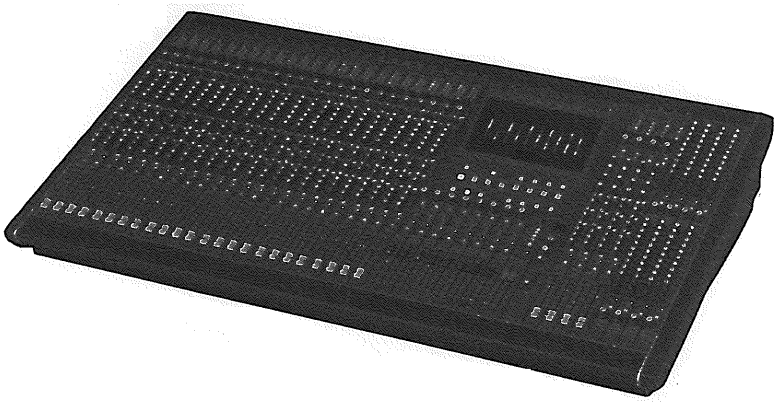
SRP-V316/V324/V332/V340

SERVICE MANUAL

J Model
AEP Model
UK Model
E Model



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AUDIO MIXING CONSOLE

オーディオミキシングコンソール

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SECTION 1.
SERVICE NOTE

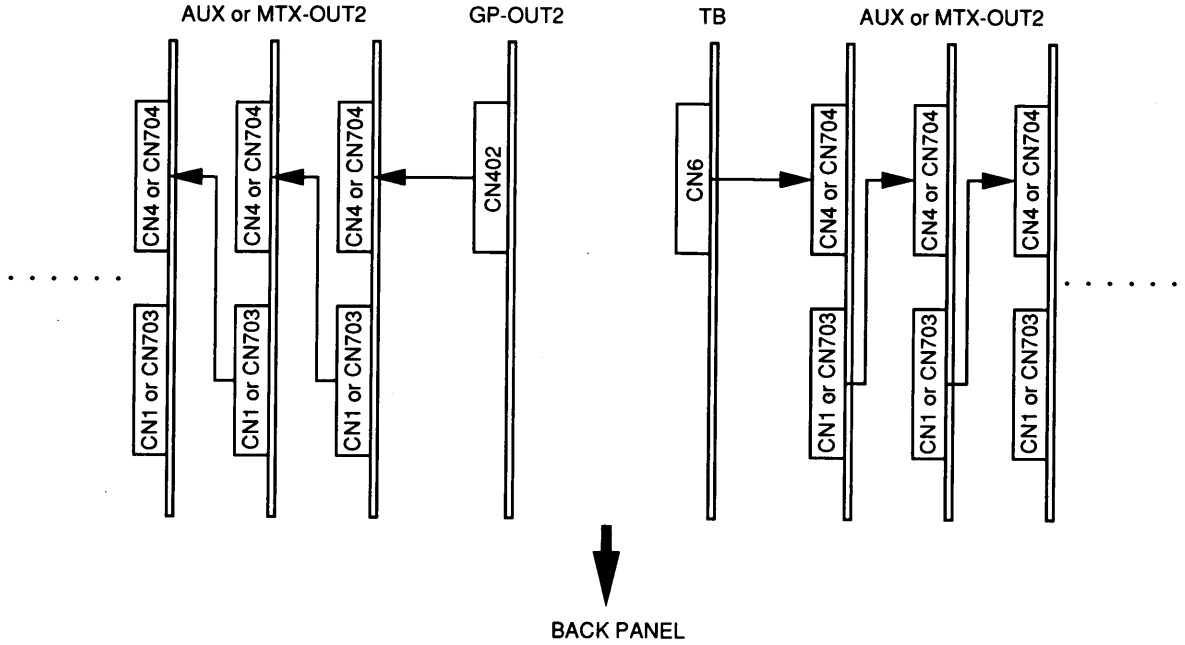
1. サービスノート

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.

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。



SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ 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 Á LA SÉCURITÉ!

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

サービス，点検時には次のことにご注意下さい。

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⚠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ため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

2. 電気調整要項

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)

MN-IN1 基板レベル調整

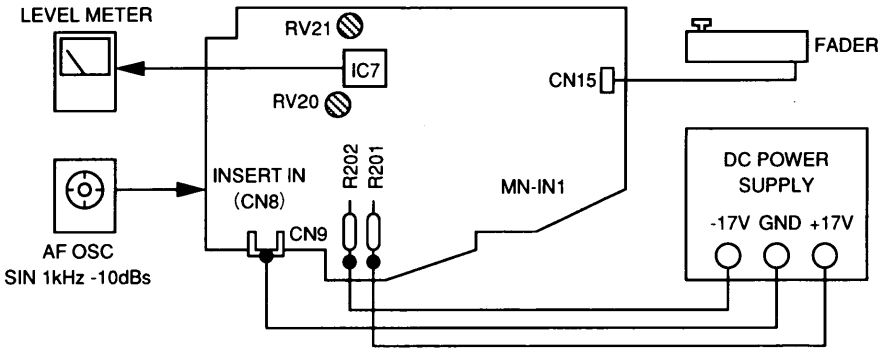
PAN ボリューム（RV1）を交換した場合，調整を行います。

【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）

[Connection]

【接続】



[VR, SW setting]

PAN control (RV1): Center

Fader : Max.

【VR，SW の設定】

PAN ボリューム（RV1）：センター

フェーダー：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.

【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

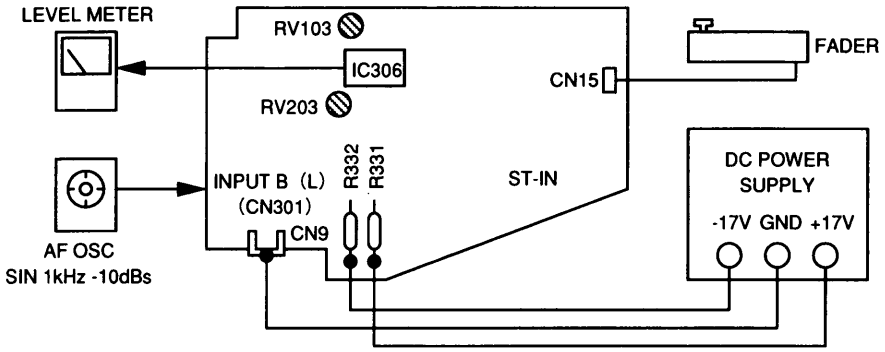
Make an adjustment if BALANCE control (RV302) was replaced.

[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 STERO 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]

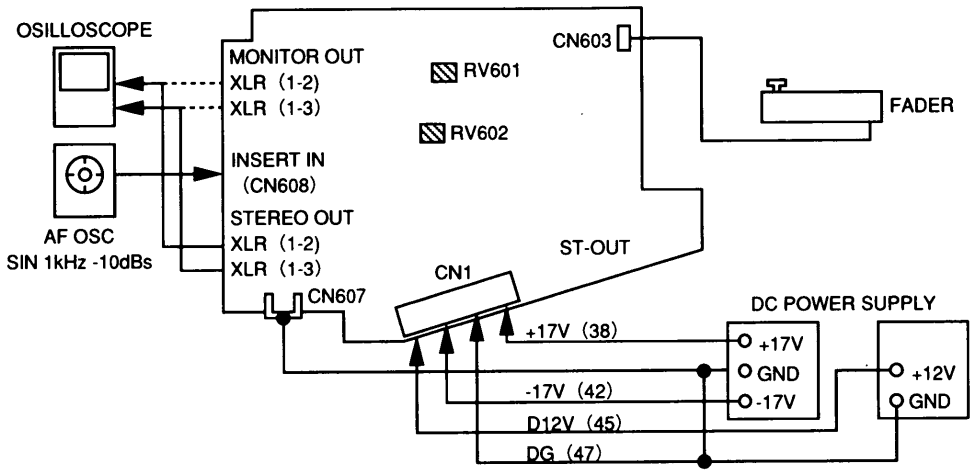
【接続】

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 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.

【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]

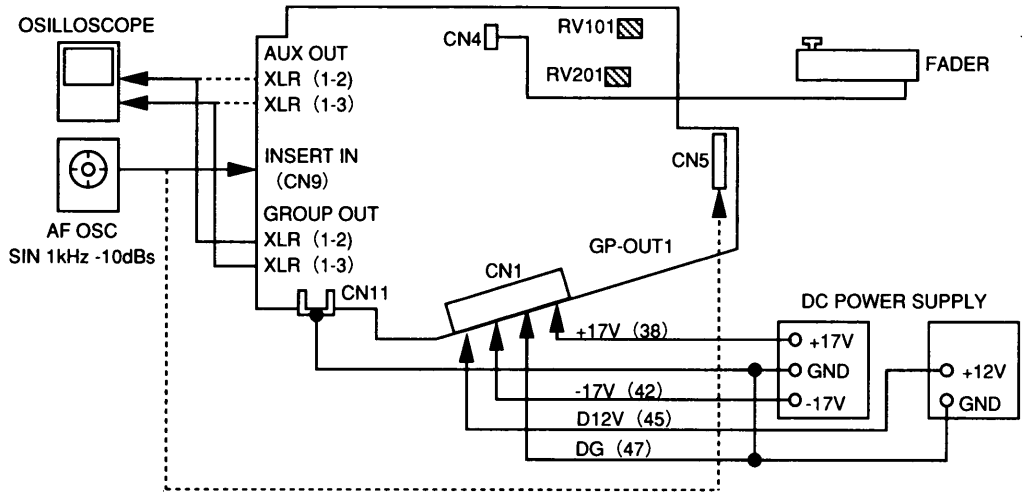
【接続】

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 setting]

Fader: Max.

【VR，SW の設定】

フェーダー：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.

【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 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.

【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。

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

※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.

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。

[Devices required]

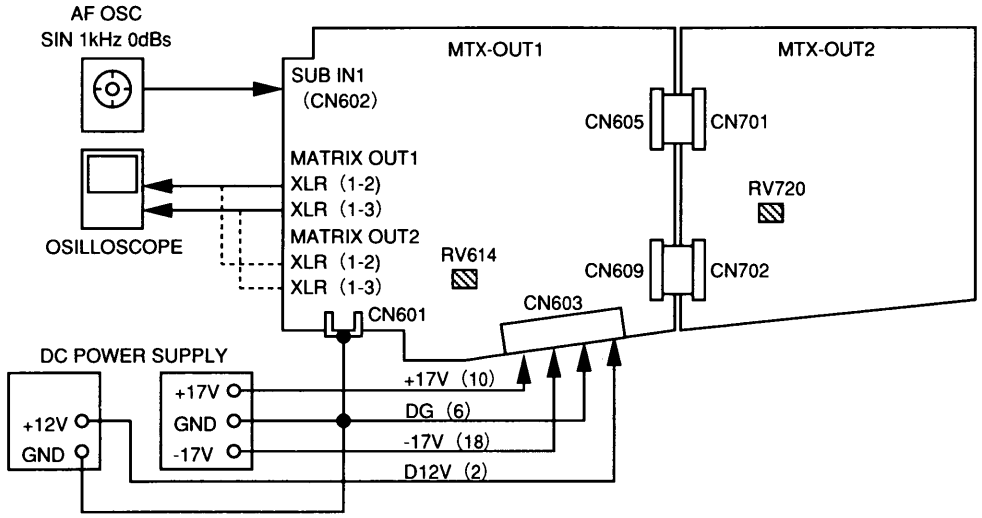
Oscilloscope, Low frequency oscillator, DC power supply

【使用機器】

オシロスコープ，低周波発振器，直流電源

[Connection]

【接続】



[VR, SW setting]

SUB1 controls (RV601, RV701) : Max.
MASTER controls (RV613, RV713) : Max.

【VR、SW の設定】

SUB1 ボリューム（RV601，RV701） ：MAX
MASTER ボリューム（VR613，VR713）：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.

【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. ダイヤグラム

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	0	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

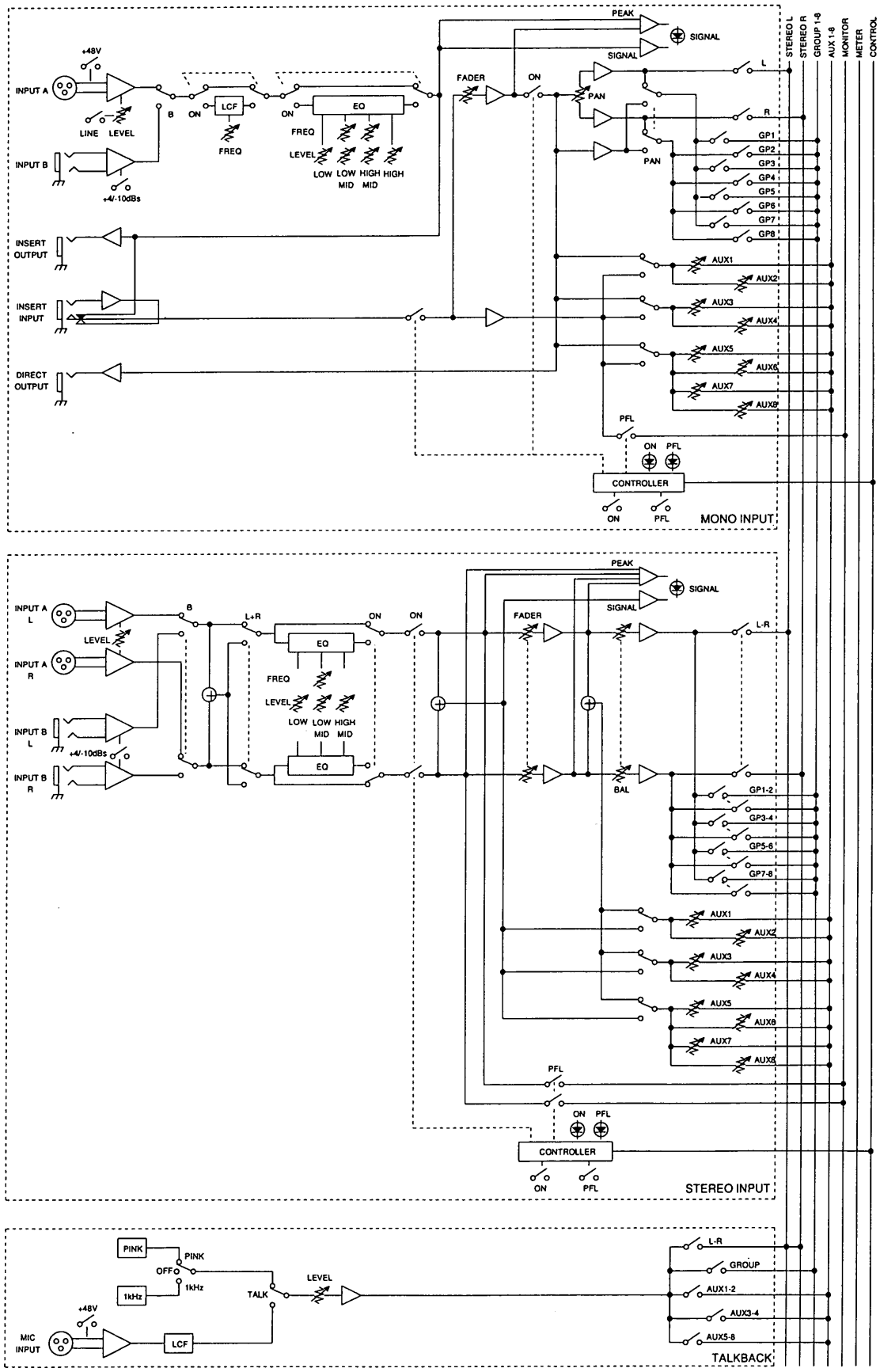
3-1. IC ピン端子説明

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	シリアルデーター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

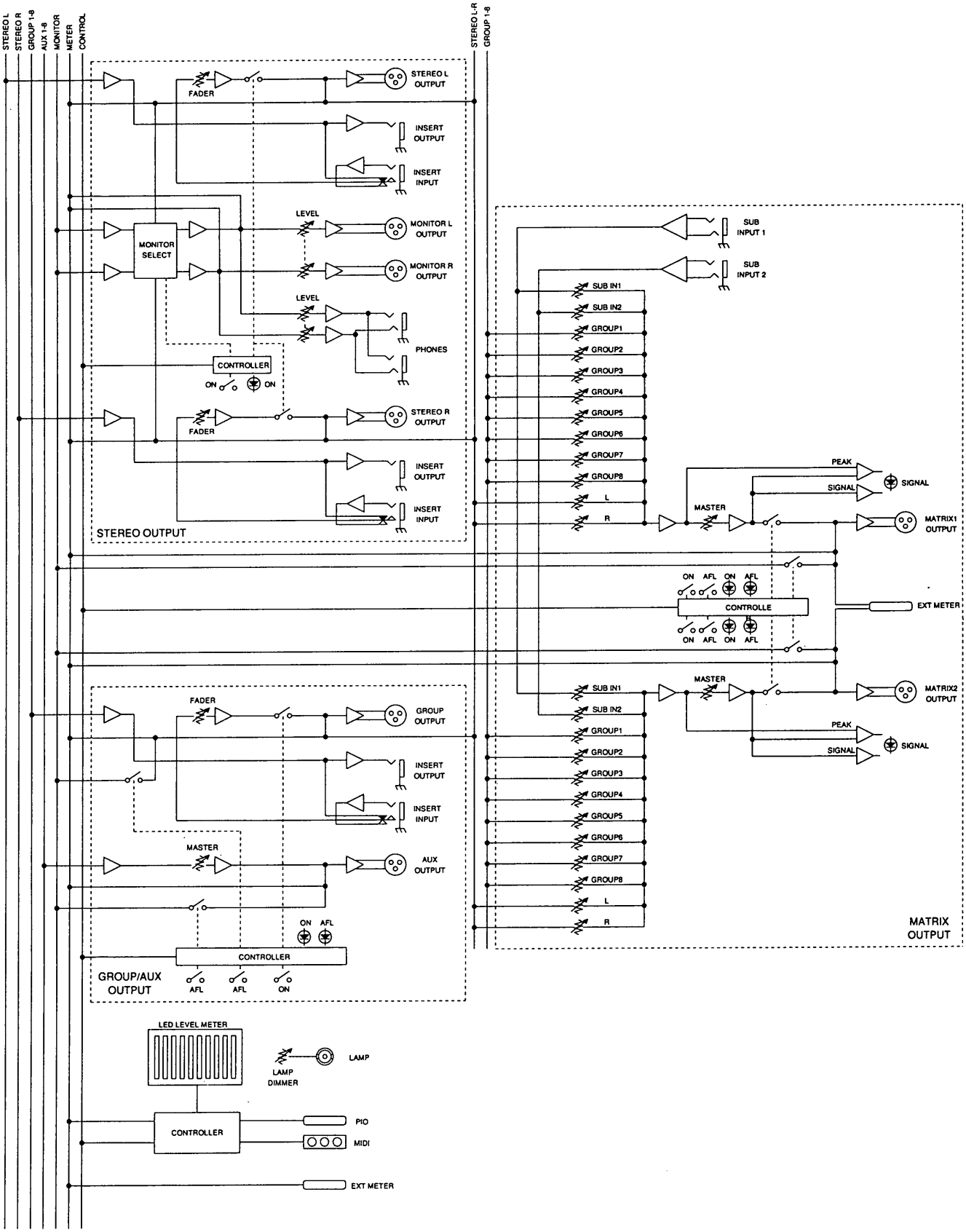
3-2. BLOCK DIAGRAM (1)

3-2. ブロックダイヤグラム（1）

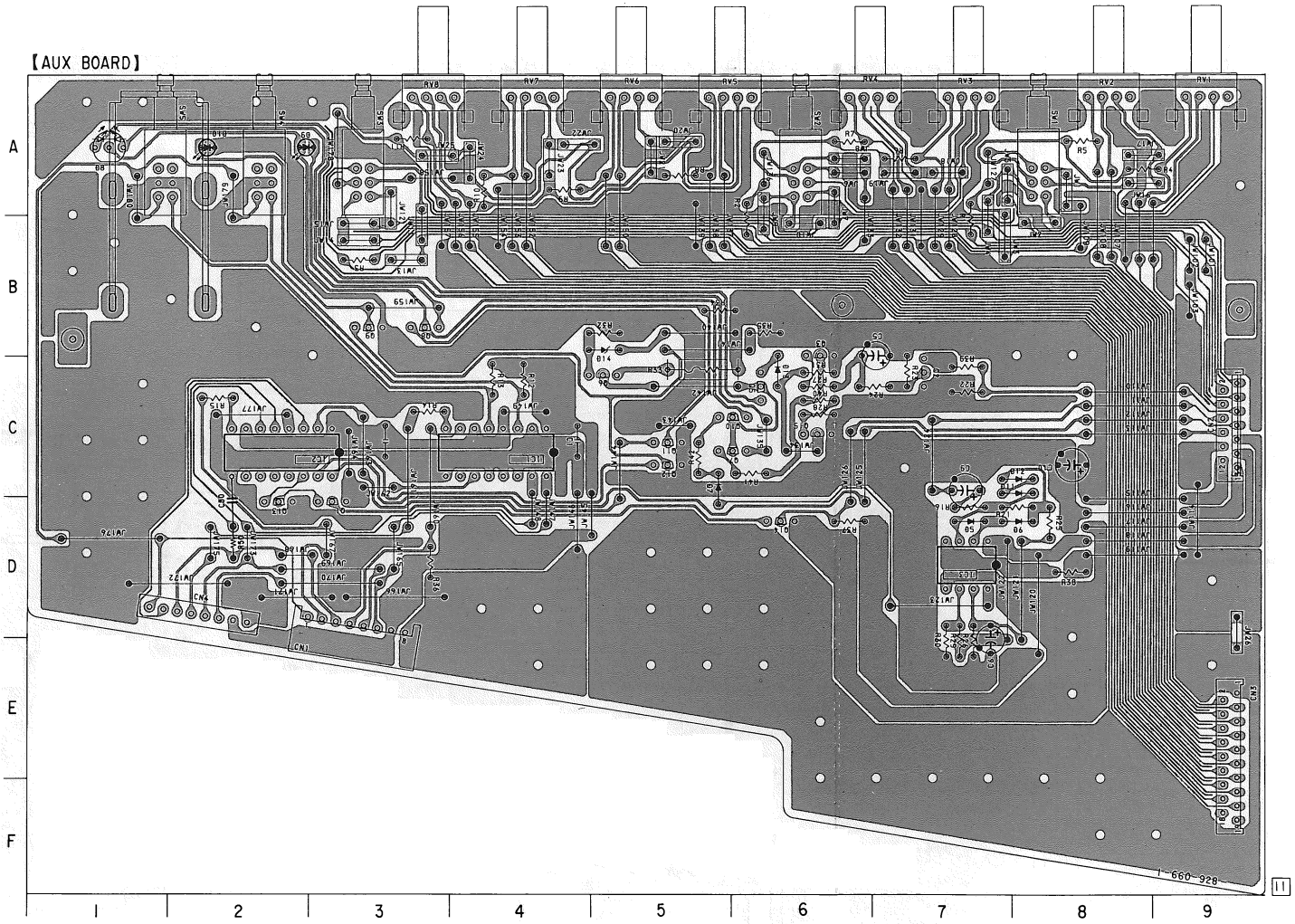


3-3. BLOCK DIAGRAM (2)

3-3. ブロックダイヤグラム（2）



3-4. PRINTED WIRING BOARDS – AUX Section –
3-4. プリント図ーAUX基板ー



• **AUX BOARD Location**

Ref. No.	Location
CN1	E-3
CN2	C-9
CN3	E-9
CN4	D-2
D5	D-7
D6	D-8
D7	C-5
D8	A-1
D9	A-2
D10	A-2
D11	C-8
D12	C-8
D13	C-6
D14	B-5
IC1	C-4
IC2	C-2
IC3	D-7
Q1	D-3
Q2	C-7
Q3	B-6
Q5	C-6
Q6	C-5
Q7	C-6
Q8	B-3
Q9	B-3
Q10	C-6
Q11	C-5
Q12	C-5
Q13	D-2
Q14	D-6
Q15	C-6

Note on Printed Wiring Board:

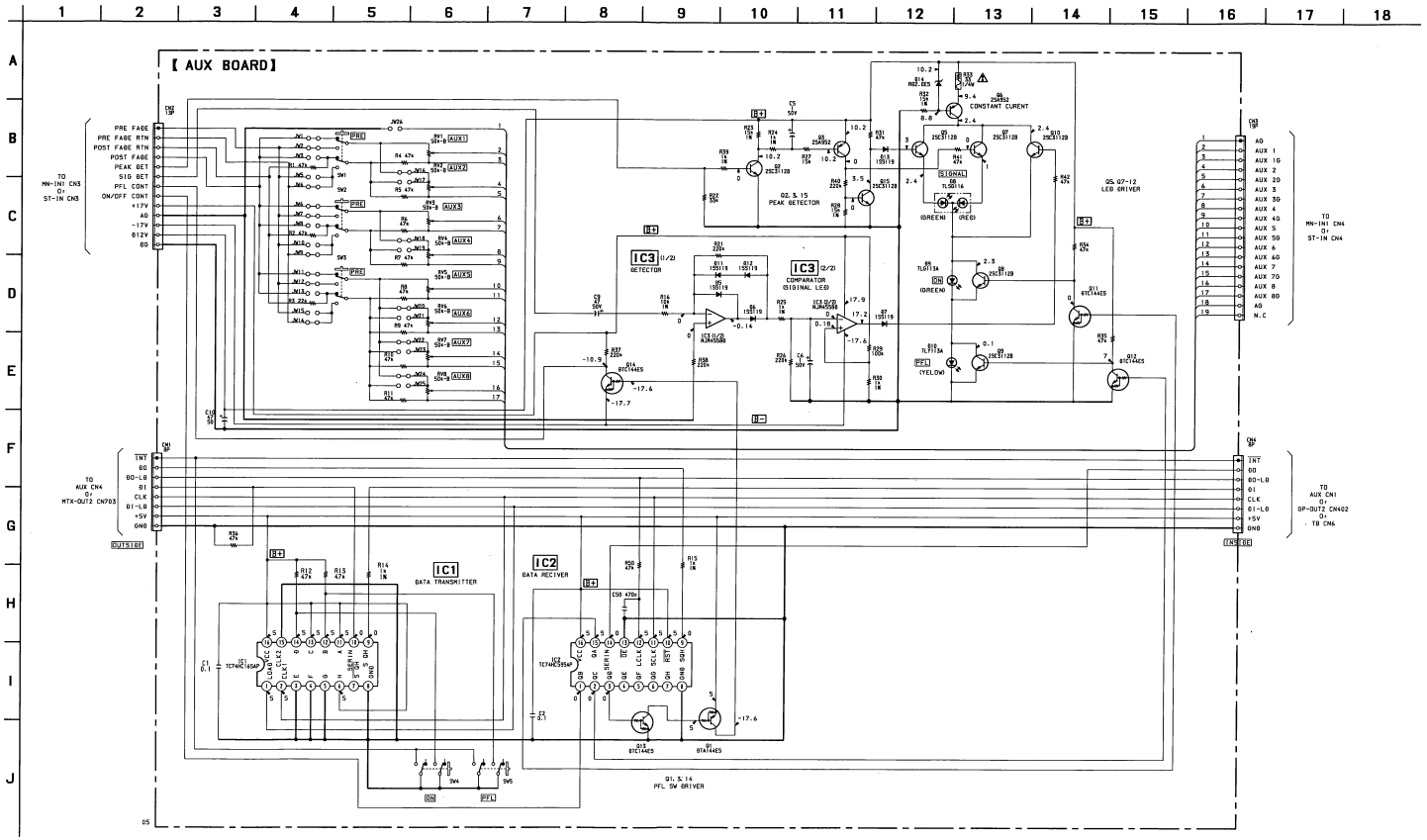
- ○——— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.

