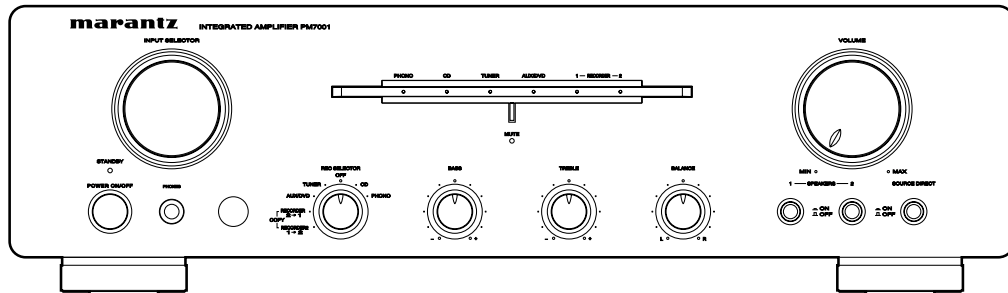


Service Manual

PM7001 /U1B

Integrated Amplifier



• For purposes of improvement, specifications and design are subject to change without notice.

• Please use this service manual with referring to the operating instructions without fail.

• Some illustrations using in this service manual are slightly different from the actual set.

marantz®

PM7001

Ver. 2

Please refer to the
MODIFICATION NOTICE.

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, **MARANTZ** company has created the ultimate in stereo sound. Only original **MARANTZ** parts can insure that your **MARANTZ** product will continue to perform to the specifications for which it is famous.

Parts for your **MARANTZ** equipment are generally available to our National Marantz Subsidiary or Agent.

ORDERING PARTS :

Parts can be ordered either by mail or by Fax.. In both cases, the correct part number has to be specified.

The following information must be supplied to eliminate delays in processing your order :

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature : any order form or Fax. must be signed, otherwise such part order will be considered as null and void.

USA

MARANTZ AMERICA, INC
100 CORPORATE DRIVE
MAHWAH, NEW JERSEY 07430
USA

EUROPE / TRADING

D&M EUROPE B. V.
P. O. BOX 8744, BUILDING SILVERPOINT
BEEMDSTRAAT 11, 5653 MA EINDHOVEN
THE NETHERLANDS
PHONE : +31 - 40 - 2507844
FAX : +31 - 40 - 2507860

CANADA

D&M Canada Inc.
5-505 APPLE CREEK BLVD.
MARKHAM, ONTARIO L3R 5B1
CANADA
PHONE : 905 - 415 - 9292
FAX : 905 - 475 - 4159

JAPAN

D&M Holdings Inc.
D&M BUILDING, 2-1 NISSHIN-CHO,
KAWASAKI-KU, KAWASAKI-SHI,
KANAGAWA, 210-8569 JAPAN

株式会社 ディーアンドエムホールディングス

本 社 〒210-8569
神奈川県川崎市川崎区日進町2-1 D&Mビル

KOREA

D&M SALES AND MARKETING KOREA LTD.
2F, YEON BLDG.,
88-5, BANPO-DONG, SEOCHO-GU,
SEOUL KOREA
PHONE : +82 - 2 - 715 - 9041
FAX : +82 - 2 - 715 - 9040

CHINA

D&M SALES AND MARKETING SHANGHAI LTD.
ROOM.808 SHANGHAI AIRPORT CITY TERMINAL
NO.1600 NANJING (WEST) ROAD, SHANGHAI,
CHINA. 200040
TEL : 021 - 6248 - 5151
FAX : 021 - 6248 - 4434

NOTE ON SAFETY :

Symbol ⚠ Fire or electrical shock hazard. Only original parts should be used to replaced any part marked with symbol ⚠.

Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

安全上の注意 :

⚠がついている部品は、安全上重要な部品です。必ず指定されている部品番号の部品を使用して下さい。

SHOCK, FIRE HAZARD SERVICE TEST :

CAUTION : After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or Front Panel of product and controls and chassis bottom.

Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before it is return to the user/customer.

Ref. UL Standard No. 60065.

In case of difficulties, do not hesitate to contact the Technical
Department at above mentioned address.

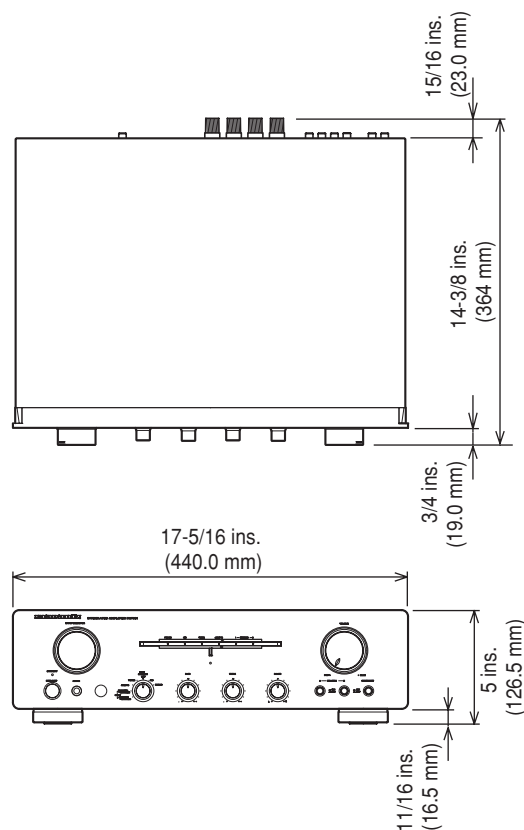
1. TECHNICAL SPECIFICATIONS

Power output (20 Hz – 20 kHz simultaneous drive of both channels)	
..... 70W x 2 (8Ω load)	
..... 100W x 2 (4Ω load)	
Total harmonic distortion (20Hz – 20kHz simultaneous drive of both channels, 8Ω load)	0.02%
Output band width (8Ω load, 0.05%)	5Hz – 60kHz
Frequency response (CD, 1W, 8Ω load)	5Hz – 100kHz ±3dB
Dumping factor (8Ω load, 20Hz – 20kHz)	100
Input sensitivity/Input impedance	
PHONO (MM)	2.5mV/47kΩ
CD, LINE, TUNER, AUX/DVD, RECORDER	
.....	200mV/20kΩ
MAIN IN	1.6V/20kΩ
Output voltage/Output impedance	
PRE OUT	1.6 V/560Ω
Maximum allowable PHONO input level (1kHz)	
MM	130mV
RIAA deviation (20Hz ~ 20kHz)	±0.5dB
S/N (IHF-A, 1W, 8Ω load)	
PHONO (MM)	85dB (5mV input)
CD, LINE, TUNER, AUX/DVD, RECORDER	
.....	88dB (500mV input)
MAIN IN	107dB
Tone control	
Bass (50Hz)	±10dB
Treble (20kHz)	±10dB
Power requirement	AC 120V 60Hz
Power consumption	
(UL6500)	250W
(4Ω, 100W x 2 output)	470W
Accessories	
Remote controller	1
AA batteries	2
Detachable AC power cable	1

Maximum outer dimensions (Amplifier)

Width	17-5/16 ins. (440 mm)
Height	5 ins. (126.5 mm)
Depth	14-3/8 ins. (364 mm)
Weight (Amplifier)	23.1 lbs (10.5 kg)

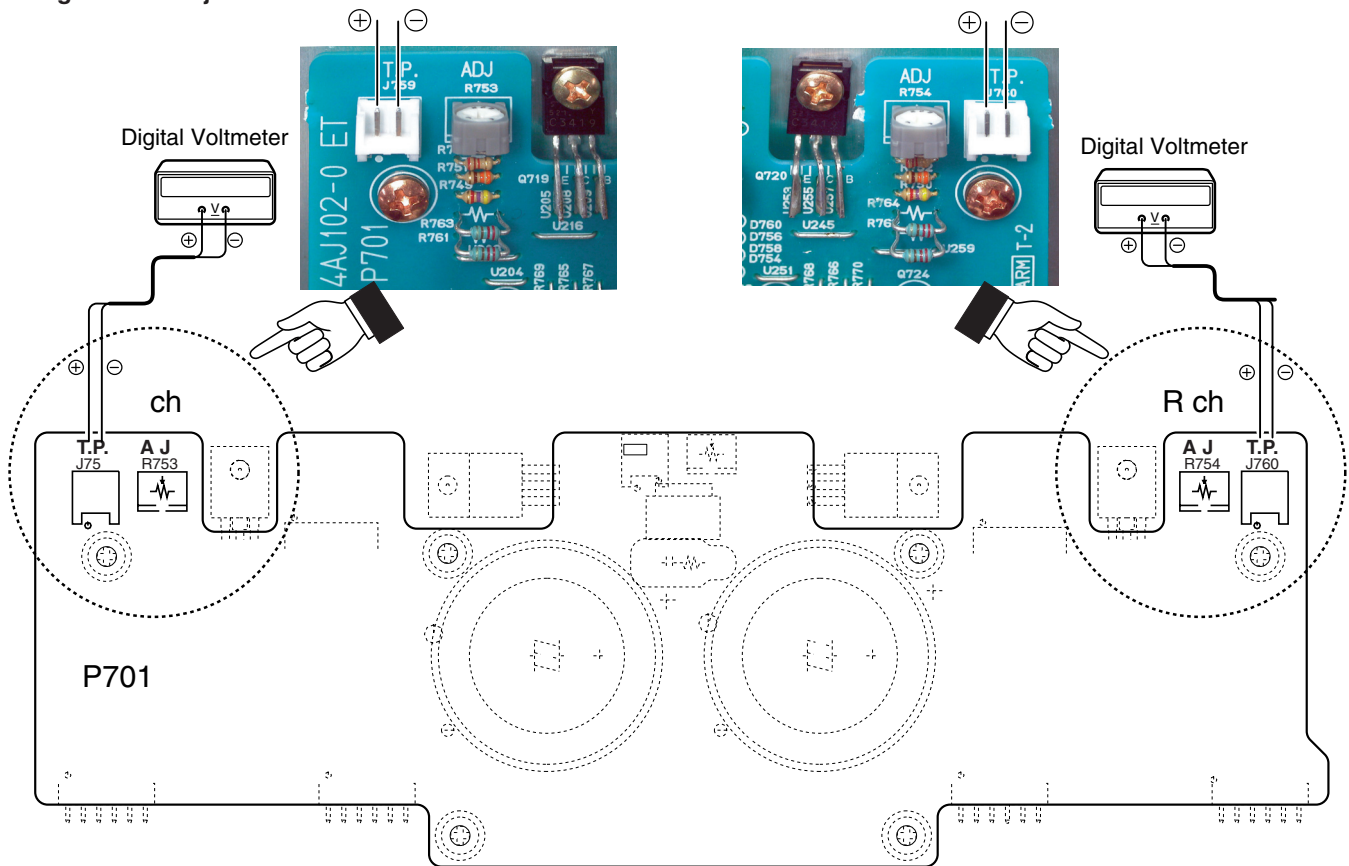
Specifications subject to change without prior notice.



