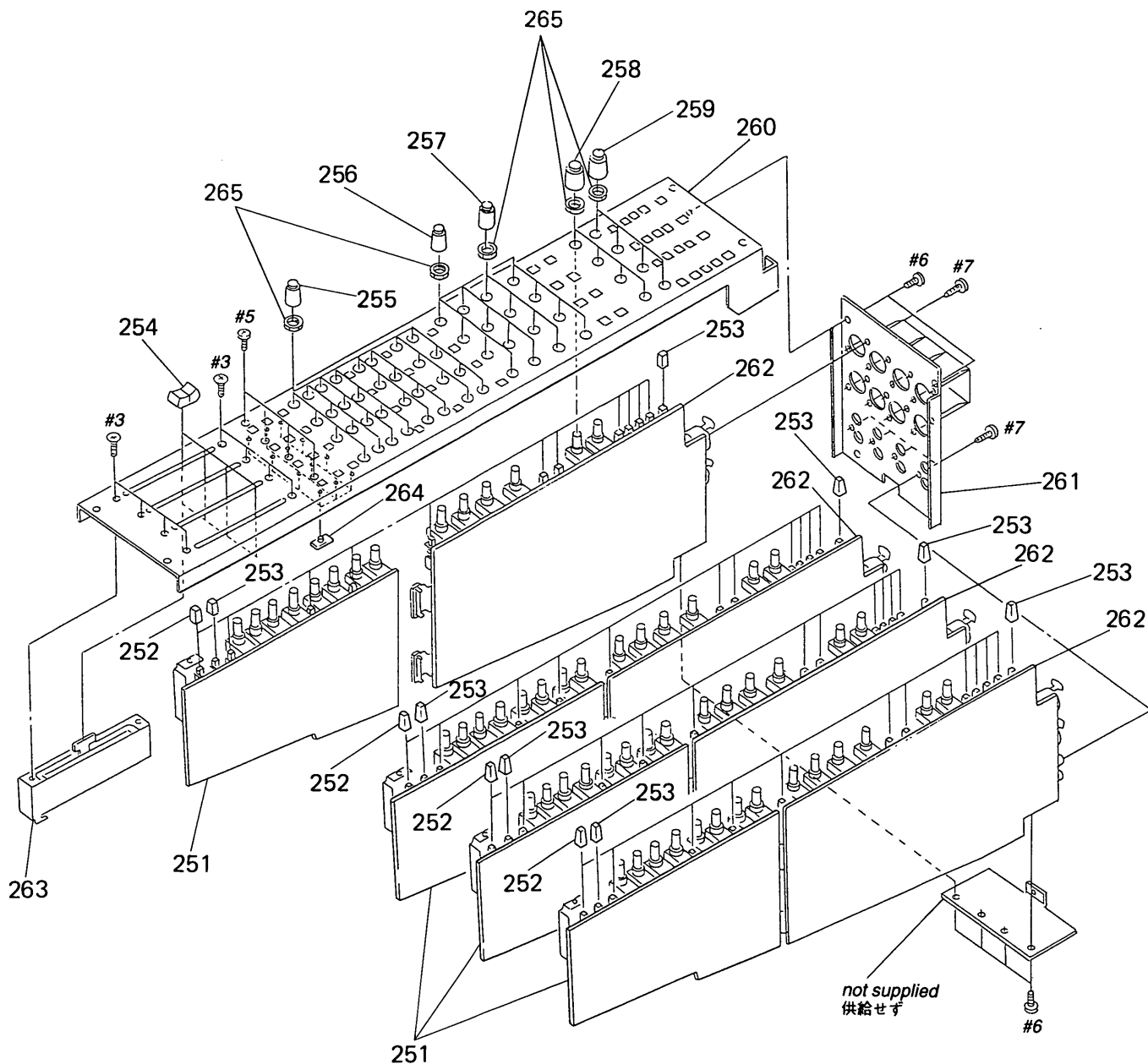


Ref. No.	Part No.	Description	Remark
* 201	A-4587-523-A	AUX BOARD, COMPLETE	
202	2-344-567-01	KNOB (SMALL), PUSH BUTTON (GRAY)	
203	2-344-567-11	KNOB (SMALL), PUSH BUTTON (RED)	
204	4-904-377-21	KNOB, FADER (GRAY)	
205	4-935-181-11	KNOB (SMALL), ROTARY (BLUE)	
206	4-935-181-41	KNOB (SMALL), ROTARY (GRAY)	
207	4-935-181-21	KNOB (SMALL), ROTARY (YELLOW)	
208	4-935-181-01	KNOB (SMALL), ROTARY (GREEN)	
209	4-906-510-21	KNOB (LARGE), ROTARY (GRAY)	

Ref. No.	Part No.	Description	Remark
210	4-906-510-31	KNOB (LARGE), ROTARY (RED)	
* 211	2-344-577-01	PANEL (MONO INPUT)	
* 212	2-344-571-01	PLATE (MONO INPUT), JACK	
* 213	1-660-906-11	MN-IN2 BOARD	
* 214	2-280-622-61	SUPPORT (M3X20), HEXAGON	
* 215	A-4588-800-A	MN-IN1 BOARD, COMPLETE	
216	1-225-271-11	RES, SLIDE CARBON VAR 10K	
* 217	3-318-636-02	PLATE, INDICATION, REC	
218	4-857-437-11	NUT (9)	

(6) ST-IN ASS'Y SECTION

(6) ST-IN 組立部

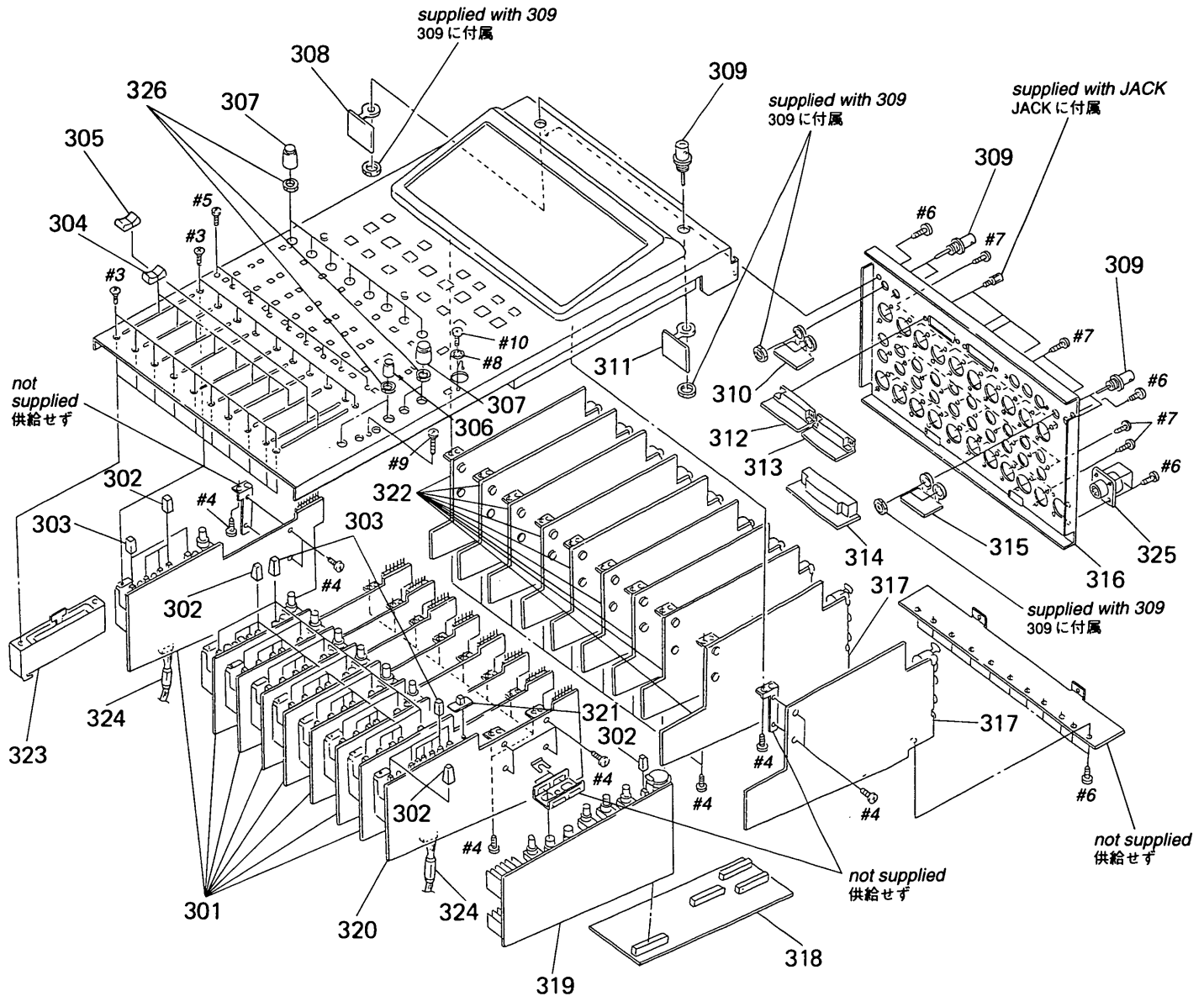


Ref. No.	Part No.	Description	Remark
* 251	A-4587-523-A	AUX BOARD, COMPLETE	
252	2-344-567-01	KNOB (SMALL), PUSH BUTTON (GRAY)	
253	2-344-567-11	KNOB (SMALL), PUSH BUTTON (RED)	
254	4-904-377-21	KNOB, FADER (GRAY)	
255	4-935-181-11	KNOB (SMALL), ROTARY (BLUE)	
256	4-935-181-41	KNOB (SMALL), ROTARY (GRAY)	
257	4-935-181-21	KNOB (SMALL), ROTARY (YELLOW)	
258	4-906-510-21	KNOB (LARGE), ROTARY (GRAY)	

Ref. No.	Part No.	Description	Remark
259	4-906-510-31	KNOB (LARGE), ROTARY (RED)	
* 260	2-344-578-01	PANEL (STEREO INPUT)	
* 261	2-344-572-01	PLATE (STEREO INPUT), JACK	
* 262	A-4588-803-A	ST-IN BOARD, COMPLETE	
263	1-225-273-11	RES, SLIDE CARBON VAR 10K/10K	
* 264	3-318-636-02	PLATE, INDICATION, REC	
265	4-857-437-11	NUT (°)	

(7) MASTER ASS'Y SECTION-1

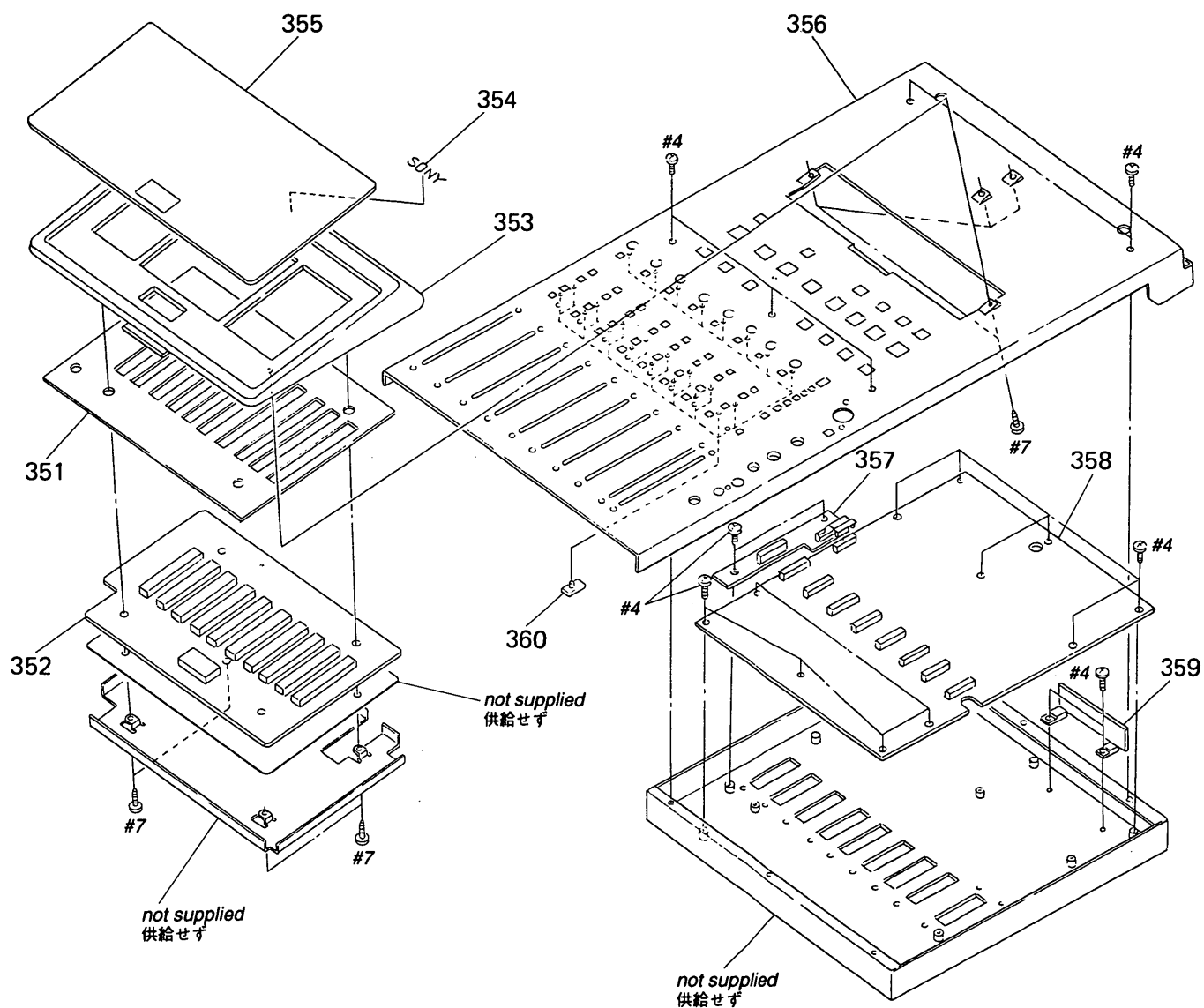
(7) マスタ組立部ー1



Ref. No.	Part No.	Description	Remark
* 301	A-4588-808-A	GP-OUT2 BOARD, COMPLETE	
302	2-344-567-11	KNOB (SMALL), PUSH BUTTON (RED)	
303	2-344-567-01	KNOB (SMALL), PUSH BUTTON (GRAY)	
304	4-904-377-01	KNOB, FADER (BLACK)	
305	4-904-377-11	KNOB, FADER (RED)	
306	4-935-181-41	KNOB (SMALL), ROTARY (GRAY)	
307	4-906-510-21	KNOB (LARGE), ROTARY (GRAY)	
* 308	1-660-917-11	CN5 BOARD	
309	1-563-354-11	CONNECTOR, BNC	
* 310	1-660-919-11	CN7 BOARD	
* 311	1-660-918-11	CN6 BOARD	
* 312	1-660-916-11	CN4 BOARD	
* 313	1-660-914-11	CN2 BOARD	

Ref. No.	Part No.	Description	Remark
* 314	1-660-913-11	CN1 BOARD	
* 315	1-660-920-11	CN8 BOARD	
* 316	2-344-576-01	PLATE (MASTER), JACK	
* 317	A-4587-525-A	ST-OUT BOARD, COMPLETE	
* 318	1-660-908-11	MB BOARD	
* 319	A-4588-811-A	HP BOARD, COMPLETE	
* 320	A-4588-810-A	TB BOARD, COMPLETE	
321	4-922-518-11	KNOB (TIMER)	
* 322	A-4587-524-A	GP-OUT1 BOARD, COMPLETE	
323	1-225-271-11	RES, SLIDE CARBON VAR 10K	
324	1-543-798-11	FILTER, CLAMP	
325	1-508-942-12	CONNECTOR 14P	
326	4-857-437-11	NUT (9)	

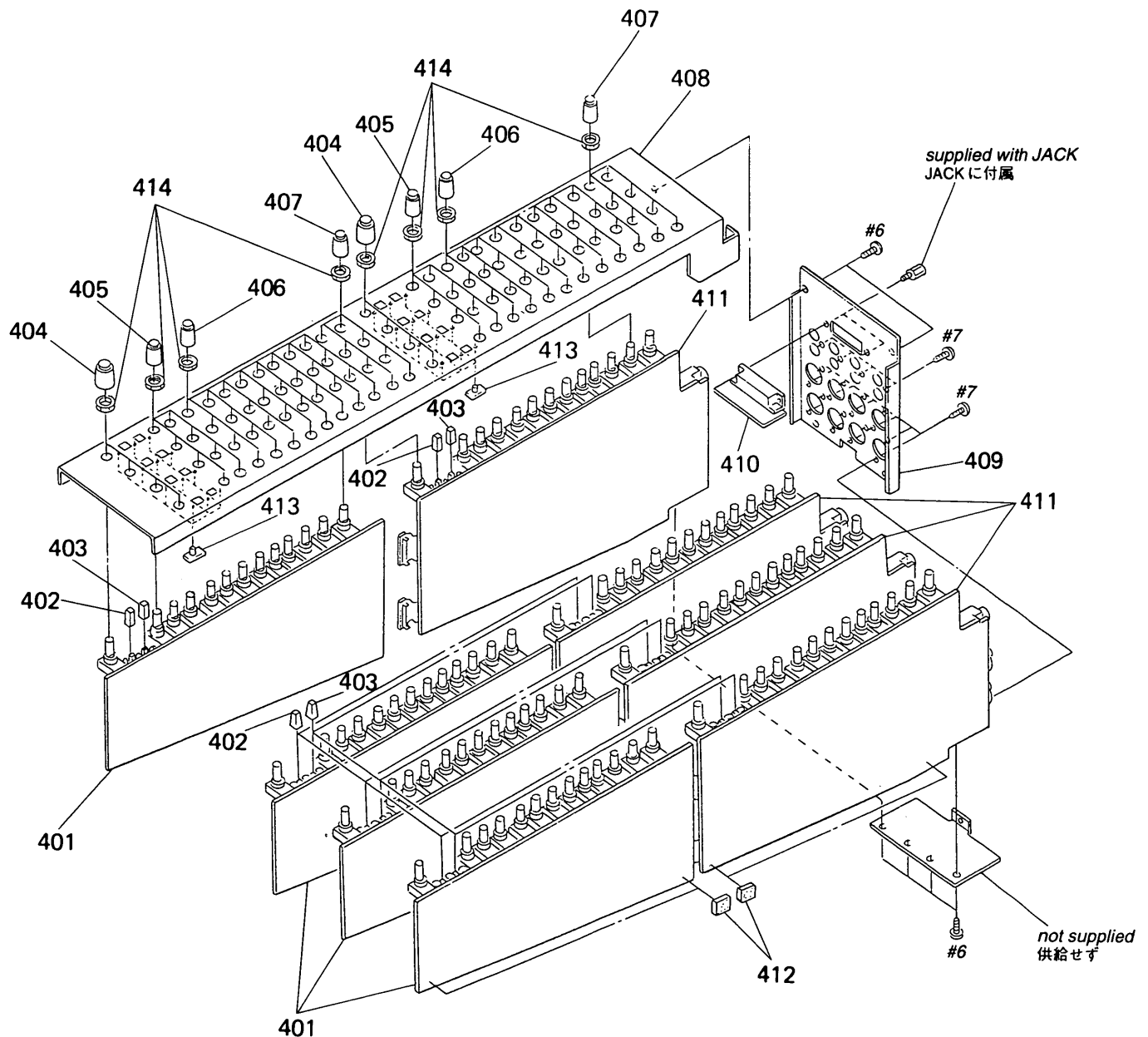
(8) MASTER ASS'Y SECTION-2
(8) マスタ組立部ー 2



Ref. No.	Part No.	Description	Remark
* 351	2-344-802-01	CASE (B), SHIELD	
* 352	1-660-911-11	METER BOARD	
* 353	2-344-591-01	PANEL	
354	3-704-177-01	EMBLEM (NO. 7), SONY	
355	2-344-588-01	PLATE (PANEL), ORNAMENTAL	

Ref. No.	Part No.	Description	Remark
* 356	2-344-580-01	PANEL (MASTER)	
* 357	1-660-915-11	CN3 BOARD	
* 358	A-4587-522-A	CPU BOARD, COMPLETE	
* 359	1-660-912-11	TR BOARD	
* 360	3-318-636-02	PLATE, INDICATION, REC	

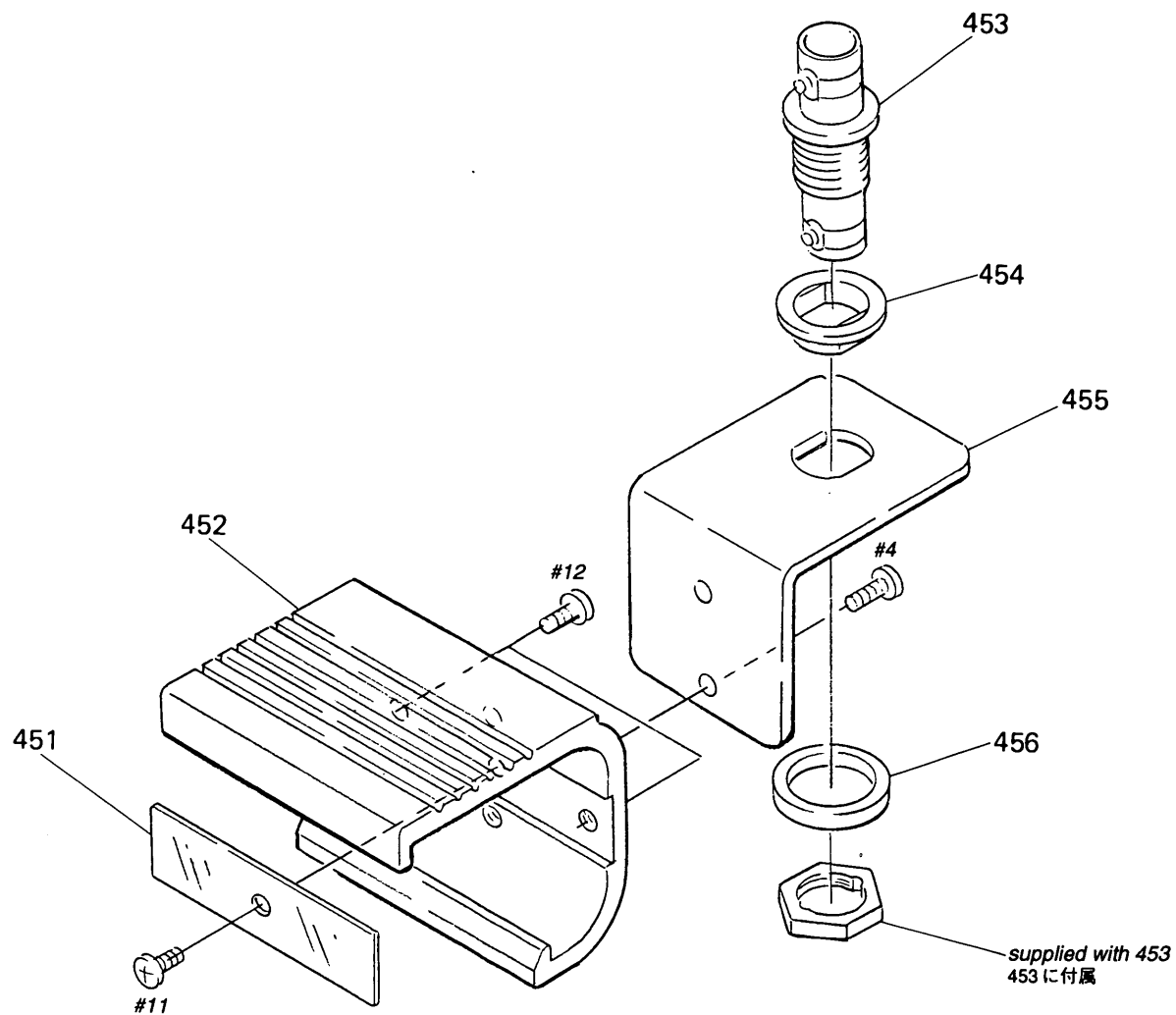
(9) MATRIX ASS'Y SECTION
(9) マトリクス組立部



Ref. No.	Part No.	Description	Remark
* 401	A-4588-822-A	MTX-OUT2 BOARD, COMPLETE	
402	2-344-567-01	KNOB (SMALL), PUSH BUTTON (GRAY)	
403	2-344-567-11	KNOB (SMALL), PUSH BUTTON (RED)	
404	4-906-510-21	KNOB (LARGE), ROTARY (GRAY)	
405	4-935-181-11	KNOB (SMALL), ROTARY (RED)	
406	4-935-181-41	KNOB (SMALL), ROTARY (GRAY)	
407	4-935-181-21	KNOB (SMALL), ROTARY (YELLOW)	