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。

3-5. SCHEMATIC DIAGRAM – AUX Board –

3-5. 回路図ー AUX 基板ー



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- ⚠ : fusible resistor.
- ▭ : panel designation.
- B+ : B+ Line.
- B− : B- Line.

Note:	Note:
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.

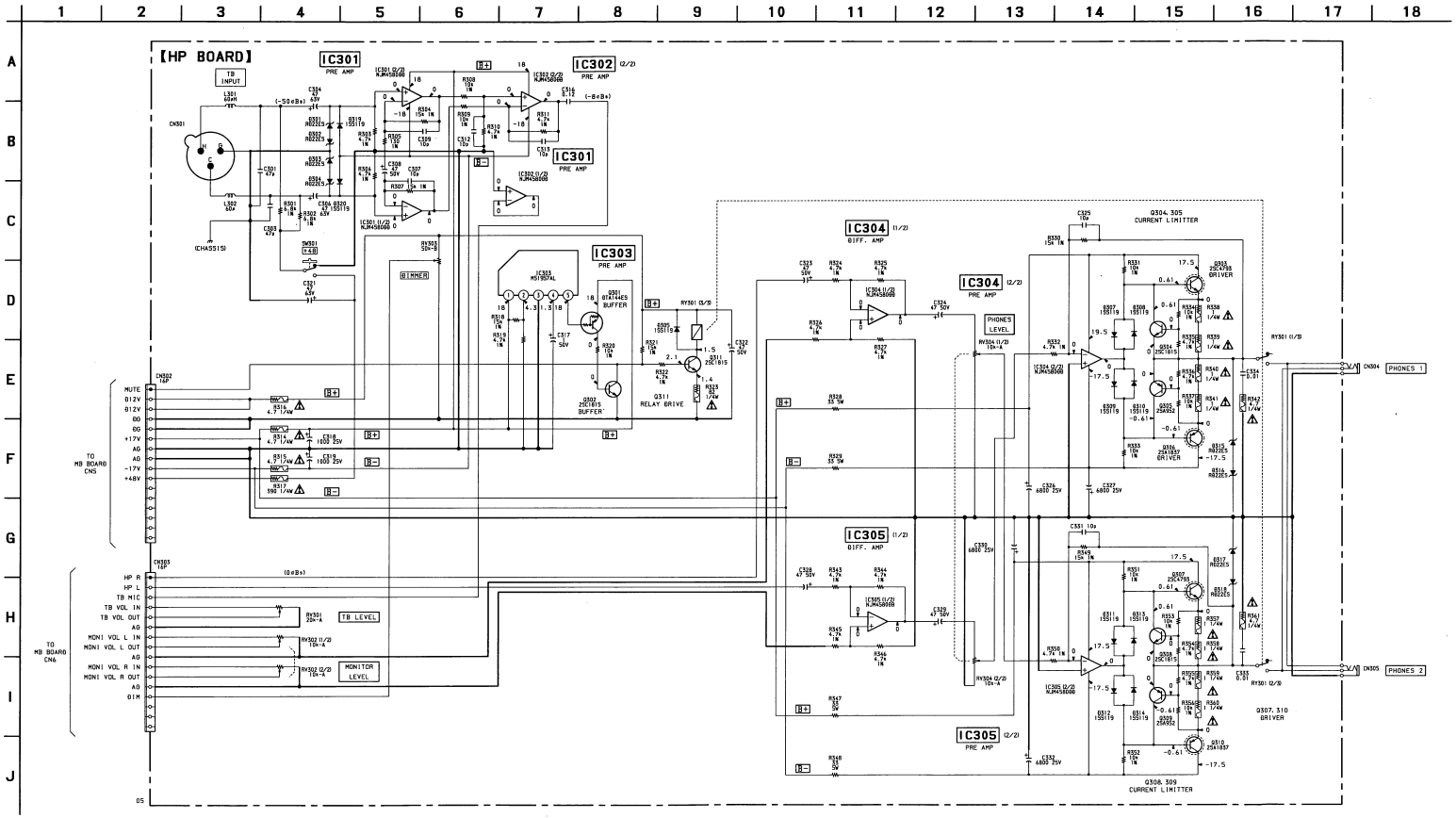
回路図ノート

- ケミコン、タンタル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）。
- 抵抗で指示のないものは ¼W 以下を示す。単位はすべてΩ。
- %は許容差を示す。
- ⚠ : ヒューズ抵抗。
- ▭ : パネル表示名称。
- B+ : B＋ライン。
- B− : 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。

3-6. SCHEMATIC DIAGRAM – HP Board –

3-6. 回路図－HP 基板－



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.
- B+ : B+ Line.
- B− : B- Line.

Note:	Note:
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.

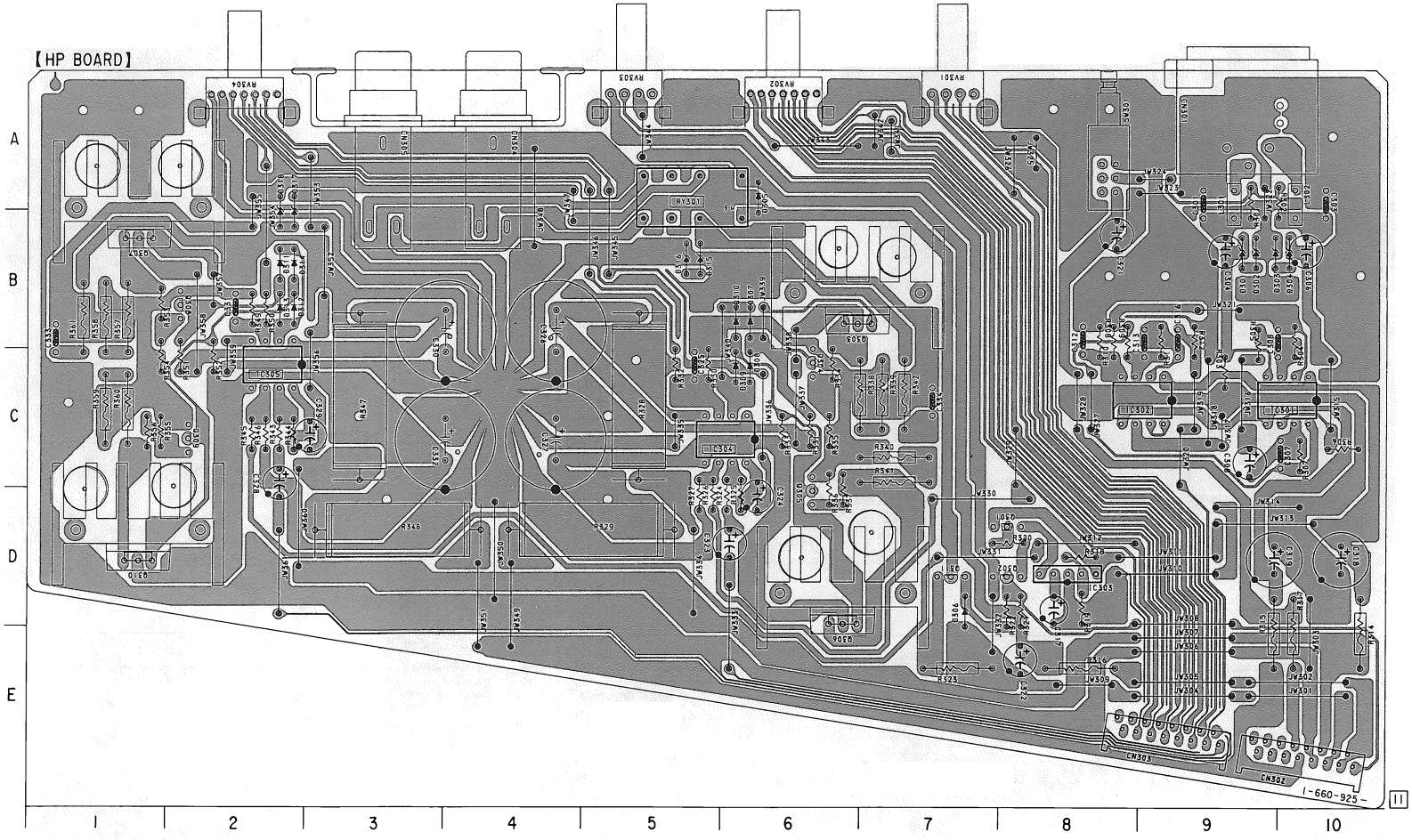
回路図ノート

- ケミコン、タンタル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）。
- 抵抗で指示のないものは ¼W 以下を示す。単位はすべて Ω。
- : 不燃性抵抗。
- : ヒューズ抵抗。
- : パネル表示名称。
- B+ : B+ライン。
- B− : 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。

3-7. PRINTED WIRING BOARD – HP Board –

3-7. プリント図ーHP基板ー



• **HP Board Location**

Ref. No.	Location	Ref. No.	Location
CN301	A-9	D318	B-2
CN302	E-10		
CN303	E-9	IC301	C-10
CN304	A-4	IC302	C-9
CN305	A-3	IC303	D-8
		IC304	C-6
D301	B-9	IC305	C-2
D302	B-9		
D303	B-10	Q301	D-8
D304	B-10	Q302	D-8
D305	A-6	Q303	B-6
D307	B-6	Q304	C-6
D308	C-6	Q305	D-6
D309	C-6	Q306	D-6
D310	B-6	Q307	B-1
D311	B-2	Q308	B-2
D312	B-2	Q309	C-2
D313	B-2	Q310	D-1
D314	B-2	Q311	D-7
D315	B-5		
D316	B-5		
D317	B-2		

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。

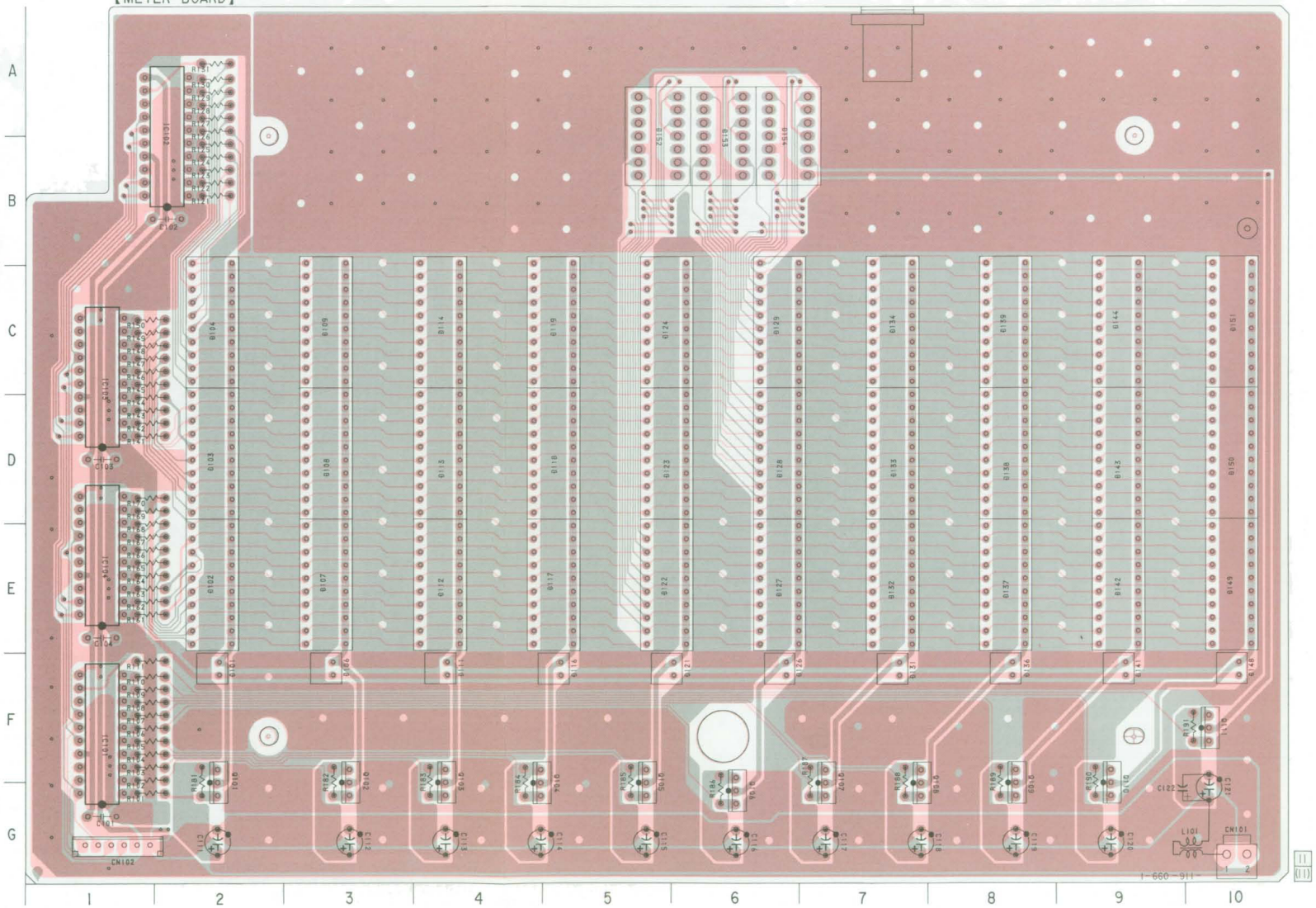
3-8. PRINTED WIRING BOARD – METER Board –

3-8. プリント図ー METER 基板ー

• 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	D126	F-6
Q105	F-5	D127	E-6
Q106	G-6	D128	D-6
Q107	F-7	D129	C-6
Q108	F-7	D131	F-7
Q109	F-8	D132	E-7
Q110	F-9	D133	D-7
Q111	F-10	D134	C-7
		D136	F-8
CN101	G-10	D137	E-8
CN102	G-1	D138	D-8
		D139	C-8
D101	F-2	D141	F-9
D102	E-2	D142	E-9
D103	D-2	D143	D-9
D104	C-2	D144	C-9
D106	F-3	D148	F-10
D107	E-3	D149	E-10
D108	D-3	D150	D-10
D109	C-3	D151	C-10
D111	F-4	D152	B-5
D112	E-4	D153	B-6
D113	D-4	D154	B-6
D114	C-4		
D116	F-5	IC101	F-1
D117	E-5	IC102	A-2
D118	D-5	IC103	C-1
D119	C-5	IC104	E-1
D121	F-5		

【METER BOARD】



Note on Printed Wiring Board:

- o——— : 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

- o——— : 部品面側取付のリード線。
- : 裏側のパターン。
- : 見ている面側のパターン。

Note on Schematic Diagram:

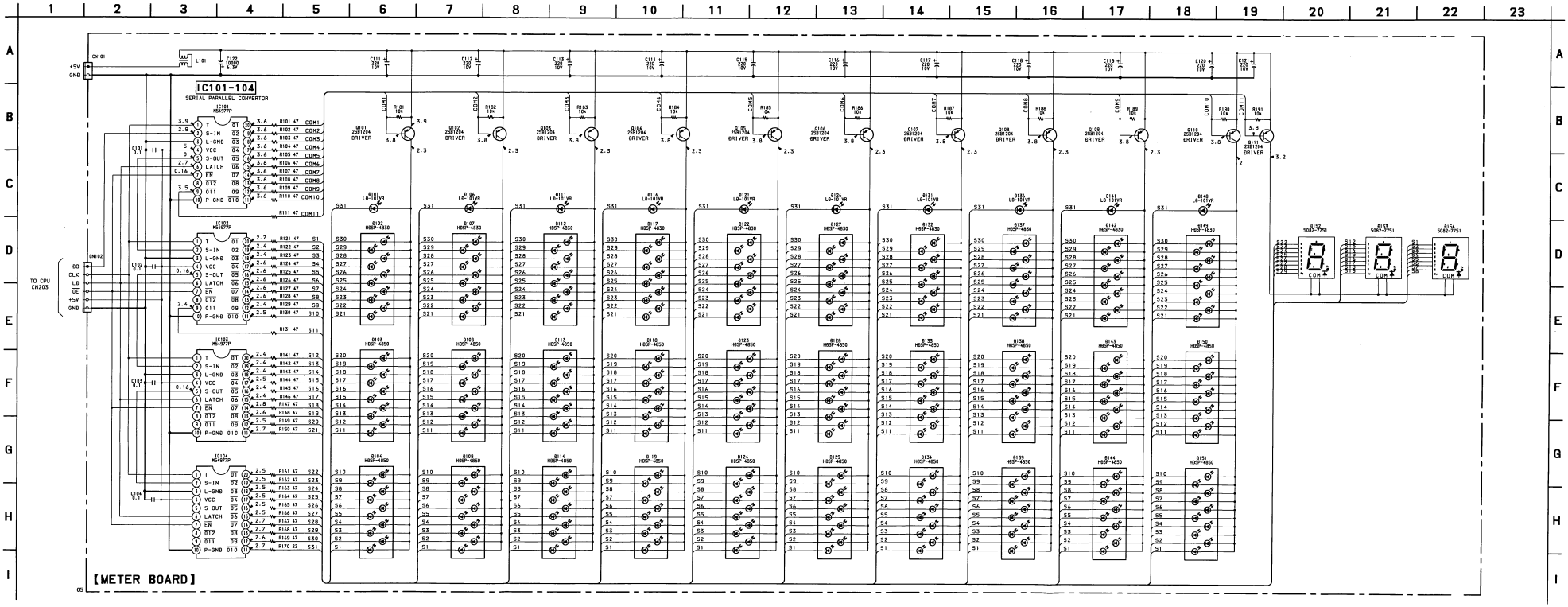
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- B+ : B+ Line.

回路図ノート

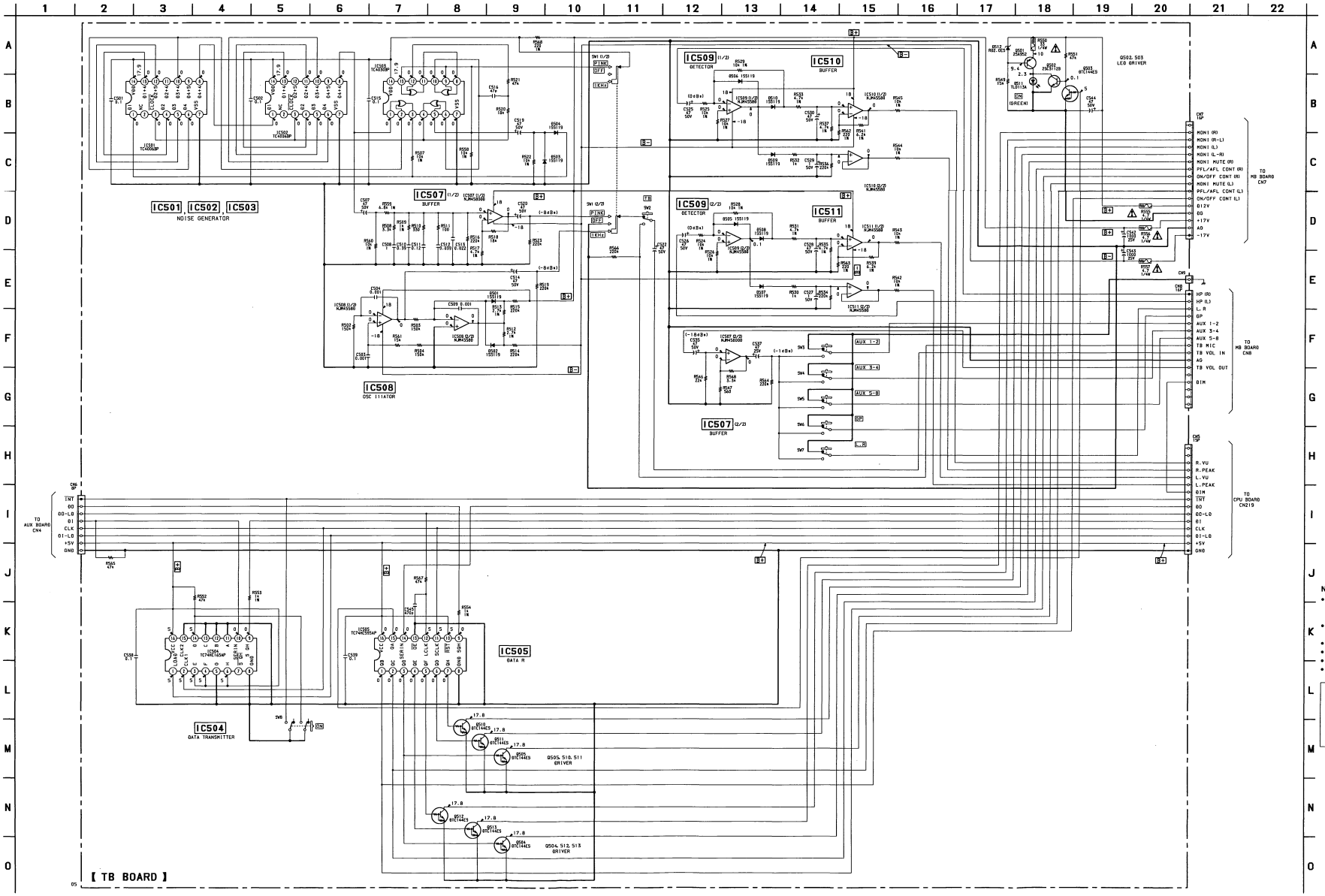
- ケミコン、タンタルを除くコンデンサで、耐圧50V以下のものは、その耐圧を省略。単位はすべてμF（pはpF）。
- 抵抗で指示のないものは¼W以下を示す。単位はすべてΩ。
- %は許容差を示す。
- B+ ：B+ライン。

3-9. SCHEMATIC DIAGRAM – METER Board –

3-9. 回路図ー METER 基板ー



3-10. SCHEMATIC DIAGRAM – TB Board –
3-10. 回路図ー TB 基板ー



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- : fusible resistor.
- : panel designation.
- B+ : B+ Line.
- B− : B− Line.

Note:	Note:
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.