2. ALIGNMENTS

Idling Current Adjustment

アイドリング電流調整



Adjustment Procedure

Set the power voltage to rated voltage for this adjustment.

1. Adjust the Idling Current with the variable resistor **R753** and **R754** on the PWB P701.
2. Turn off the power.
3. "+" of Connect Digital Voltage is connected to the **No. 1 pin** and connected "-" to **No. 2 pin** of **J759**.
4. "+" of Connect Digital Voltage is connected to the **No. 1 pin** and connected "-" to **No. 2 pin** of **J760**.
5. Before turning on the power, **R753** and **R754** have been counter clockwise turned with the adjustment driver.
6. Turn on the power, **VOLUME** is set as $-\infty$.
7. After 2 minutes.

With seeing the digital voltage meter turn the variable resistor clockwise slowly to adjust the idling current. Idling adjustment with **R753** (**R754**).

- Turn **R753** (**R754**) clockwise to increase the idling current.

- The adjustment value of idling current is **4 mV(20 mA) $\pm$ 0.5 mV(2.5 mA) each.**

8. After 7 minutes. Repeat the same procedure as 7.

- The adjustment value of idling current is **12 mV(60 mA) $\pm$ 0.5 mV(2.5 mA) each.**

調整手順

調整時は必ず電源電圧を定格電圧に合わせてください。

1. P701 基板上の半固定抵抗 **R753** と **R754** でアイドリング電流を調整します。
2. 電源を OFF します。
3. P701 基板の **J759** にデジタルボルトメーターを接続します。デジタルボルトメーターは **J759** の **1** 番ピン (丸印側) を "+"、2 番ピンを "-" に接続します。
4. P701 基板の **J760** にデジタルボルトメーターを接続します。デジタルボルトメーターは **J760** の **1** 番ピン (丸印側) を "+"、2 番ピンを "-" に接続します。
5. 電源を投入する前に半固定抵抗 **R753** と **R754** を、調整ドライバーで反時計方向に回しきってください。
6. 電源を投入しボリュームを $-\infty$ にしてください。
7. 電源を投入後 2 分経過後。

P701 基板の **J759** (**J760**) に接続したデジタルボルトメーターの電圧値を監視しながら、半固定抵抗 **R753** (**R754**) をゆっくりと時計向に回してください。

- **R753** と **R754** を時計方向に回すとアイドリング電流が増加します。

- アイドリング電流の調整値はそれぞれ **"4 mV(20 mA) $\pm$ 0.5 mV(2.5 mA)"** にします。

8. さらに "7 分" 経過後。上記 7. の手順でもう一度調整します。

- アイドリング電流の調整値はそれぞれ **"12 mV(60 mA) $\pm$ 0.5 mV(2.5 mA)"** にします。

Adjustment is completed.

9. Remove connection cable, attach the top cover.

(Idling current decreases with the temperature rise inside the unit, and it is set to 10 mV (50 mA) of setting value in about 30 minutes after turn on the power.)

以上で調整は完了です。

9. デジタルボルトメーターの接続を外し、トップカバーを取付けます。

(調整終了後トップカバーを取付けるとセット内部の温度上昇に伴いアイドリング電流が減少し、電源投入後約 30 分で設定値の "10 mV(50 mA)" になります)。

3. SERVICE MODE

Microprocessor (Q201) version check

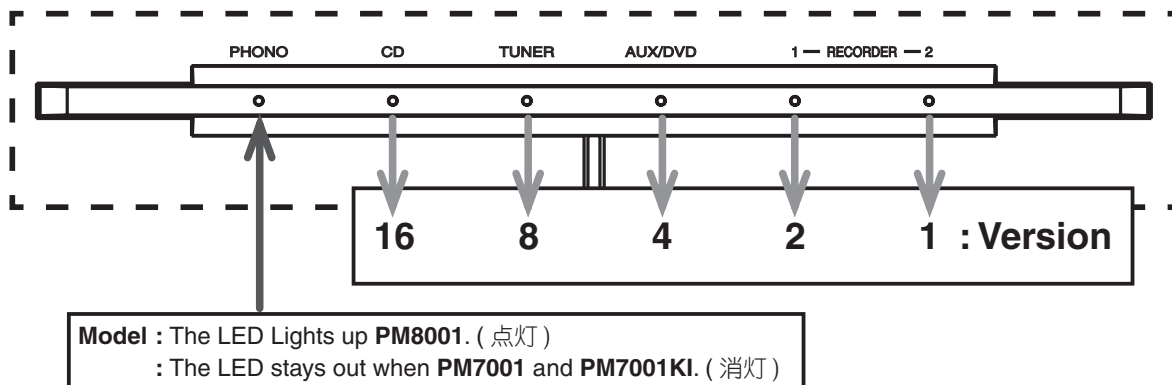
Operate by using [Remote controller RC4001PM]

1. Press the **POWER** button to turn on the unit.
2. Press **RECORDER 2 (TAPE)** button and press **7, 6, 0, 0** button on the remote controller.
(Please each button within 3 seconds)
3. The firmware version is displayed on the front LED.
(Display time is only for 3 seconds.)

Microprocessor (Q201) VERSION 確認

操作はリモコン (RC4001PM) を使用します。

- 1) **POWER** ボタンを押し、本体の電源をいれます。
- 2) リモコンの **RECORDER 2 (TAPE)**、**7**、**6**、**0**、**0** ボタンを順に押します。
(各ボタンは 3 秒以内に押してください)
- 3) **FIRMWARE** のバージョンが LED にて表示されます。
(表示は 3 秒間のみです)
また、**PHONO** の LED でモデルを示します。



The firmware version is displayed in the lighting position of LED.

Ex. :

- Light up PHONO, **Model: PM8001**
- Light up RECORDER-2(1), **Version: 1**
- Light up RECORDER-2(1) and AUX/DVD (4), **Version: 5**
- Light up RECORDER-2(1) and TUNER (8), **Version: 9**

LED が点灯している箇所がバージョン表示です。

表示例 :

- 点灯 PHONO, **Model: PM8001**
- 点灯 RECORDER-2(1), **Version: 1**
- 点灯 RECORDER-2(1) and AUX/DVD (4), **Version: 5**
- 点灯 RECORDER-2(1) and TUNER (8), **Version: 9**

4. Each LED light up then all LED light up.
5. Turn off the power to quit Service Mode.
(The unit to the default status)

- 4) フロントパネルのLED が順次点灯し、その後全点灯します。
- 5) 電源を切ると **SERVICE** モードが解除されます。
(本機は、各種設定された内容が初期化され、工場出荷時の状態に戻ります)

4. WRITING MAIN MICROPROCESSOR (Q201) PROCEDURE

Microprocessor needs writing software, when a microprocessor (Q201) is replaced.

NECESSARY EQUIPMENT

- Windows PC (OS : Windows2000 or WindowsXP) with Serial Port
- RS-232C Cable straight type (9 Pin female - 9 Pin female)
- Connection JIG (90M-PM11S1JIG)
- Writing Tool and some files (FlashProg.exe, etc... in TM86FH47pass folder)
- Writing data (PM7001_xxxx.h16)
NOTE: xx is a revision number.

WRITING PROCEDURE

Disconnect the mains cord from the unit.

Connect RS-232C on the connection JIG and Serial Port of windows PC with RS-232C cable.

Connect FPC (upside contact) to the rear panel of the unit from connection JIG.