Ref. No.	Part No.	Description	Remark
* 408	2-344-579-01	PANEL (MATRIX OUTPUT)	
* 409	2-344-573-01	PLATE (MATRIX OUTPUT), JACK	
* 410	1-660-910-11	CN9 BOARD	
* 411	A-4588-821-A	MTX-OUT1 BOARD, COMPLETE	
412	3-343-272-01	CUSHION (K)	
* 413	3-318-636-02	PLATE, INDICATION, REC	
414	4-857-437-11	NUT (9)	

(10) LAMP BRACKET ASS'Y SECTION (SRP-V332, V340)
(10) ランプ取付板組立部 (SRP-V332, V340)



Ref. No.	Part No.	Description	Remark
* 451	2-344-807-01	SHEET, PROTECTION	
* 452	2-344-806-01	STAND (B), LIGHT	
* 453	1-778-734-11	CONNECTOR, COAXIAL (BNC TYPE)	

Ref. No.	Part No.	Description	Remark
* 454	2-344-839-01	BUSHING, INSULATING	
* 455	2-344-805-01	STAND (A), LIGHT	
* 456	2-344-838-01	WASHER, INSULATING	

SECTION 5. ELECTRICAL PARTS LIST

5. 電気部品表

AUX

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 and -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

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

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

【使用上の注意】

- ここに記載されている部品は、補修用部品であるため、回路図及びセットに付いている部品と異なる場合があります。
- XX, -Xは標準化部品のためセットに付いている部品と異なる場合があります。
- *印の部品は常時在庫していません。
- コンデンサの単位でuFは μ Fを示します。
- 抵抗の単位 Ω は省略してあります。
金被 : 金属被膜抵抗
サンキン : 酸化金属被膜抵抗

- インダクタの単位で, uHは μ Hを示します。
- 半導体の名称でuA..., uPB..., uPC..., uPD...等はそれぞれ μ A..., μ PB..., μ PC..., μ PD...を示します。

お願い

図面番号で部品を指定するときは基板名, またはブロックを併せて指定して下さい。

Δ 印の部品, または Δ 印付きの点線で囲まれた部品は, 安全性を維持するために重要な部品です。従って交換時は, 必ず指定の部品を使用して下さい。

Ref. No.	Part No.	Description	Remark
*	A-4587-523-A	AUX BOARD, COMPLETE *****	
		< CAPACITOR >	
	C1	1-164-159-11 CERAMIC 0.1uF	50V
	C2	1-164-159-11 CERAMIC 0.1uF	50V
	C5	1-124-903-11 ELECT 1uF	20% 50V
	C6	1-124-903-11 ELECT 1uF	20% 50V
	C9	1-126-967-11 ELECT 47uF	20% 50V
	C10	1-126-967-11 ELECT 47uF	20% 50V
	C50	1-130-467-00 MYLAR 470PF	5% 50V
		< CONNECTOR >	
	CN1	1-564-523-11 PLUG, CONNECTOR 8P	
*	CN2	1-764-212-11 CONNECTOR, BOARD TO BOARD 13P	
	CN3	1-569-338-11 CONNECTOR, BOARD TO BOARD 19P	
	CN4	1-564-523-11 PLUG, CONNECTOR 8P	

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D5	8-719-921-19	DIODE 1SS119-25TG	
D6	8-719-921-19	DIODE 1SS119-25TG	
D7	8-719-921-19	DIODE 1SS119-25TG	
D8	8-719-820-77	DIODE TLG116	
D9	8-719-955-04	DIODE TLG113A	
D10	8-719-802-02	DIODE TLY113A	
D11	8-719-921-19	DIODE 1SS119-25TG	
D12	8-719-921-19	DIODE 1SS119-25TG	
D13	8-719-921-19	DIODE 1SS119-25TG	
D14	8-719-110-96	DIODE RD2.0ES-T2B2	
		< IC >	
IC1	8-759-916-52	IC TC74HC165AP	
IC2	8-759-233-43	IC TC74HC595AP	
IC3	8-759-634-51	IC NJM4558D	

AUX

CN1

CN2

Ref. No.	Part No.	Description	Remark
< TRANSISTOR >			
Q1	8-729-029-56	TRANSISTOR DTA144ESA-TP	
Q2	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q3	8-729-195-23	TRANSISTOR 2SA952TP-K1	
Q5	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q6	8-729-195-23	TRANSISTOR 2SA952TP-K1	
Q7	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q8	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q9	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q10	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q11	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q12	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q13	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q14	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q15	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
< RESISTOR >			
R1	1-249-437-11	CARBON 47K 5% 1/4W	
R2	1-249-437-11	CARBON 47K 5% 1/4W	
R3	1-249-433-11	CARBON 22K 5% 1/4W	
R4	1-249-437-11	CARBON 47K 5% 1/4W	
R5	1-249-437-11	CARBON 47K 5% 1/4W	
R6	1-249-437-11	CARBON 47K 5% 1/4W	
R7	1-249-437-11	CARBON 47K 5% 1/4W	
R8	1-249-437-11	CARBON 47K 5% 1/4W	
R9	1-249-437-11	CARBON 47K 5% 1/4W	
R10	1-249-437-11	CARBON 47K 5% 1/4W	
R11	1-249-437-11	CARBON 47K 5% 1/4W	
R12	1-249-437-11	CARBON 47K 5% 1/4W	
R13	1-249-437-11	CARBON 47K 5% 1/4W	
R14	1-215-421-00	METAL 1K 1% 1/4W	
R15	1-215-421-00	METAL 1K 1% 1/4W	
R16	1-215-445-00	METAL 10K 1% 1/4W	
R21	1-247-887-00	CARBON 220K 5% 1/4W	
R22	1-249-435-11	CARBON 33K 5% 1/4W	
R23	1-215-449-00	METAL 15K 1% 1/4W	
R24	1-215-421-00	METAL 1K 1% 1/4W	
R25	1-215-421-00	METAL 1K 1% 1/4W	
R26	1-247-887-00	CARBON 220K 5% 1/4W	
R27	1-215-449-00	METAL 15K 1% 1/4W	
R28	1-215-449-00	METAL 15K 1% 1/4W	
R29	1-249-441-11	CARBON 100K 5% 1/4W	
R30	1-215-421-00	METAL 1K 1% 1/4W	
R31	1-249-437-11	CARBON 47K 5% 1/4W	
R32	1-215-449-00	METAL 15K 1% 1/4W	
△R33	1-212-869-00	FUSIBLE 33 5% 1/4W F	
R34	1-249-437-11	CARBON 47K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R35	1-249-437-11	CARBON 47K 5% 1/4W	
R36	1-249-437-11	CARBON 47K 5% 1/4W	
R37	1-247-887-00	CARBON 220K 5% 1/4W	
R38	1-247-887-00	CARBON 220K 5% 1/4W	
R39	1-215-421-00	METAL 1K 1% 1/4W	
R40	1-247-887-00	CARBON 220K 5% 1/4W	
R41	1-249-437-11	CARBON 47K 5% 1/4W	
R42	1-249-437-11	CARBON 47K 5% 1/4W	
R50	1-249-437-11	CARBON 47K 5% 1/4W	
< VARIABLE RESISTOR >			
RV1	1-225-269-11	RES, VAR, CARBON 50K (AUX1)	
RV2	1-225-269-11	RES, VAR, CARBON 50K (AUX2)	
RV3	1-225-269-11	RES, VAR, CARBON 50K (AUX3)	
RV4	1-225-269-11	RES, VAR, CARBON 50K (AUX4)	
RV5	1-225-269-11	RES, VAR, CARBON 50K (AUX5)	
RV6	1-225-269-11	RES, VAR, CARBON 50K (AUX6)	
RV7	1-225-269-11	RES, VAR, CARBON 50K (AUX7)	
RV8	1-225-269-11	RES, VAR, CARBON 50K (AUX8)	
< SWITCH >			
SW1	1-572-004-11	SWITCH, PUSH (PRE)	
SW2	1-572-004-11	SWITCH, PUSH (PRE)	
SW3	1-572-004-11	SWITCH, PUSH (PRE)	
SW4	1-554-824-21	SWITCH, PUSH (1 KEY) (ON)	
SW5	1-554-824-21	SWITCH, PUSH (1 KEY) (PFL)	

*	1-660-913-11	CN1 BOARD	

< CONNECTOR >			
CN501	1-564-510-11	PLUG, CONNECTOR 7P	
CN502	1-580-042-11	CONNECTOR, DIN	
< DIODE >			
D501	8-719-113-56	DIODE RD22ES-T2B2	
D502	8-719-113-56	DIODE RD22ES-T2B2	
D503	8-719-113-56	DIODE RD22ES-T2B2	
D504	8-719-113-56	DIODE RD22ES-T2B2	
D505	8-719-113-56	DIODE RD22ES-T2B2	
D506	8-719-113-56	DIODE RD22ES-T2B2	

*	1-660-914-11	CN2 BOARD	

< CONNECTOR >			
CN601	1-564-511-11	PLUG, CONNECTOR 8P	
* CN602	1-564-512-11	PLUG, CONNECTOR 9P	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

△印の部品、または△印付きの点線で囲まれた部品は、安全性を維持するために重要な部品です。従って交換時は、必ず指定の部品を使用して下さい。

CN2

CN3

CN4

CN5

CN6

CN7

CN8

CN9

Ref. No.	Part No.	Description	Remark
CN603	1-764-121-21	SOCKET, (D) SUB CONNECTOR 25P	
		< DIODE >	
D601	8-719-921-19	DIODE 1SS119-25TG	
D602	8-719-921-19	DIODE 1SS119-25TG	
D603	8-719-921-19	DIODE 1SS119-25TG	
D604	8-719-921-19	DIODE 1SS119-25TG	
D605	8-719-921-19	DIODE 1SS119-25TG	
D606	8-719-921-19	DIODE 1SS119-25TG	
D607	8-719-921-19	DIODE 1SS119-25TG	
D608	8-719-921-19	DIODE 1SS119-25TG	
D609	8-719-921-19	DIODE 1SS119-25TG	
D610	8-719-921-19	DIODE 1SS119-25TG	
D611	8-719-921-19	DIODE 1SS119-25TG	
D612	8-719-921-19	DIODE 1SS119-25TG	
D613	8-719-921-19	DIODE 1SS119-25TG	
D614	8-719-921-19	DIODE 1SS119-25TG	
D615	8-719-921-19	DIODE 1SS119-25TG	
D616	8-719-921-19	DIODE 1SS119-25TG	

*	1-660-915-11	CN3 BOARD	

		< CONNECTOR >	
CN701	1-750-176-11	HOUSING, CONNECTOR(PC BOARD) 15P	
* CN702	1-764-211-11	CONNECTOR, BOARD TO BOARD 13P	

*	1-660-916-11	CN4 BOARD	

		< CONNECTOR >	
CN201	1-564-511-11	PLUG, CONNECTOR 8P	
CN202	1-564-511-11	PLUG, CONNECTOR 8P	
CN203	1-564-511-11	PLUG, CONNECTOR 8P	
CN204	1-764-121-21	SOCKET, (D) SUB CONNECTOR 25P	

*	1-660-917-11	CN5 BOARD	

		< CONNECTOR >	
CN301	1-564-320-00	PIN, CONNECTOR (B2P-VH) 2P	
CN302	1-564-320-00	PIN, CONNECTOR (B2P-VH) 2P	
		< COIL >	
L301	1-424-090-11	COIL, LINE FILTER	
L302	1-424-090-11	COIL, LINE FILTER	

Ref. No.	Part No.	Description	Remark
*	1-660-918-11	CN6 BOARD	

		< CONNECTOR >	
CN304	1-564-320-00	PIN, CONNECTOR (B2P-VH) 2P	
CN305	1-564-320-00	PIN, CONNECTOR (B2P-VH) 2P	
		< COIL >	
L303	1-424-090-11	COIL, LINE FILTER	
L304	1-424-090-11	COIL, LINE FILTER	

*	1-660-919-11	CN7 BOARD	

		< CONNECTOR >	
CN307	1-564-320-00	PIN, CONNECTOR (B2P-VH) 2P	
CN308	1-564-320-00	PIN, CONNECTOR (B2P-VH) 2P	
		< COIL >	
L305	1-424-090-11	COIL, LINE FILTER	
L306	1-424-090-11	COIL, LINE FILTER	
L307	1-424-090-11	COIL, LINE FILTER	
L308	1-424-090-11	COIL, LINE FILTER	

*	1-660-920-11	CN8 BOARD	

		< CONNECTOR >	
CN311	1-564-320-00	PIN, CONNECTOR (B2P-VH) 2P	
		< COIL >	
L309	1-424-090-11	COIL, LINE FILTER	
L310	1-424-090-11	COIL, LINE FILTER	
L311	1-424-090-11	COIL, LINE FILTER	
L312	1-424-090-11	COIL, LINE FILTER	

*	1-660-910-11	CN9 BOARD	

		1-564-511-11 PLUG, CONNECTOR 8P	
		1-764-121-21 SOCKET, (D) SUB CONNECTOR 25P	

CPU

Ref. No.	Part No.	Description	Remark
*	A-4587-522-A	CPU BOARD, COMPLETE *****	
	3-708-877-01	CAP	
		< CAPACITOR >	
C201	1-126-967-11	ELECT 47uF	20% 50V
C202	1-130-469-00	MYLAR 680PF	5% 50V
C203	1-126-941-11	ELECT 470uF	20% 25V
C204	1-164-159-11	CERAMIC 0.1uF	50V
C205	1-164-159-11	CERAMIC 0.1uF	50V
C206	1-164-159-11	CERAMIC 0.1uF	50V
C207	1-164-159-11	CERAMIC 0.1uF	50V
C208	1-164-159-11	CERAMIC 0.1uF	50V
C209	1-164-159-11	CERAMIC 0.1uF	50V
C210	1-162-203-31	CERAMIC 15PF	5% 50V
C211	1-162-203-31	CERAMIC 15PF	5% 50V
C212	1-164-159-11	CERAMIC 0.1uF	50V
C213	1-164-159-11	CERAMIC 0.1uF	50V
C214	1-164-159-11	CERAMIC 0.1uF	50V
C215	1-164-159-11	CERAMIC 0.1uF	50V
C216	1-164-159-11	CERAMIC 0.1uF	50V
C217	1-164-159-11	CERAMIC 0.1uF	50V
C218	1-126-967-11	ELECT 47uF	20% 50V
C219	1-130-483-00	MYLAR 0.01uF	5% 50V
C220	1-130-483-00	MYLAR 0.01uF	5% 50V
C221	1-130-483-00	MYLAR 0.01uF	5% 50V
C222	1-130-483-00	MYLAR 0.01uF	5% 50V
C223	1-164-159-11	CERAMIC 0.1uF	50V
C224	1-164-159-11	CERAMIC 0.1uF	50V
C225	1-164-159-11	CERAMIC 0.1uF	50V
C226	1-164-159-11	CERAMIC 0.1uF	50V
C230	1-164-159-11	CERAMIC 0.1uF	50V
C231	1-164-159-11	CERAMIC 0.1uF	50V
C232	1-164-159-11	CERAMIC 0.1uF	50V
C233	1-164-159-11	CERAMIC 0.1uF	50V
C234	1-164-159-11	CERAMIC 0.1uF	50V
C235	1-164-159-11	CERAMIC 0.1uF	50V
C236	1-126-941-11	ELECT 470uF	20% 25V
C240	1-164-159-11	CERAMIC 0.1uF	50V
C241	1-164-159-11	CERAMIC 0.1uF	50V
C248	1-164-159-11	CERAMIC 0.1uF	50V
C249	1-164-159-11	CERAMIC 0.1uF	50V
C250	1-164-159-11	CERAMIC 0.1uF	50V
C251	1-164-159-11	CERAMIC 0.1uF	50V
C252	1-164-159-11	CERAMIC 0.1uF	50V
C253	1-164-159-11	CERAMIC 0.1uF	50V
C254	1-164-159-11	CERAMIC 0.1uF	50V

Ref. No.	Part No.	Description	Remark
C255	1-164-159-11	CERAMIC 0.1uF	50V
C256	1-164-159-11	CERAMIC 0.1uF	50V
C257	1-164-159-11	CERAMIC 0.1uF	50V
C258	1-164-159-11	CERAMIC 0.1uF	50V
C259	1-164-159-11	CERAMIC 0.1uF	50V
C260	1-130-469-00	MYLAR 680PF	5% 50V
C261	1-130-469-00	MYLAR 680PF	5% 50V
C262	1-130-469-00	MYLAR 680PF	5% 50V
C270	1-126-937-11	ELECT 4700uF	20% 16V
		< CONNECTOR >	
* CN201	1-564-509-11	PLUG, CONNECTOR 6P	
* CN211	1-764-212-11	CONNECTOR, BOARD TO BOARD 13P	
CN212	1-750-176-11	HOUSING, CONNECTOR(PC BOARD) 15P	
CN213	1-750-176-11	HOUSING, CONNECTOR(PC BOARD) 15P	
CN214	1-750-176-11	HOUSING, CONNECTOR(PC BOARD) 15P	
CN215	1-750-176-11	HOUSING, CONNECTOR(PC BOARD) 15P	
CN216	1-750-176-11	HOUSING, CONNECTOR(PC BOARD) 15P	
CN217	1-750-176-11	HOUSING, CONNECTOR(PC BOARD) 15P	
CN218	1-750-176-11	HOUSING, CONNECTOR(PC BOARD) 15P	
CN219	1-750-176-11	HOUSING, CONNECTOR(PC BOARD) 15P	
		< DIODE >	
D201	8-719-109-97	DIODE RD6. 8ESB	
D202	8-719-921-19	DIODE 1SS119-25TG	
D210	8-719-200-77	DIODE 10E2N	
D230	8-719-921-19	DIODE 1SS119-25TG	
D231	8-719-921-19	DIODE 1SS119-25TG	
D232	8-719-921-19	DIODE 1SS119-25TG	
D233	8-719-921-19	DIODE 1SS119-25TG	
D234	8-719-921-19	DIODE 1SS119-25TG	
D235	8-719-921-19	DIODE 1SS119-25TG	
D236	8-719-921-19	DIODE 1SS119-25TG	
D237	8-719-921-19	DIODE 1SS119-25TG	
D238	8-719-110-96	DIODE RD2. 0ES-T2B2	
D242	8-719-921-19	DIODE 1SS119-25TG	
D244	8-719-921-19	DIODE 1SS119-25TG	
D245	8-719-921-19	DIODE 1SS119-25TG	
D250	8-719-921-19	DIODE 1SS119-25TG	
D251	8-719-921-19	DIODE 1SS119-25TG	
D252	8-719-921-19	DIODE 1SS119-25TG	
D253	8-719-921-19	DIODE 1SS119-25TG	
D254	8-719-921-19	DIODE 1SS119-25TG	
D255	8-719-921-19	DIODE 1SS119-25TG	
D256	8-719-921-19	DIODE 1SS119-25TG	
D257	8-719-921-19	DIODE 1SS119-25TG	
D262	8-719-921-19	DIODE 1SS119-25TG	
D263	8-719-921-19	DIODE 1SS119-25TG	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
D264	8-719-921-19	DIODE 1SS119-25TG		< TRANSISTOR >			
D265	8-719-921-19	DIODE 1SS119-25TG		Q201	8-729-030-03	TRANSISTOR DTC144ESA-TP	
D270	8-719-921-19	DIODE 1SS119-25TG		Q202	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
D271	8-719-921-19	DIODE 1SS119-25TG		Q203	8-729-030-03	TRANSISTOR DTC144ESA-TP	
D272	8-719-921-19	DIODE 1SS119-25TG		Q204	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
D273	8-719-921-19	DIODE 1SS119-25TG		Q205	8-729-195-23	TRANSISTOR 2SA952TP-K1	
D274	8-719-921-19	DIODE 1SS119-25TG		Q206	8-729-030-03	TRANSISTOR DTC144ESA-TP	
D275	8-719-921-19	DIODE 1SS119-25TG		Q207	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
D276	8-719-921-19	DIODE 1SS119-25TG		Q208	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
D277	8-719-921-19	DIODE 1SS119-25TG		Q210	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
D282	8-719-921-19	DIODE 1SS119-25TG		Q211	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
D283	8-719-921-19	DIODE 1SS119-25TG		Q212	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
D284	8-719-921-19	DIODE 1SS119-25TG		Q213	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
D285	8-719-921-19	DIODE 1SS119-25TG		Q214	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
< IC >				Q215	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
IC202	8-759-636-16	IC M51957AL		Q216	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
IC203	8-759-636-16	IC M51957AL		Q217	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
IC204	8-759-294-18	IC HN58C65P-25		Q230	8-729-195-23	TRANSISTOR 2SA952TP-K1	
* IC205	8-759-462-01	IC HD6475208P10-V300		Q231	8-729-195-23	TRANSISTOR 2SA952TP-K1	
IC207	8-759-007-19	IC TC74HC4051AP		Q232	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
IC208	8-759-007-19	IC TC74HC4051AP		Q234	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
IC209	8-759-007-20	IC TC74HC4052AP		Q236	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
IC210	8-759-032-85	IC TC74HC138AP		Q237	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
IC211	8-759-032-85	IC TC74HC138AP		Q238	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
IC212	8-759-032-85	IC TC74HC138AP		Q239	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
IC213	8-759-032-85	IC TC74HC138AP		Q240	8-729-030-03	TRANSISTOR DTC144ESA-TP	
IC214	8-759-916-48	IC TC74HC151AP		Q241	8-729-030-03	TRANSISTOR DTC144ESA-TP	
IC216	8-759-916-52	IC TC74HC165AP		Q242	8-729-030-03	TRANSISTOR DTC144ESA-TP	
IC217	8-759-233-43	IC TC74HC595AP		Q243	8-729-030-03	TRANSISTOR DTC144ESA-TP	
IC218	8-759-916-52	IC TC74HC165AP		Q244	8-729-030-03	TRANSISTOR DTC144ESA-TP	
IC219	8-759-233-43	IC TC74HC595AP		Q245	8-729-030-03	TRANSISTOR DTC144ESA-TP	
IC220	8-759-916-52	IC TC74HC165AP		Q246	8-729-030-03	TRANSISTOR DTC144ESA-TP	
IC221	8-759-233-43	IC TC74HC595AP		Q247	8-729-030-03	TRANSISTOR DTC144ESA-TP	
IC222	8-759-916-52	IC TC74HC165AP		Q250	8-729-195-23	TRANSISTOR 2SA952TP-K1	
IC223	8-759-233-43	IC TC74HC595AP		Q251	8-729-195-23	TRANSISTOR 2SA952TP-K1	
< COIL >				Q252	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
L201	1-424-090-11	COIL, LINE FILTER		Q253	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
L202	1-424-090-11	COIL, LINE FILTER		Q254	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
L203	1-424-090-11	COIL, LINE FILTER		Q255	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
L204	1-424-090-11	COIL, LINE FILTER		Q256	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
L205	1-424-090-11	COIL, LINE FILTER		Q257	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
L206	1-424-090-11	COIL, LINE FILTER		Q258	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
L207	1-424-090-11	COIL, LINE FILTER		Q259	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
L208	1-424-090-11	COIL, LINE FILTER		Q260	8-729-030-03	TRANSISTOR DTC144ESA-TP	
< PHOTO INTERRUPTER >				Q261	8-729-030-03	TRANSISTOR DTC144ESA-TP	
PH201	8-719-938-71	PHOTO COUPLER PC900		Q262	8-729-030-03	TRANSISTOR DTC144ESA-TP	
				Q263	8-729-030-03	TRANSISTOR DTC144ESA-TP	
				Q264	8-729-030-03	TRANSISTOR DTC144ESA-TP	