回路図ノート

- ケミコン、タンタル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）。
- 抵抗で指示のないものは¼W以下を示す。単位はすべてΩ。
- %は許容差を示す。
- ：ヒューズ抵抗。
- ：パネル表示名称。
- B＋ ：B＋ライン。
- B－ ：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。

3-11. PRINTED WIRING BOARD – TB Board –

3-11. プリント図ーTB基板ー

• **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	Q501	C-2
D507	B-11	Q502	C-1
D508	C-11	Q503	C-1
D509	C-11	Q504	E-5
D510	D-11	Q505	D-6
D511	A-1	Q510	E-5
D512	C-2	Q511	E-5
		Q512	E-5
IC501	B-9	Q513	E-5

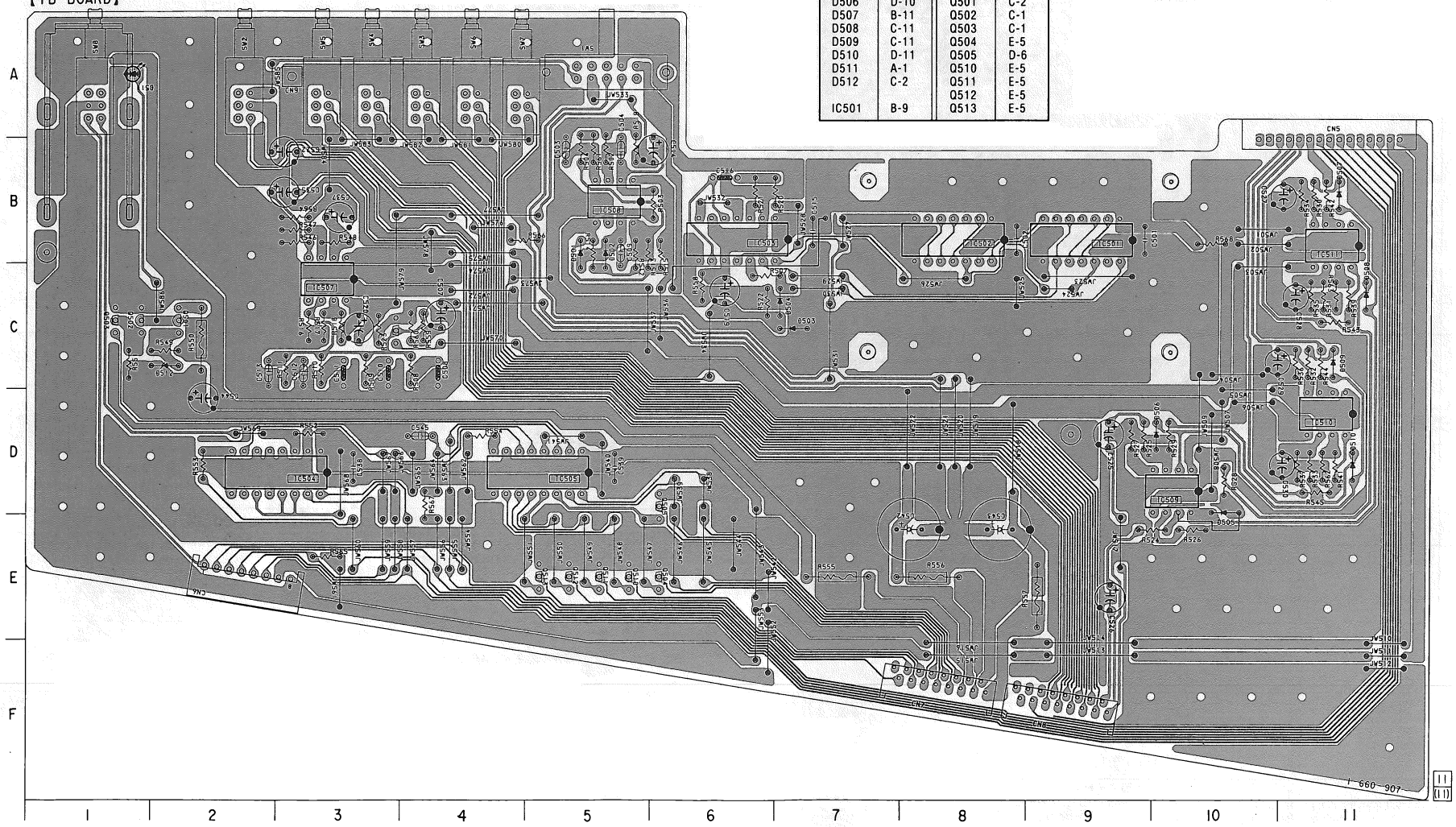
Note on Printed Wiring Board:

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

プリント図ノート

- ○——— : 部品面側取付のリード線。
- ▒▒▒ : 見ている面側のパターン。

【TB BOARD】



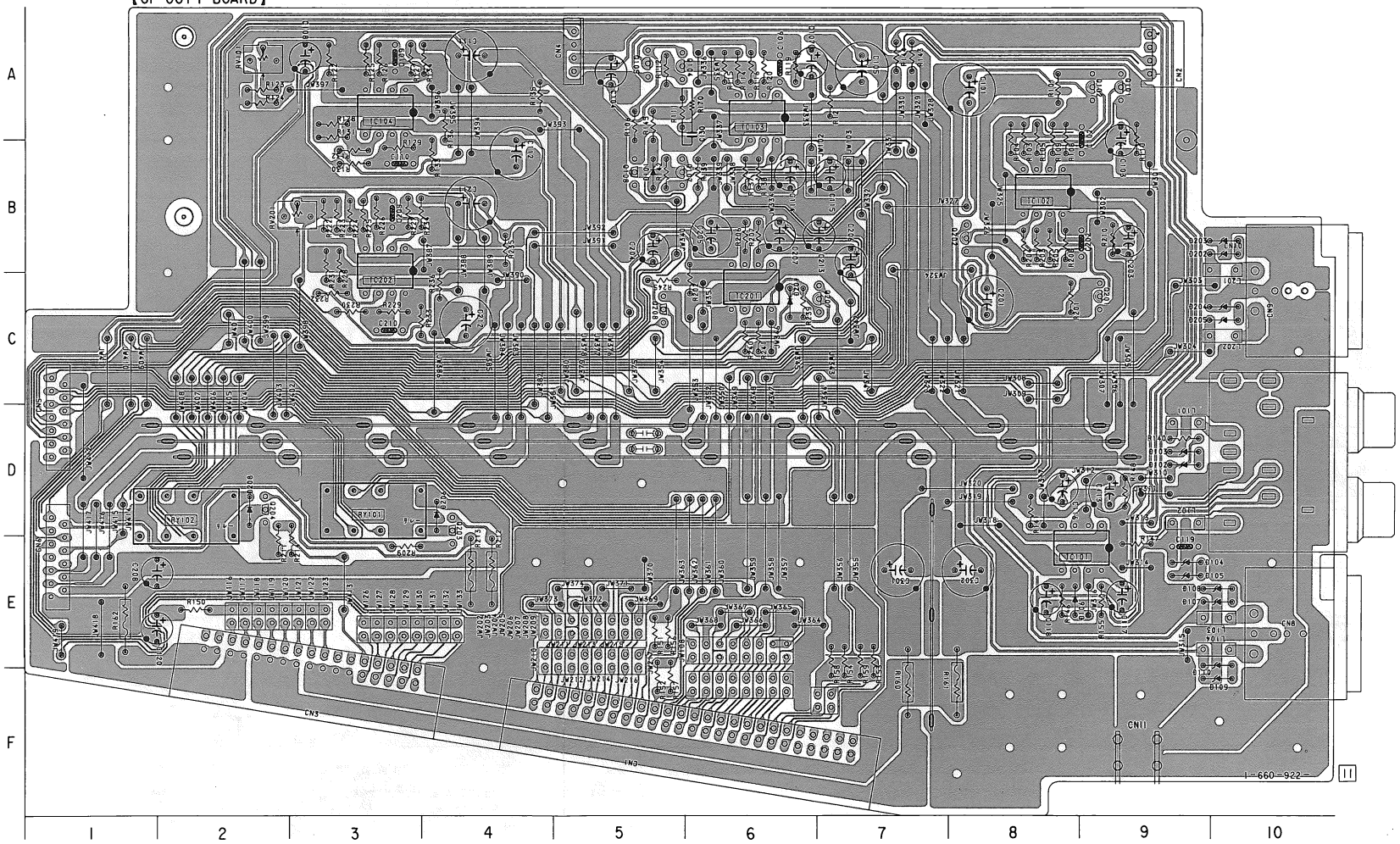
3-12. PRINTED WIRING BOARD – GP-OUT1 Board –

3-12. プリント図ー GP-OUT1 基板ー

• **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

【GP OUT I BOARD】



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. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- ⚠ : fusible resistor.
- ▭ : panel designation.
- B+ : B+ Line.
- B− : B- Line.

Note:	Note:
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.

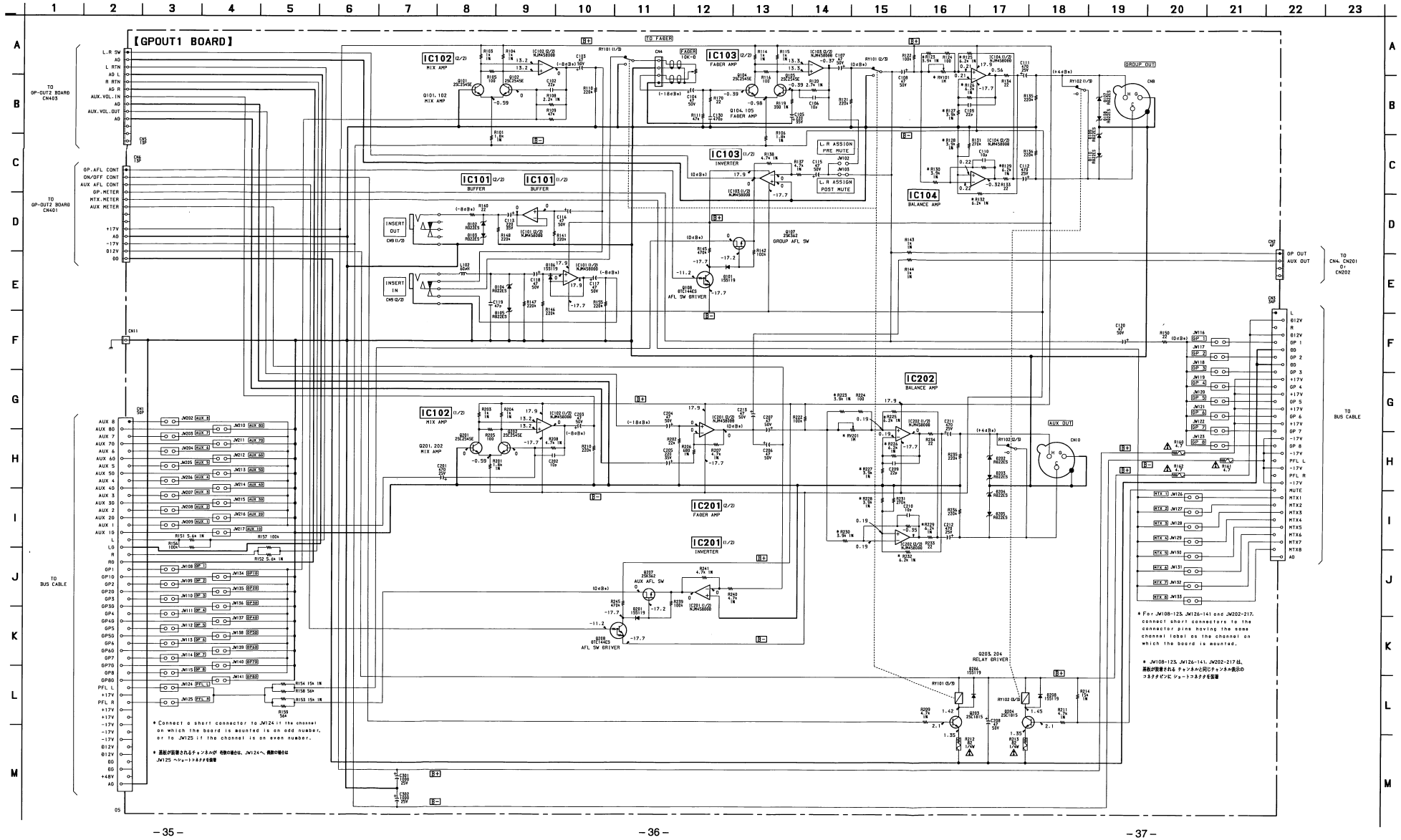
回路図ノート

- ケミコン、タンタル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）。
- 抵抗で指示のないものは¼W以下を示す。単位はすべてΩ。
- %は許容差を示す。
- ⚠ : ヒューズ抵抗。
- ▭ : パネル表示名称。
- B+ : B+ライン。
- B− : 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。

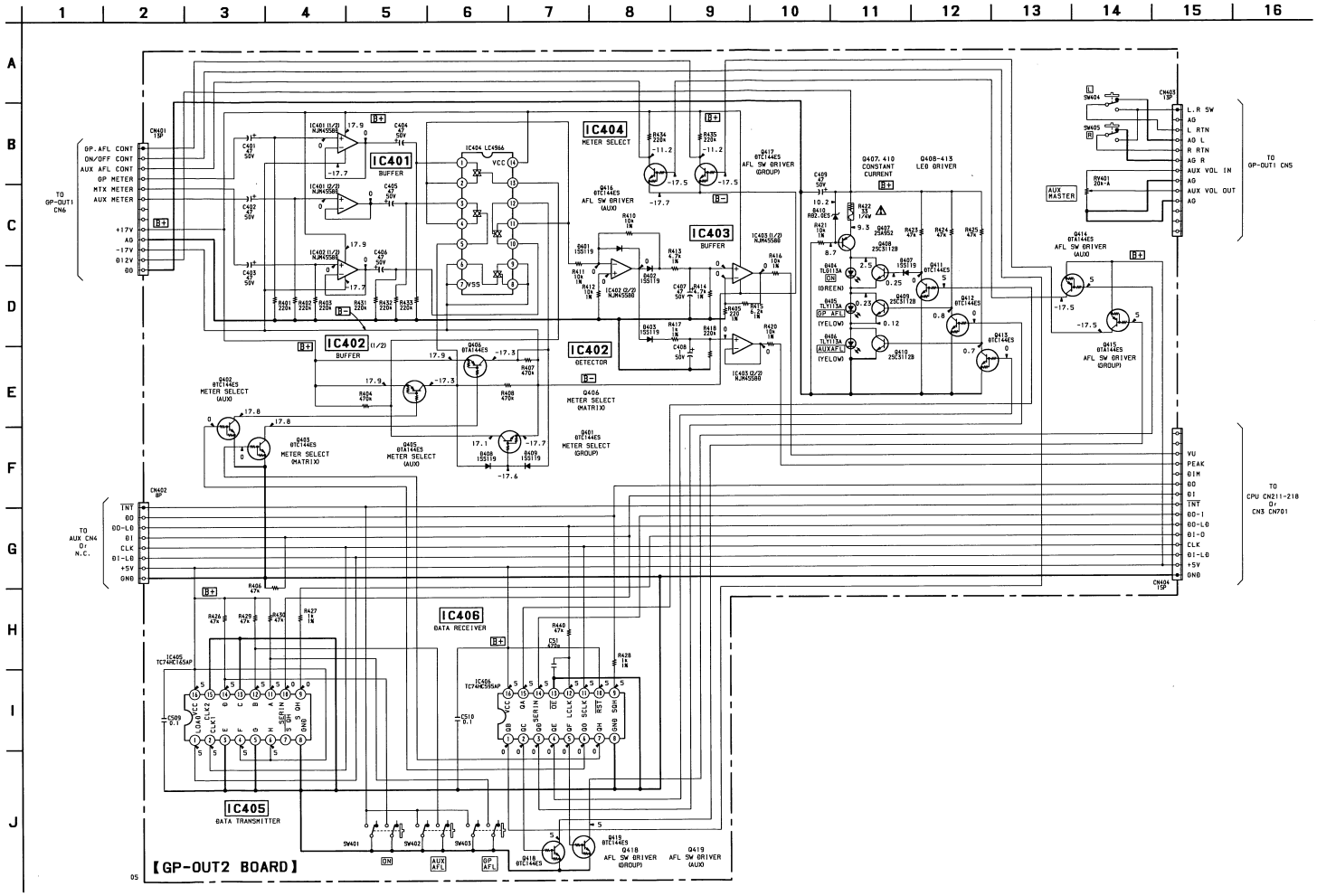
3-13. SCHEMATIC DIAGRAM – GP-OUT1 Board –

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: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- ⚠ : fusible resistor.
- ▭ : panel designation.
- B+ : B+ Line.
- B− : B- Line.

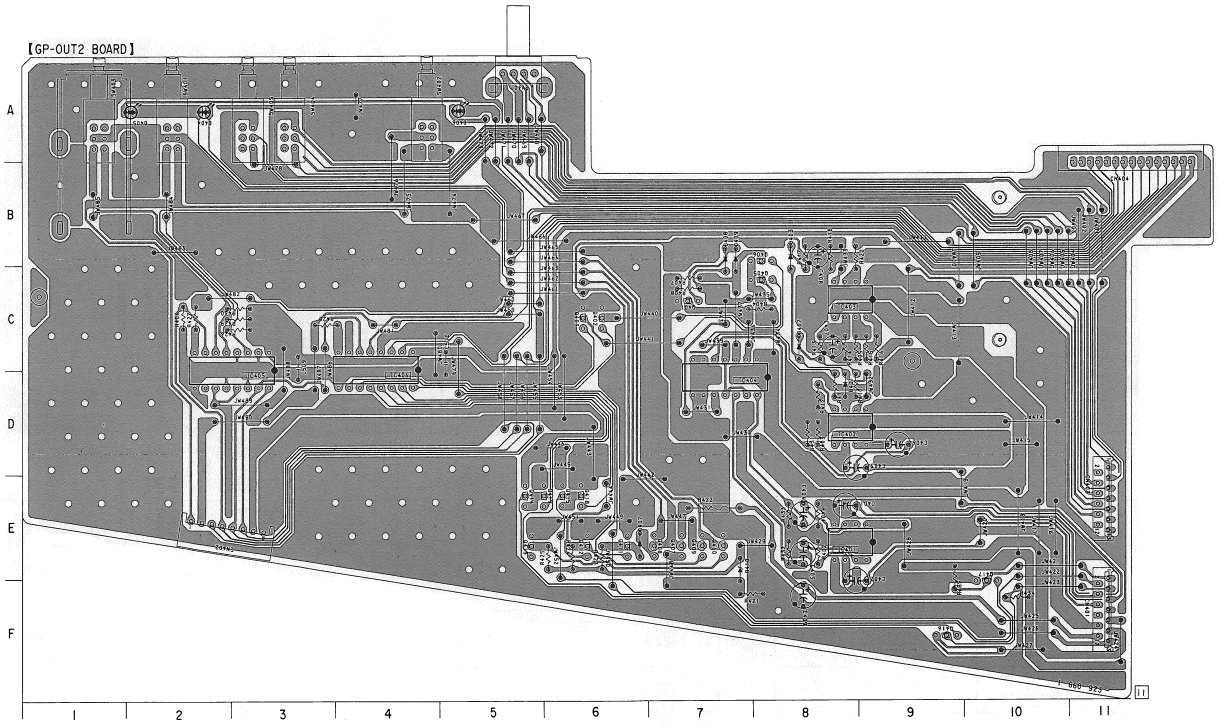
Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

回路図ノート

- ケミコン、タンタル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）。
- 抵抗で指示のないものは ¼W以下を示す。単位はすべてΩ。
- %は許容差を示す。
- ⚠ ：ヒューズ抵抗。
- ▭ ：パネル表示名称。
- B+ ：B＋ライン。
- B− ：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。

3-15. PRINTED WIRING BOARD – GP-OUT2 Board –
3-15. プリント図ーGP-OUT2基板ー



• **GP-OUT2 BOARD Location**

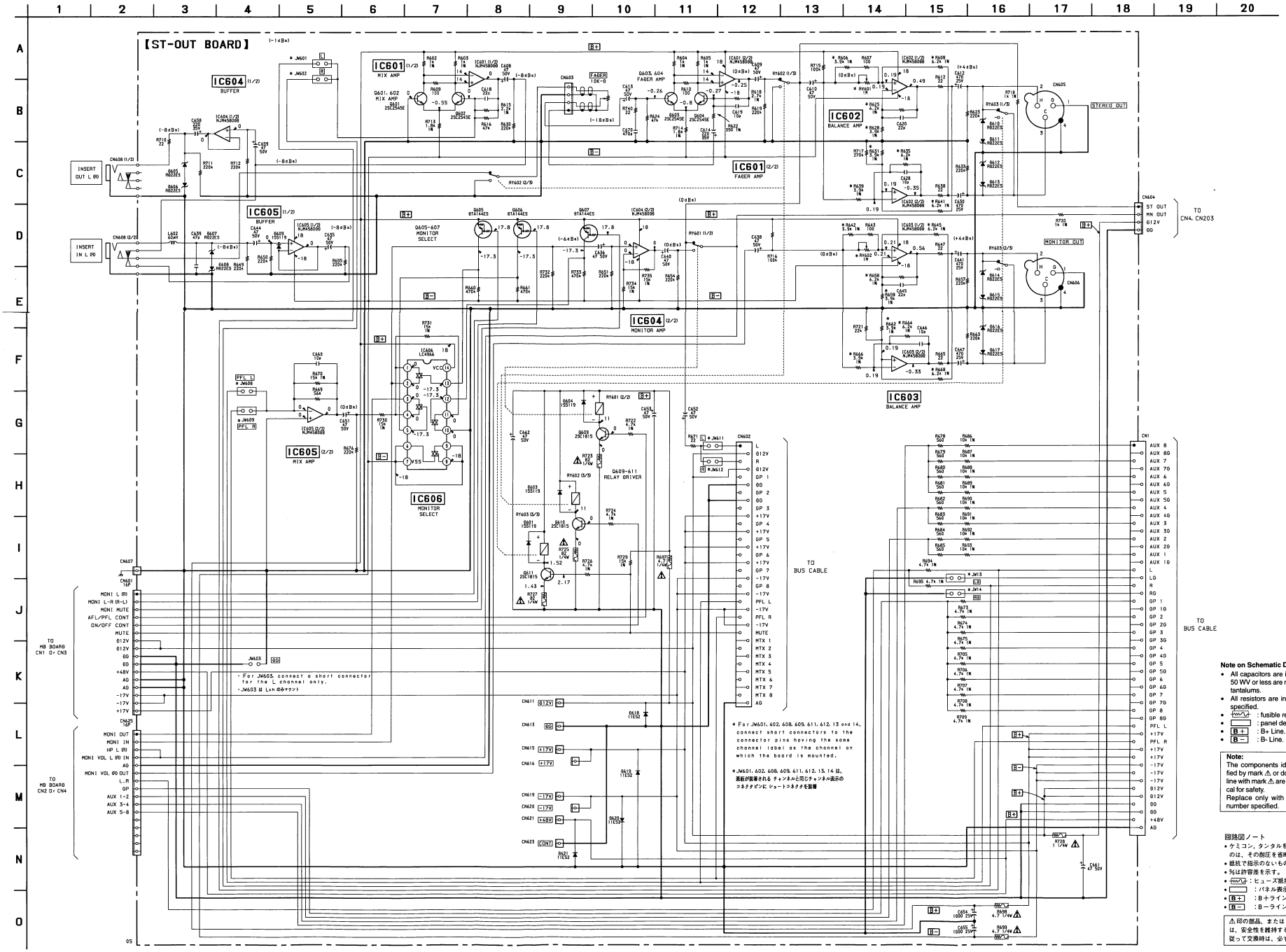
Ref. No.	Location	Ref. No.	Location
CN401	F-11	IC406	C-4
CN402	E-2		
CN403	E-11	Q401	C-7
CN404	A-11	Q402	C-6
		Q403	C-6
D401	D-8	Q405	C-8
D402	C-8	Q406	B-8
D403	B-8	Q407	E-7
D404	A-2	Q408	E-7
D405	A-2	Q409	E-7
D406	A-5	Q410	E-7
D407	E-6	Q411	E-6
D408	B-7	Q412	E-6
D409	B-7	Q413	E-5
D410	E-7	Q414	E-5
		Q415	E-6
IC401	E-8	Q416	F-9
IC402	D-8	Q417	F-10
IC403	C-8	Q418	E-6
IC404	D-7	Q419	E-6
IC405	C-3		

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。

3-16. SCHEMATIC DIAGRAM – ST-OUT Board –

3-16. 回路図ー ST-OUT 基板ー



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- : fusible resistor.
- : panel designation.
- B+ : B+ Line.
- B− : B- Line.

Note:	Note:
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.

回路図ノート

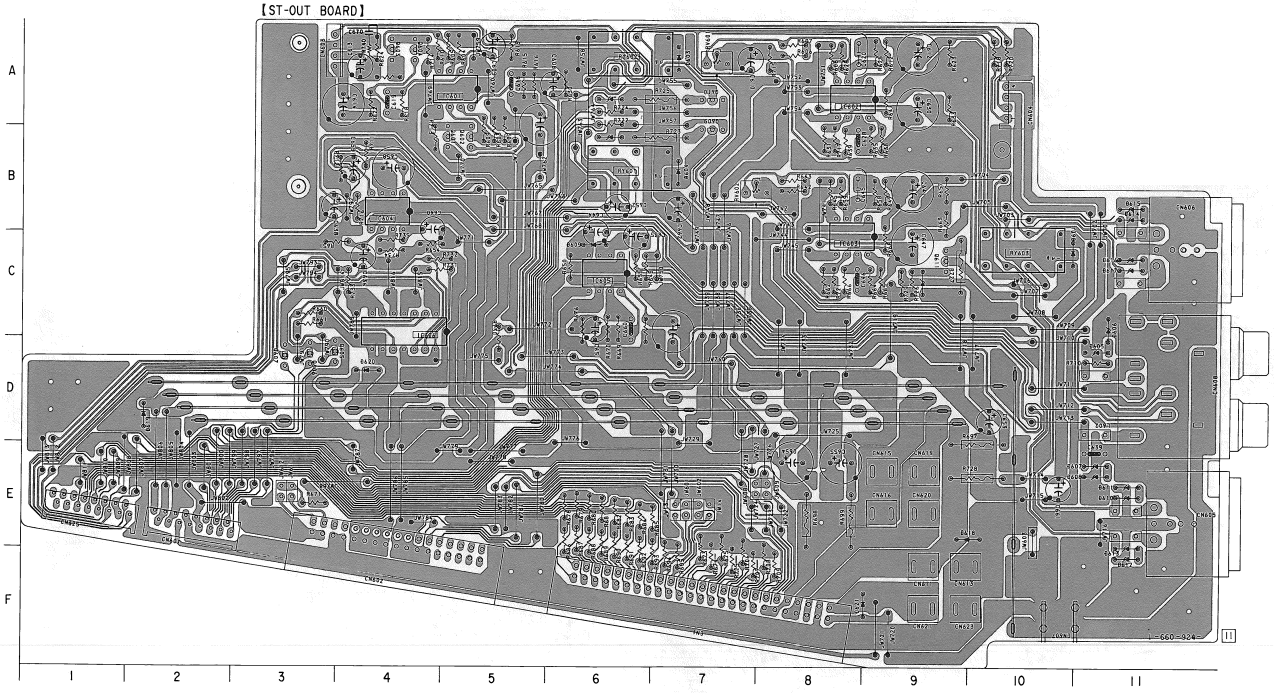
- ケミコン、タンタルを除くコンデンサで、耐圧50V以下のものは、その耐圧を省略。単位はすべて μF (p は pF)。
- 抵抗で指示のないものは ¼W以下を示す。単位はすべてΩ。
- %は許容差を示す。
- : ヒューズ抵抗。
- : パネル表示名称。
- B+ : B+ライン。
- B− : B−ライン。

⚠ 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。

3-17. PRINTED WIRING BOARD – ST-OUT Board –

3-17. プリント図ーST-OUT基板ー

【ST-OUT BOARD】



• **ST-OUT BOARD Location**

Ref. No.	Location	Ref. No.	Location
CN1	F-7	D612	F-11
CN601	E-2	D613	E-11
CN602	F-4	D614	B-11
CN603	A-3	D615	B-11
CN604	A-10	D616	C-11
CN605	E-11	D617	C-11
CN606	C-11	D618	E-10
CN607	F-10	D619	D-2
CN608	D-11	D620	D-4
CN611	F-9	D621	F-9
CN613	F-9		
CN615	E-9	IC601	A-5
CN616	E-9	IC602	A-8
CN619	E-9	IC603	C-8
CN620	E-9	IC604	B-4
CN621	F-9	IC605	C-6
CN623	F-9	IC606	C-4
CN625	E-1		
		Q601	B-5
D601	C-10	Q602	B-5
D603	A-7	Q603	A-4
D604	B-7	Q604	A-4
D605	D-11	Q605	D-3
D606	C-11	Q606	D-3
D607	E-11	Q607	D-3
D608	E-11	Q609	B-7
D609	C-6	Q610	A-7
D610	E-11	Q611	C-9
D611	E-11		