メインマイコン Q201 を交換したときは、Q201 ヘプログラムを書き込む必要があります。下記手順に従って書き込みをしてください。

必要機器

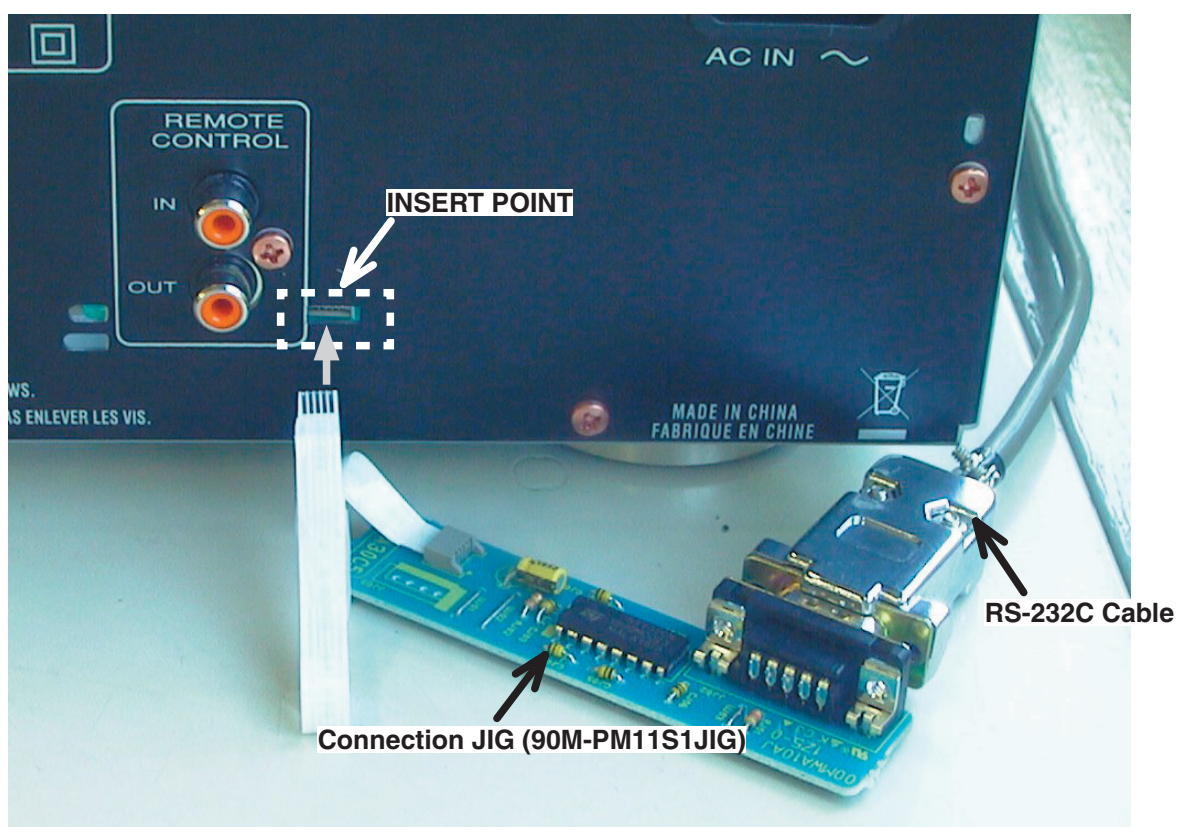
- Windows PC (OS : Windows2000 または WindowsXP) で Serial ポートのあるもの
- RS-232C ストレートケーブル (9Pin メス -9Pin メス)
- 接続治具 (90M-PM11S1JIG)
- 書き込み用ソフトウェア一式 (M86FH47pass フォルダ内 FlashProg.exe、他)
- 書き込み用データ (PM7001_xxxx.h16)

書き込み手順

本機の電源ケーブルを抜きます。

Windows PC の Serial Port と接続治具を RS-232C ケーブルで接続します。

本機のリアパネルに接続治具の FPC をコンタクト面を上にして差し込みます。



Reconnect the mains cord to the unit.

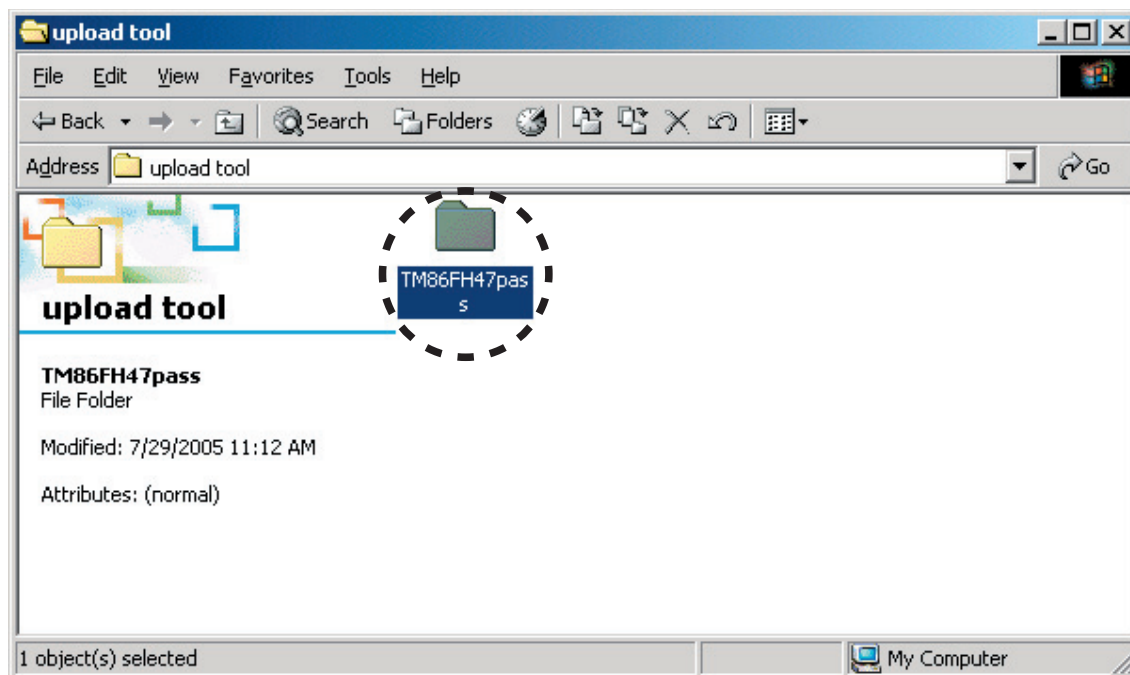
Put the "TM86FH47pass" folder into anywhere on your PC's hard disc.

本機の電源ケーブルを差し込みます。

TM86FH47pass フォルダを Windows PC の任意のフォルダにコピーします。

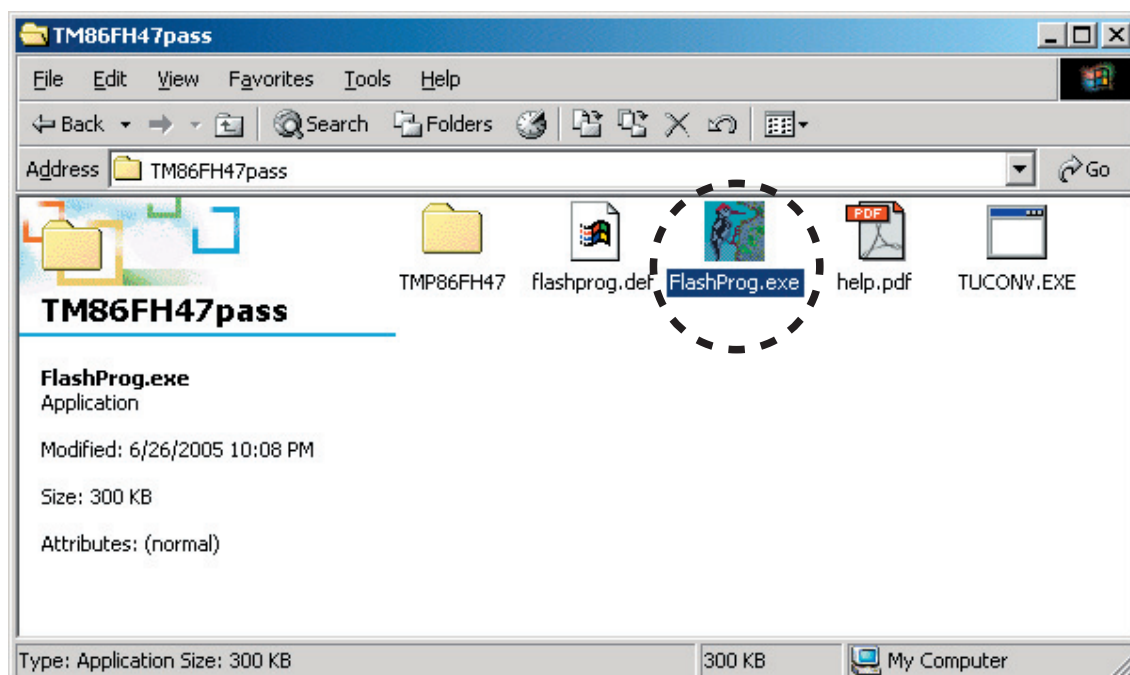
Double click the **TM86FH47pass** folder.