CPU

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark
Q265	8-729-030-03	TRANSISTOR	DTC144ESA-TP				R226	1-247-807-31	CARBON	100	5%	1/4W	
Q266	8-729-030-03	TRANSISTOR	DTC144ESA-TP				R228	1-247-807-31	CARBON	100	5%	1/4W	
Q267	8-729-030-03	TRANSISTOR	DTC144ESA-TP				R229	1-247-807-31	CARBON	100	5%	1/4W	
							R230	1-247-807-31	CARBON	100	5%	1/4W	
Q270	8-729-195-23	TRANSISTOR	2SA952TP-K1										
Q271	8-729-195-23	TRANSISTOR	2SA952TP-K1				R231	1-249-433-11	CARBON	22K	5%	1/4W	
Q272	8-729-207-46	TRANSISTOR	2SC3112B-TPE2				R232	1-215-421-00	METAL	1K	1%	1/4W	
Q273	8-729-207-46	TRANSISTOR	2SC3112B-TPE2				R233	1-249-437-11	CARBON	47K	5%	1/4W	
Q274	8-729-207-46	TRANSISTOR	2SC3112B-TPE2				R234	1-249-437-11	CARBON	47K	5%	1/4W	
							R240	1-215-435-00	METAL	3.9K	1%	1/4W	
Q276	8-729-207-46	TRANSISTOR	2SC3112B-TPE2										
Q277	8-729-207-46	TRANSISTOR	2SC3112B-TPE2				R241	1-215-435-00	METAL	3.9K	1%	1/4W	
Q278	8-729-207-46	TRANSISTOR	2SC3112B-TPE2				R242	1-215-435-00	METAL	3.9K	1%	1/4W	
Q279	8-729-207-46	TRANSISTOR	2SC3112B-TPE2				R243	1-215-435-00	METAL	3.9K	1%	1/4W	
Q280	8-729-030-03	TRANSISTOR	DTC144ESA-TP				R244	1-215-435-00	METAL	3.9K	1%	1/4W	
							R245	1-215-435-00	METAL	3.9K	1%	1/4W	
Q281	8-729-030-03	TRANSISTOR	DTC144ESA-TP										
Q282	8-729-030-03	TRANSISTOR	DTC144ESA-TP				R246	1-215-435-00	METAL	3.9K	1%	1/4W	
Q283	8-729-030-03	TRANSISTOR	DTC144ESA-TP				R247	1-215-435-00	METAL	3.9K	1%	1/4W	
Q284	8-729-030-03	TRANSISTOR	DTC144ESA-TP				R250	1-215-435-00	METAL	3.9K	1%	1/4W	
Q285	8-729-030-03	TRANSISTOR	DTC144ESA-TP				R251	1-215-435-00	METAL	3.9K	1%	1/4W	
							R252	1-215-435-00	METAL	3.9K	1%	1/4W	
Q286	8-729-030-03	TRANSISTOR	DTC144ESA-TP										
Q287	8-729-030-03	TRANSISTOR	DTC144ESA-TP				R253	1-215-435-00	METAL	3.9K	1%	1/4W	
							R254	1-215-435-00	METAL	3.9K	1%	1/4W	
		< RESISTOR & CAPACITOR >					R255	1-215-435-00	METAL	3.9K	1%	1/4W	
R201	1-249-437-11	CARBON	47K	5%	1/4W		R256	1-215-435-00	METAL	3.9K	1%	1/4W	
R202	1-249-437-11	CARBON	47K	5%	1/4W		R257	1-215-435-00	METAL	3.9K	1%	1/4W	
R204	1-215-437-00	METAL	4.7K	1%	1/4W								
R205	1-215-405-00	METAL	220	1%	1/4W		R260	1-215-435-00	METAL	3.9K	1%	1/4W	
R206	1-215-405-00	METAL	220	1%	1/4W		R261	1-215-435-00	METAL	3.9K	1%	1/4W	
							R262	1-215-435-00	METAL	3.9K	1%	1/4W	
R207	1-215-405-00	METAL	220	1%	1/4W		R263	1-215-435-00	METAL	3.9K	1%	1/4W	
R208	1-249-433-11	CARBON	22K	5%	1/4W		△R282	1-202-972-61	FUSIBLE	1	5%	1/4W	F
R209	1-215-405-00	METAL	220	1%	1/4W								
R210	1-215-405-00	METAL	220	1%	1/4W		△R283	1-202-972-61	FUSIBLE	1	5%	1/4W	F
R211	1-215-445-00	METAL	10K	1%	1/4W		△R284	1-202-972-61	FUSIBLE	1	5%	1/4W	F
							△R285	1-202-972-61	FUSIBLE	1	5%	1/4W	F
R212	1-164-159-11	CERAMIC	0.1MF		50V		R286	1-215-437-00	METAL	4.7K	1%	1/4W	
R212	1-215-435-00	METAL	3.9K	1%	1/4W		R287	1-215-437-00	METAL	4.7K	1%	1/4W	
R213	1-215-441-00	METAL	6.8K	1%	1/4W								
R214	1-164-159-11	CERAMIC	0.1MF		50V		R288	1-215-437-00	METAL	4.7K	1%	1/4W	
R214	1-215-427-00	METAL	1.8K	1%	1/4W		R289	1-215-437-00	METAL	4.7K	1%	1/4W	
							R290	1-215-437-00	METAL	4.7K	1%	1/4W	
R215	1-215-437-00	METAL	4.7K	1%	1/4W		R291	1-215-437-00	METAL	4.7K	1%	1/4W	
R216	1-215-437-00	METAL	4.7K	1%	1/4W		R292	1-215-437-00	METAL	4.7K	1%	1/4W	
R217	1-215-437-00	METAL	4.7K	1%	1/4W								
R218	1-215-437-00	METAL	4.7K	1%	1/4W		R293	1-215-437-00	METAL	4.7K	1%	1/4W	
R219	1-215-437-00	METAL	4.7K	1%	1/4W		△R294	1-202-972-61	FUSIBLE	1	5%	1/4W	F
							△R295	1-202-972-61	FUSIBLE	1	5%	1/4W	F
R220	1-215-437-00	METAL	4.7K	1%	1/4W		R301	1-249-437-11	CARBON	47K	5%	1/4W	
R221	1-215-445-00	METAL	10K	1%	1/4W		R302	1-249-437-11	CARBON	47K	5%	1/4W	
R222	1-215-445-00	METAL	10K	1%	1/4W								
R223	1-247-807-31	CARBON	100	5%	1/4W		R303	1-249-437-11	CARBON	47K	5%	1/4W	
R224	1-247-807-31	CARBON	100	5%	1/4W		R304	1-249-437-11	CARBON	47K	5%	1/4W	
							R305	1-249-437-11	CARBON	47K	5%	1/4W	
R225	1-247-807-31	CARBON	100	5%	1/4W		R306	1-249-437-11	CARBON	47K	5%	1/4W	
							R307	1-249-437-11	CARBON	47K	5%	1/4W	

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Les composants identifiés
par une marque  sont
critiques pour la sécurité.
Ne les remplacer que par une pièce
portant le numéro spécifié.

△印の部品、または△印付きの点線で囲まれた部品は、安全性を維持するために重要な部品です。
従って交換時は、必ず指定の部品を使用して下さい。

Ref. No.	Part No.	Description	Remark		
R308	1-249-437-11	CARBON	47K	5%	1/4W
R309	1-249-437-11	CARBON	47K	5%	1/4W
R310	1-249-437-11	CARBON	47K	5%	1/4W
R311	1-249-437-11	CARBON	47K	5%	1/4W
R312	1-249-437-11	CARBON	47K	5%	1/4W
R313	1-249-437-11	CARBON	47K	5%	1/4W
R314	1-249-437-11	CARBON	47K	5%	1/4W
R315	1-249-437-11	CARBON	47K	5%	1/4W
R316	1-249-437-11	CARBON	47K	5%	1/4W
△R320	1-249-393-11	CARBON	10	5%	1/4W F
△R321	1-249-393-11	CARBON	10	5%	1/4W F
△R322	1-249-393-11	CARBON	10	5%	1/4W F
△R323	1-249-393-11	CARBON	10	5%	1/4W F
△R324	1-249-393-11	CARBON	10	5%	1/4W F
△R325	1-249-393-11	CARBON	10	5%	1/4W F
△R326	1-249-393-11	CARBON	10	5%	1/4W F
△R327	1-249-393-11	CARBON	10	5%	1/4W F
R330	1-215-421-00	METAL	1K	1%	1/4W
△R331	1-212-869-00	FUSIBLE	33	5%	1/4W F
R332	1-249-437-11	CARBON	47K	5%	1/4W
R333	1-249-437-11	CARBON	47K	5%	1/4W
R334	1-249-437-11	CARBON	47K	5%	1/4W
R335	1-249-437-11	CARBON	47K	5%	1/4W
△R337	1-212-869-00	FUSIBLE	33	5%	1/4W F
R338	1-249-437-11	CARBON	47K	5%	1/4W
R339	1-249-437-11	CARBON	47K	5%	1/4W
R340	1-249-437-11	CARBON	47K	5%	1/4W
R341	1-249-437-11	CARBON	47K	5%	1/4W
△R351	1-212-869-00	FUSIBLE	33	5%	1/4W F
R352	1-249-437-11	CARBON	47K	5%	1/4W
R353	1-249-437-11	CARBON	47K	5%	1/4W
R354	1-249-437-11	CARBON	47K	5%	1/4W
R355	1-249-437-11	CARBON	47K	5%	1/4W
△R357	1-212-869-00	FUSIBLE	33	5%	1/4W F
R358	1-249-437-11	CARBON	47K	5%	1/4W
R359	1-249-437-11	CARBON	47K	5%	1/4W
R360	1-249-437-11	CARBON	47K	5%	1/4W
R361	1-249-437-11	CARBON	47K	5%	1/4W
△R371	1-212-869-00	FUSIBLE	33	5%	1/4W F
R372	1-249-437-11	CARBON	47K	5%	1/4W
R373	1-249-437-11	CARBON	47K	5%	1/4W
R374	1-249-437-11	CARBON	47K	5%	1/4W
R375	1-249-437-11	CARBON	47K	5%	1/4W
△R377	1-212-869-00	FUSIBLE	33	5%	1/4W F
R378	1-249-437-11	CARBON	47K	5%	1/4W
R379	1-249-437-11	CARBON	47K	5%	1/4W
R380	1-249-437-11	CARBON	47K	5%	1/4W
R381	1-249-437-11	CARBON	47K	5%	1/4W

Ref. No.	Part No.	Description	Remark		
R401	1-249-437-11	CARBON	47K	5%	1/4W
R402	1-249-437-11	CARBON	47K	5%	1/4W
R403	1-249-437-11	CARBON	47K	5%	1/4W
R404	1-249-437-11	CARBON	47K	5%	1/4W
R405	1-249-437-11	CARBON	47K	5%	1/4W
R406	1-249-437-11	CARBON	47K	5%	1/4W
R407	1-249-437-11	CARBON	47K	5%	1/4W
R408	1-249-437-11	CARBON	47K	5%	1/4W
R411	1-249-437-11	CARBON	47K	5%	1/4W
R412	1-249-437-11	CARBON	47K	5%	1/4W
R413	1-249-437-11	CARBON	47K	5%	1/4W
R414	1-249-437-11	CARBON	47K	5%	1/4W
R415	1-249-437-11	CARBON	47K	5%	1/4W
R416	1-249-437-11	CARBON	47K	5%	1/4W
R417	1-249-437-11	CARBON	47K	5%	1/4W
R418	1-249-437-11	CARBON	47K	5%	1/4W
R421	1-249-437-11	CARBON	47K	5%	1/4W
R422	1-249-437-11	CARBON	47K	5%	1/4W
R423	1-249-437-11	CARBON	47K	5%	1/4W
R424	1-249-437-11	CARBON	47K	5%	1/4W
R425	1-249-437-11	CARBON	47K	5%	1/4W
R426	1-249-437-11	CARBON	47K	5%	1/4W
R427	1-249-437-11	CARBON	47K	5%	1/4W
R428	1-249-437-11	CARBON	47K	5%	1/4W
R429	1-215-445-00	METAL	10K	1%	1/4W

< SWITCH >

SW201	1-692-994-11	SWITCH, TACTILE (ILLUMINATED)
SW203	1-692-994-11	SWITCH, TACTILE (ILLUMINATED)
SW205	1-692-994-11	SWITCH, TACTILE (ILLUMINATED)
SW206	1-692-994-11	SWITCH, TACTILE (ILLUMINATED)
SW207	1-692-994-11	SWITCH, TACTILE (ILLUMINATED)
SW208	1-692-994-11	SWITCH, TACTILE (ILLUMINATED)
SW211	1-692-890-11	SWITCH, TACTILE
SW212	1-692-890-11	SWITCH, TACTILE
SW213	1-692-890-11	SWITCH, TACTILE
SW214	1-692-890-11	SWITCH, TACTILE
SW215	1-692-890-11	SWITCH, TACTILE
SW216	1-692-890-11	SWITCH, TACTILE
SW217	1-692-890-11	SWITCH, TACTILE
SW218	1-692-890-11	SWITCH, TACTILE
SW221	1-692-994-11	SWITCH, TACTILE (ILLUMINATED)
SW222	1-692-994-11	SWITCH, TACTILE (ILLUMINATED)
SW223	1-692-994-11	SWITCH, TACTILE (ILLUMINATED)
SW225	1-692-994-11	SWITCH, TACTILE (ILLUMINATED)
SW226	1-692-994-11	SWITCH, TACTILE (ILLUMINATED)
SW227	1-692-994-11	SWITCH, TACTILE (ILLUMINATED)
SW228	1-692-994-11	SWITCH, TACTILE (ILLUMINATED)

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

△印の部品、または△印付きの点線で囲まれた部品は、安全性を維持するために重要な部品です。従って交換時は、必ず指定の部品を使用して下さい。

Ref. No.	Part No.	Description	Remark			
< VIBRATOR >						
X201	1-577-110-11	VIBRATOR, CRYSTAL				

*	A-4587-524-A	GP-OUT1 BOARD, COMPLETE	*****			
*	1-560-242-11	BUS BAR 3P				
*	1-560-242-91	BUS BAR 10P				
< CAPACITOR >						
C102	1-107-597-11	MICA	22PF	5%	500V	
C103	1-126-967-11	ELECT	47uF	20%	50V	
C104	1-126-967-11	ELECT	47uF	20%	50V	
C105	1-126-949-11	ELECT	220uF	20%	35V	
C106	1-107-202-00	MICA	10PF	5%	500V	
C107	1-126-967-11	ELECT	47uF	20%	50V	
C108	1-126-967-11	ELECT	47uF	20%	50V	
C109	1-107-597-11	MICA	22PF	5%	500V	
C110	1-107-202-00	MICA	10PF	5%	500V	
C111	1-126-941-11	ELECT	470uF	20%	25V	
C112	1-126-941-11	ELECT	470uF	20%	25V	
C113	1-126-949-11	ELECT	220uF	20%	35V	
C115	1-126-967-11	ELECT	47uF	20%	50V	
C116	1-126-967-11	ELECT	47uF	20%	50V	
C117	1-126-967-11	ELECT	47uF	20%	50V	
C118	1-126-967-11	ELECT	47uF	20%	50V	
C119	1-107-163-00	MICA	47PF	5%	500V	
C120	1-126-967-11	ELECT	47uF	20%	50V	
C130	1-130-467-00	MYLAR	470PF	5%	50V	
C201	1-126-941-11	ELECT	470uF	20%	25V	
C202	1-107-202-00	MICA	10PF	5%	500V	
C203	1-126-967-11	ELECT	47uF	20%	50V	
C204	1-126-967-11	ELECT	47uF	20%	50V	
C205	1-126-949-11	ELECT	220uF	20%	35V	
C206	1-126-967-11	ELECT	47uF	20%	50V	
C207	1-126-967-11	ELECT	47uF	20%	50V	
C208	1-126-967-11	ELECT	47uF	20%	50V	
C209	1-107-597-11	MICA	22PF	5%	500V	
C210	1-107-202-00	MICA	10PF	5%	500V	
C211	1-126-941-11	ELECT	470uF	20%	25V	
C212	1-126-941-11	ELECT	470uF	20%	25V	
C213	1-126-967-11	ELECT	47uF	20%	50V	
C301	1-126-942-61	ELECT	1000uF	20%	25V	
C302	1-126-942-61	ELECT	1000uF	20%	25V	
< CONNECTOR >						
* CN1	1-573-991-11	PIN, CONNECTOR (PC BOARD) 50P				

Ref. No.	Part No.	Description	Remark
* CN2	1-564-519-11	PLUG, CONNECTOR 4P	
* CN3	1-565-730-11	PIN, CONNECTOR(RIGHT ANGLE) 34P	
* CN4	1-564-507-11	PLUG, CONNECTOR 4P	
* CN5	1-764-211-11	CONNECTOR, BOARD TO BOARD 13P	
* CN6	1-764-211-11	CONNECTOR, BOARD TO BOARD 13P	
CN8	1-778-008-11	CONNECTOR (PLUG) 3P	
CN9	1-580-041-11	JACK, LARGE (2 GANG)	
CN10	1-778-008-11	CONNECTOR (PLUG) 3P	
CN11	1-537-865-11	TERMINAL (M3)	
< DIODE >			
D101	8-719-921-19	DIODE	1SS119-25TG
D102	8-719-113-56	DIODE	RD22ES-T2B2
D103	8-719-113-56	DIODE	RD22ES-T2B2
D104	8-719-113-56	DIODE	RD22ES-T2B2
D105	8-719-113-56	DIODE	RD22ES-T2B2
D106	8-719-921-19	DIODE	1SS119-25TG
D107	8-719-113-56	DIODE	RD22ES-T2B2
D108	8-719-113-56	DIODE	RD22ES-T2B2
D109	8-719-113-56	DIODE	RD22ES-T2B2
D110	8-719-113-56	DIODE	RD22ES-T2B2
D201	8-719-921-19	DIODE	1SS119-25TG
D202	8-719-113-56	DIODE	RD22ES-T2B2
D203	8-719-113-56	DIODE	RD22ES-T2B2
D204	8-719-113-56	DIODE	RD22ES-T2B2
D205	8-719-113-56	DIODE	RD22ES-T2B2
D206	8-719-921-19	DIODE	1SS119-25TG
D208	8-719-921-19	DIODE	1SS119-25TG
< IC >			
IC101	8-759-710-59	IC	NJM4580D-D
IC102	8-759-710-59	IC	NJM4580D-D
IC103	8-759-710-59	IC	NJM4580D-D
IC104	8-759-710-59	IC	NJM4580D-D
IC201	8-759-710-59	IC	NJM4580D-D
IC202	8-759-710-59	IC	NJM4580D-D
< COIL >			
L102	1-424-090-11	COIL, LINE FILTER	
< TRANSISTOR >			
Q101	8-729-354-52	TRANSISTOR	2SC2545-ETZ
Q102	8-729-354-52	TRANSISTOR	2SC2545-ETZ
Q104	8-729-354-52	TRANSISTOR	2SC2545-ETZ
Q105	8-729-354-52	TRANSISTOR	2SC2545-ETZ
Q107	8-729-232-29	TRANSISTOR	2SK362-BL
Q108	8-729-030-03	TRANSISTOR	DTC144ESA-TP
Q201	8-729-354-52	TRANSISTOR	2SC2545-ETZ

Ref. No.	Part No.	Description	Remark
Q202	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q203	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q204	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q207	8-729-232-29	TRANSISTOR 2SK362-BL	
Q208	8-729-030-03	TRANSISTOR DTC144ESA-TP	

< RESISTOR >

R101	1-215-427-00	METAL	1.8K	1%	1/4W
R103	1-215-421-00	METAL	1K	1%	1/4W
R104	1-215-421-00	METAL	1K	1%	1/4W
R105	1-215-405-00	METAL	220	1%	1/4W
R105	1-247-807-31	CARBON	100	5%	1/4W
R106	1-215-427-00	METAL	1.8K	1%	1/4W
R108	1-215-429-00	METAL	2.2K	1%	1/4W
R109	1-249-437-11	CARBON	47K	5%	1/4W
R110	1-247-887-00	CARBON	220K	5%	1/4W
R111	1-249-437-11	CARBON	47K	5%	1/4W
R114	1-215-421-00	METAL	1K	1%	1/4W
R115	1-215-421-00	METAL	1K	1%	1/4W
R116	1-247-807-31	CARBON	100	5%	1/4W
R119	1-215-411-00	METAL	390	1%	1/4W
R120	1-215-431-00	METAL	2.7K	1%	1/4W
R121	1-247-887-00	CARBON	220K	5%	1/4W
R122	1-249-441-11	CARBON	100K	5%	1/4W
R123	1-215-435-00	METAL	3.9K	1%	1/4W
R124	1-247-807-31	CARBON	100	5%	1/4W
R125	1-215-440-00	METAL	6.2K	1%	1/4W
R126	1-215-440-00	METAL	6.2K	1%	1/4W
R127	1-215-435-00	METAL	3.9K	1%	1/4W
R128	1-215-435-00	METAL	3.9K	1%	1/4W
R129	1-215-440-00	METAL	6.2K	1%	1/4W
R130	1-215-435-00	METAL	3.9K	1%	1/4W
R131	1-247-889-00	CARBON	270K	5%	1/4W
R132	1-215-440-00	METAL	6.2K	1%	1/4W
R133	1-249-397-11	CARBON	22	5%	1/4W
R134	1-249-397-11	CARBON	22	5%	1/4W
R135	1-247-887-00	CARBON	220K	5%	1/4W
R136	1-247-887-00	CARBON	220K	5%	1/4W
R137	1-215-437-00	METAL	4.7K	1%	1/4W
R138	1-215-437-00	METAL	4.7K	1%	1/4W
R140	1-249-397-11	CARBON	22	5%	1/4W
R141	1-247-887-00	CARBON	220K	5%	1/4W
R142	1-249-441-11	CARBON	100K	5%	1/4W
R143	1-215-421-00	METAL	1K	1%	1/4W
R144	1-215-421-00	METAL	1K	1%	1/4W
R145	1-247-895-00	CARBON	470K	5%	1/4W
R146	1-247-887-00	CARBON	220K	5%	1/4W
R147	1-247-887-00	CARBON	220K	5%	1/4W