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。

3-18. PRINTED WIRING BOARD – MTX-OUT1 Board –

3-18. プリント図ーMTX-OUT1 基板ー

• **MTX-OUT1 BOARD Location**

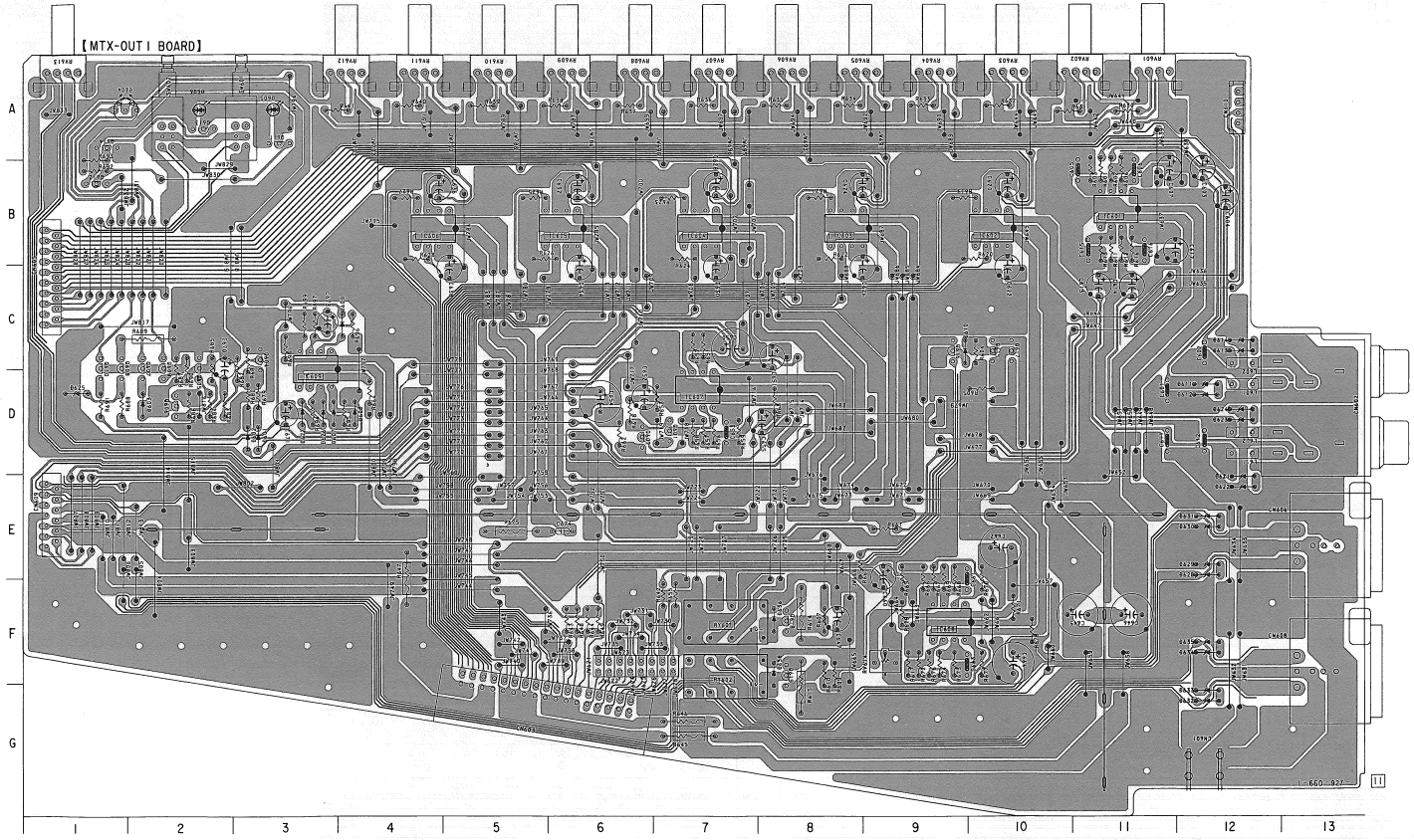
Ref. No.	Location	Ref. No.	Location
CN601	G-12	IC601	B-11
CN602	D-13	IC602	B-10
CN603	G-5	IC603	B-8
CN605	C-1	IC604	B-7
CN606	E-13	IC605	B-6
CN608	F-13	IC606	B-4
CN609	E-1	IC607	D-7
CN610	A-12	IC608	F-9
		IC609	C-3
D601	D-3		
D602	D-3	Q601	D-7
D603	D-2	Q602	D-6
D604	A-1	Q604	C-3
D605	A-3	Q605	C-2
D606	A-2	Q606	D-2
D607	D-3	Q607	D-2
D608	D-4	Q608	C-1
D609	C-4	Q609	C-2
D610	C-9	Q610	C-1
D611	D-12	Q611	A-3
D612	D-12	Q612	B-1
D613	C-12	Q613	A-2
D614	C-12	Q614	A-1
D621	E-12	Q615	C-10
D622	E-12	Q616	C-9
D623	D-12	Q617	C-10
D624	D-12	Q618	F-8
D625	D-1	Q619	F-8
D626	D-3		
D627	D-3		
D628	E-12		
D629	E-12		
D630	E-12		
D631	E-12		
D632	G-12		
D633	G-12		

Note on Printed Wiring Board:

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

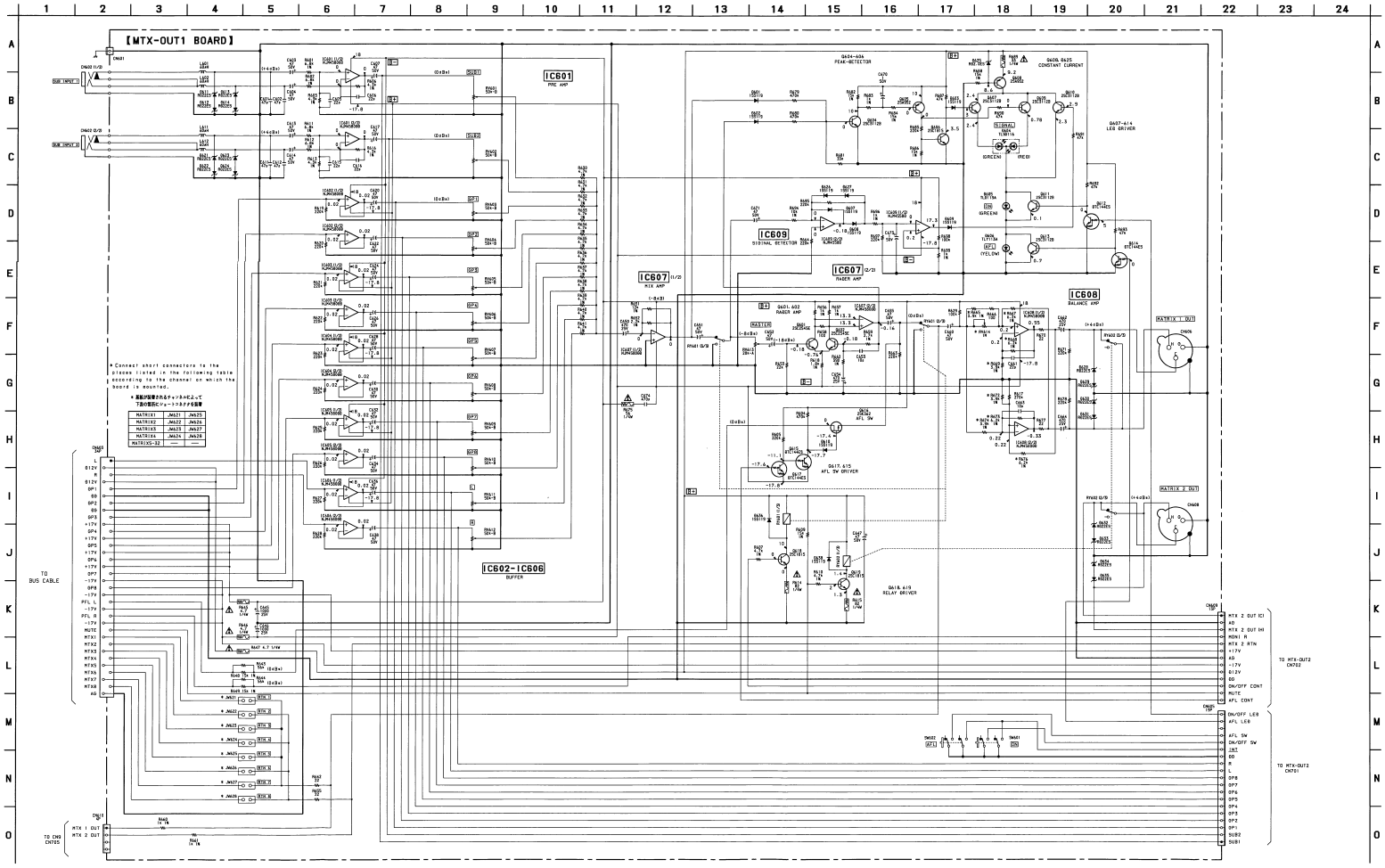
プリント図ノート

- ⊶——— : 部品面側取付のリード線。
- ▒▒▒▒ : 見ている面側のパターン。



3-19. SCHEMATIC DIAGRAM – MTX-OUT1 Board –

3-19. 回路図— MTX-OUT1 基板—



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- : fusible resistor.
- : panel designation.
- : B+ Line.
- : B- Line.

Note:	Note:
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.

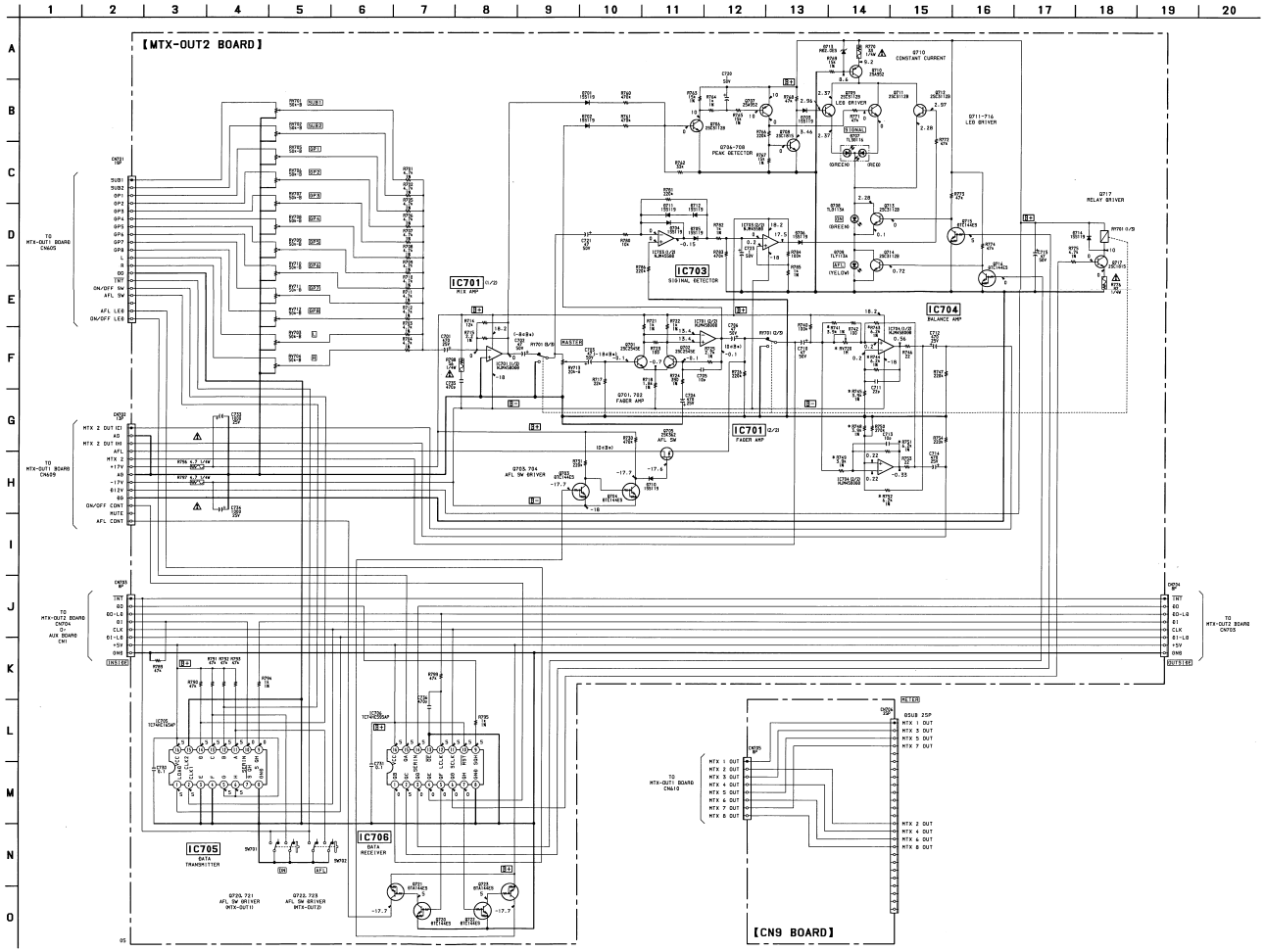
回路図ノート

- ケミコン、タンタル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）。
- 抵抗で指示のないものは¼W以下を示す。単位はすべてΩ。
- %は許容差を示す。
- : ヒューズ抵抗。
- : パネル表示名称。
- : B+ライン。
- : 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。

3-20. SCHEMATIC DIAGRAM – MTX-OUT2 and CN9 Boards –

3-20. 回路図— MTX-OUT2, CN9 基板—



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- ⚠ : fusible resistor.
- ▭ : panel designation.
- B+ : B+ Line.
- B− : B- Line.

Note:	Note:
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.

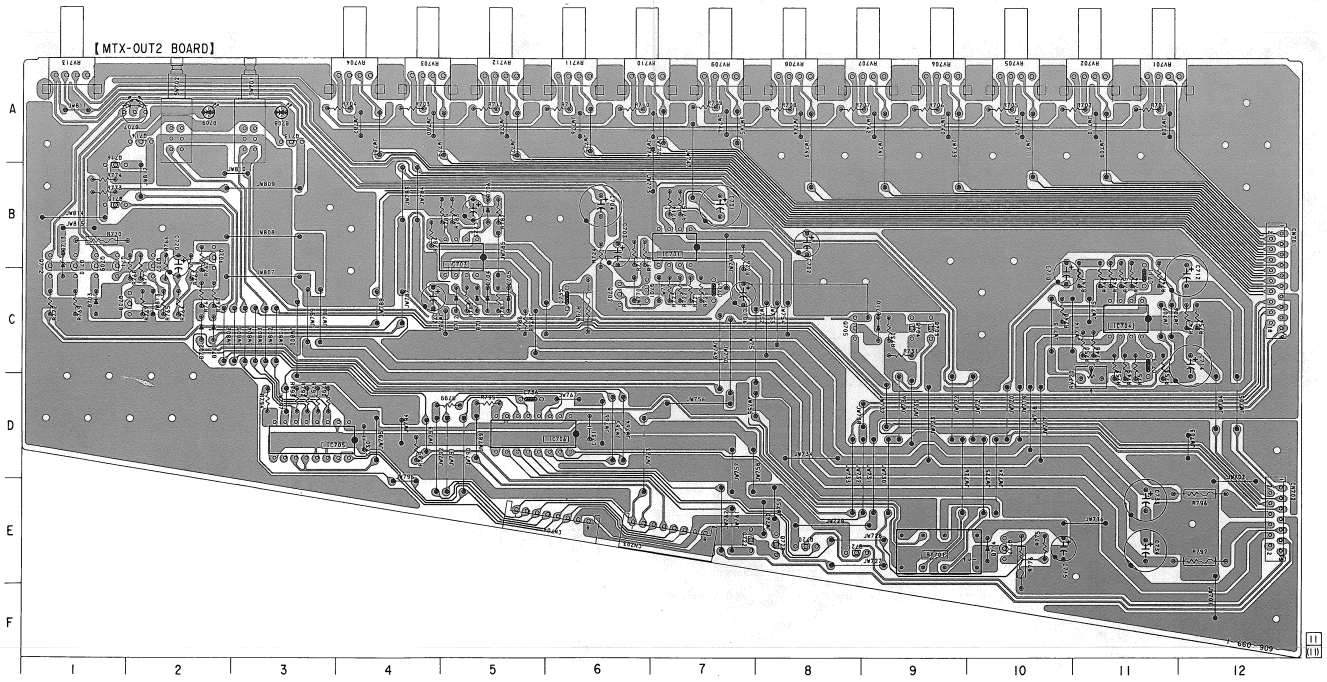
回路図ノート

- ケミコン，タンタル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）。
- 抵抗で指示のないものは¼W以下を示す。単位はすべてΩ。
- ⚠は許容安全を示す。
- ⚠：ヒューズ抵抗。
- ▭ ：パネル表示名称。
- B+ ：B+ライン。
- B− ：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。

3-21. PRINTED WIRING BOARDS – MTX-OUT2 and CN9 Boards –

3-21. プリント図ー MTX-OUT2, CN9 基板ー



• MTX-OUT2 Board Location

Ref. No.	Location	Ref. No.	Location
CN701	C-12	Q701	C-6
CN702	E-12	Q702	C-6
CN703	E-7	Q703	C-9
CN704	E-6	Q704	C-9
		Q705	C-8
D701	C-2	Q706	B-2
D702	C-2	Q707	B-2
D703	C-1	Q708	C-2
D704	C-5	Q709	B-1
D705	C-5	Q710	B-1
D706	B-5	Q711	B-1
D707	A-2	Q712	B-2
D708	A-3	Q713	A-3
D709	A-2	Q714	A-2
D710	C-9	Q715	B-1
D711	C-5	Q716	B-1
D712	C-5	Q717	E-10
D713	B-1	Q720	E-8
D714	E-10	Q721	E-8
		Q722	E-7
IC701	B-7	Q723	E-8
IC703	B-5		
IC704	C-11		
IC705	D-3		
IC706	D-5		

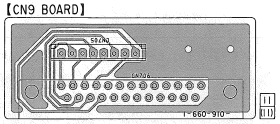
Note on Printed Wiring Board:

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

プリント図ノート

- o——— : 部品面側取付のリード線。
- ▒▒▒ : 見ている面側のパターン。

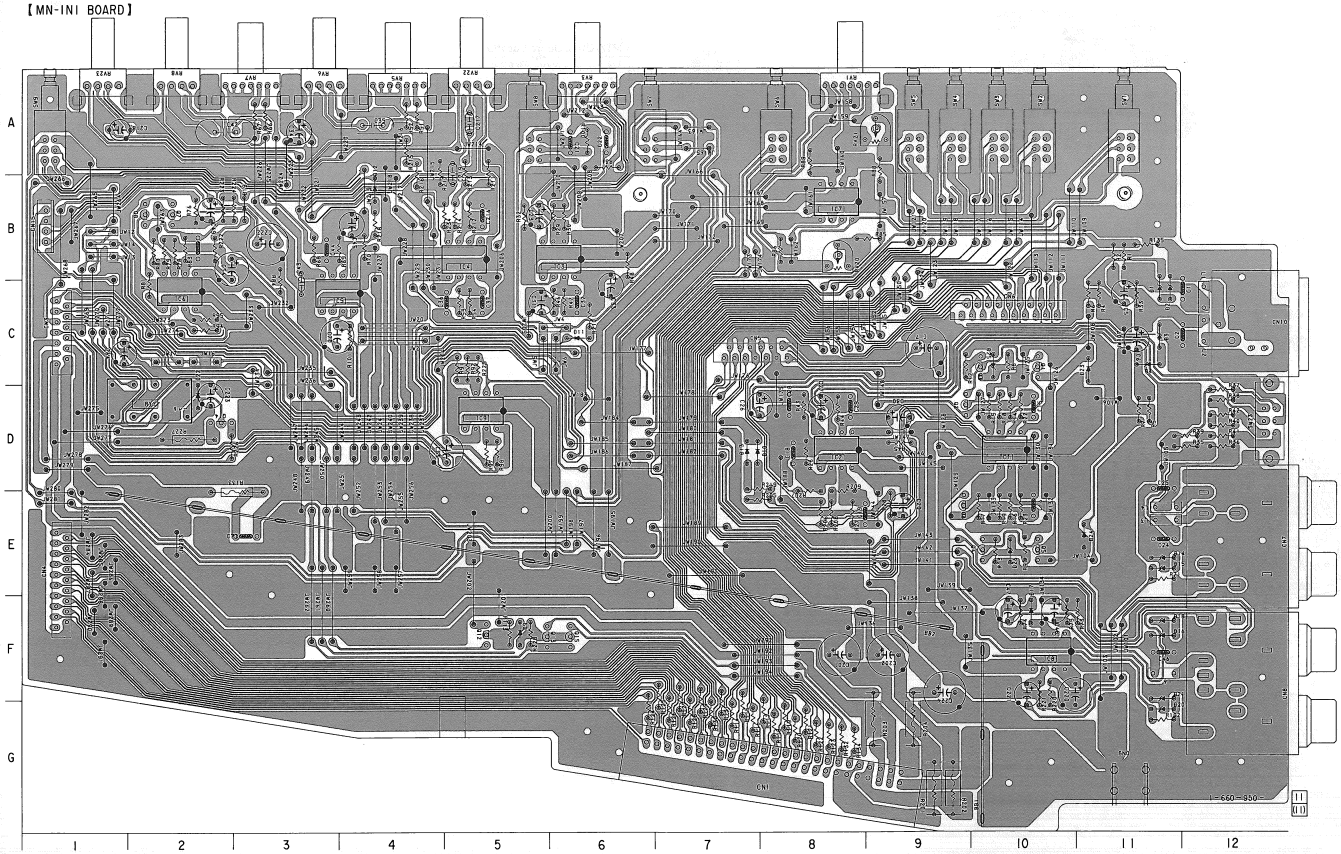
【CN9 BOARD】



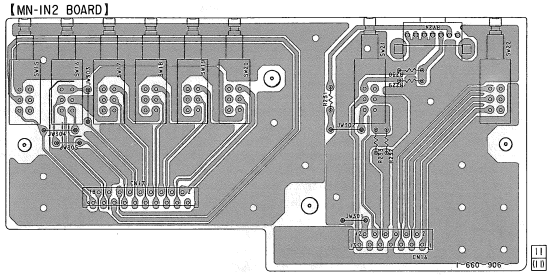
3-22. PRINTED WIRING BOARDS – MN-IN1 and MN-IN2 Boards –

3-22. プリント図ー MN-IN1, MN-IN2 基板ー

【MN-IN1 BOARD】



【MN-IN2 BOARD】



• **MN-IN1 BOARD Location**

Ref. No.	Location	Ref. No.	Location
CN1	G-8	D23	C-11
CN3	C-1	D24	E-11
CN4	E-1	D25	C-10
CN5	C-7	D26	E-10
CN6	C-10		
CN7	E-12	IC1	D-10
CN8	F-12	IC2	D-8
CN9	G-11	IC3	B-6
CN10	C-12	IC4	B-5
CN15	B-1	IC5	C-3
		IC6	C-2
D1	C-11	IC7	B-8
D2	C-11	IC8	F-10
D3	C-11	IC9	D-5
D4	C-11		
D9	F-5	Q1	C-10
D10	D-7	Q2	D-9
D11	C-6	Q3	C-10
D12	B-4	Q4	E-10
D13	D-7	Q5	E-10
D14	E-11	Q6	E-9
D15	E-11	Q7	B-2
D16	F-11	Q8	B-2
D17	F-10	Q12	F-5
D18	F-11	Q13	F-5
D19	B-3	Q14	D-2
D20	G-11	Q15	F-6
D21	G-11		
D22	D-2		

Note on Printed Wiring Board:

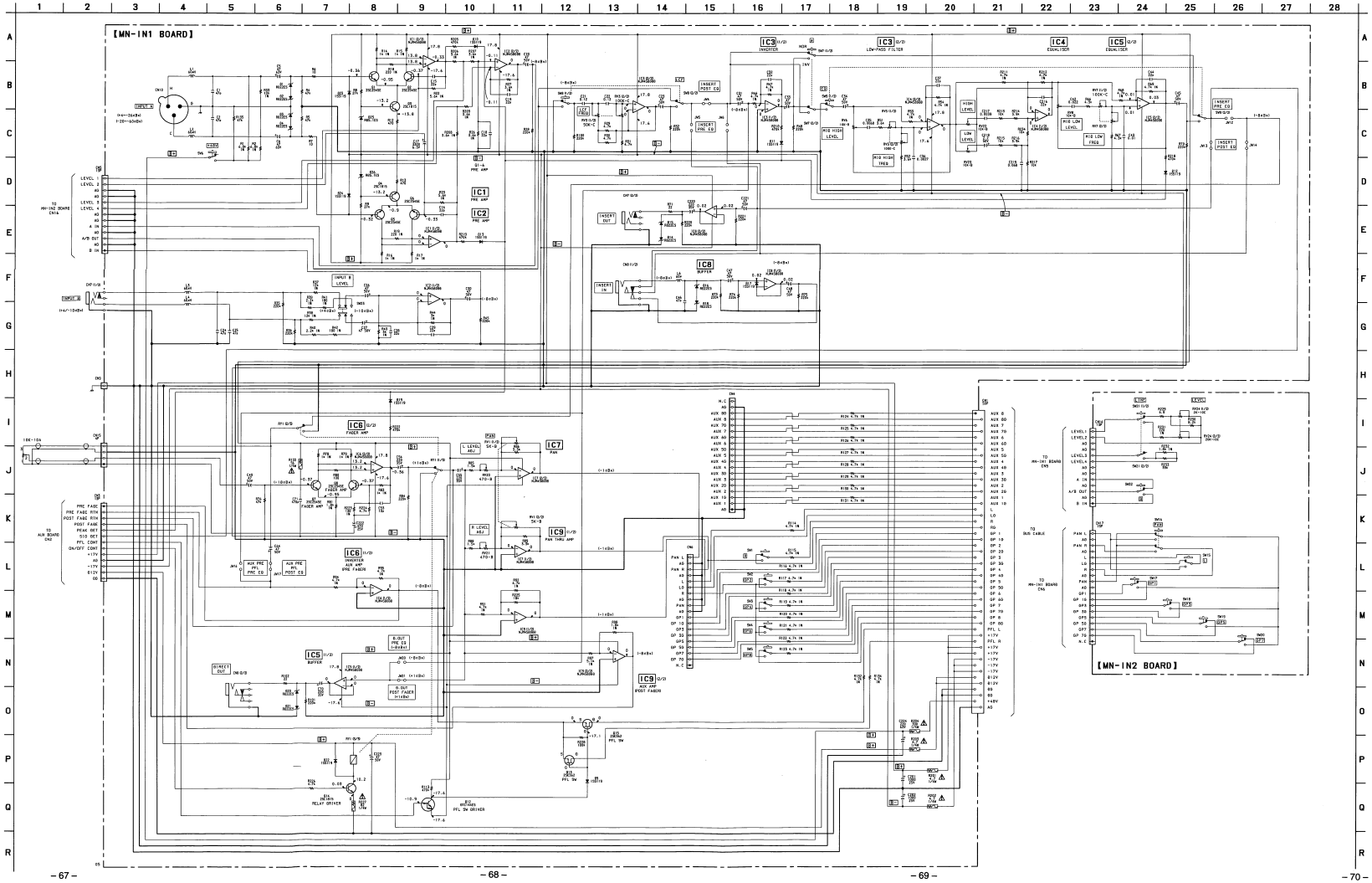
- ⟷ : parts extracted from the component side.
- ▒ : Pattern from the side which enables seeing.