TM86FH47pass フォルダをダブルクリックして開きます。



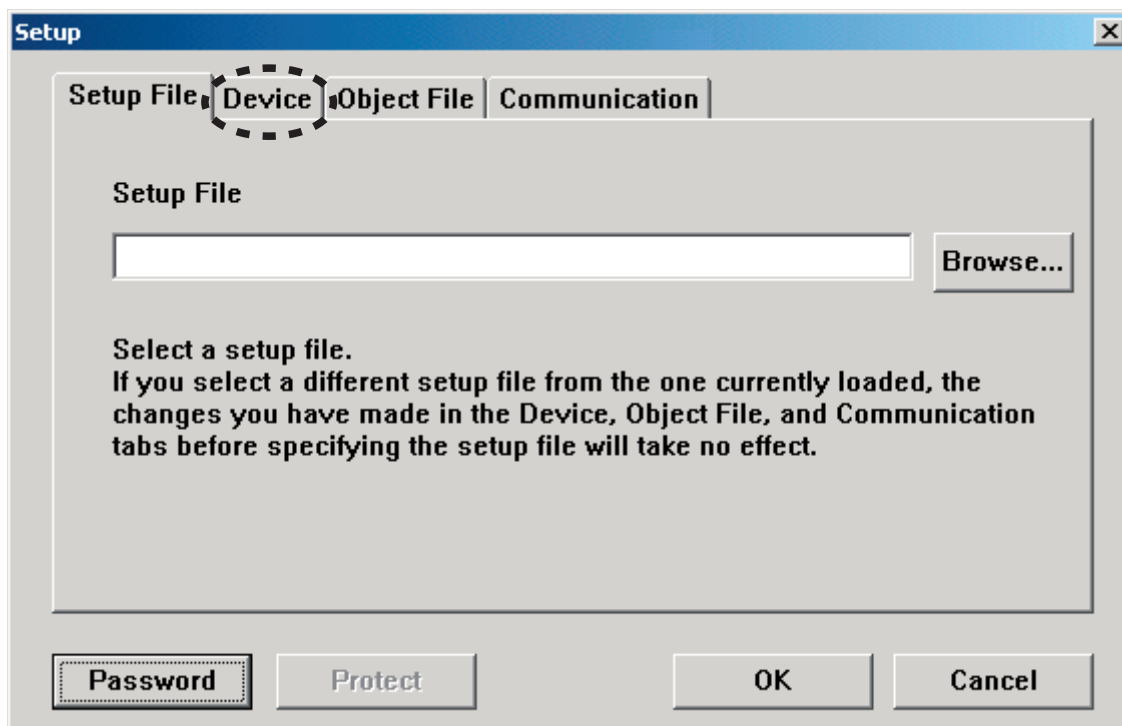
Double click **FlashProg.exe**.

FlashProg.exe をダブルクリックします。



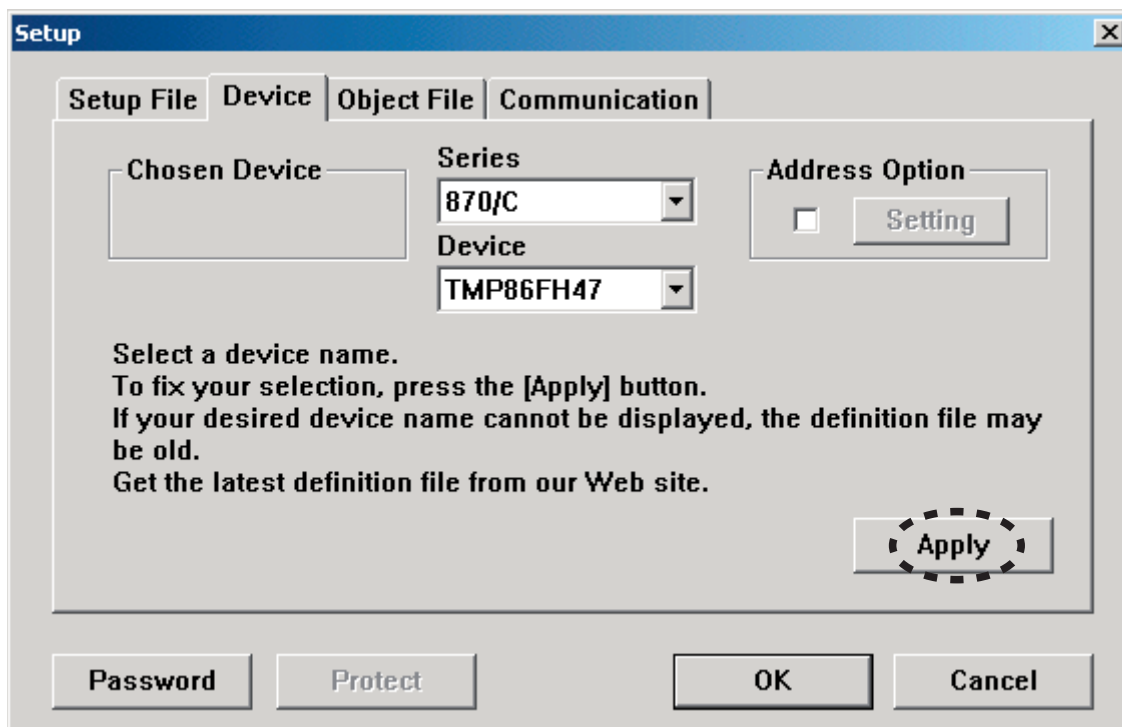
Click **Device**.

Device をクリックします。



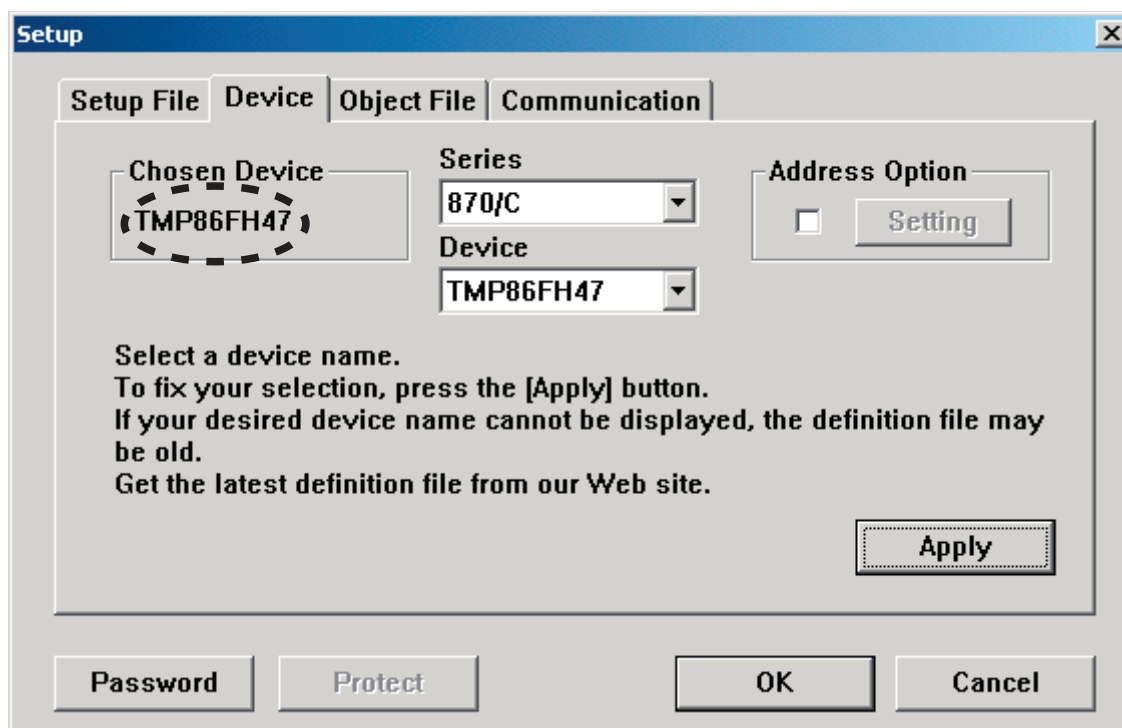
Click **Apply**.