Ref. No.	Part No.	Description	Remark
R148	1-247-887-00	CARBON	220K 5% 1/4W
R150	1-249-397-11	CARBON	22 5% 1/4W
R151	1-215-439-00	METAL	5.6K 1% 1/4W
R152	1-215-439-00	METAL	5.6K 1% 1/4W
R153	1-215-449-00	METAL	15K 1% 1/4W
R154	1-215-449-00	METAL	15K 1% 1/4W
R155	1-247-887-00	CARBON	220K 5% 1/4W
R156	1-249-441-11	CARBON	100K 5% 1/4W
R157	1-249-441-11	CARBON	100K 5% 1/4W
R158	1-249-438-11	CARBON	56K 5% 1/4W
R159	1-249-438-11	CARBON	56K 5% 1/4W
△R160	1-212-849-00	FUSIBLE	4.7 5% 1/4W F
△R161	1-212-849-00	FUSIBLE	4.7 5% 1/4W F
△R162	1-212-849-00	FUSIBLE	4.7 5% 1/4W F
R170	1-249-397-11	CARBON	22 5% 1/4W
R201	1-215-427-00	METAL	1.8K 1% 1/4W
R202	1-249-433-11	CARBON	22K 5% 1/4W
R203	1-215-421-00	METAL	1K 1% 1/4W
R204	1-215-421-00	METAL	1K 1% 1/4W
R205	1-215-405-00	METAL	220 1% 1/4W
R205	1-247-807-31	CARBON	100 5% 1/4W
R206	1-215-417-00	METAL	680 1% 1/4W
R207	1-215-437-00	METAL	4.7K 1% 1/4W
R208	1-215-437-00	METAL	4.7K 1% 1/4W
R209	1-215-437-00	METAL	4.7K 1% 1/4W
R210	1-247-887-00	CARBON	220K 5% 1/4W
R211	1-215-437-00	METAL	4.7K 1% 1/4W
△R212	1-212-879-11	FUSIBLE	82 5% 1/4W F
△R213	1-212-879-11	FUSIBLE	82 5% 1/4W F
R214	1-215-449-00	METAL	15K 1% 1/4W
R222	1-249-441-11	CARBON	100K 5% 1/4W
R223	1-215-435-00	METAL	3.9K 1% 1/4W
R224	1-247-807-31	CARBON	100 5% 1/4W
R225	1-215-440-00	METAL	6.2K 1% 1/4W
R226	1-215-440-00	METAL	6.2K 1% 1/4W
R227	1-215-435-00	METAL	3.9K 1% 1/4W
R228	1-215-435-00	METAL	3.9K 1% 1/4W
R229	1-215-440-00	METAL	6.2K 1% 1/4W
R230	1-215-435-00	METAL	3.9K 1% 1/4W
R231	1-247-889-00	CARBON	270K 5% 1/4W
R232	1-215-440-00	METAL	6.2K 1% 1/4W
R233	1-249-397-11	CARBON	22 5% 1/4W
R234	1-249-397-11	CARBON	22 5% 1/4W
R235	1-247-887-00	CARBON	220K 5% 1/4W
R236	1-247-887-00	CARBON	220K 5% 1/4W
R239	1-249-441-11	CARBON	100K 5% 1/4W
R240	1-215-437-00	METAL	4.7K 1% 1/4W
R241	1-215-437-00	METAL	4.7K 1% 1/4W
R245	1-247-895-00	CARBON	470K 5% 1/4W

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GP-OUT1

GP-OUT2

Ref. No.	Part No.	Description	Remark
< VARIABLE RESISTOR >			
RV101	1-238-478-11	RES, ADJ, CARBON 1M	
RV201	1-238-478-11	RES, ADJ, CARBON 1M	
< RELAY >			
RY101	1-515-787-11	RELAY	
RY102	1-515-787-11	RELAY	

*	A-4588-808-A	GP-OUT2 BOARD, COMPLETE	

< CAPACITOR >			
C51	1-130-467-00	MYLAR 470PF 5% 50V	
C401	1-126-967-11	ELECT 47uF 20% 50V	
C402	1-126-967-11	ELECT 47uF 20% 50V	
C403	1-126-967-11	ELECT 47uF 20% 50V	
C404	1-126-967-11	ELECT 47uF 20% 50V	
C405	1-126-967-11	ELECT 47uF 20% 50V	
C406	1-126-967-11	ELECT 47uF 20% 50V	
C407	1-126-967-11	ELECT 47uF 20% 50V	
C408	1-124-903-11	ELECT 1uF 20% 50V	
C409	1-126-967-11	ELECT 47uF 20% 50V	
C509	1-164-159-11	CERAMIC 0.1uF 50V	
C510	1-164-159-11	CERAMIC 0.1uF 50V	
< CONNECTOR >			
* CN401	1-764-212-11	CONNECTOR, BOARD TO BOARD 13P	
CN402	1-564-523-11	PLUG, CONNECTOR 8P	
* CN403	1-764-212-11	CONNECTOR, BOARD TO BOARD 13P	
CN404	1-750-177-11	PIN, CONNECTOR (PC BOARD) 15P	
< DIODE >			
D401	8-719-921-19	DIODE 1SS119-25TG	
D402	8-719-921-19	DIODE 1SS119-25TG	
D403	8-719-921-19	DIODE 1SS119-25TG	
D404	8-719-955-04	DIODE TLG113A	
D405	8-719-802-02	DIODE TLY113A	
D406	8-719-802-02	DIODE TLY113A	
D407	8-719-921-19	DIODE 1SS119-25TG	
D408	8-719-921-19	DIODE 1SS119-25TG	
D409	8-719-921-19	DIODE 1SS119-25TG	
D410	8-719-110-96	DIODE RD2.0ES-T2B2	
< IC >			
IC401	8-759-634-51	IC NJM4558D	
IC402	8-759-634-51	IC NJM4558D	
IC403	8-759-634-51	IC NJM4558D	
IC404	8-759-801-01	IC LC4966	

Ref. No.	Part No.	Description	Remark
IC405	8-759-916-52	IC TC74HC165AP	
IC406	8-759-233-43	IC TC74HC595AP	
< TRANSISTOR >			
Q401	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q402	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q403	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q405	8-729-029-56	TRANSISTOR DTA144ESA-TP	
Q406	8-729-029-56	TRANSISTOR DTA144ESA-TP	
Q407	8-729-195-23	TRANSISTOR 2SA952TP-K1	
Q408	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q409	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q410	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q411	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q412	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q413	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q414	8-729-029-56	TRANSISTOR DTA144ESA-TP	
Q415	8-729-029-56	TRANSISTOR DTA144ESA-TP	
Q416	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q417	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q418	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q419	8-729-030-03	TRANSISTOR DTC144ESA-TP	
< RESISTOR >			
R401	1-247-887-00	CARBON 220K 5% 1/4W	
R402	1-247-887-00	CARBON 220K 5% 1/4W	
R403	1-247-887-00	CARBON 220K 5% 1/4W	
R404	1-247-895-00	CARBON 470K 5% 1/4W	
R405	1-215-405-00	METAL 220 1% 1/4W	
R406	1-249-437-11	CARBON 47K 5% 1/4W	
R407	1-247-895-00	CARBON 470K 5% 1/4W	
R408	1-247-895-00	CARBON 470K 5% 1/4W	
R410	1-215-445-00	METAL 10K 1% 1/4W	
R411	1-215-445-00	METAL 10K 1% 1/4W	
R412	1-215-445-00	METAL 10K 1% 1/4W	
R413	1-215-437-00	METAL 4.7K 1% 1/4W	
R414	1-215-437-00	METAL 4.7K 1% 1/4W	
R415	1-215-440-00	METAL 6.2K 1% 1/4W	
R416	1-215-445-00	METAL 10K 1% 1/4W	
R417	1-215-421-00	METAL 1K 1% 1/4W	
R418	1-247-887-00	CARBON 220K 5% 1/4W	
R420	1-215-445-00	METAL 10K 1% 1/4W	
R421	1-215-445-00	METAL 10K 1% 1/4W	
△R422	1-212-869-00	FUSIBLE 33 5% 1/4W F	
R423	1-249-437-11	CARBON 47K 5% 1/4W	
R424	1-249-437-11	CARBON 47K 5% 1/4W	
R425	1-249-437-11	CARBON 47K 5% 1/4W	
R426	1-249-437-11	CARBON 47K 5% 1/4W	

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Ref. No.	Part No.	Description	Remark		
R427	1-215-421-00	METAL	1K	1%	1/4W
R428	1-215-421-00	METAL	1K	1%	1/4W
R429	1-249-437-11	CARBON	47K	5%	1/4W
R430	1-249-437-11	CARBON	47K	5%	1/4W
R431	1-247-887-00	CARBON	220K	5%	1/4W
R432	1-247-887-00	CARBON	220K	5%	1/4W
R433	1-247-887-00	CARBON	220K	5%	1/4W
R434	1-247-887-00	CARBON	220K	5%	1/4W
R435	1-247-887-00	CARBON	220K	5%	1/4W
R440	1-249-437-11	CARBON	47K	5%	1/4W
< VARIABLE RESISTOR >					
RV401	1-225-275-11	RES, VAR, CARBON 20K			
< SWITCH >					
SW401	1-554-824-21	SWITCH, PUSH (1 KEY)			
SW402	1-554-824-21	SWITCH, PUSH (1 KEY)			
SW403	1-554-824-21	SWITCH, PUSH (1 KEY)			
SW404	1-572-004-11	SWITCH, PUSH			
SW405	1-572-004-11	SWITCH, PUSH			

*	A-4588-811-A	HP BOARD, COMPLETE			

*	4-921-402-01	HEAT SINK			
	7-682-547-09	SCREW +B 3X6			
< CAPACITOR >					
C301	1-107-163-00	MICA	47PF	5%	500V
C303	1-107-163-00	MICA	47PF	5%	500V
C304	1-128-552-51	ELECT	47uF	20%	63V
C306	1-128-552-51	ELECT	47uF	20%	63V
C307	1-107-597-11	MICA	22PF	5%	500V
C308	1-126-967-11	ELECT	47uF	20%	50V
C309	1-107-597-11	MICA	22PF	5%	500V
C312	1-107-597-11	MICA	22PF	5%	500V
C313	1-107-597-11	MICA	22PF	5%	500V
C316	1-130-496-00	MYLAR	0.12uF	5%	50V
C317	1-126-963-11	ELECT	4.7uF	20%	50V
C318	1-126-942-61	ELECT	1000uF	20%	25V
C319	1-126-942-61	ELECT	1000uF	20%	25V
C321	1-128-552-51	ELECT	47uF	20%	63V
C322	1-126-967-11	ELECT	47uF	20%	50V
C323	1-126-967-11	ELECT	47uF	20%	50V
C324	1-126-967-11	ELECT	47uF	20%	50V
C325	1-107-202-00	MICA	10PF	5%	500V
C326	1-126-946-11	ELECT	6800uF	20%	25V
C327	1-126-946-11	ELECT	6800uF	20%	25V

Ref. No.	Part No.	Description	Remark		
C328	1-126-967-11	ELECT	47uF	20%	50V
C329	1-126-967-11	ELECT	47uF	20%	50V
C330	1-126-946-11	ELECT	6800uF	20%	25V
C331	1-107-202-00	MICA	10PF	5%	500V
C332	1-126-946-11	ELECT	6800uF	20%	25V
C333	1-130-483-00	MYLAR	0.01uF	5%	50V
C334	1-130-483-00	MYLAR	0.01uF	5%	50V

< CONNECTOR >

CN301	1-778-009-11	CONNECTOR (RECEPTACLE) 3P
CN302	1-750-860-11	CONNECTOR, BOARD TO BOARD 16P
CN303	1-750-860-11	CONNECTOR, BOARD TO BOARD 16P
CN304	1-507-796-71	JACK
CN305	1-507-796-71	JACK

< DIODE >

D301	8-719-113-56	DIODE	RD22ES-T2B2
D302	8-719-113-56	DIODE	RD22ES-T2B2
D303	8-719-113-56	DIODE	RD22ES-T2B2
D304	8-719-113-56	DIODE	RD22ES-T2B2
D305	8-719-921-19	DIODE	1SS119-25TG
D307	8-719-921-19	DIODE	1SS119-25TG
D308	8-719-921-19	DIODE	1SS119-25TG
D309	8-719-921-19	DIODE	1SS119-25TG
D310	8-719-921-19	DIODE	1SS119-25TG
D311	8-719-921-19	DIODE	1SS119-25TG
D312	8-719-921-19	DIODE	1SS119-25TG
D313	8-719-921-19	DIODE	1SS119-25TG
D314	8-719-921-19	DIODE	1SS119-25TG
D315	8-719-113-56	DIODE	RD22ES-T2B2
D316	8-719-113-56	DIODE	RD22ES-T2B2
D317	8-719-113-56	DIODE	RD22ES-T2B2
D318	8-719-113-56	DIODE	RD22ES-T2B2
D319	8-719-921-19	DIODE	1SS119-25TG
D320	8-719-921-19	DIODE	1SS119-25TG

< IC >

IC301	8-759-710-59	IC	NJM4580D-D
IC302	8-759-710-59	IC	NJM4580D-D
IC303	8-759-636-16	IC	M51957AL
IC304	8-759-710-59	IC	NJM4580D-D
IC305	8-759-710-59	IC	NJM4580D-D

< COIL >

L301	1-424-090-11	COIL, LINE FILTER
L302	1-424-090-11	COIL, LINE FILTER

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< TRANSISTOR >				R337	1-215-445-00	METAL 10K 1% 1/4W	
Q301	8-729-029-56	TRANSISTOR DTA144ESA-TP		△R338	1-202-972-61	FUSIBLE 1 5% 1/4W F	
Q302	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2		△R339	1-202-972-61	FUSIBLE 1 5% 1/4W F	
Q303	8-729-809-29	TRANSISTOR 2SC4431-K		△R340	1-202-972-61	FUSIBLE 1 5% 1/4W F	
Q304	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2		△R341	1-202-972-61	FUSIBLE 1 5% 1/4W F	
Q305	8-729-195-23	TRANSISTOR 2SA952TP-K1		△R342	1-212-849-00	FUSIBLE 4.7 5% 1/4W F	
Q306	8-729-809-26	TRANSISTOR 2SA1684-K		R343	1-215-437-00	METAL 4.7K 1% 1/4W	
Q307	8-729-809-29	TRANSISTOR 2SC4431-K		R344	1-215-437-00	METAL 4.7K 1% 1/4W	
Q308	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2		R345	1-215-437-00	METAL 4.7K 1% 1/4W	
Q309	8-729-195-23	TRANSISTOR 2SA952TP-K1		R346	1-215-437-00	METAL 4.7K 1% 1/4W	
Q310	8-729-809-26	TRANSISTOR 2SA1684-K		△R347	1-215-933-11	METAL OXIDE 33 5% 5W F	
Q311	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2		△R348	1-215-933-11	METAL OXIDE 33 5% 5W F	
< RESISTOR >				R349	1-215-449-00	METAL 15K 1% 1/4W	
R301	1-215-441-00	METAL 6.8K 1% 1/4W		R350	1-215-437-00	METAL 4.7K 1% 1/4W	
R302	1-215-441-00	METAL 6.8K 1% 1/4W		R351	1-215-445-00	METAL 10K 1% 1/4W	
R303	1-215-437-00	METAL 4.7K 1% 1/4W		R352	1-215-445-00	METAL 10K 1% 1/4W	
R304	1-215-449-00	METAL 15K 1% 1/4W		R353	1-215-445-00	METAL 10K 1% 1/4W	
R305	1-215-400-81	METAL 130 1% 1/4W		R354	1-215-437-00	METAL 4.7K 1% 1/4W	
R306	1-215-437-00	METAL 4.7K 1% 1/4W		R355	1-215-437-00	METAL 4.7K 1% 1/4W	
R307	1-215-449-00	METAL 15K 1% 1/4W		R356	1-215-445-00	METAL 10K 1% 1/4W	
R308	1-215-445-00	METAL 10K 1% 1/4W		△R357	1-202-972-61	FUSIBLE 1 5% 1/4W F	
R309	1-215-445-00	METAL 10K 1% 1/4W		△R358	1-202-972-61	FUSIBLE 1 5% 1/4W F	
R310	1-215-437-00	METAL 4.7K 1% 1/4W		△R359	1-202-972-61	FUSIBLE 1 5% 1/4W F	
R311	1-215-437-00	METAL 4.7K 1% 1/4W		△R360	1-202-972-61	FUSIBLE 1 5% 1/4W F	
△R314	1-212-849-00	FUSIBLE 4.7 5% 1/4W F		△R361	1-212-849-00	FUSIBLE 4.7 5% 1/4W F	
△R315	1-212-849-00	FUSIBLE 4.7 5% 1/4W F		< VARIABLE RESISTOR >			
△R316	1-212-849-00	FUSIBLE 4.7 5% 1/4W F		RV301	1-225-275-11	RES, VAR, CARBON 20K	
△R317	1-212-895-00	FUSIBLE 390 5% 1/4W F		RV302	1-225-276-11	RES, VAR, CARBON 10K/10K	
R318	1-215-449-00	METAL 15K 1% 1/4W		RV303	1-225-269-11	RES, VAR, CARBON 50K	
R319	1-215-437-00	METAL 4.7K 1% 1/4W		RV304	1-225-276-11	RES, VAR, CARBON 10K/10K	
R320	1-215-445-00	METAL 10K 1% 1/4W		< RELAY >			
R321	1-215-449-00	METAL 15K 1% 1/4W		RY301	1-515-787-11	RELAY	
R322	1-215-437-00	METAL 4.7K 1% 1/4W		< SWITCH >			
△R323	1-212-879-11	FUSIBLE 82 5% 1/4W F		SW301	1-572-004-11	SWITCH, PUSH	
R324	1-215-437-00	METAL 4.7K 1% 1/4W		*****			
R325	1-215-437-00	METAL 4.7K 1% 1/4W		* 1-660-908-11 MB BOARD			
R326	1-215-437-00	METAL 4.7K 1% 1/4W		*****			
R327	1-215-437-00	METAL 4.7K 1% 1/4W		< CONNECTOR >			
△R328	1-215-933-11	METAL OXIDE 33 5% 5W F		CN1	1-750-859-21	CONNECTOR, BOARD TO BOARD 16P	
△R329	1-215-933-11	METAL OXIDE 33 5% 5W F		CN2	1-750-859-21	CONNECTOR, BOARD TO BOARD 16P	
R330	1-215-449-00	METAL 15K 1% 1/4W		CN3	1-750-859-21	CONNECTOR, BOARD TO BOARD 16P	
R331	1-215-445-00	METAL 10K 1% 1/4W		CN4	1-750-859-21	CONNECTOR, BOARD TO BOARD 16P	
R332	1-215-437-00	METAL 4.7K 1% 1/4W		CN5	1-750-859-21	CONNECTOR, BOARD TO BOARD 16P	
R333	1-215-445-00	METAL 10K 1% 1/4W					
R334	1-215-445-00	METAL 10K 1% 1/4W					
R335	1-215-437-00	METAL 4.7K 1% 1/4W					
R336	1-215-437-00	METAL 4.7K 1% 1/4W					

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Ref. No.	Part No.	Description	Remark
CN6	1-750-859-21	CONNECTOR, BOARD TO BOARD 16P	
CN7	1-750-859-21	CONNECTOR, BOARD TO BOARD 16P	
CN8	1-750-859-21	CONNECTOR, BOARD TO BOARD 16P	

*	1-660-911-11	METER BOARD	

		< CAPACITOR >	
C101	1-164-159-11	CERAMIC 0.1uF	50V
C102	1-164-159-11	CERAMIC 0.1uF	50V
C103	1-164-159-11	CERAMIC 0.1uF	50V
C104	1-164-159-11	CERAMIC 0.1uF	50V
C111	1-126-923-11	ELECT 220uF	20% 10V
C112	1-126-923-11	ELECT 220uF	20% 10V
C113	1-126-923-11	ELECT 220uF	20% 10V
C114	1-126-923-11	ELECT 220uF	20% 10V
C115	1-126-923-11	ELECT 220uF	20% 10V
C116	1-126-923-11	ELECT 220uF	20% 10V
C117	1-126-923-11	ELECT 220uF	20% 10V
C118	1-126-923-11	ELECT 220uF	20% 10V
C119	1-126-923-11	ELECT 220uF	20% 10V
C120	1-126-923-11	ELECT 220uF	20% 10V
C121	1-126-923-11	ELECT 220uF	20% 10V
		< CONNECTOR >	
CN101	1-564-320-00	PIN, CONNECTOR (B2P-VH) 2P	
* CN102	1-564-509-11	PLUG, CONNECTOR 6P	
		< DIODE >	
D101	8-719-940-87	DIODE LD-101VR	
D102	8-719-984-42	DIODE HDSP-4830-S02	
D103	8-719-984-41	DIODE HDSP-4850-S22	
D104	8-719-984-41	DIODE HDSP-4850-S22	
D106	8-719-940-87	DIODE LD-101VR	
D107	8-719-984-42	DIODE HDSP-4830-S02	
D108	8-719-984-41	DIODE HDSP-4850-S22	
D109	8-719-984-41	DIODE HDSP-4850-S22	
D111	8-719-940-87	DIODE LD-101VR	
D112	8-719-984-42	DIODE HDSP-4830-S02	
D113	8-719-984-41	DIODE HDSP-4850-S22	
D114	8-719-984-41	DIODE HDSP-4850-S22	
D116	8-719-940-87	DIODE LD-101VR	
D117	8-719-984-42	DIODE HDSP-4830-S02	
D118	8-719-984-41	DIODE HDSP-4850-S22	
D119	8-719-984-41	DIODE HDSP-4850-S22	
D121	8-719-940-87	DIODE LD-101VR	
D122	8-719-984-42	DIODE HDSP-4830-S02	
D123	8-719-984-41	DIODE HDSP-4850-S22	
D124	8-719-984-41	DIODE HDSP-4850-S22	

Ref. No.	Part No.	Description	Remark
D126	8-719-940-87	DIODE LD-101VR	
D127	8-719-984-42	DIODE HDSP-4830-S02	
D128	8-719-984-41	DIODE HDSP-4850-S22	
D129	8-719-984-41	DIODE HDSP-4850-S22	
D131	8-719-940-87	DIODE LD-101VR	
D132	8-719-984-42	DIODE HDSP-4830-S02	
D133	8-719-984-41	DIODE HDSP-4850-S22	
D134	8-719-984-41	DIODE HDSP-4850-S22	
D136	8-719-940-87	DIODE LD-101VR	
D137	8-719-984-42	DIODE HDSP-4830-S02	
D138	8-719-984-41	DIODE HDSP-4850-S22	
D139	8-719-984-41	DIODE HDSP-4850-S22	
D141	8-719-940-87	DIODE LD-101VR	
D142	8-719-984-42	DIODE HDSP-4830-S02	
D143	8-719-984-41	DIODE HDSP-4850-S22	
D144	8-719-984-41	DIODE HDSP-4850-S22	
D148	8-719-940-87	DIODE LD-101VR	
D149	8-719-984-42	DIODE HDSP-4830-S02	
D150	8-719-984-41	DIODE HDSP-4850-S22	
D151	8-719-984-41	DIODE HDSP-4850-S22	
D152	8-719-975-13	DIODE 5082-7751C	
D153	8-719-975-13	DIODE 5082-7751C	
D154	8-719-975-13	DIODE 5082-7751C	
		< IC >	
IC101	8-759-603-19	IC M54977P	
IC102	8-759-603-19	IC M54977P	
IC103	8-759-603-19	IC M54977P	
IC104	8-759-603-19	IC M54977P	
		< TRANSISTOR >	
Q101	8-729-822-78	TRANSISTOR 2SB1204	
Q102	8-729-822-78	TRANSISTOR 2SB1204	
Q103	8-729-822-78	TRANSISTOR 2SB1204	
Q104	8-729-822-78	TRANSISTOR 2SB1204	
Q105	8-729-822-78	TRANSISTOR 2SB1204	
Q106	8-729-822-78	TRANSISTOR 2SB1204	
Q107	8-729-822-78	TRANSISTOR 2SB1204	
Q108	8-729-822-78	TRANSISTOR 2SB1204	
Q109	8-729-822-78	TRANSISTOR 2SB1204	
Q110	8-729-822-78	TRANSISTOR 2SB1204	
Q111	8-729-822-78	TRANSISTOR 2SB1204	
		< RESISTOR >	
R101	1-249-401-11	CARBON 47 5% 1/4W	
R102	1-249-401-11	CARBON 47 5% 1/4W	
R103	1-249-401-11	CARBON 47 5% 1/4W	
R104	1-249-401-11	CARBON 47 5% 1/4W	