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。

3-23. SCHEMATIC DIAGRAM – MN-IN1 and MN-IN2 Boards –

3-23. 回路図 – MN-IN1, MN-IN2 基板 –



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF
  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- ⚠ : fusible resistor.
- ▭ : panel designation.
- B+ : B+ Line.
- B− : B- Line.

Note:	Note:
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.

回路図ノート

- ケミコン、タンタル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 pF)。
- 抵抗で指示のないものは ¼W以下を示す。単位はすべてΩ。
- ⚠は許容品を示す。
- ⚠ : ヒューズ抵抗。
- ▭ : パネル表示名称。
- B+ : B+ライン。
- B− : 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。

3-24. PRINTED WIRING BOARD – ST-IN Board –

3-24. プリント図ーST-IN 基板ー

• **ST-IN BOARD Location**

Ref. No.	Location	Ref. No.	Location
CN1	G-8	IC101	C-10
CN3	C-1	IC102	B-5
CN4	E-1	IC201	D-8
CN9	G-11	IC202	C-4
CN15	B-1	IC301	D-5
CN101	C-12	IC302	C-5
CN201	D-12	IC303	F-11
CN301	F-12	IC304	F-4
		IC305	C-3
D101	B-12	IC306	B-8
D102	B-12	IC307	F-3
D103	C-11	IC308	D-1
D104	C-12		
D105	F-5	Q101	C-10
D106	C-11	Q102	C-10
D107	D-11	Q103	C-10
D108	D-9	Q104	D-10
D109	D-9	Q105	D-10
D110	F-6	Q106	D-10
D111	B-3	Q107	F-6
D112	F-12	Q108	C-2
D113	F-12	Q109	C-3
D201	D-11	Q201	C-9
D202	D-11	Q202	C-9
D203	E-12	Q203	C-9
D204	E-12	Q204	E-8
D205	F-5	Q205	E-8
D210	F-6	Q206	D-8
D211	B-2	Q207	F-6
D212	G-12	Q208	B-2
D213	G-12	Q209	B-2
D302	D-4	Q301	F-5
D303	C-10	Q302	D-4
D304	D-10		
D305	C-9		
D306	E-8		

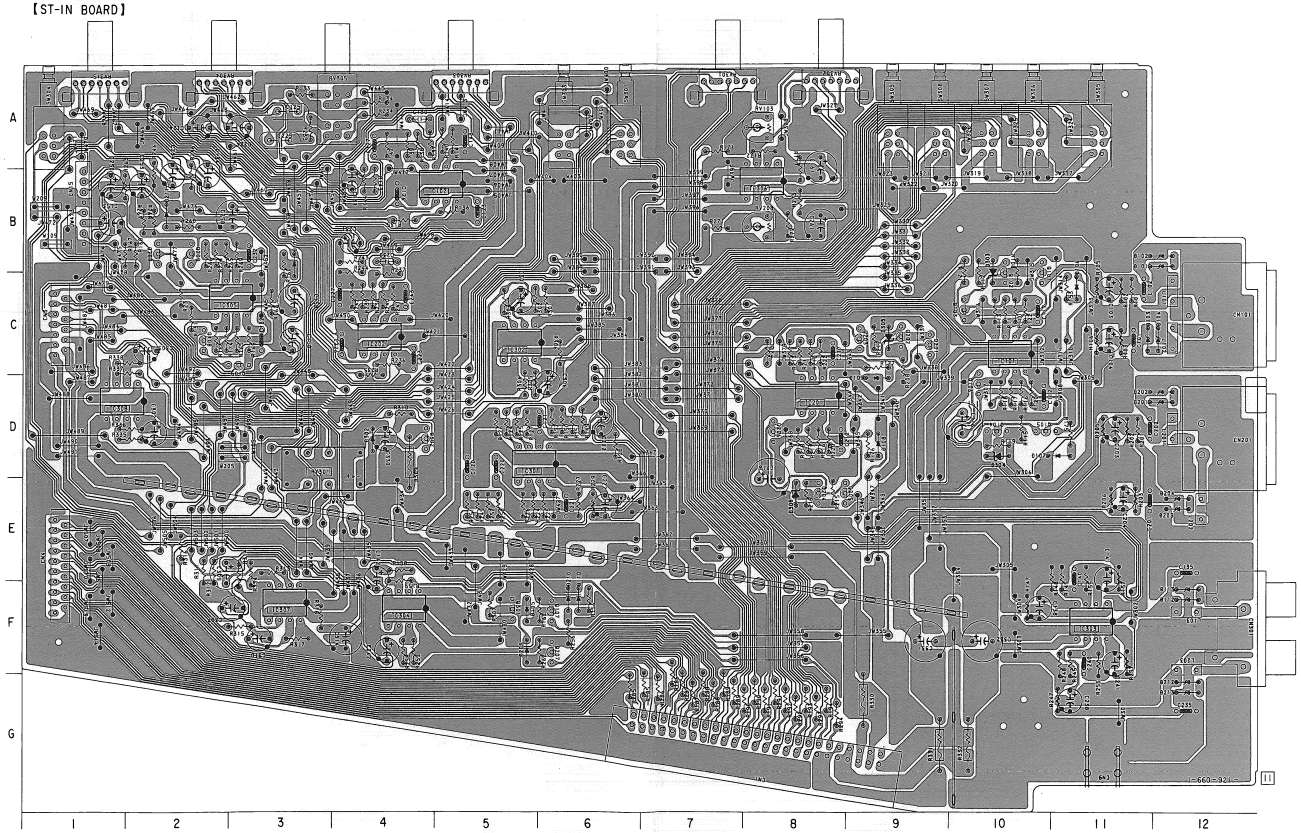
Note on Printed Wiring Board:

• o——— : parts extracted from the component side.
• ▒▒▒ : Pattern from the side which enables seeing.

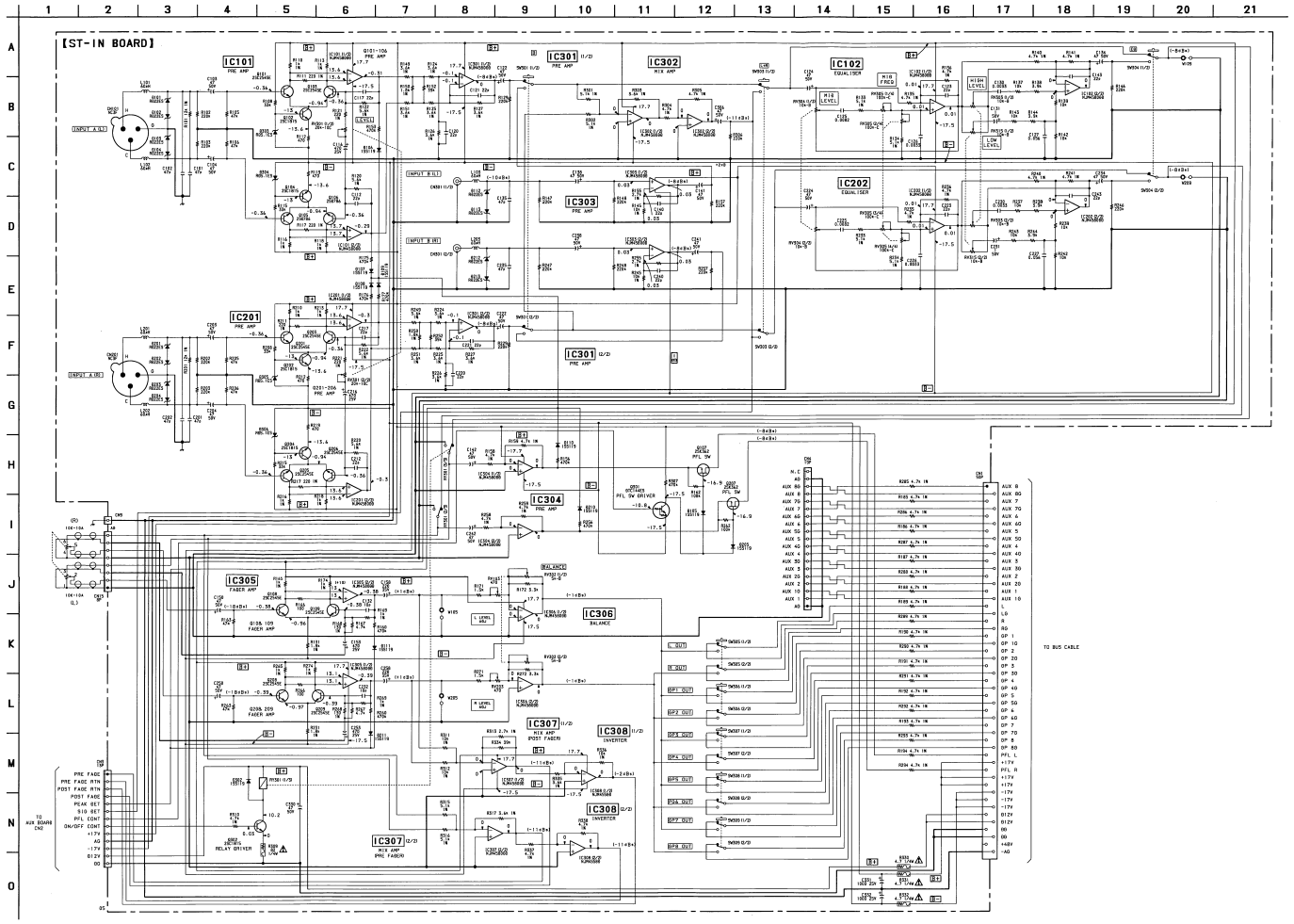
プリント図ノート

• o——：部品面側取付のリード線。
• ▒▒▒：見ている面側のパターン。

【ST-IN BOARD】



3-25. SCHEMATIC DIAGRAM – ST-IN Board –
3-25. 回路図－ ST-IN 基板－



Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- ▭ : fusible resistor.
- ▭ : panel designation.
- B+ : B+ Line.
- B− : B− Line.

Note:	Note:
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.

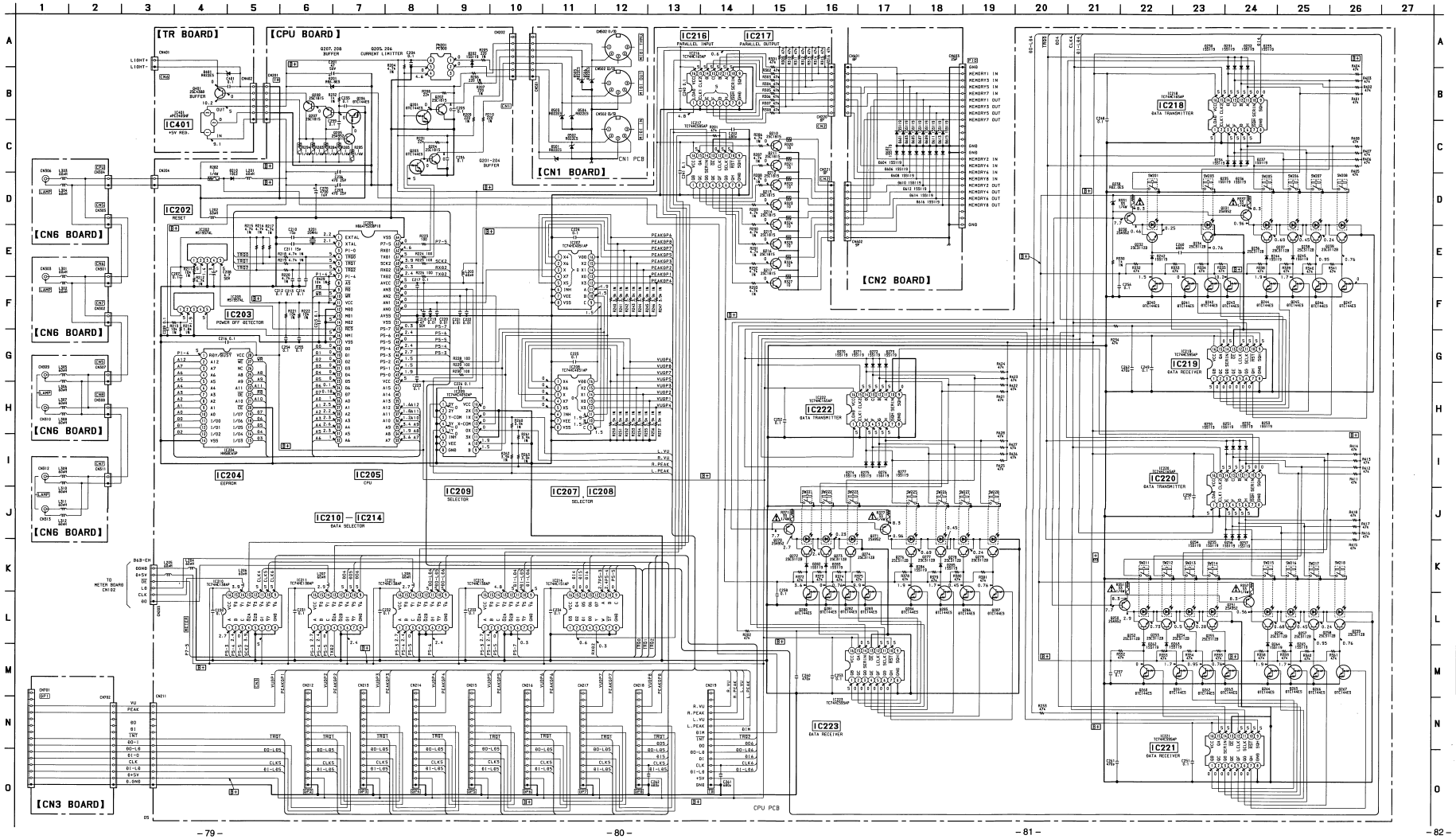
回路図ノート

- ケミコン、タンタル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）。
- 抵抗で指示のないものは1/4W以下を示す。単位はすべてΩ。
- ％は許容差を示す。
- ▭：ヒューズ抵抗。
- ▭：パネル表示名称。
- B+：B+ライン。
- B−：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ください。

3-26. SCHEMATIC DIAGRAM – CPU Board –

3-26. 回路図— CPU 基板部—



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.
- : B+ Line.

Note:	Note:
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.

回路図ノート

- ケミコン、タンタル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)。
- 抵抗で指示のないものは1/4W以下を示す。単位はすべてΩ。
- : 不燃性抵抗。
- : ヒューズ抵抗。
- : パネル表示名称。
- : B+ライン。

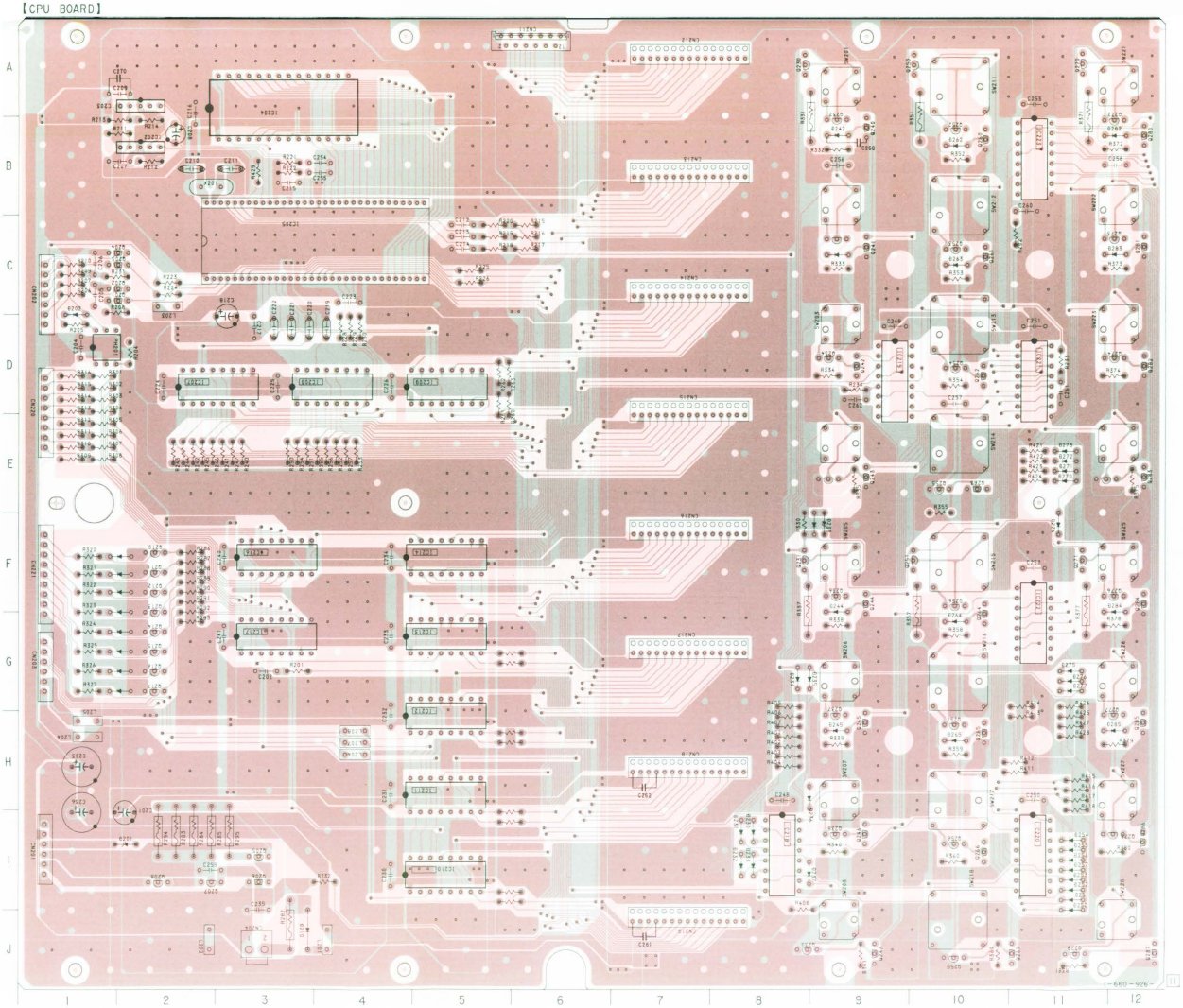
⚠ 印の部品、または ⚠ 印付きの点線で囲まれた部品は、安全性を維持するために、重要な部品です。従って交換時は、必ず指定の部品を使用して下さい。

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
- ○——：部品面側取付のリード線。
- ：裏側のパターン。
- ：見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－

【CPU BOARD】



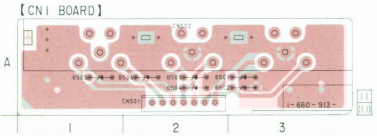
- **CPU BOARD Location**

Ref. No.	Location	Ref. No.	Location
CN201	I-1	IC223	B-11
CN211	A-6		
CN212	A-7	Q201	C-2
CN213	B-7	Q202	C-2
CN214	C-7	Q203	C-2
CN215	D-7	Q204	C-2
CN216	F-7	Q205	I-3
CN217	G-7	Q206	I-3
CN218	H-7	Q207	I-2
CN219	J-7	Q208	I-2
		Q210	F-2
D201	I-2	Q211	F-2
D202	D-1	Q212	F-2
D210	J-3	Q213	G-2
D230	I-8	Q214	G-2
D231	I-8	Q215	G-2
D232	I-8	Q216	G-2
D233	I-8	Q217	G-2
D234	G-8	Q230	A-8
D235	G-9	Q231	F-8
D236	H-9	Q232	B-9
D237	I-9	Q234	D-9
D238	F-9	Q236	F-9
D242	B-9	Q237	H-9
D244	G-9	Q238	I-9
D245	H-9	Q239	J-8
D250	I-11	Q240	B-9
D251	I-11	Q241	C-9
D252	I-11	Q242	D-9
D253	I-11	Q243	E-9
D254	I-11	Q244	F-9
D255	I-11	Q245	H-9
D256	I-11	Q246	I-9
D257	I-11	Q247	J-10
D262	B-10	Q250	A-10
D263	C-10	Q251	F-10
D264	G-10	Q252	B-10
D265	H-10	Q253	C-10
D270	E-11	Q254	D-10
D271	E-11	Q255	E-10
D272	E-11	Q256	F-10
D273	E-11	Q257	H-10
D274	F-11	Q258	I-10
D275	G-11	Q259	J-10
D276	G-11	Q260	B-10
D277	G-11	Q261	C-10
D282	B-12	Q262	D-10
D283	C-11	Q263	E-10
D284	G-12	Q264	G-10
D285	H-12	Q265	H-10
		Q266	I-10
IC202	B-2	Q267	J-11
IC203	A-2	Q270	A-11
IC204	A-3	Q271	F-11
IC205	C-3	Q272	B-12
IC207	D-3	Q273	C-12
IC208	D-4	Q274	D-12
IC209	D-5	Q276	F-12
IC210	I-5	Q277	H-12
IC211	H-5	Q278	I-12
IC212	H-5	Q279	J-11
IC213	G-5	Q280	B-12
IC214	F-5	Q281	C-12
IC216	F-3	Q282	D-12
IC217	G-3	Q283	E-12
IC218	I-8	Q284	F-12
IC219	D-9	Q285	H-12
IC220	I-11	Q286	I-12
IC221	D-11	Q287	J-12
IC222	G-11		

- **CN1 BOARD**

Ref. No.	Location
CN501	A-2
CN502	A-2
D501	A-3
D502	A-3
D503	A-2
D504	A-2
D505	A-1
D506	A-2

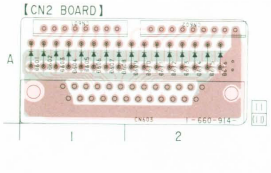
【CN1 BOARD】



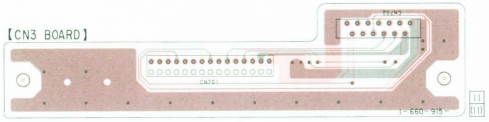
- **CN2 BOARD**

Ref. No.	Location
CN601	A-1
CN602	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

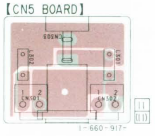
【CN2 BOARD】



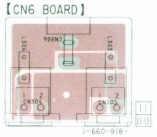
【CN3 BOARD】



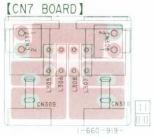
【CN5 BOARD】



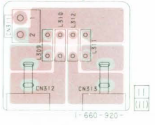
【CN6 BOARD】



【CN7 BOARD】



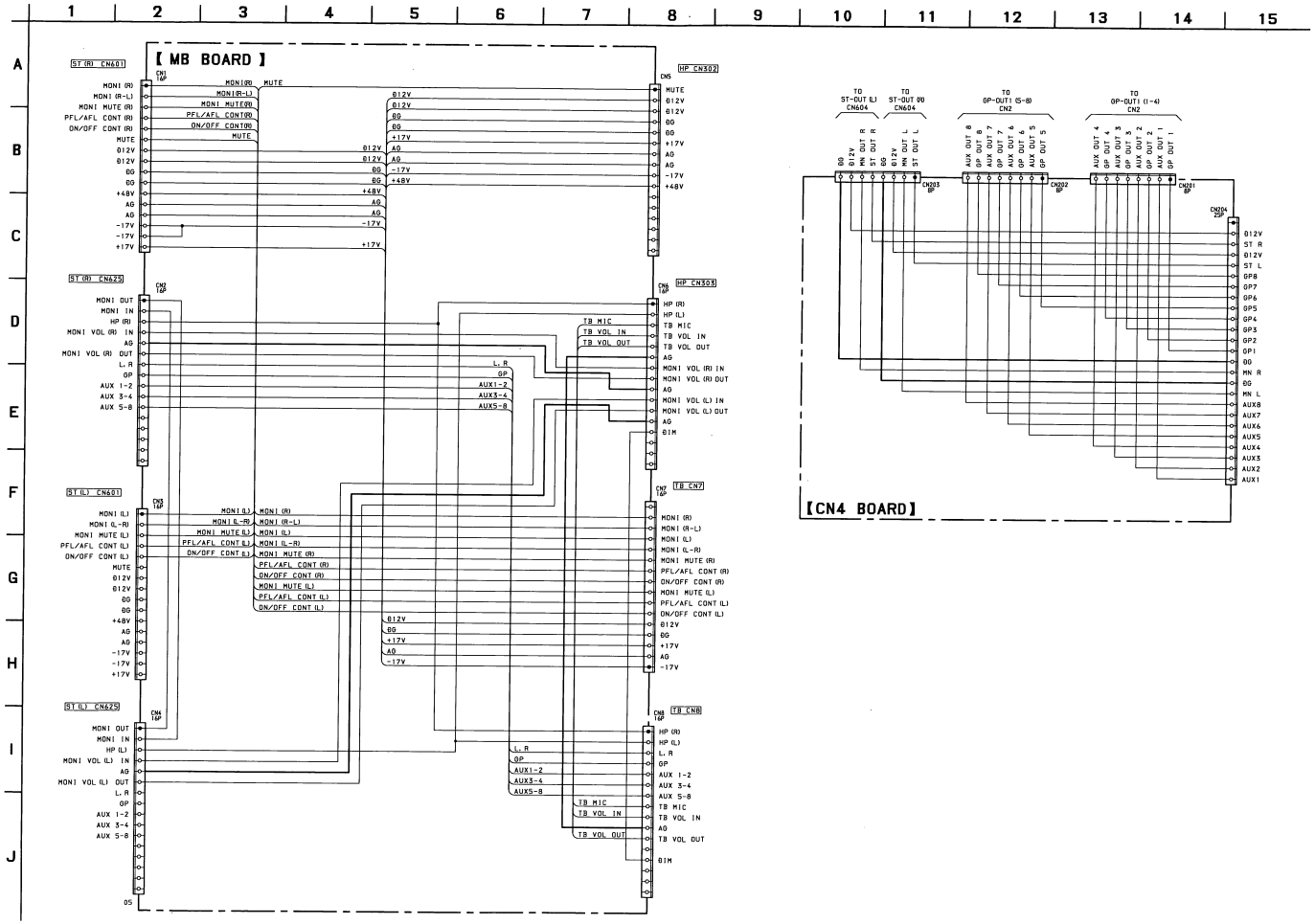
【CN8 BOARD】



【TR BOARD】

3-28. SCHEMATIC DIAGRAM – MB and CN4 Boards –

3-28. 回路図ー MB, CN4 基板ー



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- B+ : B+ Line.
- B− : B- Line.