Apply をクリックします。



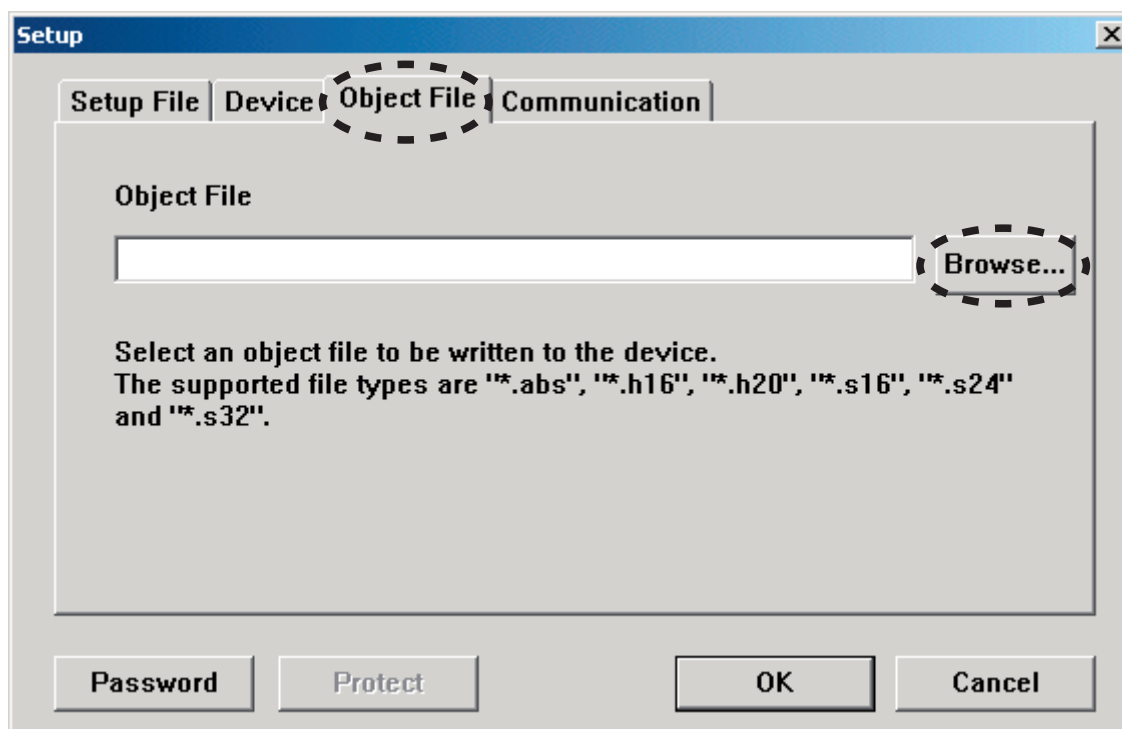
TMP86FH47 appear in Chosen Device.

Chosen Device に TMP86FH47 が入力されます。



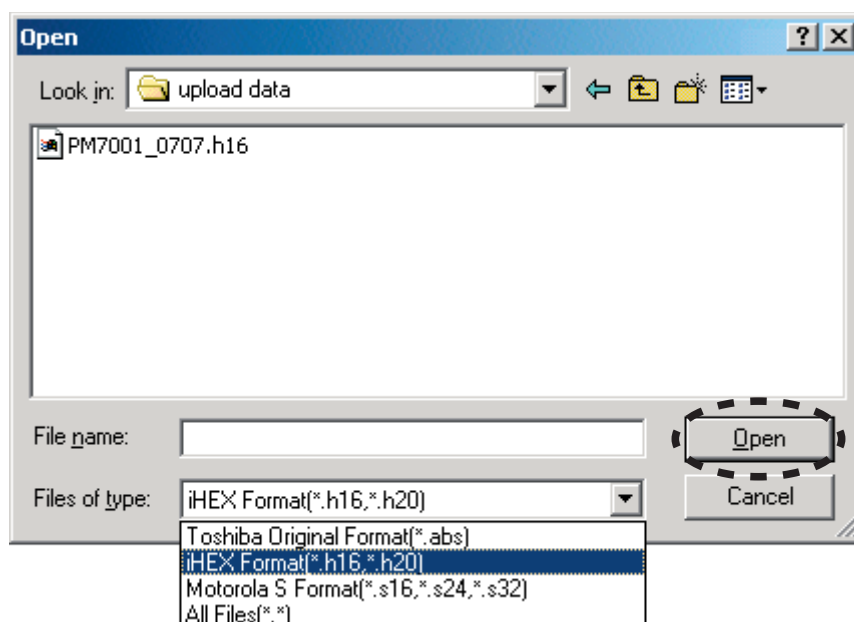
Click **Object File**, and click **Browse...**

Object File をクリックし、**Browse...** をクリックします。



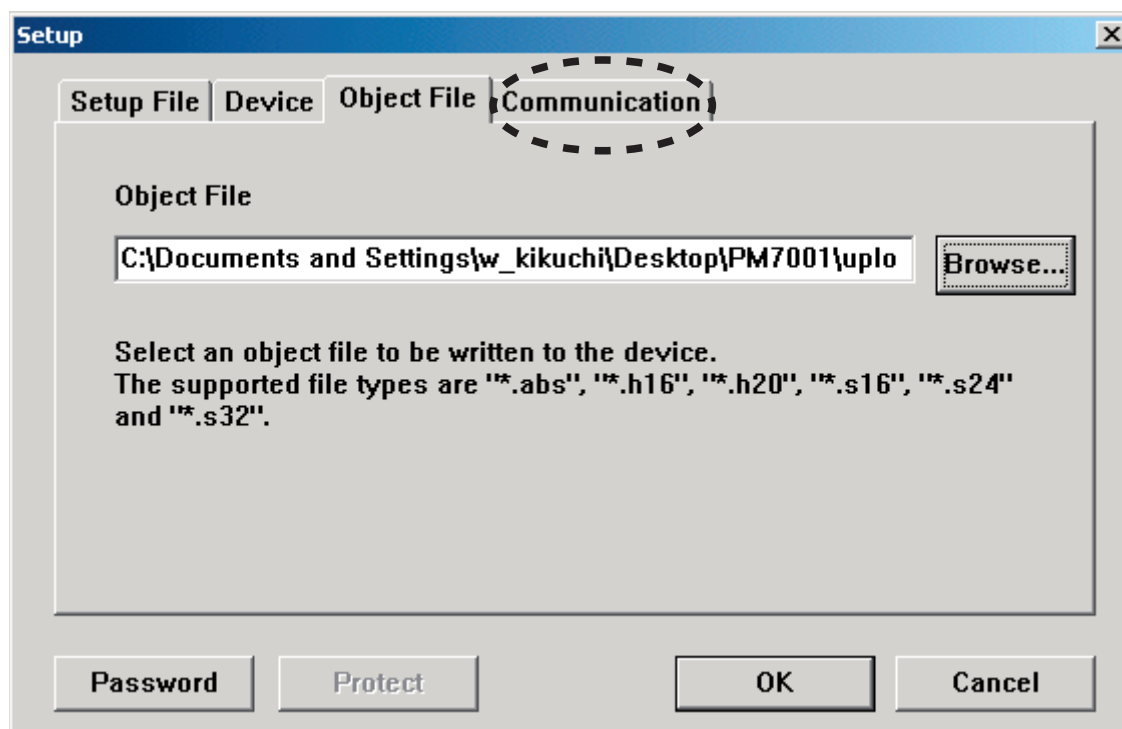
Choose **iHEX Fomat[* .h16,* .h20]** in Files of type.
Choose writing data, and click **Open**.

Files of type から **iHEX Fomat[* .h16,* .h20]** を選び、書き込み用データファイルを選択して **Open** をクリックします。(書き込むファイル名は変わることがあります。)



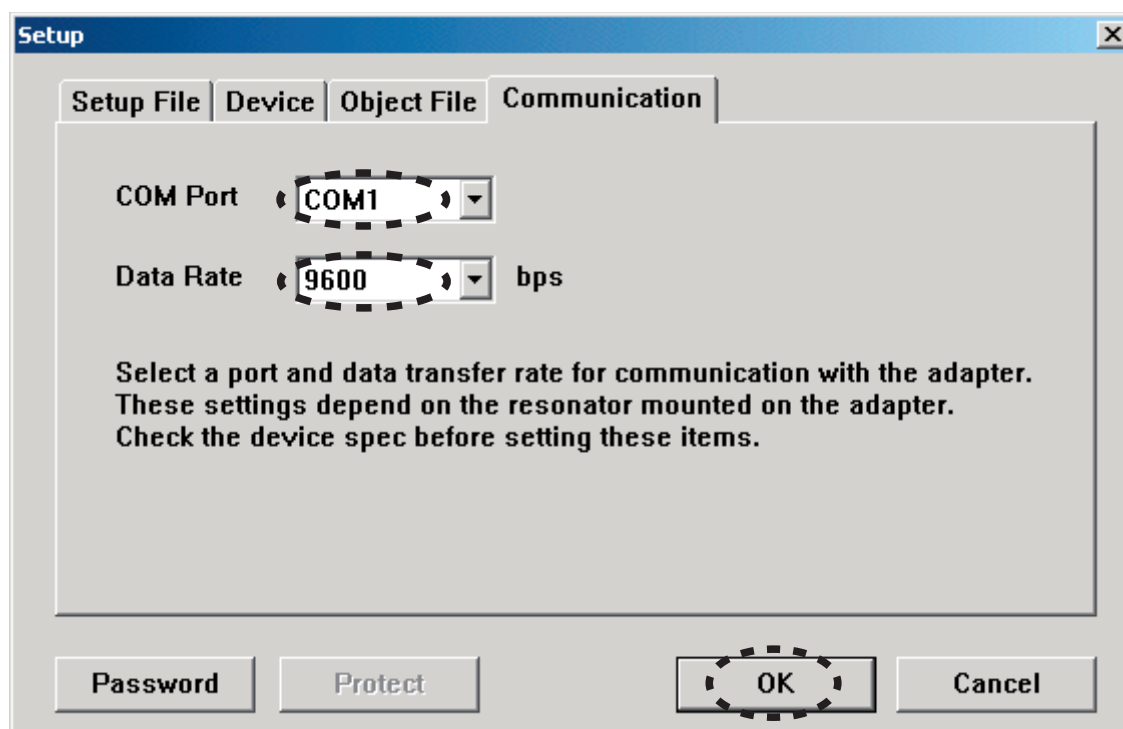
Click **Communication**.