METER

MN-IN1

Ref. No.	Part No.	Description	Remark		
R105	1-249-401-11	CARBON	47	5%	1/4W
R106	1-249-401-11	CARBON	47	5%	1/4W
R107	1-249-401-11	CARBON	47	5%	1/4W
R108	1-249-401-11	CARBON	47	5%	1/4W
R109	1-249-401-11	CARBON	47	5%	1/4W
R110	1-249-401-11	CARBON	47	5%	1/4W
R111	1-249-401-11	CARBON	47	5%	1/4W
R121	1-249-401-11	CARBON	47	5%	1/4W
R122	1-249-401-11	CARBON	47	5%	1/4W
R123	1-249-401-11	CARBON	47	5%	1/4W
R124	1-249-401-11	CARBON	47	5%	1/4W
R125	1-249-401-11	CARBON	47	5%	1/4W
R126	1-249-401-11	CARBON	47	5%	1/4W
R127	1-249-401-11	CARBON	47	5%	1/4W
R128	1-249-401-11	CARBON	47	5%	1/4W
R129	1-249-401-11	CARBON	47	5%	1/4W
R130	1-249-401-11	CARBON	47	5%	1/4W
R131	1-249-401-11	CARBON	47	5%	1/4W
R141	1-249-401-11	CARBON	47	5%	1/4W
R142	1-249-401-11	CARBON	47	5%	1/4W
R143	1-249-401-11	CARBON	47	5%	1/4W
R144	1-249-401-11	CARBON	47	5%	1/4W
R145	1-249-401-11	CARBON	47	5%	1/4W
R146	1-249-401-11	CARBON	47	5%	1/4W
R147	1-249-401-11	CARBON	47	5%	1/4W
R148	1-249-401-11	CARBON	47	5%	1/4W
R149	1-249-401-11	CARBON	47	5%	1/4W
R150	1-249-401-11	CARBON	47	5%	1/4W
R161	1-249-401-11	CARBON	47	5%	1/4W
R162	1-249-401-11	CARBON	47	5%	1/4W
R163	1-249-401-11	CARBON	47	5%	1/4W
R164	1-249-401-11	CARBON	47	5%	1/4W
R165	1-249-401-11	CARBON	47	5%	1/4W
R166	1-249-401-11	CARBON	47	5%	1/4W
R167	1-249-401-11	CARBON	47	5%	1/4W
R168	1-249-401-11	CARBON	47	5%	1/4W
R169	1-249-401-11	CARBON	47	5%	1/4W
R170	1-249-397-11	CARBON	22	5%	1/4W
R181	1-215-445-00	METAL	10K	1%	1/4W
R182	1-215-445-00	METAL	10K	1%	1/4W
R183	1-215-445-00	METAL	10K	1%	1/4W
R184	1-215-445-00	METAL	10K	1%	1/4W
R185	1-215-445-00	METAL	10K	1%	1/4W
R186	1-215-445-00	METAL	10K	1%	1/4W
R187	1-215-445-00	METAL	10K	1%	1/4W
R188	1-215-445-00	METAL	10K	1%	1/4W
R189	1-215-445-00	METAL	10K	1%	1/4W
R190	1-215-445-00	METAL	10K	1%	1/4W

Ref. No.	Part No.	Description	Remark		
R191	1-215-445-00	METAL	10K	1%	1/4W

*	A-4588-800-A	MN-IN1 BOARD, COMPLETE	*****		
*	1-560-242-11	BUS BAR 3P			
*	1-560-242-41	BUS BAR 11P			
< CAPACITOR >					
C1	1-107-163-00	MICA	47PF	5%	500V
C2	1-107-163-00	MICA	47PF	5%	500V
C5	1-128-552-51	ELECT	47uF	20%	63V
C6	1-128-552-51	ELECT	47uF	20%	63V
C15	1-107-597-11	MICA	22PF	5%	500V
C16	1-107-597-11	MICA	22PF	5%	500V
C17	1-126-917-11	ELECT	3300uF	20%	6.3V
C18	1-107-597-11	MICA	22PF	5%	500V
C19	1-107-597-11	MICA	22PF	5%	500V
C20	1-126-967-11	ELECT	47uF	20%	50V
C21	1-130-496-00	MYLAR	0.12uF	5%	50V
C22	1-130-496-00	MYLAR	0.12uF	5%	50V
C23	1-126-967-11	ELECT	47uF	20%	50V
C24	1-107-163-00	MICA	47PF	5%	500V
C25	1-107-163-00	MICA	47PF	5%	500V
C26	1-126-967-11	ELECT	47uF	20%	50V
C27	1-126-967-11	ELECT	47uF	20%	50V
C28	1-107-597-11	MICA	22PF	5%	500V
C29	1-107-597-11	MICA	22PF	5%	500V
C30	1-126-967-11	ELECT	47uF	20%	50V
C31	1-126-967-11	ELECT	47uF	20%	50V
C32	1-107-597-11	MICA	22PF	5%	500V
C33	1-126-967-11	ELECT	47uF	20%	50V
C34	1-126-967-11	ELECT	47uF	20%	50V
C35	1-130-481-00	MYLAR	0.0068uF	5%	50V
C36	1-130-476-00	MYLAR	0.0027uF	5%	50V
C37	1-107-597-11	MICA	22PF	5%	500V
C42	1-130-487-00	MYLAR	0.022uF	5%	50V
C43	1-130-483-00	MYLAR	0.01uF	5%	50V
C44	1-107-597-11	MICA	22PF	5%	500V
C45	1-126-967-11	ELECT	47uF	20%	50V
C46	1-107-163-00	MICA	47PF	5%	500V
C47	1-126-967-11	ELECT	47uF	20%	50V
C48	1-126-967-11	ELECT	47uF	20%	50V
C49	1-126-967-11	ELECT	47uF	20%	50V
C53	1-107-202-00	MICA	10PF	5%	500V
C54	1-126-949-11	ELECT	220uF	20%	35V
C55	1-126-949-11	ELECT	220uF	20%	35V
C64	1-126-967-11	ELECT	47uF	20%	50V
C70	1-126-949-11	ELECT	220uF	20%	35V

Ref. No.	Part No.	Description	Remark		
C71	1-130-467-00	MYLAR	470PF	5%	50V
C201	1-126-942-61	ELECT	1000uF	20%	25V
C202	1-126-942-61	ELECT	1000uF	20%	25V
C216	1-107-597-11	MICA	22PF	5%	500V
C217	1-130-477-00	MYLAR	0.0033uF	5%	50V
C218	1-124-903-11	ELECT	1uF	20%	50V
C219	1-130-492-11	MYLAR	0.056uF	5%	50V
C220	1-126-949-11	ELECT	220uF	20%	35V
C221	1-126-967-11	ELECT	47uF	20%	50V
C222	1-126-941-11	ELECT	470uF	20%	25V
C223	1-126-967-11	ELECT	47uF	20%	50V
C224	1-128-553-11	ELECT	220uF	20%	63V

< CONNECTOR >

* CN1	1-573-991-11	PIN, CONNECTOR (PC BOARD) 50P
* CN3	1-764-211-11	CONNECTOR, BOARD TO BOARD 13P
CN4	1-569-341-11	CONNECTOR, BOARD TO BOARD 19P
* CN5	1-764-211-11	CONNECTOR, BOARD TO BOARD 13P
CN6	1-569-341-11	CONNECTOR, BOARD TO BOARD 19P
CN7	1-750-973-11	JACK (LARGE TYPE) (2 GANG) (INPUT B/INSERT)
CN8	1-580-041-11	JACK, LARGE (2 GANG) (DIRECT OUT/INSERT I)
CN9	1-537-865-11	TERMINAL (M3)
CN10	1-778-009-11	CONNECTOR (RECEPTACLE) 3P (INPUT A)
* CN15	1-564-507-11	PLUG, CONNECTOR 4P

< DIODE >

D1	8-719-113-56	DIODE	RD22ES-T2B2
D2	8-719-113-56	DIODE	RD22ES-T2B2
D3	8-719-113-56	DIODE	RD22ES-T2B2
D4	8-719-113-56	DIODE	RD22ES-T2B2
D9	8-719-921-19	DIODE	1SS119-25TG
D10	8-719-921-19	DIODE	1SS119-25TG
D11	8-719-921-19	DIODE	1SS119-25TG
D12	8-719-921-19	DIODE	1SS119-25TG
D13	8-719-921-19	DIODE	1SS119-25TG
D14	8-719-113-56	DIODE	RD22ES-T2B2
D15	8-719-113-56	DIODE	RD22ES-T2B2
D16	8-719-113-56	DIODE	RD22ES-T2B2
D17	8-719-921-19	DIODE	1SS119-25TG
D18	8-719-113-56	DIODE	RD22ES-T2B2
D19	8-719-921-19	DIODE	1SS119-25TG
D20	8-719-113-56	DIODE	RD22ES-T2B2
D21	8-719-113-56	DIODE	RD22ES-T2B2
D22	8-719-921-19	DIODE	1SS119-25TG
D23	8-719-921-19	DIODE	1SS119-25TG
D24	8-719-921-19	DIODE	1SS119-25TG
D25	8-719-109-85	DIODE	RD5.1ES-T2B
D26	8-719-109-85	DIODE	RD5.1ES-T2B

Ref. No.	Part No.	Description	Remark
< IC >			
IC1	8-759-710-59	IC NJM4580D-D	
IC2	8-759-710-59	IC NJM4580D-D	
IC3	8-759-710-59	IC NJM4580D-D	
IC4	8-759-710-59	IC NJM4580D-D	
IC5	8-759-710-59	IC NJM4580D-D	
IC6	8-759-710-59	IC NJM4580D-D	
IC7	8-759-710-59	IC NJM4580D-D	
IC8	8-759-710-59	IC NJM4580D-D	
IC9	8-759-710-59	IC NJM4580D-D	

< COIL >

L1	1-424-090-11	COIL, LINE FILTER
L2	1-424-090-11	COIL, LINE FILTER
L3	1-424-090-11	COIL, LINE FILTER
L4	1-424-090-11	COIL, LINE FILTER
L6	1-424-090-11	COIL, LINE FILTER

< TRANSISTOR >

Q1	8-729-354-52	TRANSISTOR	2SC2545-ETZ
Q2	8-729-354-52	TRANSISTOR	2SC2545-ETZ
Q3	8-729-119-78	TRANSISTOR	2SC1815Y-TPE2
Q4	8-729-119-78	TRANSISTOR	2SC1815Y-TPE2
Q5	8-729-354-52	TRANSISTOR	2SC2545-ETZ
Q6	8-729-354-52	TRANSISTOR	2SC2545-ETZ
Q7	8-729-354-52	TRANSISTOR	2SC2545-ETZ
Q8	8-729-354-52	TRANSISTOR	2SC2545-ETZ
Q12	8-729-030-03	TRANSISTOR	DTC144ESA-TP
Q13	8-729-232-29	TRANSISTOR	2SK362-BL
Q14	8-729-119-78	TRANSISTOR	2SC1815Y-TPE2
Q15	8-729-232-29	TRANSISTOR	2SK362-BL

< RESISTOR >

R1	1-215-441-00	METAL	6.8K	1%	1/4W
R2	1-215-441-00	METAL	6.8K	1%	1/4W
R4	1-249-437-11	CARBON	47K	5%	1/4W
R5	1-249-437-11	CARBON	47K	5%	1/4W
R8	1-249-435-11	CARBON	33K	5%	1/4W
R9	1-249-435-11	CARBON	33K	5%	1/4W
R12	1-249-413-11	CARBON	470	5%	1/4W
R13	1-249-413-11	CARBON	470	5%	1/4W
R14	1-215-421-00	METAL	1K	1%	1/4W
R15	1-215-421-00	METAL	1K	1%	1/4W
R16	1-215-421-00	METAL	1K	1%	1/4W
R17	1-215-421-00	METAL	1K	1%	1/4W
R18	1-215-405-00	METAL	220	1%	1/4W
R19	1-215-405-00	METAL	220	1%	1/4W
R22	1-215-439-00	METAL	5.6K	1%	1/4W

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R23	1-215-439-00	METAL	5.6K 1% 1/4W	R92	1-215-437-00	METAL	4.7K 1% 1/4W
R26	1-215-434-00	METAL	3.6K 1% 1/4W	R94	1-215-437-00	METAL	4.7K 1% 1/4W
R27	1-215-434-00	METAL	3.6K 1% 1/4W	R95	1-215-437-00	METAL	4.7K 1% 1/4W
R28	1-247-887-00	CARBON	220K 5% 1/4W	R97	1-215-438-00	METAL	5.1K 1% 1/4W
R29	1-215-437-00	METAL	4.7K 1% 1/4W	R98	1-215-427-00	METAL	1.8K 1% 1/4W
R30	1-215-437-00	METAL	4.7K 1% 1/4W	R100	1-247-887-00	CARBON	220K 5% 1/4W
R31	1-215-437-00	METAL	4.7K 1% 1/4W	R101	1-247-887-00	CARBON	220K 5% 1/4W
R32	1-247-887-00	CARBON	220K 5% 1/4W	R102	1-249-397-11	CARBON	22 5% 1/4W
R33	1-215-445-00	METAL	10K 1% 1/4W	R113	1-247-895-00	CARBON	470K 5% 1/4W
R35	1-247-887-00	CARBON	220K 5% 1/4W	R114	1-215-437-00	METAL	4.7K 1% 1/4W
R36	1-247-887-00	CARBON	220K 5% 1/4W	R115	1-215-437-00	METAL	4.7K 1% 1/4W
R37	1-215-447-00	METAL	12K 1% 1/4W	R116	1-215-437-00	METAL	4.7K 1% 1/4W
R38	1-215-447-00	METAL	12K 1% 1/4W	R117	1-215-437-00	METAL	4.7K 1% 1/4W
R39	1-215-429-00	METAL	2.2K 1% 1/4W	R118	1-215-437-00	METAL	4.7K 1% 1/4W
R40	1-215-429-00	METAL	2.2K 1% 1/4W	R119	1-215-437-00	METAL	4.7K 1% 1/4W
R41	1-215-403-00	METAL	180 1% 1/4W	R120	1-215-437-00	METAL	4.7K 1% 1/4W
R42	1-215-403-00	METAL	180 1% 1/4W	R121	1-215-437-00	METAL	4.7K 1% 1/4W
R43	1-215-432-00	METAL	3K 1% 1/4W	R122	1-215-437-00	METAL	4.7K 1% 1/4W
R44	1-215-432-00	METAL	3K 1% 1/4W	R123	1-215-437-00	METAL	4.7K 1% 1/4W
R45	1-247-887-00	CARBON	220K 5% 1/4W	R124	1-215-437-00	METAL	4.7K 1% 1/4W
R46	1-215-437-00	METAL	4.7K 1% 1/4W	R125	1-215-437-00	METAL	4.7K 1% 1/4W
R47	1-215-437-00	METAL	4.7K 1% 1/4W	R126	1-215-437-00	METAL	4.7K 1% 1/4W
R48	1-247-887-00	CARBON	220K 5% 1/4W	R127	1-215-437-00	METAL	4.7K 1% 1/4W
R51	1-215-434-00	METAL	3.6K 1% 1/4W	R128	1-215-437-00	METAL	4.7K 1% 1/4W
R52	1-215-434-00	METAL	3.6K 1% 1/4W	R129	1-215-437-00	METAL	4.7K 1% 1/4W
R53	1-215-437-00	METAL	4.7K 1% 1/4W	R130	1-215-437-00	METAL	4.7K 1% 1/4W
R54	1-215-437-00	METAL	4.7K 1% 1/4W	R131	1-215-437-00	METAL	4.7K 1% 1/4W
R66	1-215-436-00	METAL	4.3K 1% 1/4W	R132	1-215-437-00	METAL	4.7K 1% 1/4W
R67	1-215-436-00	METAL	4.3K 1% 1/4W	△R133	1-212-875-00	FUSIBLE	56 5% 1/4W F
R68	1-215-437-00	METAL	4.7K 1% 1/4W	R134	1-215-437-00	METAL	4.7K 1% 1/4W
R69	1-215-437-00	METAL	4.7K 1% 1/4W	△R201	1-212-849-00	FUSIBLE	4.7 5% 1/4W F
R70	1-247-887-00	CARBON	220K 5% 1/4W	△R202	1-212-849-00	FUSIBLE	4.7 5% 1/4W F
R71	1-249-397-11	CARBON	22 5% 1/4W	△R203	1-212-849-00	FUSIBLE	4.7 5% 1/4W F
R73	1-247-887-00	CARBON	220K 5% 1/4W	△R204	1-212-895-00	FUSIBLE	390 5% 1/4W F
R74	1-247-887-00	CARBON	220K 5% 1/4W	R205	1-247-895-00	CARBON	470K 5% 1/4W
R75	1-247-887-00	CARBON	220K 5% 1/4W	R206	1-215-434-00	METAL	3.6K 1% 1/4W
R76	1-249-437-11	CARBON	47K 5% 1/4W	R207	1-215-434-00	METAL	3.6K 1% 1/4W
R78	1-215-421-00	METAL	1K 1% 1/4W	R208	1-215-434-00	METAL	3.6K 1% 1/4W
R79	1-215-421-00	METAL	1K 1% 1/4W	R209	1-215-434-00	METAL	3.6K 1% 1/4W
R80	1-247-807-31	CARBON	100 5% 1/4W	R210	1-247-895-00	CARBON	470K 5% 1/4W
R81	1-215-427-00	METAL	1.8K 1% 1/4W	R211	1-215-437-00	METAL	4.7K 1% 1/4W
R83	1-215-421-00	METAL	1K 1% 1/4W	R212	1-215-437-00	METAL	4.7K 1% 1/4W
R84	1-247-887-00	CARBON	220K 5% 1/4W	R213	1-215-445-00	METAL	10K 1% 1/4W
R85	1-249-419-11	CARBON	1.5K 5% 1/4W	R214	1-215-435-00	METAL	3.9K 1% 1/4W
R86	1-247-843-11	CARBON	3.3K 5% 1/4W	R215	1-215-445-00	METAL	10K 1% 1/4W
R88	1-249-419-11	CARBON	1.5K 5% 1/4W	R216	1-215-435-00	METAL	3.9K 1% 1/4W
R89	1-247-843-11	CARBON	3.3K 5% 1/4W	R217	1-215-445-00	METAL	10K 1% 1/4W
R91	1-215-437-00	METAL	4.7K 1% 1/4W	R218	1-247-895-00	CARBON	470K 5% 1/4W

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MN-IN1

MN-IN2

MTX-OUT1

Ref. No.	Part No.	Description	Remark
R219	1-247-895-00	CARBON 470K 5%	1/4W
R220	1-247-887-00	CARBON 220K 5%	1/4W
R221	1-247-887-00	CARBON 220K 5%	1/4W
R222	1-247-895-00	CARBON 470K 5%	1/4W
R223	1-215-400-81	METAL 130 1%	1/4W
R224	1-215-437-00	METAL 4.7K 1%	1/4W
R225	1-249-432-11	CARBON 18K 5%	1/4W
R226	1-215-437-00	METAL 4.7K 1%	1/4W
△R227	1-212-879-11	FUSIBLE 82 5%	1/4W F
R228	1-249-441-11	CARBON 100K 5%	1/4W
R234	1-215-445-00	METAL 10K 1%	1/4W

< VARIABLE RESISTOR >

RV1	1-225-264-11	RES, VAR, CARBON 5K/5K
RV3	1-225-265-11	RES, VAR, CARBON
RV5	1-225-266-11	RES, VAR, CARBON 100K/100K (MID HIGH FRE
RV6	1-225-268-11	RES, VAR, CARBON 10K (MID HIGH LEVEL)
RV7	1-225-266-11	RES, VAR, CARBON 100K/100K (MID LOW LEVE
RV8	1-225-268-11	RES, VAR, CARBON 10K
RV20	1-228-989-00	RES, ADJ, METAL 470
RV21	1-228-989-00	RES, ADJ, METAL 470
RV22	1-225-268-11	RES, VAR, CARBON 10K (HIGH LEVEL)
RV23	1-225-268-11	RES, VAR, CARBON 10K (LOW LEVEL)

< RELAY >

RY1	1-515-787-11	RELAY
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< SWITCH >

SW1	1-572-004-11	SWITCH, PUSH (R)
SW2	1-572-004-11	SWITCH, PUSH (GP2)
SW3	1-572-004-11	SWITCH, PUSH (GP4)
SW4	1-572-004-11	SWITCH, PUSH (GP6)
SW5	1-572-004-11	SWITCH, PUSH (GP8)
SW6	1-572-004-11	SWITCH, PUSH
SW7	1-572-004-11	SWITCH, PUSH (c)
SW8	1-572-004-11	SWITCH, PUSH (LCF)
SW9	1-572-004-11	SWITCH, PUSH (EQ)
SW23	1-570-707-21	SWITCH, SLIDE (INPUT B LEVEL)

* 1-660-906-11 MN-IN2 BOARD

< CONNECTOR >

* CN16	1-764-212-11	CONNECTOR, BOARD TO BOARD 13P
CN17	1-569-338-11	CONNECTOR, BOARD TO BOARD 19P

Ref. No.	Part No.	Description	Remark
		< RESISTOR >	

R229	1-249-391-11	CARBON 6.8 5%	1/4W
R230	1-215-445-00	METAL 10K 1%	1/4W
R231	1-215-405-00	METAL 220 1%	1/4W
R232	1-215-427-00	METAL 1.8K 1%	1/4W
R233	1-249-435-11	CARBON 33K 5%	1/4W

< VARIABLE RESISTOR >

RV24	1-225-272-11	RES, VAR, CARBON 20K/2K
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< SWITCH >

SW15	1-572-004-11	SWITCH, PUSH
SW16	1-572-004-11	SWITCH, PUSH
SW17	1-572-004-11	SWITCH, PUSH
SW18	1-572-004-11	SWITCH, PUSH
SW19	1-572-004-11	SWITCH, PUSH

SW20	1-572-004-11	SWITCH, PUSH
SW21	1-572-004-11	SWITCH, PUSH
SW22	1-572-004-11	SWITCH, PUSH

* A-4588-821-A MTX-OUT1 BOARD, COMPLETE

* 1-560-242-21	BUS BAR 4P
* 1-560-242-41	BUS BAR 11P
1-564-952-21	PIN, CONNECTOR 16P

< CAPACITOR >

C601	1-107-163-00	MICA 47PF	5%	500V
C602	1-107-163-00	MICA 47PF	5%	500V
C603	1-126-967-11	ELECT 47uF	20%	50V
C604	1-126-967-11	ELECT 47uF	20%	50V
C605	1-107-597-11	MICA 22PF	5%	500V

C606	1-107-597-11	MICA 22PF	5%	500V
C607	1-126-967-11	ELECT 47uF	20%	50V
C611	1-107-163-00	MICA 47PF	5%	500V
C612	1-107-163-00	MICA 47PF	5%	500V
C613	1-126-967-11	ELECT 47uF	20%	50V