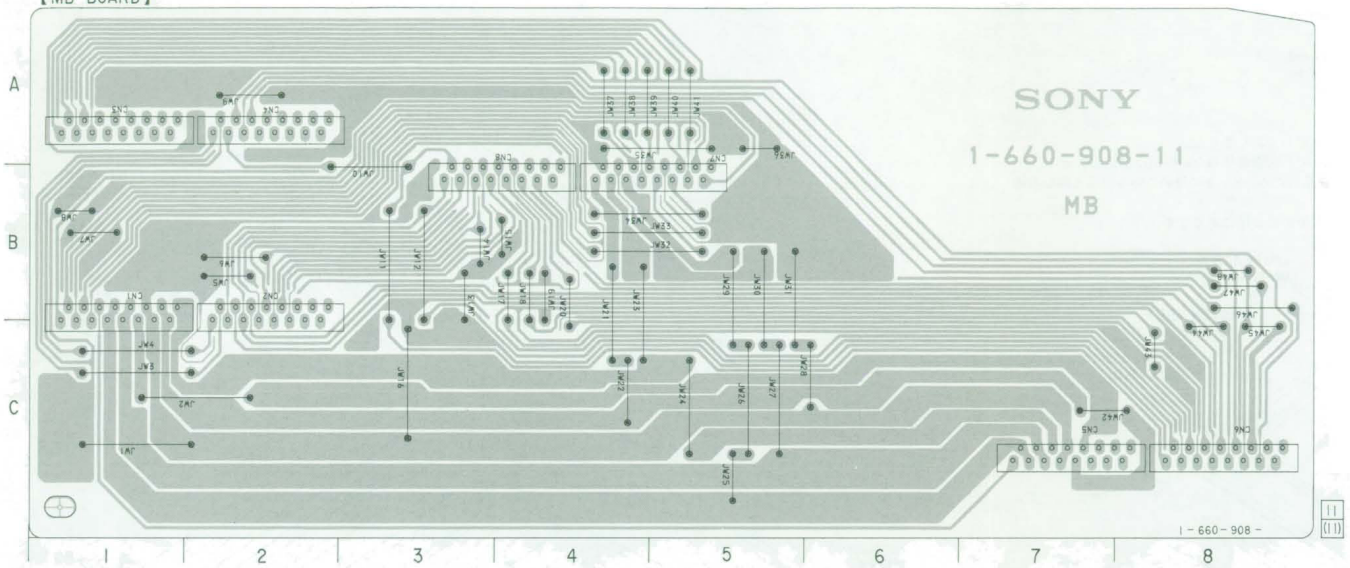
回路図ノート

- ケミコン，タンタル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）。
- 抵抗で指示のないものは¼W以下を示す。単位はすべてΩ。
- B+ ：B＋ライン。
- B− ：B－ライン。

3-29. PRINTED WIRING BOARDS – MB and CN4 Boards –

3-29. プリント図ー MB, CN4 基板部ー

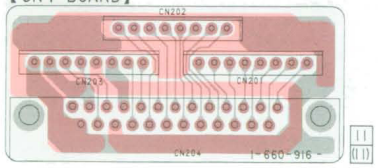
【MB BOARD】



• MB BOARD

Ref. No.	Location
CN1	B-1
CN2	B-2
CN3	A-1
CN4	A-2
CN5	C-7
CN6	C-8
CN7	B-5
CN8	B-4

【CN4 BOARD】



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

- ○—— : 部品面側取付のリード線。
- : 裏側のパターン。
- : 見ている面側のパターン。

SECTION 4. EXPLODED VIEWS
4. 分解図

NOTE:

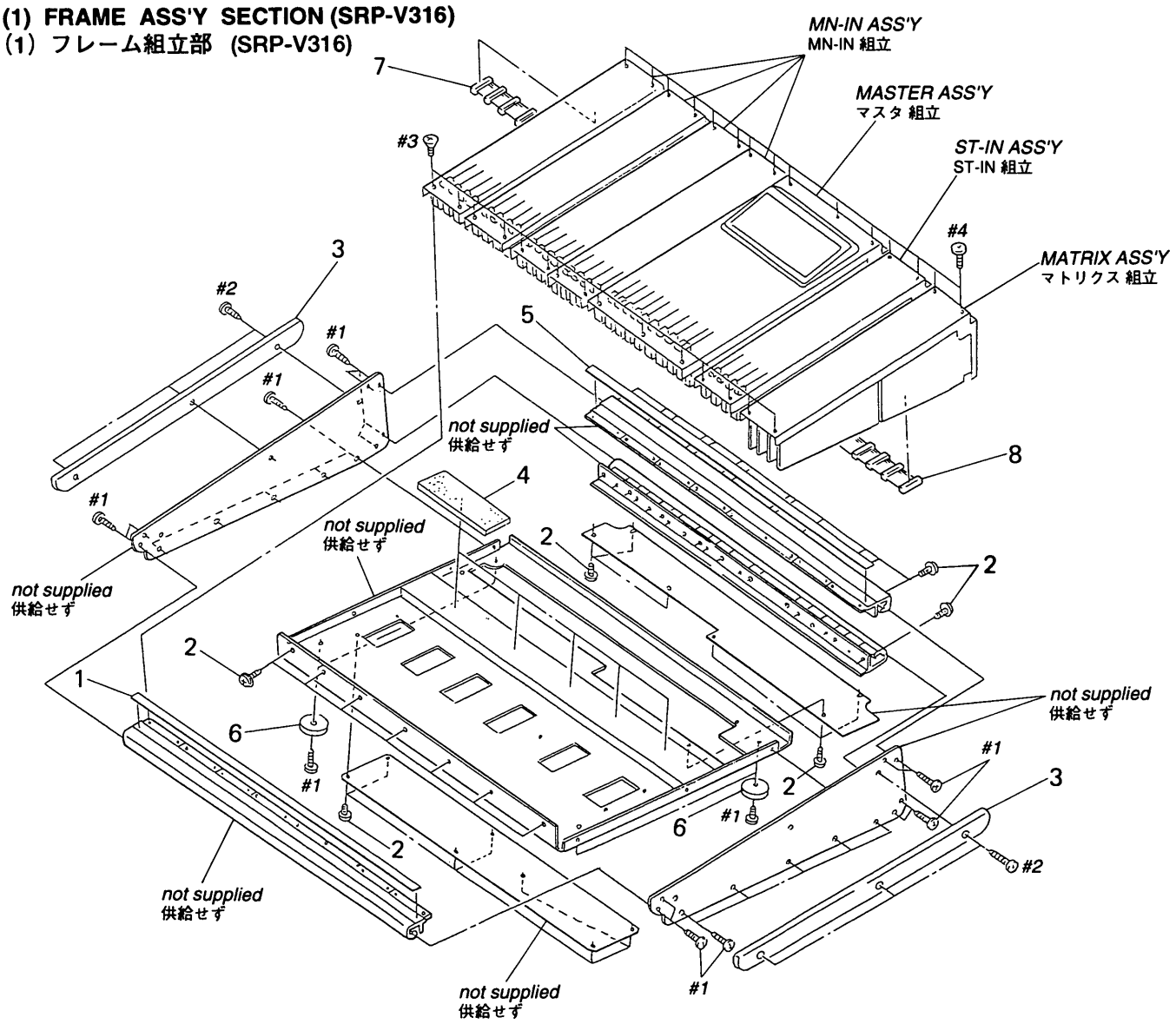
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearrance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. 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。

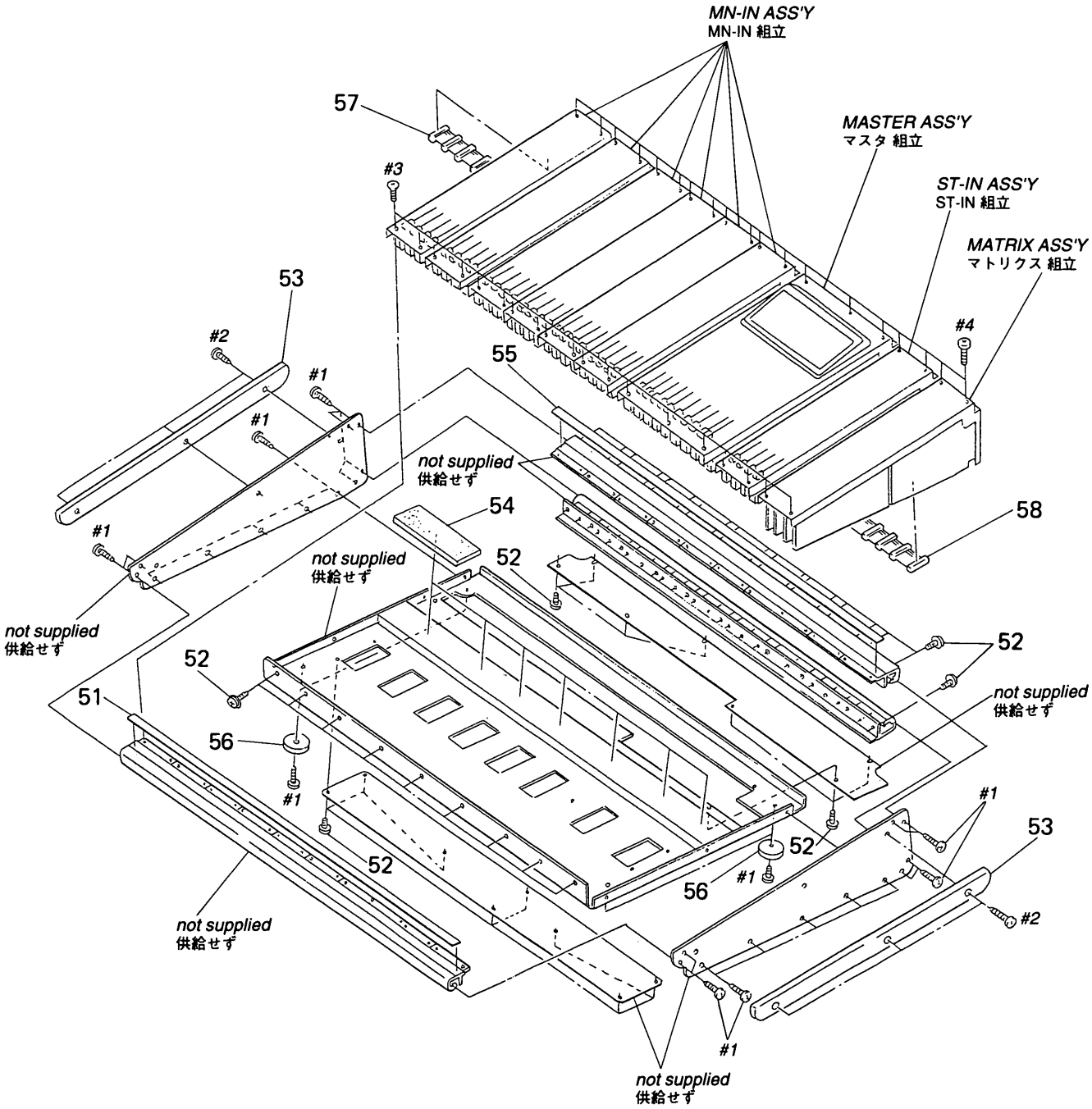
•＊印の部品は常時在庫しておりません。
•分解図中の機構部品で、図面番号のない部品は供給しません。
•-XX、-Xは標準化部品のため、セットに付いている部品と異なる場合があります。
•付属梱包部は、部品表の最後尾にあります。

(1) FRAME ASS'Y SECTION (SRP-V316)
(1) フレーム組立部 (SRP-V316)



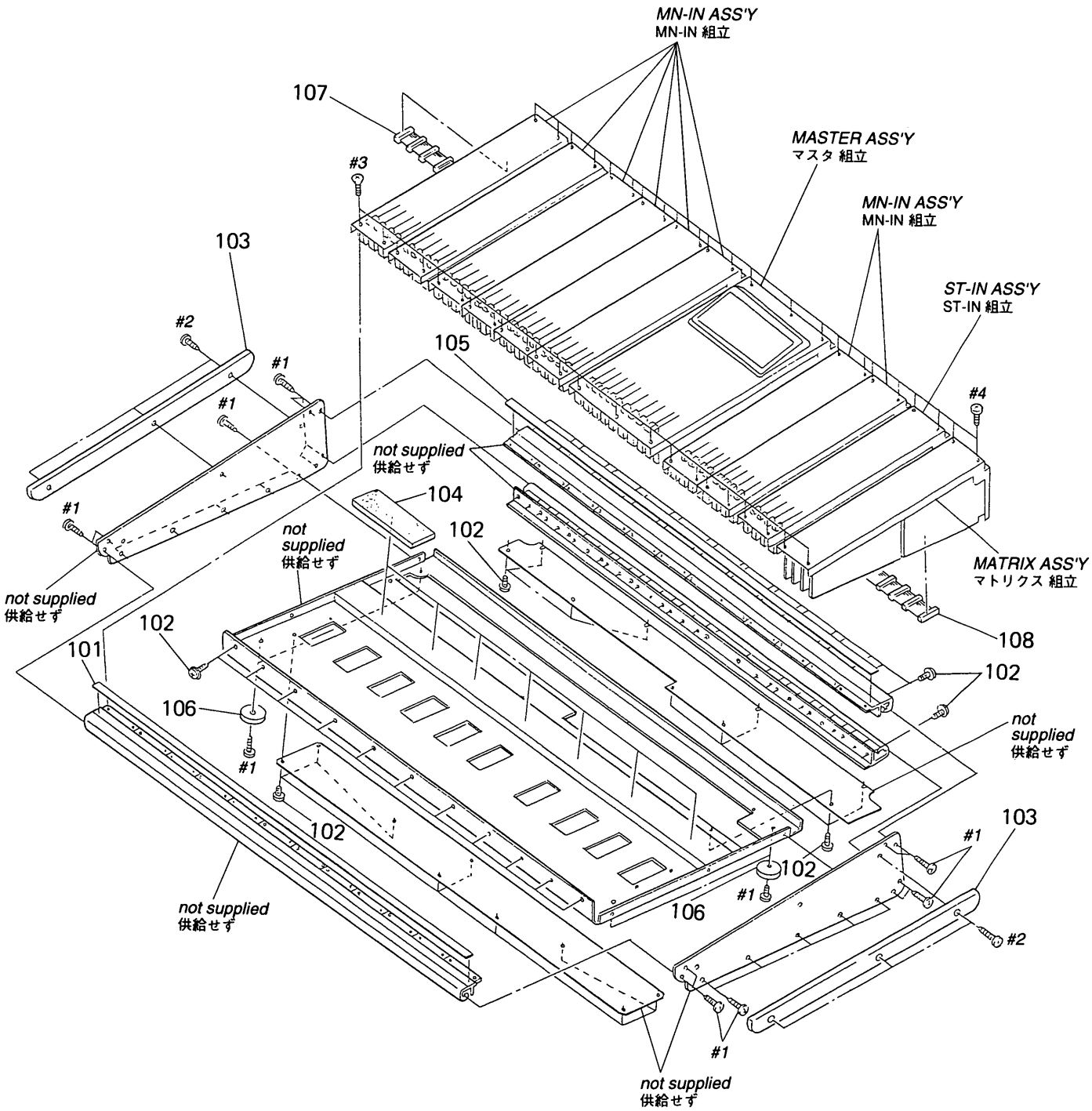
Ref. No.	Part No.	Description	Remark
* 1	2-344-823-11	PLATE (16), CHANNEL INDICATION	
2	3-704-366-01	SCREW (CASE) (M3X8)	
* 3	2-344-566-01	HANDLE	
* 4	2-344-787-01	CUSHION	
* 5	2-344-823-01	PLATE (16), CHANNEL INDICATION	
6	X-4945-465-1	FOOT ASSY	
7	1-777-452-11	CABLE (WITH CONNECTOR)	
8	1-777-067-11	CABLE (WITH CONNECTOR)	

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



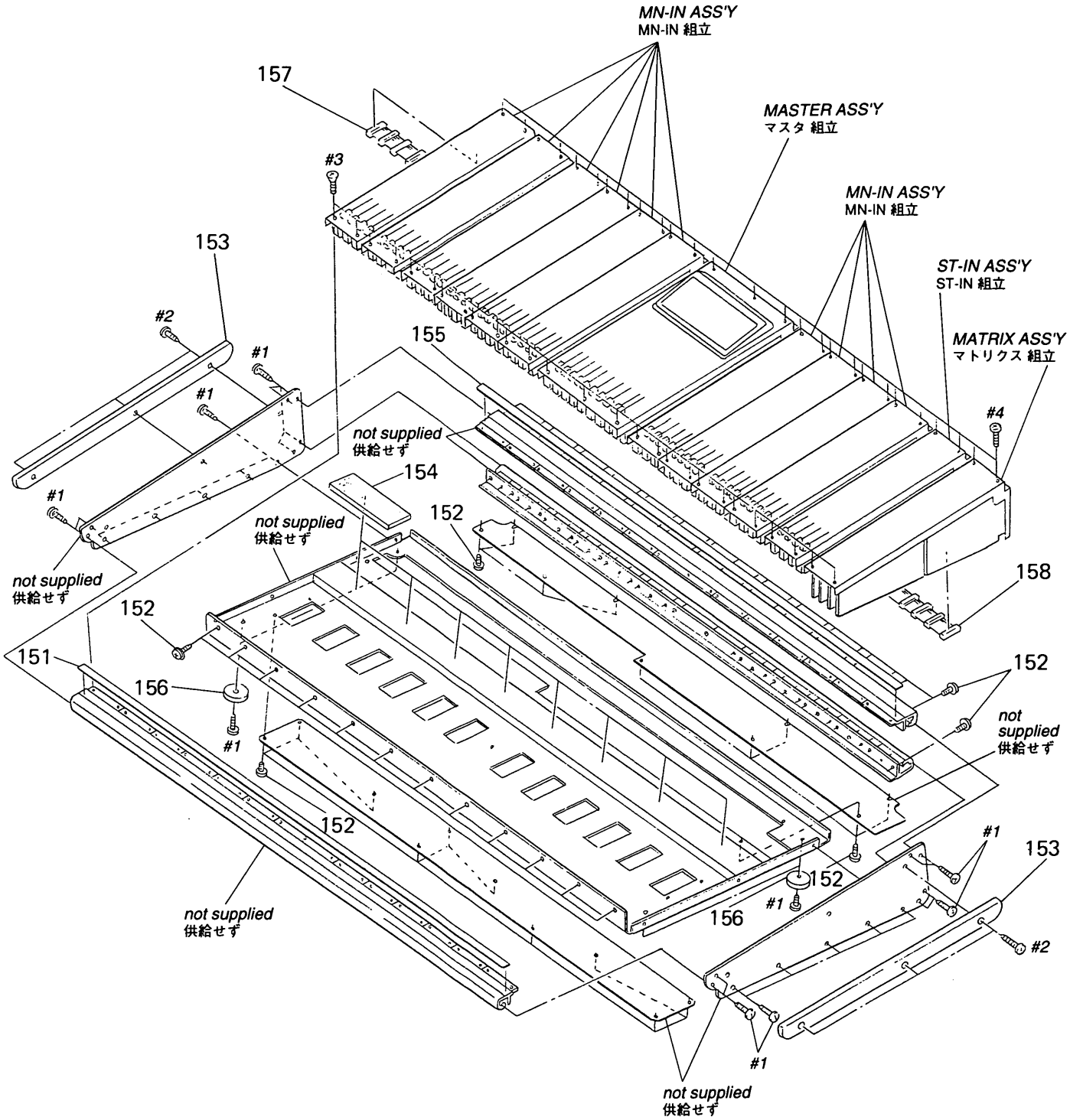
Ref. No.	Part No.	Description	Remark
* 51	2-344-824-11	PLATE (24), CHANNEL INDICATION	
52	3-704-366-01	SCREW (CASE) (M3X8)	
* 53	2-344-566-01	HANDLE	
* 54	2-344-787-01	CUSHION	
* 55	2-344-824-01	PLATE (24), CHANNEL INDICATION	
56	X-4945-465-1	FOOT ASSY	
57	1-777-066-11	CABLE (WITH CONNECTOR)	
58	1-777-067-11	CABLE (WITH CONNECTOR)	

(3) FRAME ASS'Y SECTION (SRP-V332)
(3) フレーム組立部 (SRP-V332)



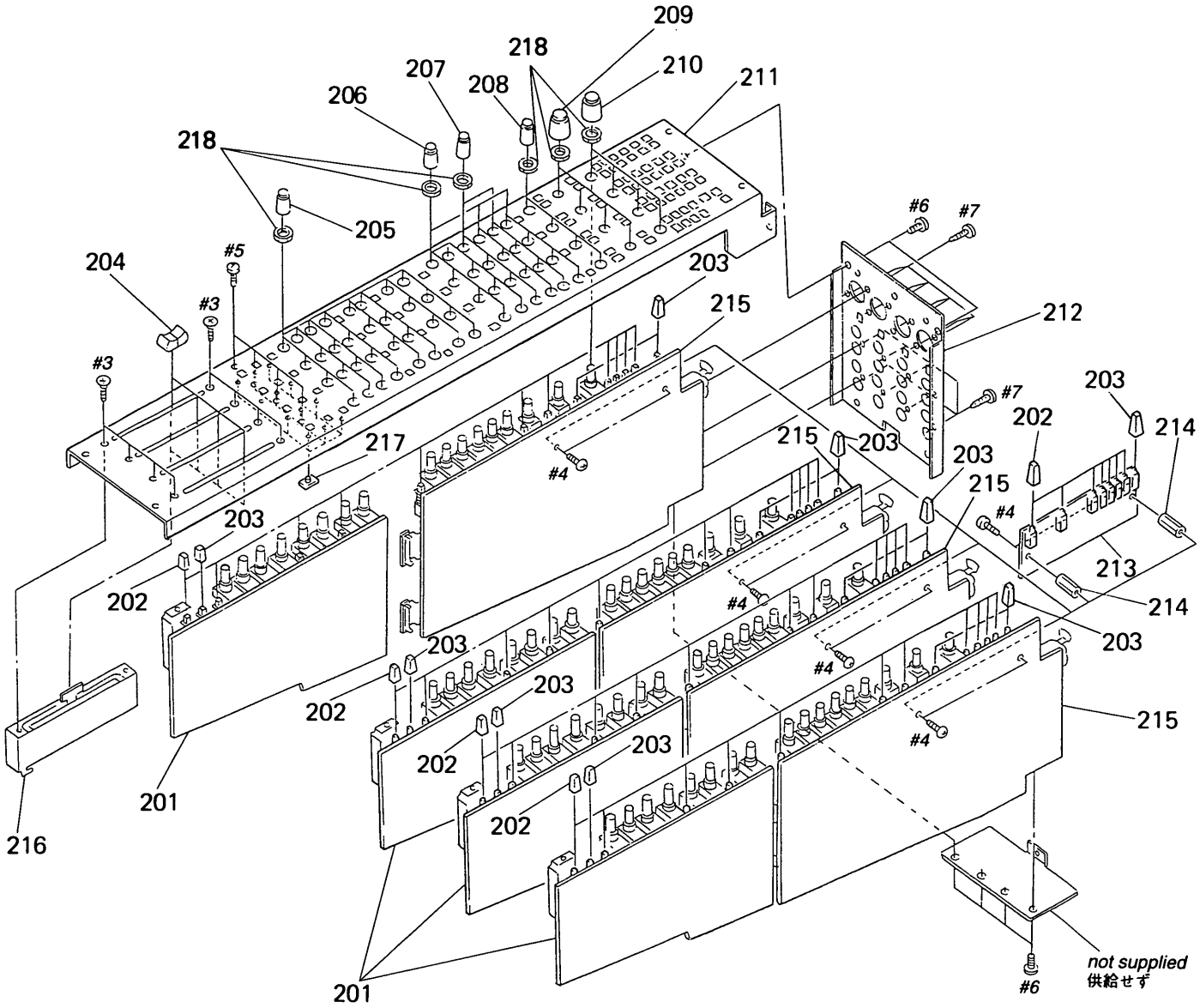
Ref. No.	Part No.	Description	Remark
* 101	2-344-825-11	PLATE (32), CHANNEL INDICATION	
102	3-704-366-01	SCREW (CASE) (M3X8)	
* 103	2-344-566-01	HANDLE	
* 104	2-344-787-01	CUSHION	
* 105	2-344-825-01	PLATE (32), CHANNEL INDICATION	
106	X-4945-465-1	FOOT ASSY	
107	1-777-453-11	CABLE (WITH CONNECTOR)	
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)