Communication をクリックします。



Choose **COM port number** in COM port.
Choose **9600** in Data Rate.
Click **OK**.

COM Port から接続する **COM Port 番号** を選びます。
Data Rate から **9600** を選択します。
OK をクリックします。

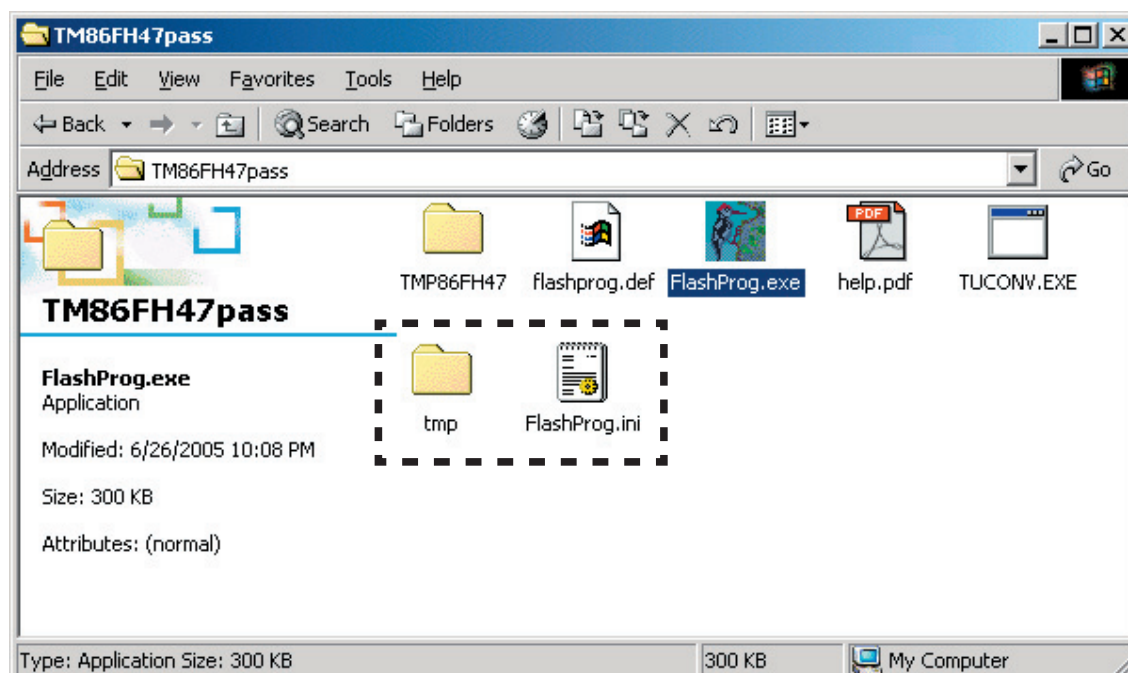


When Setup window is closed, the tmp folder and FlashProg.ini file are created simultaneously.

REMARK : These are the original set-up configuration files for that PC. If these files moved to another PC, you do not operate. When you make it operate with other PC, delete the tmp folder and the FlashProg.ini file and redo a setup.

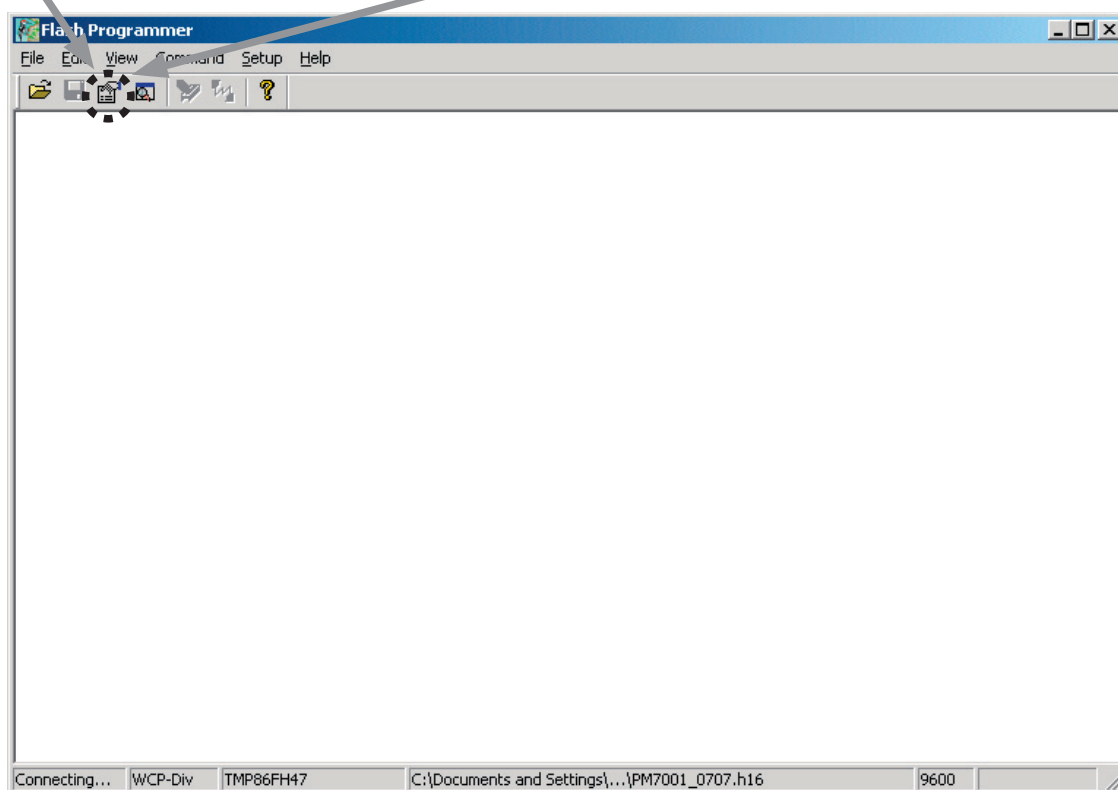
この時 TMP86FH47pass フォルダに tmp フォルダと FlashProg.ini ファイルが作成されます。

注意：これらは今設定した Windows PC 独自の設定ファイルになります。他の PC にこれらのファイルをコピーしても正しく動作しません。もし他の PC で動作させる場合は tmp フォルダと FlashProg.ini ファイルは削除して設定をやり直してください。



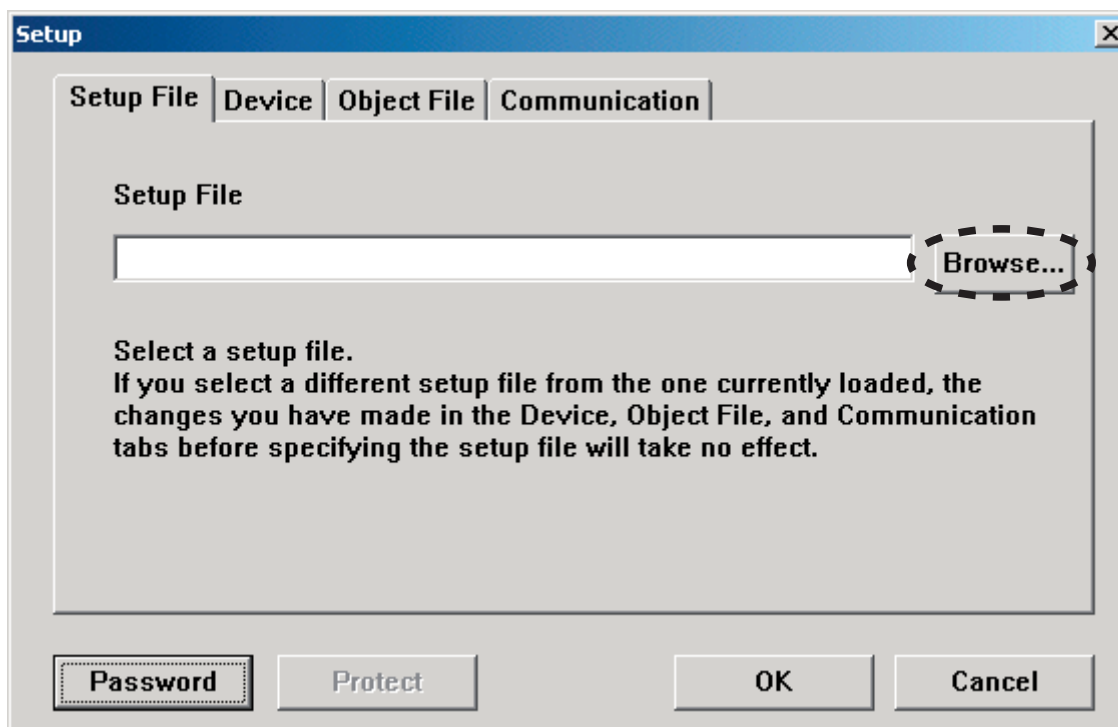
The Flash Programmer is launched.
Click **setup** icon.