C614	1-126-967-11	ELECT 47uF	20%	50V
C615	1-107-597-11	MICA 22PF	5%	500V
C616	1-107-597-11	MICA 22PF	5%	500V
C617	1-126-967-11	ELECT 47uF	20%	50V
C620	1-126-967-11	ELECT 47uF	20%	50V

C622	1-126-967-11	ELECT 47uF	20%	50V
C624	1-126-967-11	ELECT 47uF	20%	50V
C626	1-126-967-11	ELECT 47uF	20%	50V
C628	1-126-967-11	ELECT 47uF	20%	50V
C630	1-126-967-11	ELECT 47uF	20%	50V

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MTX-OUT1

Ref. No.	Part No.	Description	Remark
C632	1-126-967-11	ELECT 47uF	20% 50V
C634	1-126-967-11	ELECT 47uF	20% 50V
C636	1-126-967-11	ELECT 47uF	20% 50V
C638	1-126-967-11	ELECT 47uF	20% 50V
C645	1-126-942-61	ELECT 1000uF	20% 25V
C646	1-126-942-61	ELECT 1000uF	20% 25V
C647	1-126-967-11	ELECT 47uF	20% 50V
C650	1-126-941-11	ELECT 470uF	20% 25V
C651	1-126-967-11	ELECT 47uF	20% 50V
C652	1-126-967-11	ELECT 47uF	20% 50V
C653	1-107-202-00	MICA 10PF	5% 500V
C654	1-126-941-11	ELECT 470uF	20% 25V
C655	1-126-967-11	ELECT 47uF	20% 50V
C660	1-126-967-11	ELECT 47uF	20% 50V
C661	1-107-597-11	MICA 22PF	5% 500V
C662	1-126-941-11	ELECT 470uF	20% 25V
C663	1-107-202-00	MICA 10PF	5% 500V
C664	1-126-941-11	ELECT 470uF	20% 25V
C670	1-124-903-11	ELECT 1uF	20% 50V
C671	1-126-967-11	ELECT 47uF	20% 50V
C673	1-124-903-11	ELECT 1uF	20% 50V
C674	1-130-467-00	MYLAR 470PF	5% 50V

< CONNECTOR >

CN601	1-537-865-11	TERMINAL (M3)
CN602	1-750-973-11	JACK (LARGE TYPE) (2 GANG)
* CN603	1-565-730-11	PIN, CONNECTOR (RIGHT ANGLE) 34P
CN605	1-569-341-11	CONNECTOR, BOARD TO BOARD 19P
CN606	1-778-008-11	CONNECTOR (PLUG) 3P

CN608	1-778-008-11	CONNECTOR (PLUG) 3P
* CN609	1-764-211-11	CONNECTOR, BOARD TO BOARD 13P
* CN610	1-564-519-11	PLUG, CONNECTOR 4P

< DIODE >

D601	8-719-921-19	DIODE 1SS119-25TG
D602	8-719-921-19	DIODE 1SS119-25TG
D603	8-719-921-19	DIODE 1SS119-25TG
D604	8-719-820-77	DIODE TLG116
D605	8-719-955-04	DIODE TLG113A
D606	8-719-802-02	DIODE TLY113A
D607	8-719-921-19	DIODE 1SS119-25TG
D608	8-719-921-19	DIODE 1SS119-25TG
D609	8-719-921-19	DIODE 1SS119-25TG
D610	8-719-921-19	DIODE 1SS119-25TG
D611	8-719-113-56	DIODE RD22ES-T2B2
D612	8-719-113-56	DIODE RD22ES-T2B2
D613	8-719-113-56	DIODE RD22ES-T2B2
D614	8-719-113-56	DIODE RD22ES-T2B2
D621	8-719-113-56	DIODE RD22ES-T2B2

Ref. No.	Part No.	Description	Remark
D622	8-719-113-56	DIODE RD22ES-T2B2	
D623	8-719-113-56	DIODE RD22ES-T2B2	
D624	8-719-113-56	DIODE RD22ES-T2B2	
D625	8-719-110-96	DIODE RD2.0ES-T2B2	
D626	8-719-921-19	DIODE 1SS119-25TG	
D627	8-719-921-19	DIODE 1SS119-25TG	
D628	8-719-113-56	DIODE RD22ES-T2B2	
D629	8-719-113-56	DIODE RD22ES-T2B2	
D630	8-719-113-56	DIODE RD22ES-T2B2	
D631	8-719-113-56	DIODE RD22ES-T2B2	
D632	8-719-113-56	DIODE RD22ES-T2B2	
D633	8-719-113-56	DIODE RD22ES-T2B2	
D634	8-719-113-56	DIODE RD22ES-T2B2	
D635	8-719-113-56	DIODE RD22ES-T2B2	
D636	8-719-921-19	DIODE 1SS119-25TG	
D638	8-719-921-19	DIODE 1SS119-25TG	

< IC >

IC601	8-759-710-59	IC NJM4580D-D
IC602	8-759-710-59	IC NJM4580D-D
IC603	8-759-710-59	IC NJM4580D-D
IC604	8-759-710-59	IC NJM4580D-D
IC605	8-759-710-59	IC NJM4580D-D

IC606	8-759-710-59	IC NJM4580D-D
IC607	8-759-710-59	IC NJM4580D-D
IC608	8-759-710-59	IC NJM4580D-D
IC609	8-759-634-51	IC NJM4558D

< COIL >

L601	1-424-090-11	COIL, LINE FILTER
L602	1-424-090-11	COIL, LINE FILTER
L611	1-424-090-11	COIL, LINE FILTER
L612	1-424-090-11	COIL, LINE FILTER

< TRANSISTOR >

Q601	8-729-354-52	TRANSISTOR 2SC2545-ETZ
Q602	8-729-354-52	TRANSISTOR 2SC2545-ETZ
Q604	8-729-207-46	TRANSISTOR 2SC3112B-TPE2
Q605	8-729-195-23	TRANSISTOR 2SA952TP-K1
Q606	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2
Q607	8-729-207-46	TRANSISTOR 2SC3112B-TPE2
Q608	8-729-195-23	TRANSISTOR 2SA952TP-K1
Q609	8-729-207-46	TRANSISTOR 2SC3112B-TPE2
Q610	8-729-207-46	TRANSISTOR 2SC3112B-TPE2
Q611	8-729-207-46	TRANSISTOR 2SC3112B-TPE2
Q612	8-729-030-03	TRANSISTOR DTC144ESA-TP
Q613	8-729-207-46	TRANSISTOR 2SC3112B-TPE2
Q614	8-729-030-03	TRANSISTOR DTC144ESA-TP

Ref. No.	Part No.	Description	Remark
Q615	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q616	8-729-232-29	TRANSISTOR 2SK362-BL	
Q617	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q618	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q619	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
< RESISTOR >			
R601	1-215-441-00	METAL 6.8K 1%	1/4W
R602	1-215-441-00	METAL 6.8K 1%	1/4W
R603	1-215-436-00	METAL 4.3K 1%	1/4W
R604	1-247-895-00	CARBON 470K 5%	1/4W
R605	1-247-887-00	CARBON 220K 5%	1/4W
R606	1-215-436-00	METAL 4.3K 1%	1/4W
R607	1-215-437-00	METAL 4.7K 1%	1/4W
R609	1-215-449-00	METAL 15K 1%	1/4W
R610	1-215-437-00	METAL 4.7K 1%	1/4W
R611	1-215-441-00	METAL 6.8K 1%	1/4W
R612	1-215-441-00	METAL 6.8K 1%	1/4W
R613	1-215-436-00	METAL 4.3K 1%	1/4W
△R614	1-212-879-11	FUSIBLE 82 5%	1/4W F
△R615	1-212-879-11	FUSIBLE 82 5%	1/4W F
R616	1-215-436-00	METAL 4.3K 1%	1/4W
R617	1-247-889-00	CARBON 270K 5%	1/4W
R618	1-215-427-00	METAL 1.8K 1%	1/4W
R619	1-247-887-00	CARBON 220K 5%	1/4W
R620	1-247-887-00	CARBON 220K 5%	1/4W
R621	1-247-887-00	CARBON 220K 5%	1/4W
R622	1-247-887-00	CARBON 220K 5%	1/4W
R623	1-247-887-00	CARBON 220K 5%	1/4W
R624	1-247-887-00	CARBON 220K 5%	1/4W
R625	1-247-887-00	CARBON 220K 5%	1/4W
R626	1-247-887-00	CARBON 220K 5%	1/4W
R627	1-247-887-00	CARBON 220K 5%	1/4W
R628	1-247-887-00	CARBON 220K 5%	1/4W
R629	1-249-441-11	CARBON 100K 5%	1/4W
R630	1-215-437-00	METAL 4.7K 1%	1/4W
R631	1-215-437-00	METAL 4.7K 1%	1/4W
R632	1-215-437-00	METAL 4.7K 1%	1/4W
R633	1-215-437-00	METAL 4.7K 1%	1/4W
R634	1-215-437-00	METAL 4.7K 1%	1/4W
R635	1-215-437-00	METAL 4.7K 1%	1/4W
R636	1-215-437-00	METAL 4.7K 1%	1/4W
R637	1-215-437-00	METAL 4.7K 1%	1/4W
R638	1-215-437-00	METAL 4.7K 1%	1/4W
R639	1-215-437-00	METAL 4.7K 1%	1/4W
R640	1-215-437-00	METAL 4.7K 1%	1/4W
R641	1-215-437-00	METAL 4.7K 1%	1/4W
R642	1-249-397-11	CARBON 22 5%	1/4W

Ref. No.	Part No.	Description	Remark
R643	1-249-438-11	CARBON 56K 5%	1/4W
R644	1-249-438-11	CARBON 56K 5%	1/4W
△R645	1-212-849-00	FUSIBLE 4.7 5%	1/4W F
△R646	1-212-849-00	FUSIBLE 4.7 5%	1/4W F
△R647	1-212-849-00	FUSIBLE 4.7 5%	1/4W F
R648	1-215-449-00	METAL 15K 1%	1/4W
R649	1-215-449-00	METAL 15K 1%	1/4W
R651	1-215-447-00	METAL 12K 1%	1/4W
R652	1-215-429-00	METAL 2.2K 1%	1/4W
R653	1-249-433-11	CARBON 22K 5%	1/4W
R655	1-249-397-11	CARBON 22 5%	1/4W
R656	1-215-421-00	METAL 1K 1%	1/4W
R657	1-215-421-00	METAL 1K 1%	1/4W
R658	1-247-807-31	CARBON 100 5%	1/4W
R659	1-215-431-00	METAL 2.7K 1%	1/4W
R660	1-215-421-00	METAL 1K 1%	1/4W
R661	1-215-421-00	METAL 1K 1%	1/4W
R662	1-215-411-00	METAL 390 1%	1/4W
R663	1-247-887-00	CARBON 220K 5%	1/4W
R664	1-247-887-00	CARBON 220K 5%	1/4W
R665	1-215-435-00	METAL 3.9K 1%	1/4W
R666	1-247-807-31	CARBON 100 5%	1/4W
R667	1-215-440-00	METAL 6.2K 1%	1/4W
R668	1-215-440-00	METAL 6.2K 1%	1/4W
R669	1-215-435-00	METAL 3.9K 1%	1/4W
R670	1-249-397-11	CARBON 22 5%	1/4W
R671	1-247-887-00	CARBON 220K 5%	1/4W
R672	1-215-435-00	METAL 3.9K 1%	1/4W
R673	1-215-440-00	METAL 6.2K 1%	1/4W
R674	1-215-435-00	METAL 3.9K 1%	1/4W
△R675	1-212-875-00	FUSIBLE 56 5%	1/4W F
R676	1-215-440-00	METAL 6.2K 1%	1/4W
R677	1-249-397-11	CARBON 22 5%	1/4W
R678	1-247-887-00	CARBON 220K 5%	1/4W
R679	1-247-895-00	CARBON 470K 5%	1/4W
R680	1-247-895-00	CARBON 470K 5%	1/4W
R681	1-249-435-11	CARBON 33K 5%	1/4W
R682	1-215-449-00	METAL 15K 1%	1/4W
R683	1-215-421-00	METAL 1K 1%	1/4W
R684	1-215-449-00	METAL 15K 1%	1/4W
R685	1-247-887-00	CARBON 220K 5%	1/4W
R686	1-215-449-00	METAL 15K 1%	1/4W
R687	1-249-437-11	CARBON 47K 5%	1/4W
R688	1-215-449-00	METAL 15K 1%	1/4W
△R689	1-212-869-00	FUSIBLE 33 5%	1/4W F
R690	1-249-437-11	CARBON 47K 5%	1/4W
R691	1-249-437-11	CARBON 47K 5%	1/4W
R692	1-249-437-11	CARBON 47K 5%	1/4W
R693	1-249-437-11	CARBON 47K 5%	1/4W

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MTX-OUT1

MTX-OUT2

Ref. No.	Part No.	Description	Remark		
R694	1-215-445-00	METAL	10K	1%	1/4W
R695	1-247-887-00	CARBON	220K	5%	1/4W
R696	1-215-421-00	METAL	1K	1%	1/4W
R697	1-247-887-00	CARBON	220K	5%	1/4W
R698	1-249-441-11	CARBON	100K	5%	1/4W
R699	1-215-421-00	METAL	1K	1%	1/4W
< VARIABLE RESISTOR >					
RV601	1-225-269-11	RES, VAR, CARBON	50K		
RV602	1-225-269-11	RES, VAR, CARBON	50K		
RV603	1-225-269-11	RES, VAR, CARBON	50K		
RV604	1-225-269-11	RES, VAR, CARBON	50K		
RV605	1-225-269-11	RES, VAR, CARBON	50K		
RV606	1-225-269-11	RES, VAR, CARBON	50K		
RV607	1-225-269-11	RES, VAR, CARBON	50K		
RV608	1-225-269-11	RES, VAR, CARBON	50K		
RV609	1-225-269-11	RES, VAR, CARBON	50K		
RV610	1-225-269-11	RES, VAR, CARBON	50K		
RV611	1-225-269-11	RES, VAR, CARBON	50K		
RV612	1-225-269-11	RES, VAR, CARBON	50K		
RV613	1-225-275-11	RES, VAR, CARBON	20K		
RV614	1-238-478-11	RES, ADJ, CARBON	1M		
< RELAY >					
RY601	1-515-787-11	RELAY			
RY602	1-515-787-11	RELAY			
< SWITCH >					
SW601	1-554-824-21	SWITCH, PUSH (1 KEY)			
SW602	1-554-824-21	SWITCH, PUSH (1 KEY)			

*	A-4588-822-A	MTX-OUT2 BOARD, COMPLETE			

< CAPACITOR >					
C701	1-126-941-11	ELECT	470uF	20%	25V
C702	1-126-967-11	ELECT	47uF	20%	50V
C703	1-126-967-11	ELECT	47uF	20%	50V
C704	1-126-941-11	ELECT	470uF	20%	25V
C705	1-107-202-00	MICA	10PF	5%	500V
C706	1-126-967-11	ELECT	47uF	20%	50V
C710	1-126-967-11	ELECT	47uF	20%	50V
C711	1-107-597-11	MICA	22PF	5%	500V
C712	1-126-941-11	ELECT	470uF	20%	25V
C713	1-107-202-00	MICA	10PF	5%	500V
C714	1-126-941-11	ELECT	470uF	20%	25V
C715	1-126-967-11	ELECT	47uF	20%	50V

Ref. No.	Part No.	Description	Remark		
C720	1-124-903-11	ELECT	1uF	20%	50V
C721	1-126-967-11	ELECT	47uF	20%	50V
C723	1-124-903-11	ELECT	1uF	20%	50V
C730	1-164-159-11	CERAMIC	0.1uF		50V
C731	1-164-159-11	CERAMIC	0.1uF		50V
C733	1-126-942-61	ELECT	1000uF	20%	25V
C734	1-126-942-61	ELECT	1000uF	20%	25V
C735	1-130-467-00	MYLAR	470PF	5%	50V
C736	1-130-467-00	MYLAR	470PF	5%	50V
< CONNECTOR >					
CN701	1-569-338-11	CONNECTOR, BOARD TO BOARD	19P		
* CN702	1-764-212-11	CONNECTOR, BOARD TO BOARD	13P		
CN703	1-564-523-11	PLUG, CONNECTOR	8P		
CN704	1-564-523-11	PLUG, CONNECTOR	8P		
< DIODE >					
D701	8-719-921-19	DIODE	1SS119-25TG		
D702	8-719-921-19	DIODE	1SS119-25TG		
D703	8-719-921-19	DIODE	1SS119-25TG		
D704	8-719-921-19	DIODE	1SS119-25TG		
D705	8-719-921-19	DIODE	1SS119-25TG		
D706	8-719-921-19	DIODE	1SS119-25TG		
D707	8-719-820-77	DIODE	TLSG116		
D708	8-719-955-04	DIODE	TLG113A		
D709	8-719-802-02	DIODE	TLY113A		
D710	8-719-921-19	DIODE	1SS119-25TG		
D711	8-719-921-19	DIODE	1SS119-25TG		
D712	8-719-921-19	DIODE	1SS119-25TG		
D713	8-719-110-96	DIODE	RD2.0ES-T2B2		
D714	8-719-921-19	DIODE	1SS119-25TG		
< IC >					
IC701	8-759-710-59	IC	NJM4580D-D		
IC703	8-759-634-51	IC	NJM4558D		
IC704	8-759-710-59	IC	NJM4580D-D		
IC705	8-759-916-52	IC	TC74HC165AP		
IC706	8-759-233-43	IC	TC74HC595AP		
< TRANSISTOR >					
Q701	8-729-354-52	TRANSISTOR	2SC2545-ETZ		
Q702	8-729-354-52	TRANSISTOR	2SC2545-ETZ		
Q703	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
Q704	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
Q705	8-729-232-29	TRANSISTOR	2SK362-BL		
Q706	8-729-207-46	TRANSISTOR	2SC3112B-TPE2		
Q707	8-729-195-23	TRANSISTOR	2SA952TP-K1		
Q708	8-729-119-78	TRANSISTOR	2SC1815Y-TPE2		
Q709	8-729-207-46	TRANSISTOR	2SC3112B-TPE2		

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q710	8-729-195-23	TRANSISTOR 2SA952TP-K1		R750	1-247-889-00	CARBON 270K 5% 1/4W	
Q711	8-729-207-46	TRANSISTOR 2SC3112B-TPE2		R751	1-215-440-00	METAL 6.2K 1% 1/4W	
Q712	8-729-207-46	TRANSISTOR 2SC3112B-TPE2		R752	1-215-440-00	METAL 6.2K 1% 1/4W	
Q713	8-729-207-46	TRANSISTOR 2SC3112B-TPE2		R753	1-249-397-11	CARBON 22 5% 1/4W	
Q714	8-729-207-46	TRANSISTOR 2SC3112B-TPE2		R754	1-247-887-00	CARBON 220K 5% 1/4W	
Q715	8-729-030-03	TRANSISTOR DTC144ESA-TP		R760	1-247-895-00	CARBON 470K 5% 1/4W	
Q716	8-729-030-03	TRANSISTOR DTC144ESA-TP		R761	1-247-895-00	CARBON 470K 5% 1/4W	
Q717	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2		R762	1-249-435-11	CARBON 33K 5% 1/4W	
Q720	8-729-030-03	TRANSISTOR DTC144ESA-TP		R763	1-215-449-00	METAL 15K 1% 1/4W	
Q721	8-729-029-56	TRANSISTOR DTA144ESA-TP		R764	1-215-421-00	METAL 1K 1% 1/4W	
Q722	8-729-030-03	TRANSISTOR DTC144ESA-TP		R765	1-215-449-00	METAL 15K 1% 1/4W	
Q723	8-729-029-56	TRANSISTOR DTA144ESA-TP		R766	1-247-887-00	CARBON 220K 5% 1/4W	
< RESISTOR >				R767	1-215-449-00	METAL 15K 1% 1/4W	
R701	1-215-437-00	METAL 4.7K 1% 1/4W		R768	1-249-437-11	CARBON 47K 5% 1/4W	
R702	1-215-437-00	METAL 4.7K 1% 1/4W		R769	1-215-449-00	METAL 15K 1% 1/4W	
R703	1-215-437-00	METAL 4.7K 1% 1/4W		△R770	1-212-869-00	FUSIBLE 33 5% 1/4W F	
R704	1-215-437-00	METAL 4.7K 1% 1/4W		R771	1-249-437-11	CARBON 47K 5% 1/4W	
R705	1-215-437-00	METAL 4.7K 1% 1/4W		R772	1-249-437-11	CARBON 47K 5% 1/4W	
R706	1-215-437-00	METAL 4.7K 1% 1/4W		R773	1-249-437-11	CARBON 47K 5% 1/4W	
R707	1-215-437-00	METAL 4.7K 1% 1/4W		R774	1-249-437-11	CARBON 47K 5% 1/4W	
R708	1-215-437-00	METAL 4.7K 1% 1/4W		R775	1-215-437-00	METAL 4.7K 1% 1/4W	
R709	1-215-437-00	METAL 4.7K 1% 1/4W		△R776	1-212-879-11	FUSIBLE 82 5% 1/4W F	
R710	1-215-437-00	METAL 4.7K 1% 1/4W		R780	1-215-445-00	METAL 10K 1% 1/4W	
R711	1-215-437-00	METAL 4.7K 1% 1/4W		R781	1-247-887-00	CARBON 220K 5% 1/4W	
R712	1-215-437-00	METAL 4.7K 1% 1/4W		R782	1-215-421-00	METAL 1K 1% 1/4W	
R714	1-215-447-00	METAL 12K 1% 1/4W		R783	1-247-895-00	CARBON 470K 5% 1/4W	
R715	1-215-429-00	METAL 2.2K 1% 1/4W		R784	1-249-441-11	CARBON 100K 5% 1/4W	
R717	1-249-433-11	CARBON 22K 5% 1/4W		R785	1-215-421-00	METAL 1K 1% 1/4W	
R718	1-215-427-00	METAL 1.8K 1% 1/4W		R786	1-247-887-00	CARBON 220K 5% 1/4W	
R721	1-215-421-00	METAL 1K 1% 1/4W		R789	1-249-437-11	CARBON 47K 5% 1/4W	
R722	1-215-421-00	METAL 1K 1% 1/4W		R790	1-249-437-11	CARBON 47K 5% 1/4W	
R723	1-247-807-31	CARBON 100 5% 1/4W		R791	1-249-437-11	CARBON 47K 5% 1/4W	
R724	1-215-411-00	METAL 390 1% 1/4W		R792	1-249-437-11	CARBON 47K 5% 1/4W	
R725	1-215-431-00	METAL 2.7K 1% 1/4W		R793	1-249-437-11	CARBON 47K 5% 1/4W	
R726	1-247-887-00	CARBON 220K 5% 1/4W		R794	1-215-421-00	METAL 1K 1% 1/4W	
R730	1-247-895-00	CARBON 470K 5% 1/4W		R795	1-215-421-00	METAL 1K 1% 1/4W	
R731	1-247-887-00	CARBON 220K 5% 1/4W		△R796	1-212-849-00	FUSIBLE 4.7 5% 1/4W F	
R740	1-249-441-11	CARBON 100K 5% 1/4W		△R797	1-212-849-00	FUSIBLE 4.7 5% 1/4W F	
R741	1-215-435-00	METAL 3.9K 1% 1/4W		△R798	1-212-875-00	FUSIBLE 56 5% 1/4W F	
R742	1-247-807-31	CARBON 100 5% 1/4W		R799	1-249-437-11	CARBON 47K 5% 1/4W	
R743	1-215-440-00	METAL 6.2K 1% 1/4W		< VARIABLE RESISTOR >			
R744	1-215-440-00	METAL 6.2K 1% 1/4W		RV701	1-225-269-11	RES, VAR, CARBON 50K	
R745	1-215-435-00	METAL 3.9K 1% 1/4W		RV702	1-225-269-11	RES, VAR, CARBON 50K	
R746	1-249-397-11	CARBON 22 5% 1/4W		RV703	1-225-269-11	RES, VAR, CARBON 50K	
R747	1-247-887-00	CARBON 220K 5% 1/4W		RV704	1-225-269-11	RES, VAR, CARBON 50K	
R748	1-215-435-00	METAL 3.9K 1% 1/4W		RV705	1-225-269-11	RES, VAR, CARBON 50K	
R749	1-215-435-00	METAL 3.9K 1% 1/4W		RV706	1-225-269-11	RES, VAR, CARBON 50K	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