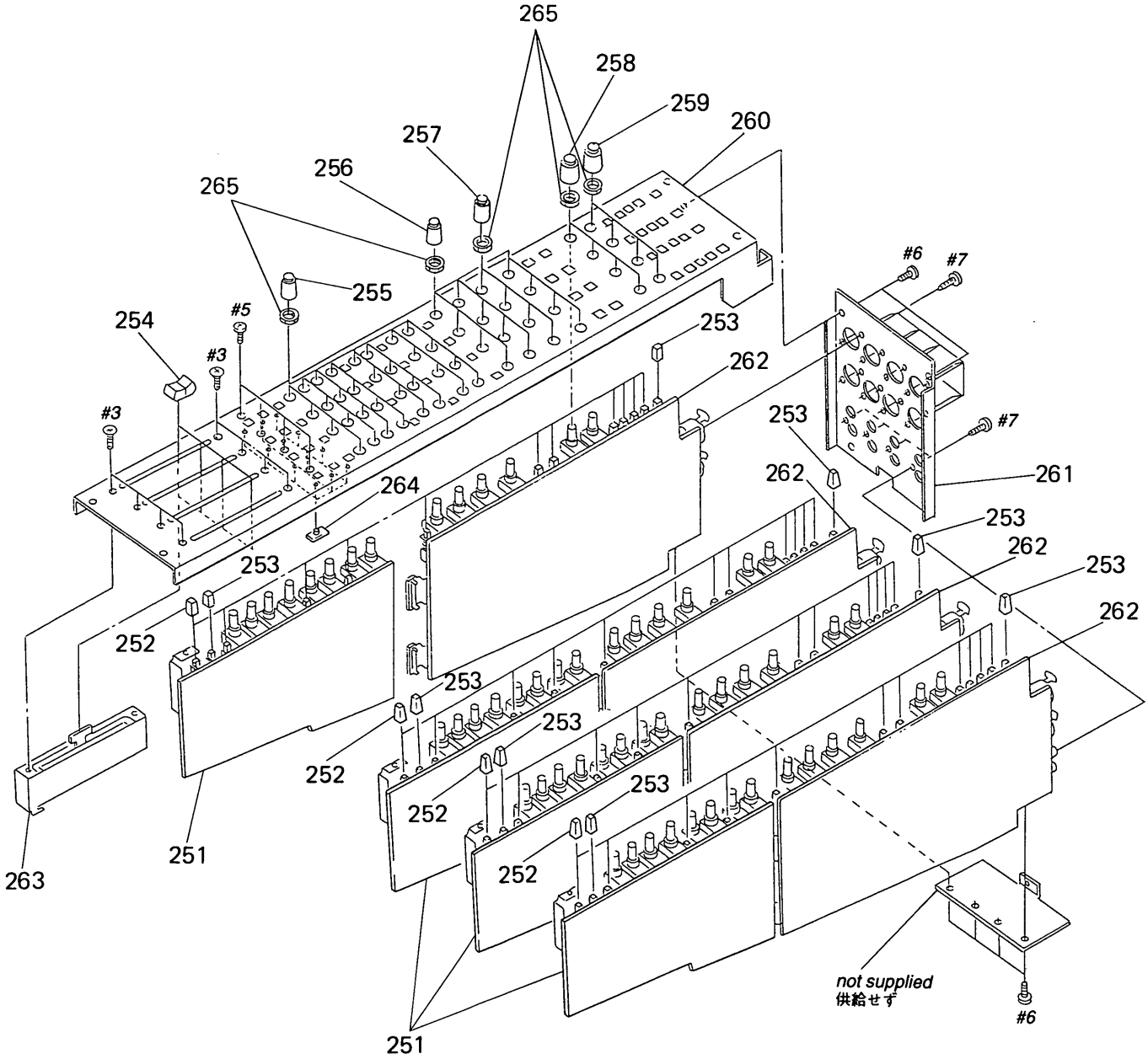
Ref. No.	Part No.	Description	Remark
* 151	2-344-826-11	PLATE (40), CHANNEL INDICATION	
152	3-704-366-01	SCREW (CASE) (M3X8)	
* 153	2-344-566-01	HANDLE	
* 154	2-344-787-01	CUSHION	
* 155	2-344-826-01	PLATE (40), CHANNEL INDICATION	
156	X-4945-465-1	FOOT ASSY	
157	1-777-455-11	CABLE (WITH CONNECTOR)	
158	1-777-456-11	CABLE (WITH CONNECTOR)	

(5) MN-IN ASS'Y SECTION
(5) MN-IN 組立部



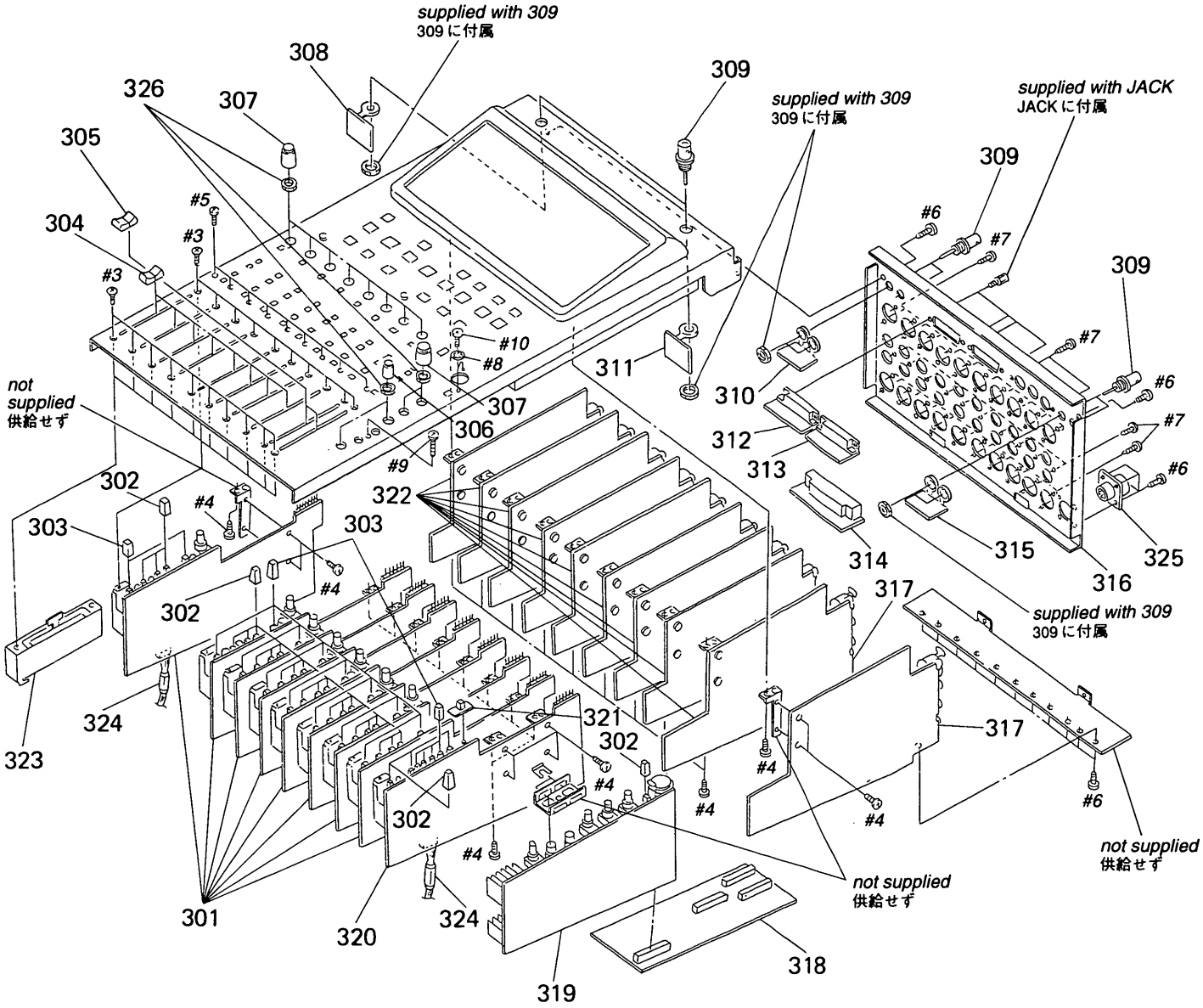
Ref. No.	Part No.	Description	Remark
* 201	A-4587-523-A	AUX BOARD, COMPLETE	
202	2-344-567-01	KNOB (SMALL), PUSH BUTTON (GRAY)	
203	2-344-567-11	KNOB (SMALL), PUSH BUTTON (RED)	
204	4-904-377-21	KNOB, FADER (GRAY)	
205	4-935-181-11	KNOB (SMALL), ROTARY (BLUE)	
206	4-935-181-41	KNOB (SMALL), ROTARY (GRAY)	
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)	
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)	
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 (9)	

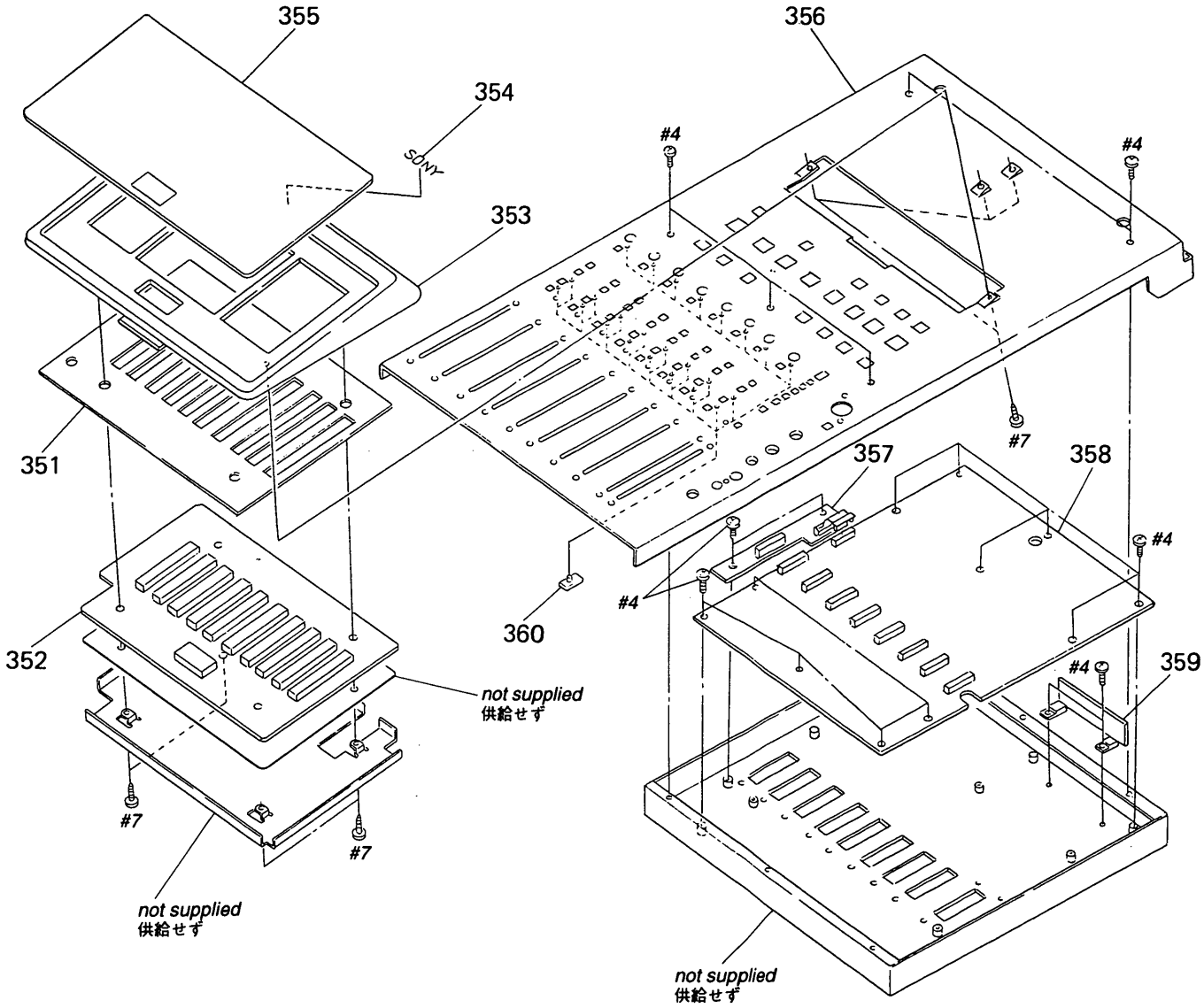
(7) MASTER ASS'Y SECTION-1
(7) マスタ組立部ー1



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	

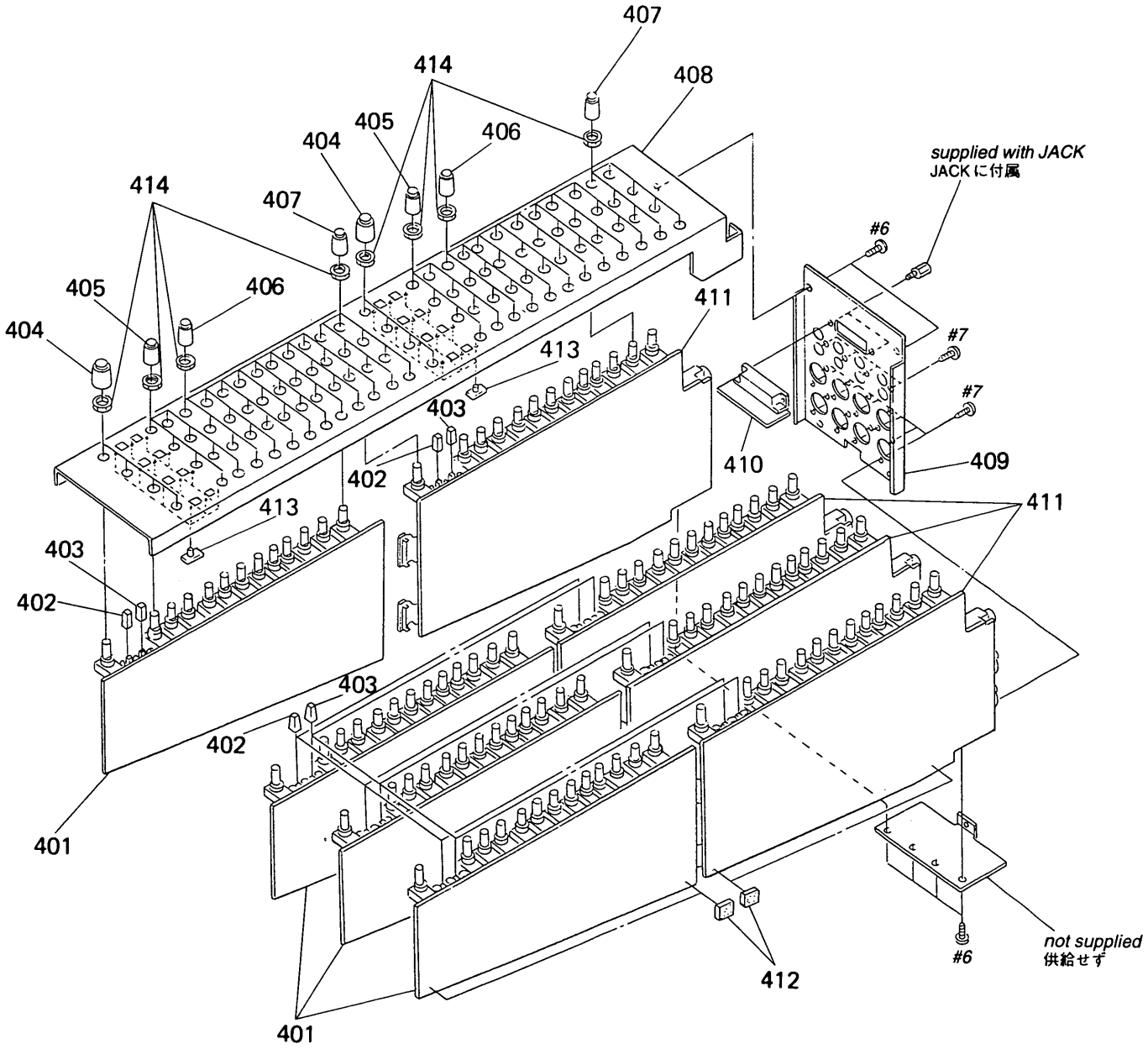
Ref. No.	Part No.	Description	Remark
* 314	1-660-913-11	CN1 BOARD	
* 315	1-660-920-11	CN8 BOARD	
* 316	2-344-576-01	PLATE (MASTER), JACK	
* 317	A-4587-525-A	ST-OUT BOARD, COMPLETE	
* 318	1-660-908-11	MB BOARD	
* 319	A-4588-811-A	HP BOARD, COMPLETE	
* 320	A-4588-810-A	TB BOARD, COMPLETE	
321	4-922-518-11	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



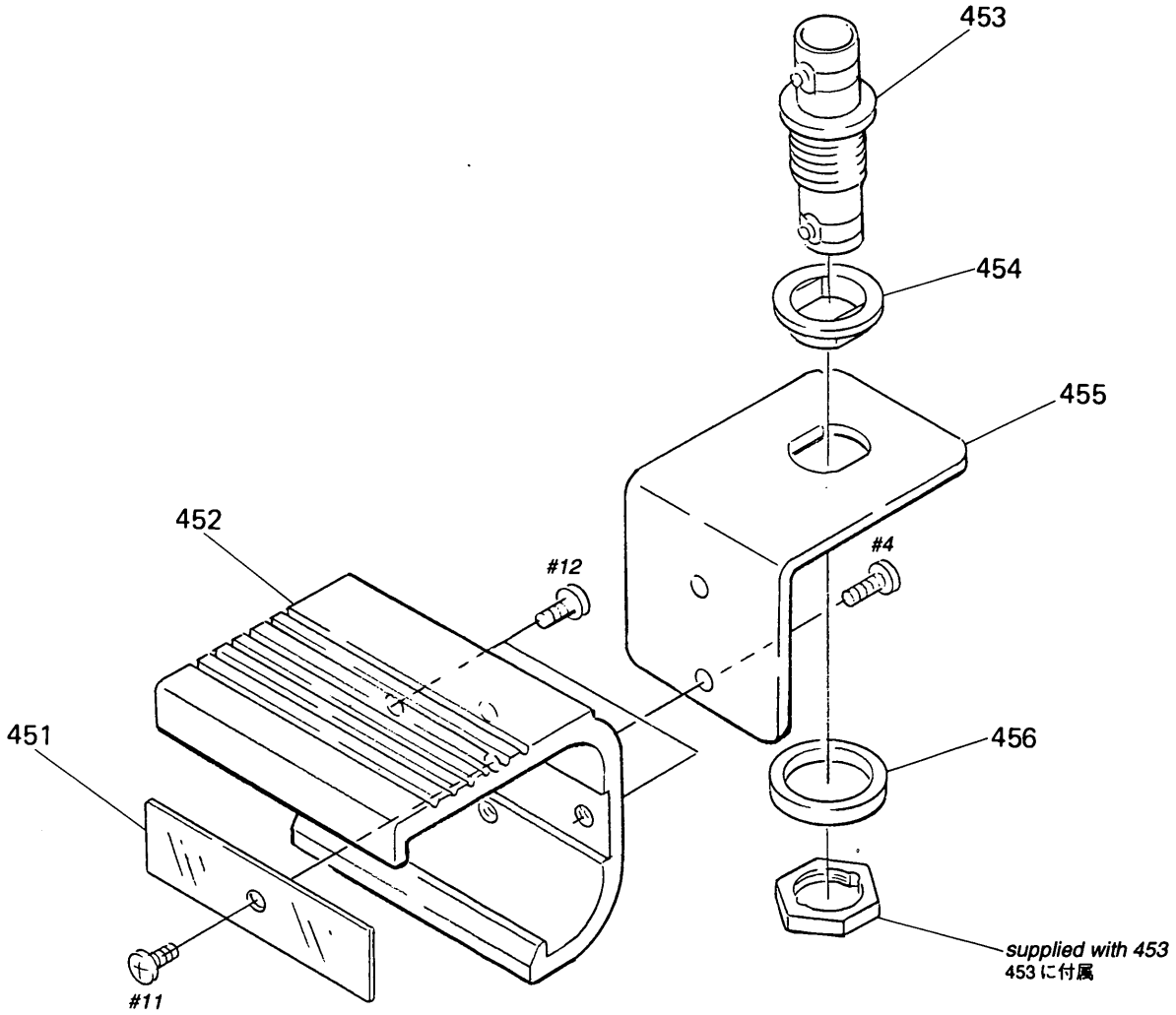
Ref. No.	Part No.	Description	Remark
* 351	2-344-802-01	CASE (B), SHIELD	
* 352	1-660-911-11	METER BOARD	
* 353	2-344-591-01	PANEL	
354	3-704-177-01	EMBLEM (NO. 7), SONY	
355	2-344-588-01	PLATE (PANEL), ORNAMENTAL	
* 356	2-344-580-01	PANEL (MASTER)	
* 357	1-660-915-11	CN3 BOARD	
* 358	A-4587-522-A	CPU 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)	
* 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)	
* 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..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH

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

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.

【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おりません。
- コンデンサの単位でｕＦはμＦ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μＨを示します。
- 半導体の名称でｕＡ...，ｕＰＢ...，ｕＰＣ...，ｕＰＤ... 等はそれぞれμＡ...，μＰＢ...，μＰＣ...，μＰＤ... 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。

⚠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
*	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	TLSG116	
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	
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。

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	

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*	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	

****

*	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 CONECTOR 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
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
D264	8-719-921-19	DIODE 1SS119-25TG	
D265	8-719-921-19	DIODE 1SS119-25TG	
D270	8-719-921-19	DIODE 1SS119-25TG	
D271	8-719-921-19	DIODE 1SS119-25TG	
D272	8-719-921-19	DIODE 1SS119-25TG	
D273	8-719-921-19	DIODE 1SS119-25TG	
D274	8-719-921-19	DIODE 1SS119-25TG	
D275	8-719-921-19	DIODE 1SS119-25TG	
D276	8-719-921-19	DIODE 1SS119-25TG	
D277	8-719-921-19	DIODE 1SS119-25TG	
D282	8-719-921-19	DIODE 1SS119-25TG	
D283	8-719-921-19	DIODE 1SS119-25TG	
D284	8-719-921-19	DIODE 1SS119-25TG	
D285	8-719-921-19	DIODE 1SS119-25TG	
		< IC >	
IC202	8-759-636-16	IC M51957AL	
IC203	8-759-636-16	IC M51957AL	
IC204	8-759-294-18	IC HN58C65P-25	
* IC205	8-759-462-01	IC HD6475208P10-V300	
IC207	8-759-007-19	IC TC74HC4051AP	
IC208	8-759-007-19	IC TC74HC4051AP	
IC209	8-759-007-20	IC TC74HC4052AP	
IC210	8-759-032-85	IC TC74HC138AP	
IC211	8-759-032-85	IC TC74HC138AP	
IC212	8-759-032-85	IC TC74HC138AP	
IC213	8-759-032-85	IC TC74HC138AP	
IC214	8-759-916-48	IC TC74HC151AP	
IC216	8-759-916-52	IC TC74HC165AP	
IC217	8-759-233-43	IC TC74HC595AP	
IC218	8-759-916-52	IC TC74HC165AP	
IC219	8-759-233-43	IC TC74HC595AP	
IC220	8-759-916-52	IC TC74HC165AP	
IC221	8-759-233-43	IC TC74HC595AP	
IC222	8-759-916-52	IC TC74HC165AP	
IC223	8-759-233-43	IC TC74HC595AP	
		< COIL >	
L201	1-424-090-11	COIL, LINE FILTER	
L202	1-424-090-11	COIL, LINE FILTER	
L203	1-424-090-11	COIL, LINE FILTER	
L204	1-424-090-11	COIL, LINE FILTER	
L205	1-424-090-11	COIL, LINE FILTER	
L206	1-424-090-11	COIL, LINE FILTER	
L207	1-424-090-11	COIL, LINE FILTER	
L208	1-424-090-11	COIL, LINE FILTER	
		< PHOTO INTERRUPTER >	
PH201	8-719-938-71	PHOTO COUPLER PC900	

Ref. No.	Part No.	Description	Remark
		< TRANSISTOR >	
Q201	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q202	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q203	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q204	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q205	8-729-195-23	TRANSISTOR 2SA952TP-K1	
Q206	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q207	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q208	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q210	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q211	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q212	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q213	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q214	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q215	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q216	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q217	8-729-119-78	TRANSISTOR 2SC1815Y-TPE2	
Q230	8-729-195-23	TRANSISTOR 2SA952TP-K1	
Q231	8-729-195-23	TRANSISTOR 2SA952TP-K1	
Q232	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q234	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q236	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q237	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q238	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q239	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q240	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q241	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q242	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q243	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q244	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q245	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q246	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q247	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q250	8-729-195-23	TRANSISTOR 2SA952TP-K1	
Q251	8-729-195-23	TRANSISTOR 2SA952TP-K1	
Q252	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q253	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q254	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q255	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q256	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q257	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q258	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q259	8-729-207-46	TRANSISTOR 2SC3112B-TPE2	
Q260	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q261	8-729-030-03	TRANSISTOR DTC144ESA-TP	
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
Q265	8-729-030-03	TRANSISTOR	DTC144ESA-TP			
Q266	8-729-030-03	TRANSISTOR	DTC144ESA-TP			
Q267	8-729-030-03	TRANSISTOR	DTC144ESA-TP			
Q270	8-729-195-23	TRANSISTOR	2SA952TP-K1			
Q271	8-729-195-23	TRANSISTOR	2SA952TP-K1			
Q272	8-729-207-46	TRANSISTOR	2SC3112B-TPE2			
Q273	8-729-207-46	TRANSISTOR	2SC3112B-TPE2			
Q274	8-729-207-46	TRANSISTOR	2SC3112B-TPE2			
Q276	8-729-207-46	TRANSISTOR	2SC3112B-TPE2			
Q277	8-729-207-46	TRANSISTOR	2SC3112B-TPE2			
Q278	8-729-207-46	TRANSISTOR	2SC3112B-TPE2			
Q279	8-729-207-46	TRANSISTOR	2SC3112B-TPE2			
Q280	8-729-030-03	TRANSISTOR	DTC144ESA-TP			
Q281	8-729-030-03	TRANSISTOR	DTC144ESA-TP			
Q282	8-729-030-03	TRANSISTOR	DTC144ESA-TP			
Q283	8-729-030-03	TRANSISTOR	DTC144ESA-TP			
Q284	8-729-030-03	TRANSISTOR	DTC144ESA-TP			
Q285	8-729-030-03	TRANSISTOR	DTC144ESA-TP			
Q286	8-729-030-03	TRANSISTOR	DTC144ESA-TP			
Q287	8-729-030-03	TRANSISTOR	DTC144ESA-TP			
		< RESISTOR & CAPACITOR >				
R201	1-249-437-11	CARBON	47K	5%	1/4W	
R202	1-249-437-11	CARBON	47K	5%	1/4W	
R204	1-215-437-00	METAL	4.7K	1%	1/4W	
R205	1-215-405-00	METAL	220	1%	1/4W	
R206	1-215-405-00	METAL	220	1%	1/4W	
R207	1-215-405-00	METAL	220	1%	1/4W	
R208	1-249-433-11	CARBON	22K	5%	1/4W	
R209	1-215-405-00	METAL	220	1%	1/4W	
R210	1-215-405-00	METAL	220	1%	1/4W	
R211	1-215-445-00	METAL	10K	1%	1/4W	
R212	1-164-159-11	CERAMIC	0.1MF			50V
R212	1-215-435-00	METAL	3.9K	1%	1/4W	
R213	1-215-441-00	METAL	6.8K	1%	1/4W	
R214	1-164-159-11	CERAMIC	0.1MF			50V
R214	1-215-427-00	METAL	1.8K	1%	1/4W	
R215	1-215-437-00	METAL	4.7K	1%	1/4W	
R216	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	
R219	1-215-437-00	METAL	4.7K	1%	1/4W	
R220	1-215-437-00	METAL	4.7K	1%	1/4W	
R221	1-215-445-00	METAL	10K	1%	1/4W	
R222	1-215-445-00	METAL	10K	1%	1/4W	
R223	1-247-807-31	CARBON	100	5%	1/4W	
R224	1-247-807-31	CARBON	100	5%	1/4W	
R225	1-247-807-31	CARBON	100	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R226	1-247-807-31	CARBON	100	5%	1/4W	
R228	1-247-807-31	CARBON	100	5%	1/4W	
R229	1-247-807-31	CARBON	100	5%	1/4W	
R230	1-247-807-31	CARBON	100	5%	1/4W	
R231	1-249-433-11	CARBON	22K	5%	1/4W	
R232	1-215-421-00	METAL	1K	1%	1/4W	
R233	1-249-437-11	CARBON	47K	5%	1/4W	
R234	1-249-437-11	CARBON	47K	5%	1/4W	
R240	1-215-435-00	METAL	3.9K	1%	1/4W	
R241	1-215-435-00	METAL	3.9K	1%	1/4W	
R242	1-215-435-00	METAL	3.9K	1%	1/4W	
R243	1-215-435-00	METAL	3.9K	1%	1/4W	
R244	1-215-435-00	METAL	3.9K	1%	1/4W	
R245	1-215-435-00	METAL	3.9K	1%	1/4W	
R246	1-215-435-00	METAL	3.9K	1%	1/4W	
R247	1-215-435-00	METAL	3.9K	1%	1/4W	
R250	1-215-435-00	METAL	3.9K	1%	1/4W	
R251	1-215-435-00	METAL	3.9K	1%	1/4W	
R252	1-215-435-00	METAL	3.9K	1%	1/4W	
R253	1-215-435-00	METAL	3.9K	1%	1/4W	
R254	1-215-435-00	METAL	3.9K	1%	1/4W	
R255	1-215-435-00	METAL	3.9K	1%	1/4W	
R256	1-215-435-00	METAL	3.9K	1%	1/4W	
R257	1-215-435-00	METAL	3.9K	1%	1/4W	
R260	1-215-435-00	METAL	3.9K	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	
R263	1-215-435-00	METAL	3.9K	1%	1/4W	
⚠R282	1-202-972-61	FUSIBLE	1	5%	1/4W	F
⚠R283	1-202-972-61	FUSIBLE	1	5%	1/4W	F
⚠R284	1-202-972-61	FUSIBLE	1	5%	1/4W	F
⚠R285	1-202-972-61	FUSIBLE	1	5%	1/4W	F
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	1-202-972-61	FUSIBLE	1	5%	1/4W	F
⚠R295	1-202-972-61	FUSIBLE	1	5%	1/4W	F
R301	1-249-437-11	CARBON	47K	5%	1/4W	
R302	1-249-437-11	CARBON	47K	5%	1/4W	
R303	1-249-437-11	CARBON	47K	5%	1/4W	
R304	1-249-437-11	CARBON	47K	5%	1/4W	
R305	1-249-437-11	CARBON	47K	5%	1/4W	
R306	1-249-437-11	CARBON	47K	5%	1/4W	
R307	1-249-437-11	CARBON	47K	5%	1/4W	