setup が閉じ、Flash Programmer が立ち上がります。
setup アイコンをクリックします。



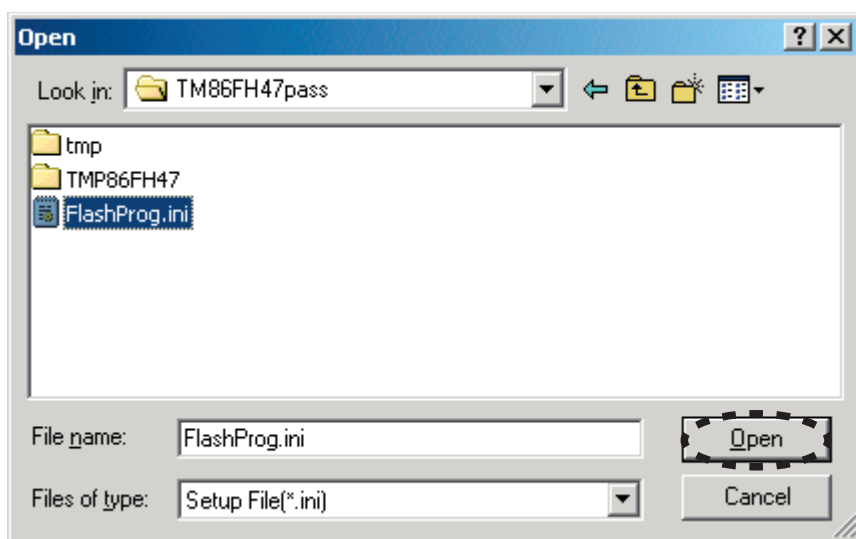
Click **Browse...**

Browse... をクリックします。



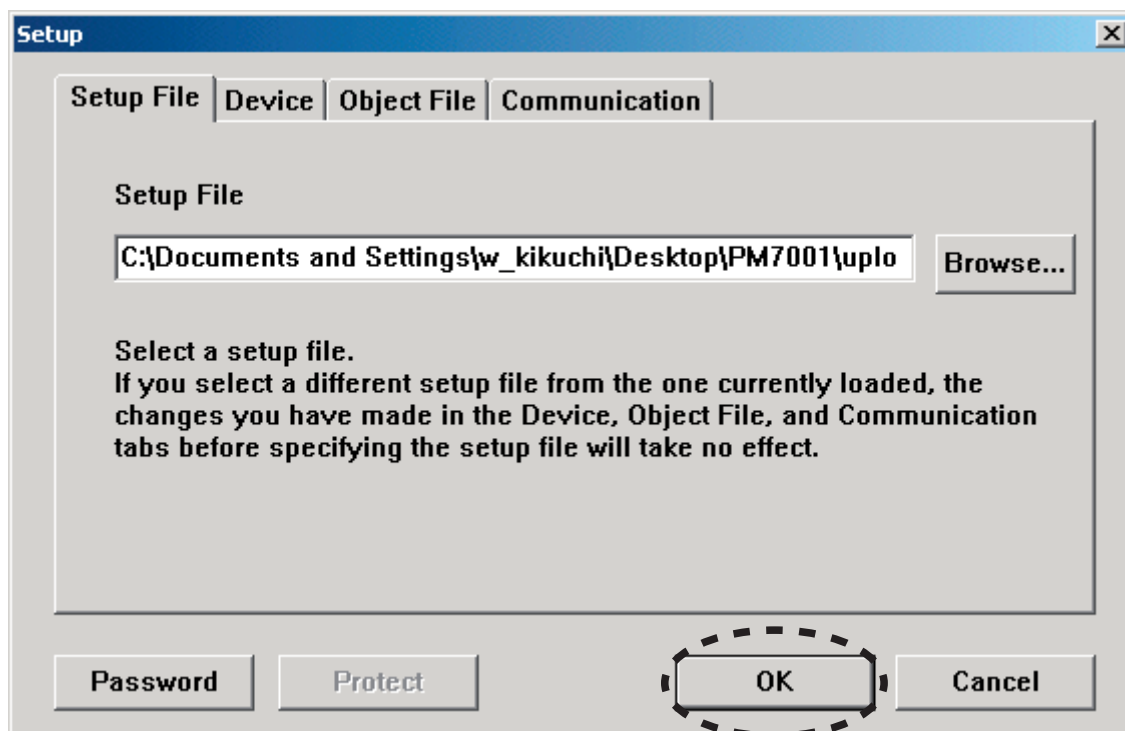
Choose **FlashProg.ini** in TM86FH47pass folder, and click **Open**.

TM86FH47pass フォルダから **FlashProg.ini** を選び、**Open** をクリックします。



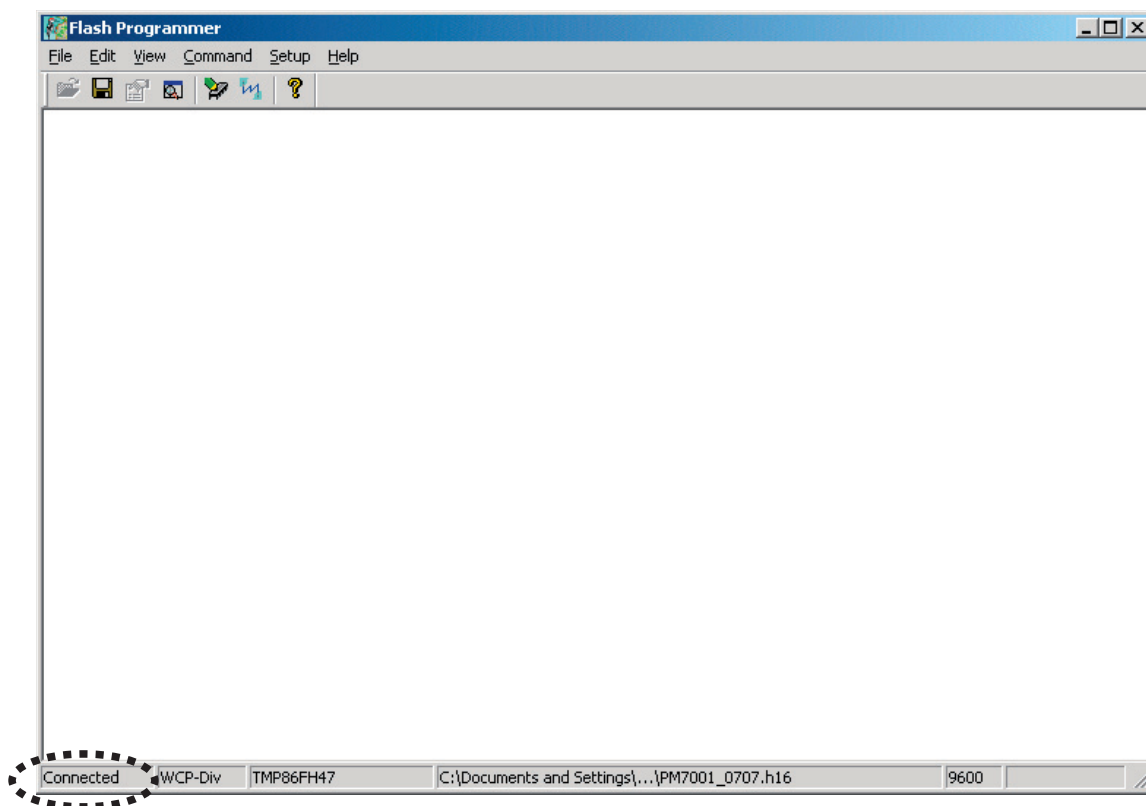
Click **OK**.

OK をクリックします。



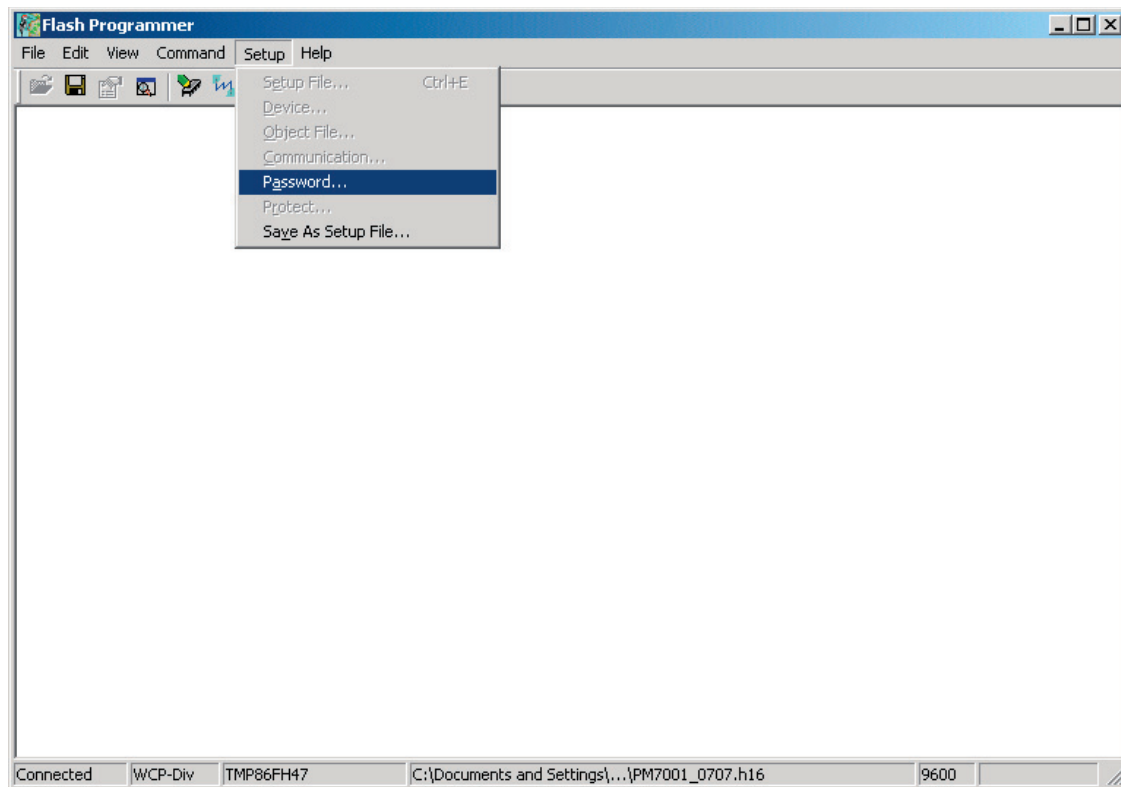
Press the **POWER ON/OFF** button, and turn on the unit.
Status indication at lower left in Flash Programming window
is changed to "Connected" from "Connecting".
When it did not changed, check the connection of FPC or
RS-232C cable.