△印の部品、または△印付きの点線で囲まれた部品は、安全性を維持するために重要な部品です。従って交換時は、必ず指定の部品を使用して下さい。

MTX-OUT2

ST-IN

Ref. No.	Part No.	Description	Remark
RV707	1-225-269-11	RES, VAR, CARBON 50K	
RV708	1-225-269-11	RES, VAR, CARBON 50K	
RV709	1-225-269-11	RES, VAR, CARBON 50K	
RV710	1-225-269-11	RES, VAR, CARBON 50K	
RV711	1-225-269-11	RES, VAR, CARBON 50K	
RV712	1-225-269-11	RES, VAR, CARBON 50K	
RV713	1-225-275-11	RES, VAR, CARBON 20K	
RV720	1-238-478-11	RES, ADJ, CARBON 1M	
< RELAY >			
RY701	1-515-787-11	RELAY	
< SWITCH >			
SW701	1-554-824-21	SWITCH, PUSH (1 KEY)	
SW702	1-554-824-21	SWITCH, PUSH (1 KEY)	

*	A-4588-803-A	ST-IN BOARD, COMPLETE	

*	1-560-242-11	BUS BAR 3P	
	1-565-063-11	BAR, BUS	
< CAPACITOR >			
C101	1-107-163-00	MICA 47PF	5% 500V
C102	1-107-163-00	MICA 47PF	5% 500V
C103	1-126-967-11	ELECT 47uF	20% 50V
C104	1-126-967-11	ELECT 47uF	20% 50V
C112	1-107-597-11	MICA 22PF	5% 500V
C116	1-126-941-11	ELECT 470uF	20% 25V
C117	1-107-597-11	MICA 22PF	5% 500V
C120	1-107-597-11	MICA 22PF	5% 500V
C121	1-107-597-11	MICA 22PF	5% 500V
C122	1-126-967-11	ELECT 47uF	20% 50V
C123	1-107-597-11	MICA 22PF	5% 500V
C124	1-126-967-11	ELECT 47uF	20% 50V
C125	1-130-482-00	MYLAR 0.0082uF	5% 50V
C126	1-130-477-00	MYLAR 0.0033uF	5% 50V
C127	1-130-492-11	MYLAR 0.056uF	5% 50V
C130	1-130-477-00	MYLAR 0.0033uF	5% 50V
C131	1-124-903-11	ELECT 1uF	20% 50V
C132	1-107-202-00	MICA 10PF	5% 500V
C134	1-126-967-11	ELECT 47uF	20% 50V
C135	1-107-163-00	MICA 47PF	5% 500V
C138	1-126-967-11	ELECT 47uF	20% 50V
C140	1-107-597-11	MICA 22PF	5% 500V
C141	1-126-967-11	ELECT 47uF	20% 50V
C142	1-126-967-11	ELECT 47uF	20% 50V
C143	1-107-597-11	MICA 22PF	5% 500V

Ref. No.	Part No.	Description	Remark
C150	1-126-967-11	ELECT 47uF	20% 50V
C153	1-126-941-11	ELECT 470uF	20% 25V
C158	1-126-949-11	ELECT 220uF	20% 35V
C201	1-107-163-00	MICA 47PF	5% 500V
C202	1-107-163-00	MICA 47PF	5% 500V
C203	1-126-967-11	ELECT 47uF	20% 50V
C204	1-126-967-11	ELECT 47uF	20% 50V
C212	1-107-597-11	MICA 22PF	5% 500V
C216	1-126-941-11	ELECT 470uF	20% 25V
C217	1-107-597-11	MICA 22PF	5% 500V
C220	1-107-597-11	MICA 22PF	5% 500V
C221	1-107-597-11	MICA 22PF	5% 500V
C222	1-126-967-11	ELECT 47uF	20% 50V
C223	1-107-597-11	MICA 22PF	5% 500V
C224	1-126-967-11	ELECT 47uF	20% 50V
C225	1-130-482-00	MYLAR 0.0082uF	5% 50V
C226	1-130-477-00	MYLAR 0.0033uF	5% 50V
C227	1-130-492-11	MYLAR 0.056uF	5% 50V
C230	1-130-477-00	MYLAR 0.0033uF	5% 50V
C231	1-124-903-11	ELECT 1uF	20% 50V
C232	1-107-202-00	MICA 10PF	5% 500V
C234	1-126-967-11	ELECT 47uF	20% 50V
C235	1-107-163-00	MICA 47PF	5% 500V
C238	1-126-967-11	ELECT 47uF	20% 50V
C240	1-107-597-11	MICA 22PF	5% 500V
C241	1-126-967-11	ELECT 47uF	20% 50V
C242	1-126-967-11	ELECT 47uF	20% 50V
C243	1-107-597-11	MICA 22PF	5% 500V
C250	1-126-967-11	ELECT 47uF	20% 50V
C253	1-126-941-11	ELECT 470uF	20% 25V
C258	1-126-949-11	ELECT 220uF	20% 35V
C306	1-126-967-11	ELECT 47uF	20% 50V
C330	1-126-967-11	ELECT 47uF	20% 50V
C331	1-126-942-61	ELECT 1000uF	20% 25V
C332	1-126-942-61	ELECT 1000uF	20% 25V
< CONNECTOR >			
* CN1	1-573-991-11	PIN, CONNECTOR (PC BOARD) 50P	
* CN3	1-764-211-11	CONNECTOR, BOARD TO BOARD 13P	
CN4	1-569-341-11	CONNECTOR, BOARD TO BOARD 19P	
CN9	1-537-865-11	TERMINAL (M3)	
CN15	1-564-511-11	PLUG, CONNECTOR 8P	
CN101	1-778-009-11	CONNECTOR (RECEPTACLE) 3P	
CN201	1-778-009-11	CONNECTOR (RECEPTACLE) 3P	
CN301	1-569-181-11	JACK, PIN 2P	
< DIODE >			
D101	8-719-113-56	DIODE RD22ES-T2B2	
D102	8-719-113-56	DIODE RD22ES-T2B2	

Ref. No.	Part No.	Description	Remark
D103	8-719-113-56	DIODE RD22ES-T2B2	
D104	8-719-113-56	DIODE RD22ES-T2B2	
D105	8-719-921-19	DIODE 1SS119-25TG	
D106	8-719-921-19	DIODE 1SS119-25TG	
D107	8-719-921-19	DIODE 1SS119-25TG	
D108	8-719-921-19	DIODE 1SS119-25TG	
D109	8-719-921-19	DIODE 1SS119-25TG	
D110	8-719-921-19	DIODE 1SS119-25TG	
D111	8-719-921-19	DIODE 1SS119-25TG	
D112	8-719-113-56	DIODE RD22ES-T2B2	
D113	8-719-113-56	DIODE RD22ES-T2B2	
D201	8-719-113-56	DIODE RD22ES-T2B2	
D202	8-719-113-56	DIODE RD22ES-T2B2	
D203	8-719-113-56	DIODE RD22ES-T2B2	
D204	8-719-113-56	DIODE RD22ES-T2B2	
D205	8-719-921-19	DIODE 1SS119-25TG	
D210	8-719-921-19	DIODE 1SS119-25TG	
D211	8-719-921-19	DIODE 1SS119-25TG	
D212	8-719-113-56	DIODE RD22ES-T2B2	
D213	8-719-113-56	DIODE RD22ES-T2B2	
D302	8-719-921-19	DIODE 1SS119-25TG	
D303	8-719-109-85	DIODE RD5. 1ES-T2B	
D304	8-719-109-85	DIODE RD5. 1ES-T2B	
D305	8-719-109-85	DIODE RD5. 1ES-T2B	
D306	8-719-109-85	DIODE RD5. 1ES-T2B	

< IC >

IC101	8-759-710-59	IC NJM4580D-D
IC102	8-759-710-59	IC NJM4580D-D
IC201	8-759-710-59	IC NJM4580D-D
IC202	8-759-710-59	IC NJM4580D-D
IC301	8-759-710-59	IC NJM4580D-D
IC302	8-759-710-59	IC NJM4580D-D
IC303	8-759-710-59	IC NJM4580D-D
IC304	8-759-710-59	IC NJM4580D-D
IC305	8-759-710-59	IC NJM4580D-D
IC306	8-759-710-59	IC NJM4580D-D
IC307	8-759-710-59	IC NJM4580D-D
IC308	8-759-710-59	IC NJM4580D-D

< COIL >

L101	1-424-090-11	COIL, LINE FILTER
L102	1-424-090-11	COIL, LINE FILTER
L103	1-424-090-11	COIL, LINE FILTER
L201	1-424-090-11	COIL, LINE FILTER
L202	1-424-090-11	COIL, LINE FILTER
L203	1-424-090-11	COIL, LINE FILTER

Ref. No.	Part No.	Description	Remark
< TRANSISTOR >			
Q101	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q102	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q103	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q104	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q105	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q106	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q107	8-729-232-29	TRANSISTOR 2SK362-BL	
Q108	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q109	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q201	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q202	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q203	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q204	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q205	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q206	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q207	8-729-232-29	TRANSISTOR 2SK362-BL	
Q208	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q209	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q301	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q302	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	

< RESISTOR >

R101	1-215-447-00	METAL 12K 1% 1/4W
R102	1-247-887-00	CARBON 220K 5% 1/4W
R103	1-247-887-00	CARBON 220K 5% 1/4W
R105	1-249-437-11	CARBON 47K 5% 1/4W
R106	1-249-437-11	CARBON 47K 5% 1/4W
R108	1-249-436-11	CARBON 39K 5% 1/4W
R110	1-215-421-00	METAL 1K 1% 1/4W
R111	1-215-405-00	METAL 220 1% 1/4W
R112	1-249-413-11	CARBON 470 5% 1/4W
R113	1-215-421-00	METAL 1K 1% 1/4W
R115	1-249-436-11	CARBON 39K 5% 1/4W
R116	1-215-421-00	METAL 1K 1% 1/4W
R117	1-215-405-00	METAL 220 1% 1/4W
R118	1-215-421-00	METAL 1K 1% 1/4W
R119	1-249-413-11	CARBON 470 5% 1/4W
R120	1-215-439-00	METAL 5.6K 1% 1/4W
R121	1-215-405-00	METAL 220 1% 1/4W
R122	1-215-439-00	METAL 5.6K 1% 1/4W
R124	1-215-434-00	METAL 3.6K 1% 1/4W
R125	1-215-434-00	METAL 3.6K 1% 1/4W
R126	1-215-434-00	METAL 3.6K 1% 1/4W
R127	1-215-434-00	METAL 3.6K 1% 1/4W
R129	1-247-887-00	CARBON 220K 5% 1/4W
R131	1-215-427-00	METAL 1.8K 1% 1/4W
R133	1-215-438-00	METAL 5.1K 1% 1/4W

Ref. No.	Part No.	Description	Remark		
R134	1-215-438-00	METAL	5. 1K	1%	1/4W
R135	1-215-437-00	METAL	4. 7K	1%	1/4W
R136	1-215-437-00	METAL	4. 7K	1%	1/4W
R137	1-215-445-00	METAL	10K	1%	1/4W
R138	1-215-435-00	METAL	3. 9K	1%	1/4W
R139	1-215-445-00	METAL	10K	1%	1/4W
R140	1-215-437-00	METAL	4. 7K	1%	1/4W
R141	1-215-437-00	METAL	4. 7K	1%	1/4W
R142	1-215-445-00	METAL	10K	1%	1/4W
R143	1-215-445-00	METAL	10K	1%	1/4W
R144	1-215-435-00	METAL	3. 9K	1%	1/4W
R145	1-215-445-00	METAL	10K	1%	1/4W
R146	1-247-887-00	CARBON	220K	5%	1/4W
R147	1-247-887-00	CARBON	220K	5%	1/4W
R148	1-247-887-00	CARBON	220K	5%	1/4W
R149	1-215-434-00	METAL	3. 6K	1%	1/4W
R150	1-215-427-00	METAL	1. 8K	1%	1/4W
R151	1-215-434-00	METAL	3. 6K	1%	1/4W
R152	1-249-436-11	CARBON	39K	5%	1/4W
R153	1-247-895-00	CARBON	470K	5%	1/4W
R155	1-215-431-00	METAL	2. 7K	1%	1/4W
R156	1-247-895-00	CARBON	470K	5%	1/4W
R157	1-247-887-00	CARBON	220K	5%	1/4W
R158	1-215-437-00	METAL	4. 7K	1%	1/4W
R159	1-215-437-00	METAL	4. 7K	1%	1/4W
R160	1-247-895-00	CARBON	470K	5%	1/4W
R162	1-249-441-11	CARBON	100K	5%	1/4W
R163	1-249-437-11	CARBON	47K	5%	1/4W
R165	1-215-421-00	METAL	1K	1%	1/4W
R166	1-247-807-31	CARBON	100	5%	1/4W
R167	1-215-437-00	METAL	4. 7K	1%	1/4W
R168	1-215-400-81	METAL	130	1%	1/4W
R169	1-215-421-00	METAL	1K	1%	1/4W
R171	1-249-419-11	CARBON	1. 5K	5%	1/4W
R172	1-247-843-11	CARBON	3. 3K	5%	1/4W
R174	1-215-421-00	METAL	1K	1%	1/4W
R175	1-247-895-00	CARBON	470K	5%	1/4W
R176	1-247-895-00	CARBON	470K	5%	1/4W
R177	1-247-895-00	CARBON	470K	5%	1/4W
R185	1-215-437-00	METAL	4. 7K	1%	1/4W
R186	1-215-437-00	METAL	4. 7K	1%	1/4W
R187	1-215-437-00	METAL	4. 7K	1%	1/4W
R188	1-215-437-00	METAL	4. 7K	1%	1/4W
R189	1-215-437-00	METAL	4. 7K	1%	1/4W
R190	1-215-437-00	METAL	4. 7K	1%	1/4W
R191	1-215-437-00	METAL	4. 7K	1%	1/4W
R192	1-215-437-00	METAL	4. 7K	1%	1/4W
R193	1-215-437-00	METAL	4. 7K	1%	1/4W
R194	1-215-437-00	METAL	4. 7K	1%	1/4W

Ref. No.	Part No.	Description	Remark		
R201	1-215-447-00	METAL	12K	1%	1/4W
R202	1-247-887-00	CARBON	220K	5%	1/4W
R203	1-247-887-00	CARBON	220K	5%	1/4W
R205	1-249-437-11	CARBON	47K	5%	1/4W
R206	1-249-437-11	CARBON	47K	5%	1/4W
R208	1-249-436-11	CARBON	39K	5%	1/4W
R210	1-215-421-00	METAL	1K	1%	1/4W
R211	1-215-405-00	METAL	220	1%	1/4W
R212	1-249-413-11	CARBON	470	5%	1/4W
R213	1-215-421-00	METAL	1K	1%	1/4W
R215	1-249-436-11	CARBON	39K	5%	1/4W
R216	1-215-421-00	METAL	1K	1%	1/4W
R217	1-215-405-00	METAL	220	1%	1/4W
R218	1-215-421-00	METAL	1K	1%	1/4W
R219	1-249-413-11	CARBON	470	5%	1/4W
R220	1-215-439-00	METAL	5. 6K	1%	1/4W
R221	1-215-405-00	METAL	220	1%	1/4W
R222	1-215-439-00	METAL	5. 6K	1%	1/4W
R224	1-215-434-00	METAL	3. 6K	1%	1/4W
R225	1-215-434-00	METAL	3. 6K	1%	1/4W
R226	1-215-434-00	METAL	3. 6K	1%	1/4W
R227	1-215-434-00	METAL	3. 6K	1%	1/4W
R229	1-247-887-00	CARBON	220K	5%	1/4W
R231	1-215-427-00	METAL	1. 8K	1%	1/4W
R233	1-215-438-00	METAL	5. 1K	1%	1/4W
R234	1-215-438-00	METAL	5. 1K	1%	1/4W
R235	1-215-437-00	METAL	4. 7K	1%	1/4W
R236	1-215-437-00	METAL	4. 7K	1%	1/4W
R237	1-215-445-00	METAL	10K	1%	1/4W
R238	1-215-435-00	METAL	3. 9K	1%	1/4W
R239	1-215-445-00	METAL	10K	1%	1/4W
R240	1-215-437-00	METAL	4. 7K	1%	1/4W
R241	1-215-437-00	METAL	4. 7K	1%	1/4W
R242	1-215-445-00	METAL	10K	1%	1/4W
R243	1-215-445-00	METAL	10K	1%	1/4W
R244	1-215-435-00	METAL	3. 9K	1%	1/4W
R245	1-215-445-00	METAL	10K	1%	1/4W
R246	1-247-887-00	CARBON	220K	5%	1/4W
R247	1-247-887-00	CARBON	220K	5%	1/4W
R248	1-247-887-00	CARBON	220K	5%	1/4W
R249	1-215-434-00	METAL	3. 6K	1%	1/4W
R250	1-215-427-00	METAL	1. 8K	1%	1/4W
R251	1-215-434-00	METAL	3. 6K	1%	1/4W
R252	1-249-436-11	CARBON	39K	5%	1/4W
R255	1-215-431-00	METAL	2. 7K	1%	1/4W
R256	1-247-895-00	CARBON	470K	5%	1/4W
R257	1-247-887-00	CARBON	220K	5%	1/4W
R258	1-215-437-00	METAL	4. 7K	1%	1/4W

Ref. No.	Part No.	Description	Remark		
R259	1-215-437-00	METAL	4. 7K	1%	1/4W
R260	1-247-895-00	CARBON	470K	5%	1/4W
R262	1-249-441-11	CARBON	100K	5%	1/4W
R263	1-249-437-11	CARBON	47K	5%	1/4W
R265	1-215-421-00	METAL	1K	1%	1/4W
R266	1-247-807-31	CARBON	100	5%	1/4W
R267	1-215-437-00	METAL	4. 7K	1%	1/4W
R268	1-215-400-81	METAL	130	1%	1/4W
R269	1-215-421-00	METAL	1K	1%	1/4W
R271	1-249-419-11	CARBON	1. 5K	5%	1/4W
R272	1-247-843-11	CARBON	3. 3K	5%	1/4W
R274	1-215-421-00	METAL	1K	1%	1/4W
R285	1-215-437-00	METAL	4. 7K	1%	1/4W
R286	1-215-437-00	METAL	4. 7K	1%	1/4W
R287	1-215-437-00	METAL	4. 7K	1%	1/4W
R288	1-215-437-00	METAL	4. 7K	1%	1/4W
R289	1-215-437-00	METAL	4. 7K	1%	1/4W
R290	1-215-437-00	METAL	4. 7K	1%	1/4W
R291	1-215-437-00	METAL	4. 7K	1%	1/4W
R292	1-215-437-00	METAL	4. 7K	1%	1/4W
R293	1-215-437-00	METAL	4. 7K	1%	1/4W
R294	1-215-437-00	METAL	4. 7K	1%	1/4W
R301	1-215-438-00	METAL	5. 1K	1%	1/4W
R302	1-215-438-00	METAL	5. 1K	1%	1/4W
R303	1-215-434-00	METAL	3. 6K	1%	1/4W
R304	1-215-437-00	METAL	4. 7K	1%	1/4W
R305	1-215-437-00	METAL	4. 7K	1%	1/4W
R306	1-247-887-00	CARBON	220K	5%	1/4W
R307	1-247-895-00	CARBON	470K	5%	1/4W
△R309	1-212-879-11	FUSIBLE	82	5%	1/4W F
R310	1-215-437-00	METAL	4. 7K	1%	1/4W
R311	1-215-445-00	METAL	10K	1%	1/4W
R312	1-215-445-00	METAL	10K	1%	1/4W
R313	1-215-431-00	METAL	2. 7K	1%	1/4W
R315	1-215-438-00	METAL	5. 1K	1%	1/4W
R316	1-215-438-00	METAL	5. 1K	1%	1/4W
R317	1-215-434-00	METAL	3. 6K	1%	1/4W
△R330	1-212-849-00	FUSIBLE	4. 7	5%	1/4W F
△R331	1-212-849-00	FUSIBLE	4. 7	5%	1/4W F
△R332	1-212-849-00	FUSIBLE	4. 7	5%	1/4W F
R334	1-249-436-11	CARBON	39K	5%	1/4W
R335	1-215-434-00	METAL	3. 6K	1%	1/4W
R336	1-215-445-00	METAL	10K	1%	1/4W
R337	1-215-437-00	METAL	4. 7K	1%	1/4W
R338	1-215-437-00	METAL	4. 7K	1%	1/4W
< VARIABLE RESISTOR >					
RV103	1-228-989-00	RES, ADJ, METAL 470			

Ref. No.	Part No.	Description	Remark		
RV203	1-228-989-00	RES, ADJ, METAL 470			
RV301	1-225-274-11	RES, VAR, CARBON 20K/20K			
RV302	1-225-264-11	RES, VAR, CARBON 5K/5K			
RV303	1-225-267-11	RES, VAR, CARBON 10K/10K			
RV304	1-225-267-11	RES, VAR, CARBON 10K/10K			
RV305	1-225-270-11	RES, VAR, CARBON 100KX4			
RV315	1-225-267-11	RES, VAR, CARBON 10K/10K			
< RELAY >					
RY301	1-515-787-11	RELAY			
< SWITCH >					
SW301	1-572-004-11	SWITCH, PUSH			
SW303	1-572-004-11	SWITCH, PUSH			
SW304	1-572-004-11	SWITCH, PUSH			
SW305	1-572-004-11	SWITCH, PUSH			
SW306	1-572-004-11	SWITCH, PUSH			
SW307	1-572-004-11	SWITCH, PUSH			
SW308	1-572-004-11	SWITCH, PUSH			
SW309	1-572-004-11	SWITCH, PUSH			

*	A-4587-525-A	ST-OUT BOARD, COMPLETE			

*	1-560-242-21	BUS BAR 4P			
*	1-560-242-41	BUS BAR 11P			
*	1-560-242-91	BUS BAR 10P			
< CAPACITOR >					
C608	1-126-967-11	ELECT	47uF	20%	50V
C609	1-126-967-11	ELECT	47uF	20%	50V
C610	1-126-967-11	ELECT	47uF	20%	50V
C612	1-126-941-11	ELECT	470uF	20%	25V
C613	1-126-967-11	ELECT	47uF	20%	50V
C614	1-126-949-11	ELECT	220uF	20%	35V
C618	1-107-597-11	MICA	22PF	5%	500V
C619	1-107-202-00	MICA	10PF	5%	500V
C620	1-107-597-11	MICA	22PF	5%	500V
C628	1-107-202-00	MICA	10PF	5%	500V
C630	1-126-941-11	ELECT	470uF	20%	25V
C635	1-126-967-11	ELECT	47uF	20%	50V
C636	1-126-967-11	ELECT	47uF	20%	50V
C638	1-126-967-11	ELECT	47uF	20%	50V
C639	1-107-163-00	MICA	47PF	5%	500V
C640	1-126-967-11	ELECT	47uF	20%	50V
C641	1-126-941-11	ELECT	470uF	20%	25V
C644	1-126-967-11	ELECT	47uF	20%	50V
C645	1-107-597-11	MICA	22PF	5%	500V
C646	1-107-202-00	MICA	10PF	5%	500V