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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。

CPU GP-OUT1

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				
* 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			
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

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

****

*	4-921-402-01	HEAT SINK
	7-682-547-09	SCREW +B 3X6

< CAPACITOR >

Ref. No.	Part No.	Description			Remark
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
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

HP MB

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

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*	1-660-908-11	MB BOARD	
		********	
		< CONNECTOR >	
CN1	1-750-859-21	CONNECTOR, BOARD TO BOARD 16P	
CN2	1-750-859-21	CONNECTOR, BOARD TO BOARD 16P	
CN3	1-750-859-21	CONNECTOR, BOARD TO BOARD 16P	
CN4	1-750-859-21	CONNECTOR, BOARD TO BOARD 16P	
CN5	1-750-859-21	CONNECTOR, BOARD TO BOARD 16P	

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
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			

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*	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		
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	
R191	1-215-445-00	METAL	10K	1%	1/4W	

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Ref. No.	Part No.	Description				Remark
*	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/INSER	
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

< 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
R23	1-215-439-00	METAL	5.6K	1%	1/4W	
R26	1-215-434-00	METAL	3.6K	1%	1/4W	
R27	1-215-434-00	METAL	3.6K	1%	1/4W	
R28	1-247-887-00	CARBON	220K	5%	1/4W	
R29	1-215-437-00	METAL	4.7K	1%	1/4W	
R30	1-215-437-00	METAL	4.7K	1%	1/4W	
R31	1-215-437-00	METAL	4.7K	1%	1/4W	
R32	1-247-887-00	CARBON	220K	5%	1/4W	
R33	1-215-445-00	METAL	10K	1%	1/4W	
R35	1-247-887-00	CARBON	220K	5%	1/4W	
R36	1-247-887-00	CARBON	220K	5%	1/4W	
R37	1-215-447-00	METAL	12K	1%	1/4W	
R38	1-215-447-00	METAL	12K	1%	1/4W	
R39	1-215-429-00	METAL	2.2K	1%	1/4W	
R40	1-215-429-00	METAL	2.2K	1%	1/4W	
R41	1-215-403-00	METAL	180	1%	1/4W	
R42	1-215-403-00	METAL	180	1%	1/4W	
R43	1-215-432-00	METAL	3K	1%	1/4W	
R44	1-215-432-00	METAL	3K	1%	1/4W	
R45	1-247-887-00	CARBON	220K	5%	1/4W	
R46	1-215-437-00	METAL	4.7K	1%	1/4W	
R47	1-215-437-00	METAL	4.7K	1%	1/4W	
R48	1-247-887-00	CARBON	220K	5%	1/4W	
R51	1-215-434-00	METAL	3.6K	1%	1/4W	
R52	1-215-434-00	METAL	3.6K	1%	1/4W	
R53	1-215-437-00	METAL	4.7K	1%	1/4W	
R54	1-215-437-00	METAL	4.7K	1%	1/4W	
R66	1-215-436-00	METAL	4.3K	1%	1/4W	
R67	1-215-436-00	METAL	4.3K	1%	1/4W	
R68	1-215-437-00	METAL	4.7K	1%	1/4W	
R69	1-215-437-00	METAL	4.7K	1%	1/4W	
R70	1-247-887-00	CARBON	220K	5%	1/4W	
R71	1-249-397-11	CARBON	22	5%	1/4W	
R73	1-247-887-00	CARBON	220K	5%	1/4W	
R74	1-247-887-00	CARBON	220K	5%	1/4W	
R75	1-247-887-00	CARBON	220K	5%	1/4W	
R76	1-249-437-11	CARBON	47K	5%	1/4W	
R78	1-215-421-00	METAL	1K	1%	1/4W	
R79	1-215-421-00	METAL	1K	1%	1/4W	
R80	1-247-807-31	CARBON	100	5%	1/4W	
R81	1-215-427-00	METAL	1.8K	1%	1/4W	
R83	1-215-421-00	METAL	1K	1%	1/4W	
R84	1-247-887-00	CARBON	220K	5%	1/4W	
R85	1-249-419-11	CARBON	1.5K	5%	1/4W	
R86	1-247-843-11	CARBON	3.3K	5%	1/4W	
R88	1-249-419-11	CARBON	1.5K	5%	1/4W	
R89	1-247-843-11	CARBON	3.3K	5%	1/4W	
R91	1-215-437-00	METAL	4.7K	1%	1/4W	
R92	1-215-437-00	METAL	4.7K	1%	1/4W	
R94	1-215-437-00	METAL	4.7K	1%	1/4W	
R95	1-215-437-00	METAL	4.7K	1%	1/4W	
R97	1-215-438-00	METAL	5.1K	1%	1/4W	
R98	1-215-427-00	METAL	1.8K	1%	1/4W	
R100	1-247-887-00	CARBON	220K	5%	1/4W	
R101	1-247-887-00	CARBON	220K	5%	1/4W	
R102	1-249-397-11	CARBON	22	5%	1/4W	
R113	1-247-895-00	CARBON	470K	5%	1/4W	
R114	1-215-437-00	METAL	4.7K	1%	1/4W	
R115	1-215-437-00	METAL	4.7K	1%	1/4W	
R116	1-215-437-00	METAL	4.7K	1%	1/4W	
R117	1-215-437-00	METAL	4.7K	1%	1/4W	
R118	1-215-437-00	METAL	4.7K	1%	1/4W	
R119	1-215-437-00	METAL	4.7K	1%	1/4W	
R120	1-215-437-00	METAL	4.7K	1%	1/4W	
R121	1-215-437-00	METAL	4.7K	1%	1/4W	
R122	1-215-437-00	METAL	4.7K	1%	1/4W	
R123	1-215-437-00	METAL	4.7K	1%	1/4W	
R124	1-215-437-00	METAL	4.7K	1%	1/4W	
R125	1-215-437-00	METAL	4.7K	1%	1/4W	
R126	1-215-437-00	METAL	4.7K	1%	1/4W	
R127	1-215-437-00	METAL	4.7K	1%	1/4W	
R128	1-215-437-00	METAL	4.7K	1%	1/4W	
R129	1-215-437-00	METAL	4.7K	1%	1/4W	
R130	1-215-437-00	METAL	4.7K	1%	1/4W	
R131	1-215-437-00	METAL	4.7K	1%	1/4W	
R132	1-215-437-00	METAL	4.7K	1%	1/4W	
⚠R133	1-212-875-00	FUSIBLE	56	5%	1/4W	F
R134	1-215-437-00	METAL	4.7K	1%	1/4W	
⚠R201	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
⚠R202	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
⚠R203	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
⚠R204	1-212-895-00	FUSIBLE	390	5%	1/4W	F
R205	1-247-895-00	CARBON	470K	5%	1/4W	
R206	1-215-434-00	METAL	3.6K	1%	1/4W	
R207	1-215-434-00	METAL	3.6K	1%	1/4W	
R208	1-215-434-00	METAL	3.6K	1%	1/4W	
R209	1-215-434-00	METAL	3.6K	1%	1/4W	
R210	1-247-895-00	CARBON	470K	5%	1/4W	
R211	1-215-437-00	METAL	4.7K	1%	1/4W	
R212	1-215-437-00	METAL	4.7K	1%	1/4W	
R213	1-215-445-00	METAL	10K	1%	1/4W	
R214	1-215-435-00	METAL	3.9K	1%	1/4W	
R215	1-215-445-00	METAL	10K	1%	1/4W	
R216	1-215-435-00	METAL	3.9K	1%	1/4W	
R217	1-215-445-00	METAL	10K	1%	1/4W	
R218	1-247-895-00	CARBON	470K	5%	1/4W	

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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				
		< 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 (¢)				
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)				

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*	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				
		< 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				
		< 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				

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*	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	TLSG116
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
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	
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	

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-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)			

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* A-4588-822-A MTX-OUT2 BOARD, COMPLETE
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< CAPACITOR >

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

Ref. No.	Part No.	Description	Remark
RV103	1-228-989-00	RES, ADJ, METAL 470	
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 >

Ref. No.	Part No.	Description	Remark
RY301	1-515-787-11	RELAY	

< SWITCH >

Ref. No.	Part No.	Description	Remark
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	

****

Ref. No.	Part No.	Description	Remark
*	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 >

Ref. No.	Part No.	Description				Remark
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。

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			
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			
		< COIL >				
L602	1-424-090-11	COIL, LINE FILTER				
		< 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
R628	1-215-435-00	METAL	3.9K	1%	1/4W	
R630	1-247-887-00	CARBON	220K	5%	1/4W	
R631	1-215-435-00	METAL	3.9K	1%	1/4W	
R633	1-247-887-00	CARBON	220K	5%	1/4W	
R635	1-215-440-00	METAL	6.2K	1%	1/4W	
R637	1-215-437-00	METAL	4.7K	1%	1/4W	
R638	1-249-397-11	CARBON	22	5%	1/4W	
R639	1-215-435-00	METAL	3.9K	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	
R643	1-247-807-31	CARBON	100	5%	1/4W	
R645	1-215-440-00	METAL	6.2K	1%	1/4W	
R647	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	
R651	1-247-887-00	CARBON	220K	5%	1/4W	
R654	1-247-887-00	CARBON	220K	5%	1/4W	
R655	1-247-887-00	CARBON	220K	5%	1/4W	
R657	1-247-887-00	CARBON	220K	5%	1/4W	
R658	1-215-440-00	METAL	6.2K	1%	1/4W	
R659	1-215-435-00	METAL	3.9K	1%	1/4W	
R660	1-247-895-00	CARBON	470K	5%	1/4W	
R661	1-247-895-00	CARBON	470K	5%	1/4W	
R662	1-215-435-00	METAL	3.9K	1%	1/4W	
R663	1-247-887-00	CARBON	220K	5%	1/4W	
R664	1-215-440-00	METAL	6.2K	1%	1/4W	
R665	1-249-397-11	CARBON	22	5%	1/4W	
R666	1-215-435-00	METAL	3.9K	1%	1/4W	
R668	1-215-440-00	METAL	6.2K	1%	1/4W	
R669	1-249-438-11	CARBON	56K	5%	1/4W	
R670	1-215-449-00	METAL	15K	1%	1/4W	
R671	1-249-397-11	CARBON	22	5%	1/4W	
R674	1-215-437-00	METAL	4.7K	1%	1/4W	
R675	1-215-437-00	METAL	4.7K	1%	1/4W	
R676	1-247-887-00	CARBON	220K	5%	1/4W	
R678	1-249-414-11	CARBON	560	5%	1/4W	
R679	1-249-414-11	CARBON	560	5%	1/4W	
R680	1-249-414-11	CARBON	560	5%	1/4W	
R681	1-249-414-11	CARBON	560	5%	1/4W	
R682	1-249-414-11	CARBON	560	5%	1/4W	
R683	1-249-414-11	CARBON	560	5%	1/4W	
R684	1-249-414-11	CARBON	560	5%	1/4W	
R685	1-249-414-11	CARBON	560	5%	1/4W	
R686	1-215-445-00	METAL	10K	1%	1/4W	
R687	1-215-445-00	METAL	10K	1%	1/4W	
R688	1-215-445-00	METAL	10K	1%	1/4W	
R689	1-215-445-00	METAL	10K	1%	1/4W	
R690	1-215-445-00	METAL	10K	1%	1/4W	
R691	1-215-445-00	METAL	10K	1%	1/4W	
R692	1-215-445-00	METAL	10K	1%	1/4W	
R693	1-215-445-00	METAL	10K	1%	1/4W	
R694	1-215-437-00	METAL	4.7K	1%	1/4W	
R695	1-215-437-00	METAL	4.7K	1%	1/4W	
⚠R697	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
⚠R698	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
⚠R699	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R705	1-215-437-00	METAL	4.7K	1%	1/4W	
R706	1-215-437-00	METAL	4.7K	1%	1/4W	
R707	1-215-437-00	METAL	4.7K	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	
R710	1-249-397-11	CARBON	22	5%	1/4W	
R711	1-247-887-00	CARBON	220K	5%	1/4W	
R712	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	
R715	1-249-441-11	CARBON	100K	5%	1/4W	
R716	1-249-441-11	CARBON	100K	5%	1/4W	
R717	1-247-889-00	CARBON	270K	5%	1/4W	
R718	1-215-421-00	METAL	1K	1%	1/4W	
R720	1-215-421-00	METAL	1K	1%	1/4W	
R721	1-249-433-11	CARBON	22K	5%	1/4W	
R722	1-215-437-00	METAL	4.7K	1%	1/4W	
⚠R723	1-212-879-11	FUSIBLE	82	5%	1/4W	F
R724	1-215-437-00	METAL	4.7K	1%	1/4W	
⚠R725	1-212-879-11	FUSIBLE	82	5%	1/4W	F
R726	1-215-437-00	METAL	4.7K	1%	1/4W	
⚠R727	1-212-879-11	FUSIBLE	82	5%	1/4W	F
⚠R728	1-202-972-61	FUSIBLE	1	5%	1/4W	F
R729	1-215-449-00	METAL	15K	1%	1/4W	
R730	1-215-449-00	METAL	15K	1%	1/4W	
R731	1-215-449-00	METAL	15K	1%	1/4W	
R732	1-247-887-00	CARBON	220K	5%	1/4W	
R733	1-247-895-00	CARBON	470K	5%	1/4W	
R734	1-215-447-00	METAL	12K	1%	1/4W	
R735	1-215-445-00	METAL	10K	1%	1/4W	
R740	1-247-397-11	CARBON	22	5%	1/4V	

< VARIABLE RESISTOR >

RV601	1-238-478-11	RES, ADJ, CARBON 1M
RV602	1-238-478-11	RES, ADJ, CARBON 1M

< RELAY >

RY601	1-515-787-11	RELAY
RY602	1-515-787-11	RELAY
RY603	1-515-787-11	RELAY

****

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。

TB

Ref. No.	Part No.	Description			Remark
*	A-4588-810-A	TB BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C501	1-164-159-11	CERAMIC	0.1uF		50V
C502	1-164-159-11	CERAMIC	0.1uF		50V
C503	1-130-471-51	MYLAR	0.001uF	5%	50V
C504	1-130-471-51	MYLAR	0.001uF	5%	50V
C507	1-126-967-11	ELECT	47uF	20%	50V
C508	1-136-177-00	FILM	1uF	5%	50V
C509	1-130-471-51	MYLAR	0.001uF	5%	50V
C510	1-137-193-51	FILM	0.39uF	5%	50V
C511	1-130-496-00	MYLAR	0.12uF	5%	50V
C512	1-130-490-11	MYLAR	0.039uF	5%	50V
C513	1-130-487-00	MYLAR	0.022uF	5%	50V
C514	1-126-967-11	ELECT	47uF	20%	50V
C515	1-164-159-11	CERAMIC	0.1uF		50V
C516	1-107-163-00	MICA	47PF	5%	500V
C519	1-126-967-11	ELECT	47uF	20%	50V
C520	1-126-967-11	ELECT	47uF	20%	50V
C522	1-126-967-11	ELECT	47uF	20%	50V
C525	1-126-967-11	ELECT	47uF	20%	50V
C526	1-126-967-11	ELECT	47uF	20%	50V
C527	1-124-903-11	ELECT	1uF	20%	50V
C528	1-126-967-11	ELECT	47uF	20%	50V
C529	1-124-903-11	ELECT	1uF	20%	50V
C530	1-126-967-11	ELECT	47uF	20%	50V
C535	1-126-967-11	ELECT	47uF	20%	50V
C537	1-126-967-11	ELECT	47uF	20%	50V
C538	1-164-159-11	CERAMIC	0.1uF		50V
C539	1-164-159-11	CERAMIC	0.1uF		50V
C542	1-126-942-61	ELECT	1000uF	20%	25V
C543	1-126-942-61	ELECT	1000uF	20%	25V
C544	1-126-967-11	ELECT	47uF	20%	50V
C545	1-130-467-00	MYLAR	470PF	5%	50V
		< CONNECTOR >			
CN5	1-750-177-11	PIN, CONNECTOR (PC BOARD) 15P			
CN6	1-564-523-11	PLUG, CONNECTOR 8P			
CN7	1-750-860-11	CONNECTOR, BOARD TO BOARD 16P			
CN8	1-750-860-11	CONNECTOR, BOARD TO BOARD 16P			
		< DIODE >			
D501	8-719-921-19	DIODE	1SS119-25TG		
D502	8-719-921-19	DIODE	1SS119-25TG		
D503	8-719-921-19	DIODE	1SS119-25TG		
D504	8-719-921-19	DIODE	1SS119-25TG		
D505	8-719-921-19	DIODE	1SS119-25TG		
D506	8-719-921-19	DIODE	1SS119-25TG		
D507	8-719-921-19	DIODE	1SS119-25TG		
D508	8-719-921-19	DIODE	1SS119-25TG		
D509	8-719-921-19	DIODE	1SS119-25TG		
D510	8-719-921-19	DIODE	1SS119-25TG		
D511	8-719-955-04	DIODE	TLG113A		
D512	8-719-110-96	DIODE	RD2.0ES-T2B2		
		< IC >			
IC501	8-759-240-06	IC	TC4006BP		
IC502	8-759-240-06	IC	TC4006BP		
IC503	8-759-207-73	IC	TC4030BPHB		
IC504	8-759-916-52	IC	TC74HC165AP		
IC505	8-759-233-43	IC	TC74HC595AP		
IC507	8-759-710-59	IC	NJM4580D-D		
IC508	8-759-634-51	IC	NJM4558D		
IC509	8-759-634-51	IC	NJM4558D		
IC510	8-759-634-51	IC	NJM4558D		
IC511	8-759-634-51	IC	NJM4558D		
		< TRANSISTOR >			
Q501	8-729-195-23	TRANSISTOR	2SA952TP-K1		
Q502	8-729-207-46	TRANSISTOR	2SC3112B-TPE2		
Q503	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
Q504	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
Q505	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
Q510	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
Q511	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
Q512	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
Q513	8-729-030-03	TRANSISTOR	DTC144ESA-TP		
		< RESISTOR >			
R502	1-247-883-00	CARBON	150K	5%	1/4W
R503	1-247-883-00	CARBON	150K	5%	1/4W
R504	1-247-883-00	CARBON	150K	5%	1/4W
R507	1-215-445-00	METAL	10K	1%	1/4W
R508	1-247-843-11	CARBON	3.3K	5%	1/4W
R509	1-215-421-00	METAL	1K	1%	1/4W
R510	1-249-411-11	CARBON	330	5%	1/4W
R511	1-247-807-31	CARBON	100	5%	1/4W
R512	1-215-431-00	METAL	2.7K	1%	1/4W
R513	1-215-431-00	METAL	2.7K	1%	1/4W
R514	1-247-887-00	CARBON	220K	5%	1/4W
R515	1-247-887-00	CARBON	220K	5%	1/4W
R516	1-247-887-00	CARBON	220K	5%	1/4W
R517	1-215-437-00	METAL	4.7K	1%	1/4W
R518	1-249-432-11	CARBON	18K	5%	1/4W
R519	1-247-887-00	CARBON	220K	5%	1/4W

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	
R522	1-215-445-00	METAL	10K	1%	1/4W	
R523	1-247-887-00	CARBON	220K	5%	1/4W	
R524	1-215-445-00	METAL	10K	1%	1/4W	
R525	1-215-445-00	METAL	10K	1%	1/4W	
R526	1-215-445-00	METAL	10K	1%	1/4W	
R527	1-215-445-00	METAL	10K	1%	1/4W	
R528	1-215-445-00	METAL	10K	1%	1/4W	
R529	1-215-445-00	METAL	10K	1%	1/4W	
R530	1-215-421-00	METAL	1K	1%	1/4W	
R531	1-215-437-00	METAL	4.7K	1%	1/4W	
R532	1-215-421-00	METAL	1K	1%	1/4W	
R533	1-215-437-00	METAL	4.7K	1%	1/4W	
R534	1-247-887-00	CARBON	220K	5%	1/4W	
R535	1-215-437-00	METAL	4.7K	1%	1/4W	
R536	1-247-887-00	CARBON	220K	5%	1/4W	
R537	1-215-437-00	METAL	4.7K	1%	1/4W	
R539	1-215-440-00	METAL	6.2K	1%	1/4W	
R541	1-215-440-00	METAL	6.2K	1%	1/4W	
R542	1-215-445-00	METAL	10K	1%	1/4W	
R543	1-215-445-00	METAL	10K	1%	1/4W	
R544	1-215-445-00	METAL	10K	1%	1/4W	
R545	1-215-445-00	METAL	10K	1%	1/4W	
R546	1-249-433-11	CARBON	22K	5%	1/4W	
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
⚠R557	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R558	1-215-445-00	METAL	10K	1%	1/4W	
R559	1-215-441-00	METAL	6.8K	1%	1/4W	
R560	1-215-445-00	METAL	10K	1%	1/4W	
R561	1-215-449-00	METAL	15K	1%	1/4W	
R562	1-215-405-00	METAL	220	1%	1/4W	
R563	1-215-405-00	METAL	220	1%	1/4W	
R564	1-247-887-00	CARBON	220K	5%	1/4W	
R565	1-249-437-11	CARBON	47K	5%	1/4W	
R566	1-247-887-00	CARBON	220K	5%	1/4W	
R567	1-249-437-11	CARBON	47K	5%	1/4W	

Ref. No.	Part No.	Description	Remark
		< SWITCH >	
SW1	1-571-212-11	SWITCH, SLIDE	
SW2	1-572-004-11	SWITCH, PUSH	
SW3	1-572-004-11	SWITCH, PUSH	
SW4	1-572-004-11	SWITCH, PUSH	
SW5	1-572-004-11	SWITCH, PUSH	
SW6	1-572-004-11	SWITCH, PUSH	
SW7	1-572-004-11	SWITCH, PUSH	
SW8	1-554-824-21	SWITCH, PUSH (1 KEY)	
**********			
*	1-660-912-11	TR BOARD	
		********	
		< CAPACITOR >	
C401	1-164-159-11	CERAMIC 0.1uF	50V
		< CONNECTOR >	
CN401	1-564-320-00	PIN, CONNECTOR (B2P-VH) 2P	
		< DIODE >	
D401	8-719-113-56	DIODE RD22ES-T2B2	
		< IC >	
IC401	8-759-144-82	IC uPC2405HF	
		< TRANSISTOR >	
Q401	8-729-321-14	TRANSISTOR 2SC4388-Y	
**********			
		MISCELLANEOUS	
		**********	
7	1-777-452-11	CABLE (WITH CONNECTOR)	
8	1-777-067-11	CABLE (WITH CONNECTOR)	
57	1-777-066-11	CABLE (WITH CONNECTOR)	
58	1-777-067-11	CABLE (WITH CONNECTOR)	
107	1-777-453-11	CABLE (WITH CONNECTOR)	
108	1-777-454-11	CABLE (WITH CONNECTOR)	
157	1-777-455-11	CABLE (WITH CONNECTOR)	
158	1-777-456-11	CABLE (WITH CONNECTOR)	
216	1-225-271-11	RES, SLIDE CARBON VAR 10K	
263	1-225-273-11	RES, SLIDE CARBON VAR 10K/10K	
309	1-563-354-11	CONNECTOR, BNC	
323	1-225-271-11	RES, SLIDE CARBON VAR 10K	
324	1-543-798-11	FILTER, CLAMP	
325	1-508-942-12	CONNECTOR 14P	
**********			

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
		********** 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	

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ACCESSORIES & PACKING MATERIALS
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2-344-733-01	MANUAL, INSTRUCTIONS	
3-800-983-01	INSTRUCTION	

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