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

△印の部品, または△印付きの点線で囲まれた部品は, 安全性を維持するために重要な部品です。従って交換時は, 必ず指定の部品を使用して下さい。

ST-OUT

Ref. No.	Part No.	Description	Remark
C647	1-126-941-11	ELECT 470uF	20% 25V
C651	1-126-967-11	ELECT 47uF	20% 50V
C652	1-126-967-11	ELECT 47uF	20% 50V
C653	1-126-967-11	ELECT 47uF	20% 50V
C654	1-126-942-61	ELECT 1000uF	20% 25V
C655	1-126-942-61	ELECT 1000uF	20% 25V
C658	1-126-949-11	ELECT 220uF	20% 35V
C659	1-126-967-11	ELECT 47uF	20% 50V
C660	1-107-202-00	MICA 10PF	5% 500V
C661	1-126-967-11	ELECT 47uF	20% 50V
C662	1-126-967-11	ELECT 47uF	20% 50V
C670	1-130-467-00	MYLAR 470PF	5% 50V

< CONNECTOR >

* CN1	1-573-991-11	PIN, CONNECTOR (PC BOARD) 50P
CN601	1-750-860-11	CONNECTOR, BOARD TO BOARD 16P
* CN602	1-565-730-11	PIN, CONNECTOR (RIGHT ANGLE) 34P
* CN603	1-564-507-11	PLUG, CONNECTOR 4P
* CN604	1-564-519-11	PLUG, CONNECTOR 4P

CN605	1-778-008-11	CONNECTOR (PLUG) 3P
CN606	1-778-008-11	CONNECTOR (PLUG) 3P
CN607	1-537-865-11	TERMINAL (M3)
CN608	1-580-041-11	JACK, LARGE (2 GANG)
CN611	1-537-862-11	TERMINAL, TAB (187 TYPE)

CN613	1-537-862-11	TERMINAL, TAB (187 TYPE)
CN615	1-537-862-11	TERMINAL, TAB (187 TYPE)
CN616	1-537-862-11	TERMINAL, TAB (187 TYPE)
CN619	1-537-862-11	TERMINAL, TAB (187 TYPE)
CN620	1-537-862-11	TERMINAL, TAB (187 TYPE)

CN621	1-537-862-11	TERMINAL, TAB (187 TYPE)
CN623	1-537-862-11	TERMINAL, TAB (187 TYPE)
CN625	1-750-860-11	CONNECTOR, BOARD TO BOARD 16P

< DIODE >

D601	8-719-921-19	DIODE 1SS119-25TG
D603	8-719-921-19	DIODE 1SS119-25TG
D604	8-719-921-19	DIODE 1SS119-25TG
D605	8-719-113-56	DIODE RD22ES-T2B2
D606	8-719-113-56	DIODE RD22ES-T2B2

D607	8-719-113-56	DIODE RD22ES-T2B2
D608	8-719-113-56	DIODE RD22ES-T2B2
D609	8-719-921-19	DIODE 1SS119-25TG
D610	8-719-113-56	DIODE RD22ES-T2B2
D611	8-719-113-56	DIODE RD22ES-T2B2

D612	8-719-113-56	DIODE RD22ES-T2B2
D613	8-719-113-56	DIODE RD22ES-T2B2
D614	8-719-113-56	DIODE RD22ES-T2B2
D615	8-719-113-56	DIODE RD22ES-T2B2
D616	8-719-113-56	DIODE RD22ES-T2B2

Ref. No.	Part No.	Description	Remark
D617	8-719-113-56	DIODE RD22ES-T2B2	
D618	8-719-200-82	DIODE 11ES2	
D619	8-719-200-82	DIODE 11ES2	
D620	8-719-200-82	DIODE 11ES2	
D621	8-719-200-82	DIODE 11ES2	

< IC >

IC601	8-759-710-59	IC NJM4580D-D
IC602	8-759-710-59	IC NJM4580D-D
IC603	8-759-710-59	IC NJM4580D-D
IC604	8-759-710-59	IC NJM4580D-D
IC605	8-759-710-59	IC NJM4580D-D

IC606	8-759-801-01	IC LC4966
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< COIL >

L602	1-424-090-11	COIL, LINE FILTER
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< TRANSISTOR >

Q601	8-729-354-52	TRANSISTOR 2SC2545-ETZ
Q602	8-729-354-52	TRANSISTOR 2SC2545-ETZ
Q603	8-729-354-52	TRANSISTOR 2SC2545-ETZ
Q604	8-729-354-52	TRANSISTOR 2SC2545-ETZ
Q605	8-729-029-56	TRANSISTOR DTA144ESA-TP

Q606	8-729-029-56	TRANSISTOR DTA144ESA-TP
Q607	8-729-029-56	TRANSISTOR DTA144ESA-TP
Q609	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2
Q610	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2
Q611	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2

< RESISTOR >

R602	1-215-421-00	METAL 1K 1% 1/4W
R603	1-215-421-00	METAL 1K 1% 1/4W
R604	1-215-421-00	METAL 1K 1% 1/4W
R605	1-215-421-00	METAL 1K 1% 1/4W
R606	1-215-435-00	METAL 3.9K 1% 1/4W

R607	1-247-807-31	CARBON 100 5% 1/4W
R608	1-215-440-00	METAL 6.2K 1% 1/4W
R609	1-247-807-31	CARBON 100 5% 1/4W
R610	1-247-807-31	CARBON 100 5% 1/4W
R612	1-249-397-11	CARBON 22 5% 1/4W

R615	1-215-429-00	METAL 2.2K 1% 1/4W
R616	1-249-437-11	CARBON 47K 5% 1/4W
R618	1-215-431-00	METAL 2.7K 1% 1/4W
R619	1-247-887-00	CARBON 220K 5% 1/4W
R622	1-215-411-00	METAL 390 1% 1/4W

R623	1-247-887-00	CARBON 220K 5% 1/4W
R624	1-249-437-11	CARBON 47K 5% 1/4W
R625	1-215-440-00	METAL 6.2K 1% 1/4W

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R628	1-215-435-00	METAL	3.9K	1%	1/4W	R691	1-215-445-00	METAL	10K	1%	1/4W
R630	1-247-887-00	CARBON	220K	5%	1/4W	R692	1-215-445-00	METAL	10K	1%	1/4W
						R693	1-215-445-00	METAL	10K	1%	1/4W
R631	1-215-435-00	METAL	3.9K	1%	1/4W	R694	1-215-437-00	METAL	4.7K	1%	1/4W
R633	1-247-887-00	CARBON	220K	5%	1/4W						
R635	1-215-440-00	METAL	6.2K	1%	1/4W	R695	1-215-437-00	METAL	4.7K	1%	1/4W
R637	1-215-437-00	METAL	4.7K	1%	1/4W	△R697	1-212-849-00	FUSIBLE	4.7	5%	1/4W F
R638	1-249-397-11	CARBON	22	5%	1/4W	△R698	1-212-849-00	FUSIBLE	4.7	5%	1/4W F
						△R699	1-212-849-00	FUSIBLE	4.7	5%	1/4W F
R639	1-215-435-00	METAL	3.9K	1%	1/4W	R705	1-215-437-00	METAL	4.7K	1%	1/4W
R641	1-215-440-00	METAL	6.2K	1%	1/4W						
R642	1-215-435-00	METAL	3.9K	1%	1/4W	R706	1-215-437-00	METAL	4.7K	1%	1/4W
R643	1-247-807-31	CARBON	100	5%	1/4W	R707	1-215-437-00	METAL	4.7K	1%	1/4W
R645	1-215-440-00	METAL	6.2K	1%	1/4W	R708	1-215-437-00	METAL	4.7K	1%	1/4W
						R709	1-215-437-00	METAL	4.7K	1%	1/4W
R647	1-249-397-11	CARBON	22	5%	1/4W	R710	1-249-397-11	CARBON	22	5%	1/4W
R649	1-247-887-00	CARBON	220K	5%	1/4W						
R650	1-247-887-00	CARBON	220K	5%	1/4W	R711	1-247-887-00	CARBON	220K	5%	1/4W
R651	1-247-887-00	CARBON	220K	5%	1/4W	R712	1-247-887-00	CARBON	220K	5%	1/4W
R654	1-247-887-00	CARBON	220K	5%	1/4W	R713	1-215-427-00	METAL	1.8K	1%	1/4W
						R714	1-215-427-00	METAL	1.8K	1%	1/4W
R655	1-247-887-00	CARBON	220K	5%	1/4W	R715	1-249-441-11	CARBON	100K	5%	1/4W
R657	1-247-887-00	CARBON	220K	5%	1/4W						
R658	1-215-440-00	METAL	6.2K	1%	1/4W	R716	1-249-441-11	CARBON	100K	5%	1/4W
R659	1-215-435-00	METAL	3.9K	1%	1/4W	R717	1-247-889-00	CARBON	270K	5%	1/4W
R660	1-247-895-00	CARBON	470K	5%	1/4W	R718	1-215-421-00	METAL	1K	1%	1/4W
						R720	1-215-421-00	METAL	1K	1%	1/4W
R661	1-247-895-00	CARBON	470K	5%	1/4W	R721	1-249-433-11	CARBON	22K	5%	1/4W
R662	1-215-435-00	METAL	3.9K	1%	1/4W						
R663	1-247-887-00	CARBON	220K	5%	1/4W	R722	1-215-437-00	METAL	4.7K	1%	1/4W
R664	1-215-440-00	METAL	6.2K	1%	1/4W	△R723	1-212-879-11	FUSIBLE	82	5%	1/4W F
R665	1-249-397-11	CARBON	22	5%	1/4W	R724	1-215-437-00	METAL	4.7K	1%	1/4W
						△R725	1-212-879-11	FUSIBLE	82	5%	1/4W F
R666	1-215-435-00	METAL	3.9K	1%	1/4W	R726	1-215-437-00	METAL	4.7K	1%	1/4W
R668	1-215-440-00	METAL	6.2K	1%	1/4W						
R669	1-249-438-11	CARBON	56K	5%	1/4W	△R727	1-212-879-11	FUSIBLE	82	5%	1/4W F
R670	1-215-449-00	METAL	15K	1%	1/4W	△R728	1-202-972-61	FUSIBLE	1	5%	1/4W F
R671	1-249-397-11	CARBON	22	5%	1/4W	R729	1-215-449-00	METAL	15K	1%	1/4W
						R730	1-215-449-00	METAL	15K	1%	1/4W
R674	1-215-437-00	METAL	4.7K	1%	1/4W	R731	1-215-449-00	METAL	15K	1%	1/4W
R675	1-215-437-00	METAL	4.7K	1%	1/4W						
R676	1-247-887-00	CARBON	220K	5%	1/4W	R732	1-247-887-00	CARBON	220K	5%	1/4W
R678	1-249-414-11	CARBON	560	5%	1/4W	R733	1-247-895-00	CARBON	470K	5%	1/4W
R679	1-249-414-11	CARBON	560	5%	1/4W	R734	1-215-447-00	METAL	12K	1%	1/4W
						R735	1-215-445-00	METAL	10K	1%	1/4W
R680	1-249-414-11	CARBON	560	5%	1/4W	R740	1-247-397-11	CARBON	22	5%	1/4W
R681	1-249-414-11	CARBON	560	5%	1/4W						
R682	1-249-414-11	CARBON	560	5%	1/4W	< VARIABLE RESISTOR >					
R683	1-249-414-11	CARBON	560	5%	1/4W	RV601	1-238-478-11	RES, ADJ, CARBON 1M			
R684	1-249-414-11	CARBON	560	5%	1/4W	RV602	1-238-478-11	RES, ADJ, CARBON 1M			
R685	1-249-414-11	CARBON	560	5%	1/4W	< RELAY >					
R686	1-215-445-00	METAL	10K	1%	1/4W	RY601	1-515-787-11	RELAY			
R687	1-215-445-00	METAL	10K	1%	1/4W	RY602	1-515-787-11	RELAY			
R688	1-215-445-00	METAL	10K	1%	1/4W	RY603	1-515-787-11	RELAY			
R689	1-215-445-00	METAL	10K	1%	1/4W	*****					
R690	1-215-445-00	METAL	10K	1%	1/4W						

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

△印の部品、または△印付きの点線で囲まれた部品は、安全性を維持するために重要な部品です。従って交換時は、必ず指定の部品を使用して下さい。

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
*	A-4588-810-A TB BOARD, COMPLETE *****					D506	8-719-921-19	DIODE	1SS119-25TG		
	< CAPACITOR >					D507	8-719-921-19	DIODE	1SS119-25TG		
C501	1-164-159-11	CERAMIC	0.1uF		50V	D508	8-719-921-19	DIODE	1SS119-25TG		
C502	1-164-159-11	CERAMIC	0.1uF		50V	D509	8-719-921-19	DIODE	1SS119-25TG		
C503	1-130-471-51	MYLAR	0.001uF	5%	50V	D510	8-719-921-19	DIODE	1SS119-25TG		
C504	1-130-471-51	MYLAR	0.001uF	5%	50V						
C507	1-126-967-11	ELECT	47uF	20%	50V			< IC >			
C508	1-136-177-00	FILM	1uF	5%	50V	IC501	8-759-240-06	IC	TC4006BP		
C509	1-130-471-51	MYLAR	0.001uF	5%	50V	IC502	8-759-240-06	IC	TC4006BP		
C510	1-137-193-51	FILM	0.39uF	5%	50V	IC503	8-759-207-73	IC	TC4030BPHB		
C511	1-130-496-00	MYLAR	0.12uF	5%	50V	IC504	8-759-916-52	IC	TC74HC165AP		
C512	1-130-490-11	MYLAR	0.039uF	5%	50V	IC505	8-759-233-43	IC	TC74HC595AP		
C513	1-130-487-00	MYLAR	0.022uF	5%	50V	IC507	8-759-710-59	IC	NJM4580D-D		
C514	1-126-967-11	ELECT	47uF	20%	50V	IC508	8-759-634-51	IC	NJM4558D		
C515	1-164-159-11	CERAMIC	0.1uF		50V	IC509	8-759-634-51	IC	NJM4558D		
C516	1-107-163-00	MICA	47PF	5%	500V	IC510	8-759-634-51	IC	NJM4558D		
C519	1-126-967-11	ELECT	47uF	20%	50V	IC511	8-759-634-51	IC	NJM4558D		
C520	1-126-967-11	ELECT	47uF	20%	50V			< TRANSISTOR >			
C522	1-126-967-11	ELECT	47uF	20%	50V	Q501	8-729-195-23	TRANSISTOR	2SA952TP-K1		
C525	1-126-967-11	ELECT	47uF	20%	50V	Q502	8-729-207-46	TRANSISTOR	2SC3112B-TPE2		
C526	1-126-967-11	ELECT	47uF	20%	50V	Q503	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
C527	1-124-903-11	ELECT	1uF	20%	50V	Q504	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
C528	1-126-967-11	ELECT	47uF	20%	50V	Q505	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
C529	1-124-903-11	ELECT	1uF	20%	50V	Q510	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
C530	1-126-967-11	ELECT	47uF	20%	50V	Q511	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
C535	1-126-967-11	ELECT	47uF	20%	50V	Q512	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
C537	1-126-967-11	ELECT	47uF	20%	50V	Q513	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
C538	1-164-159-11	CERAMIC	0.1uF		50V			< RESISTOR >			
C539	1-164-159-11	CERAMIC	0.1uF		50V	R502	1-247-883-00	CARBON	150K 5%	1/4W	
C542	1-126-942-61	ELECT	1000uF	20%	25V	R503	1-247-883-00	CARBON	150K 5%	1/4W	
C543	1-126-942-61	ELECT	1000uF	20%	25V	R504	1-247-883-00	CARBON	150K 5%	1/4W	
C544	1-126-967-11	ELECT	47uF	20%	50V	R507	1-215-445-00	METAL	10K 1%	1/4W	
C545	1-130-467-00	MYLAR	470PF	5%	50V	R508	1-247-843-11	CARBON	3.3K 5%	1/4W	
	< CONNECTOR >					R509	1-215-421-00	METAL	1K 1%	1/4W	
CN5	1-750-177-11	PIN, CONNECTOR (PC BOARD) 15P				R510	1-249-411-11	CARBON	330 5%	1/4W	
CN6	1-564-523-11	PLUG, CONNECTOR 8P				R511	1-247-807-31	CARBON	100 5%	1/4W	
CN7	1-750-860-11	CONNECTOR, BOARD TO BOARD 16P				R512	1-215-431-00	METAL	2.7K 1%	1/4W	
CN8	1-750-860-11	CONNECTOR, BOARD TO BOARD 16P				R513	1-215-431-00	METAL	2.7K 1%	1/4W	
	< DIODE >					R514	1-247-887-00	CARBON	220K 5%	1/4W	
D501	8-719-921-19	DIODE	1SS119-25TG			R515	1-247-887-00	CARBON	220K 5%	1/4W	
D502	8-719-921-19	DIODE	1SS119-25TG			R516	1-247-887-00	CARBON	220K 5%	1/4W	
D503	8-719-921-19	DIODE	1SS119-25TG			R517	1-215-437-00	METAL	4.7K 1%	1/4W	
D504	8-719-921-19	DIODE	1SS119-25TG			R518	1-249-432-11	CARBON	18K 5%	1/4W	
D505	8-719-921-19	DIODE	1SS119-25TG			R519	1-247-887-00	CARBON	220K 5%	1/4W	

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark	
R520	1-249-432-11	CARBON	18K	5%	1/4W					
R521	1-249-437-11	CARBON	47K	5%	1/4W			< SWITCH >		
R522	1-215-445-00	METAL	10K	1%	1/4W					
R523	1-247-887-00	CARBON	220K	5%	1/4W	SW1	1-571-212-11	SWITCH, SLIDE		
						SW2	1-572-004-11	SWITCH, PUSH		
R524	1-215-445-00	METAL	10K	1%	1/4W	SW3	1-572-004-11	SWITCH, PUSH		
R525	1-215-445-00	METAL	10K	1%	1/4W	SW4	1-572-004-11	SWITCH, PUSH		
R526	1-215-445-00	METAL	10K	1%	1/4W	SW5	1-572-004-11	SWITCH, PUSH		
R527	1-215-445-00	METAL	10K	1%	1/4W					
R528	1-215-445-00	METAL	10K	1%	1/4W	SW6	1-572-004-11	SWITCH, PUSH		
						SW7	1-572-004-11	SWITCH, PUSH		
R529	1-215-445-00	METAL	10K	1%	1/4W	SW8	1-554-824-21	SWITCH, PUSH (1 KEY)		
R530	1-215-421-00	METAL	1K	1%	1/4W	*****				
R531	1-215-437-00	METAL	4.7K	1%	1/4W	*	1-660-912-11	TR BOARD		
R532	1-215-421-00	METAL	1K	1%	1/4W			*****		
R533	1-215-437-00	METAL	4.7K	1%	1/4W			< CAPACITOR >		
R534	1-247-887-00	CARBON	220K	5%	1/4W					
R535	1-215-437-00	METAL	4.7K	1%	1/4W	C401	1-164-159-11	CERAMIC	0.1uF	50V
R536	1-247-887-00	CARBON	220K	5%	1/4W			< CONNECTOR >		
R537	1-215-437-00	METAL	4.7K	1%	1/4W	CN401	1-564-320-00	PIN, CONNECTOR (B2P-VH)	2P	
R539	1-215-440-00	METAL	6.2K	1%	1/4W			< DIODE >		
R541	1-215-440-00	METAL	6.2K	1%	1/4W	D401	8-719-113-56	DIODE	RD22ES-T2B2	
R542	1-215-445-00	METAL	10K	1%	1/4W			< IC >		
R543	1-215-445-00	METAL	10K	1%	1/4W	IC401	8-759-144-82	IC	uPC2405HF	
R544	1-215-445-00	METAL	10K	1%	1/4W			< TRANSISTOR >		
R545	1-215-445-00	METAL	10K	1%	1/4W	Q401	8-729-321-14	TRANSISTOR	2SC4388-Y	

R546	1-249-433-11	CARBON	22K	5%	1/4W			MISCELLANEOUS		
R547	1-249-414-11	CARBON	560	5%	1/4W			*****		
R548	1-247-843-11	CARBON	3.3K	5%	1/4W					
R549	1-215-449-00	METAL	15K	1%	1/4W					
△R550	1-212-869-00	FUSIBLE	33	5%	1/4W F					
R551	1-249-437-11	CARBON	47K	5%	1/4W					
R552	1-249-437-11	CARBON	47K	5%	1/4W					
R553	1-215-421-00	METAL	1K	1%	1/4W					
R554	1-215-421-00	METAL	1K	1%	1/4W					
△R555	1-212-849-00	FUSIBLE	4.7	5%	1/4W F					
△R556	1-212-849-00	FUSIBLE	4.7	5%	1/4W F	7	1-777-452-11	CABLE (WITH CONNECTOR)		
△R557	1-212-849-00	FUSIBLE	4.7	5%	1/4W F	8	1-777-067-11	CABLE (WITH CONNECTOR)		
R558	1-215-445-00	METAL	10K	1%	1/4W	57	1-777-066-11	CABLE (WITH CONNECTOR)		
R559	1-215-441-00	METAL	6.8K	1%	1/4W	58	1-777-067-11	CABLE (WITH CONNECTOR)		
R560	1-215-445-00	METAL	10K	1%	1/4W	107	1-777-453-11	CABLE (WITH CONNECTOR)		
R561	1-215-449-00	METAL	15K	1%	1/4W	108	1-777-454-11	CABLE (WITH CONNECTOR)		
R562	1-215-405-00	METAL	220	1%	1/4W	157	1-777-455-11	CABLE (WITH CONNECTOR)		
R563	1-215-405-00	METAL	220	1%	1/4W	158	1-777-456-11	CABLE (WITH CONNECTOR)		
R564	1-247-887-00	CARBON	220K	5%	1/4W	216	1-225-271-11	RES, SLIDE CARBON VAR	10K	
R565	1-249-437-11	CARBON	47K	5%	1/4W	263	1-225-273-11	RES, SLIDE CARBON VAR	10K/10K	
R566	1-247-887-00	CARBON	220K	5%	1/4W	309	1-563-354-11	CONNECTOR, BNC		
R567	1-249-437-11	CARBON	47K	5%	1/4W	323	1-225-271-11	RES, SLIDE CARBON VAR	10K	
						324	1-543-798-11	FILTER, CLAMP		
						325	1-508-942-12	CONNECTOR	14P	

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Ref. No.	Part No.	Description	Remark

HARDWARE LIST			

#1	7-685-662-79	SCREW +BVTP 4X14 TYPE2 SLIT	
#2	7-682-577-09	SCREW +B 5X14	
#3	7-682-247-09	SCREW +RK 3X6	
#4	7-682-547-09	SCREW +B 3X6	
#5	7-621-773-95	SCREW +B 2.6X6	
#6	7-682-547-04	SCREW +PTT 3X6 (S)	
#7	7-685-646-79	SCREW +BVTP 3X8 TYPE2 SLIT	
#8	7-623-308-07	LW 3, TYPE (A)	
#9	7-682-551-09	SCREW +B 3X14	
#10	7-685-645-79	SCREW +BVTP 3X6 TYPE2 SLIT	
#11	7-621-772-10	SCREW +B 2X4	
#12	7-682-548-09	SCREW +B 3X8	

ACCESSORIES & PACKING MATERIALS

2-344-733-01 MANUAL, INSTRUCTIONS
3-800-983-01 INSTRUCTION