本機の電源スイッチをオンにします。
Flash Programming ウィンドウの左下のステータスが
Connecting から Connected に変わります。もし Connected
に変わらないときは接続を確認してください。



Select **Password** in **Setup**.

Setup から **Password** を選びます。



Setup Password opens.

Setup Password 画面が開きます。

Setup Password

Address Mode

☐ Single Chip Mode ☒ Single Boot Mode

Device Password

☐ Device is BLANK

Input Type ☐ Ascii ☒ Hex

Password

Password Character Number Address

Password Compare Start Address

Object File Password

☒ Use Device Password

☐ BLANK Password

Input Type ☐ Ascii ☒ Hex

Password

Password Character Number Address

Password Compare Start Address

Help **OK** **Cancel**

- When writing in a blank microprocessor
Refer to 16 page
- When writing (update) in the already written-in microcomputer
Refer to 17 page

- ブランクマイコンに書き込む場合は、次のページへ
- 既に書き込まれたマイコンに書き込む場合 (アップデート) は、17 ページへ

[When writing in a blank microprocessor]

Check **Single Boot Mode** in Address Mode.

Setting in Device Password

Check **Device is BLANK**.

Check **Hex** in input type.

Password are inputted automatically, please do not change text box of "Password", "Password Character Number Address" and "Password Compare Start Address".

Setting in Object File Password

Do not check **BLANK password**.

Check **Hex** in Input Type.

Type **0102030405060708** into Password.

Type **0xFF00** into Password Character Number Address.

Type **0xFF01** into Password Compare Start Address.

Click **OK**.

[ブランクマイコンに書き込む場合]

Address Mode から **Single Boot Mode** にチェックを入れます。

Device Password 内の設定

Device is BLANK のチェックボックスにチェックを入れます。

input type から **Hex** にチェックを入れます。

Password、Password Character Number Address、

Password Compare Start Address は自動的に入力されますので変更しないでください。

Object File Password 内の設定

BLANK Password にはチェックを 入れない てください。

Input Type から **Hex** にチェックを入れてください。

Password に **0102030405060708** を入力します。

Password Character Number Address に **0xFF00** を入力します。

Password Compare Start Address に **0xFF01** を入力します。

OK をクリックします。

Setup Password

Address Mode

☐ Single Chip Mode ☒ Single Boot Mode

Device Password

☒ Device is BLANK

Input Type ☐ Ascii ☒ Hex

Password *****

Password Character Number Address 0xc000

Password Compare Start Address 0xc000

Object File Password

☒ Use Device Password

☐ BLANK Password

Input Type ☐ Ascii ☒ Hex

Password *****

Password Character Number Address 0xFF00

Password Compare Start Address 0xFF01

Help OK Cancel

[When writing (update) in the already written-in microcomputer]

Check **Single Boot Mode** in Address Mode.

Setting in Device Password

Do not check **Device is BLANK**.

Check **Hex** in input type.

Type **0102030405060708** into Password.

Type **0xFF00** into Password Character Number Address.

Type **0xFF01** into Password Compare Start Address.

Setting in Object File Password

Do not check **BLANK password**.

Check **Hex** in Input Type.

Type **0102030405060708** into Password.

Type **0xFF00** into Password Character Number Address.

Type **0xFF01** into Password Compare Start Address.

Click **OK**.

[既に書き込まれたマイコンに書き込む場合 (アップデート)]

Address Mode から **Single Boot Mode** にチェックを入れます。

Device Password 内の設定

Device is BLANK のチェックボックスにチェックを入れないでください。

input type から **Hex** にチェックを入れます。

Password に **0102030405060708** を入力します。

Password Character Number Address に **0xFF00** を入力します。

Password Compare Start Address に **0xFF01** を入力します。

Object File Password 内の設定

BLANK Password にはチェックを入れないでください。

Input Type から **Hex** にチェックを入れてください。

Password に **0102030405060708** を入力します。

Password Character Number Address に **0xFF00** を入力します。

Password Compare Start Address に **0xFF01** を入力します。

OK をクリックします。

Setup Password

Address Mode

☐ Single Chip Mode ☒ **Single Boot Mode**

Device Password

☐ Device is BLANK

Input Type ☐ Ascii ☒ **Hex**

Password 0102030405060708

Password Character Number Address 0xFF00

Password Compare Start Address 0xFF01

Object File Password

☒ **Use Device Password**

☐ BLANK Password

Input Type ☐ Ascii ☒ **Hex**

Password 0102030405060708

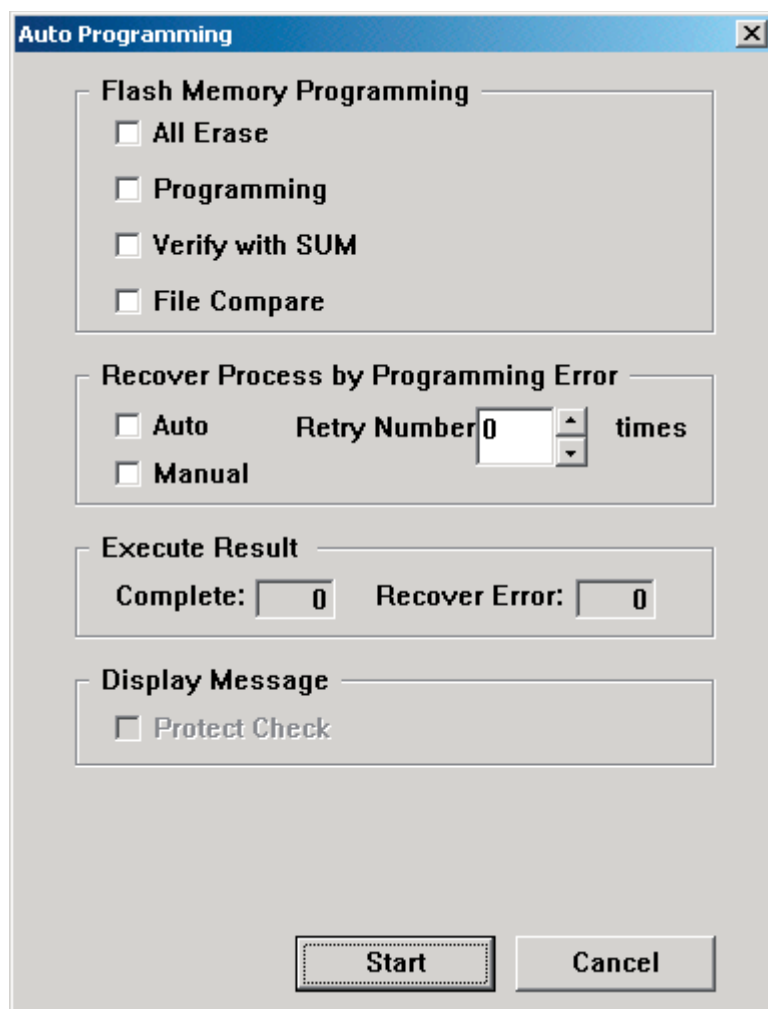
Password Character Number Address 0xFF00

Password Compare Start Address 0xFF01

Help **OK** **Cancel**

Auto Programming opens.

Auto Programming の設定画面が開きます。



The image shows a Windows-style dialog box titled "Auto Programming". It contains several sections with checkboxes and input fields. At the bottom are "Start" and "Cancel" buttons.

Flash Memory Programming

- ☐ All Erase
- ☐ Programming
- ☐ Verify with SUM
- ☐ File Compare

Recover Process by Programming Error

- ☐ Auto Retry Number times
- ☐ Manual

Execute Result

Complete: Recover Error:

Display Message

- ☐ Protect Check

Start **Cancel**

Check **All Erase**, **Programming**, **Verify with SUM** and **File Compare** in Flash Memory Programming.
Check **Manual** in Recover Process by Programming Error.
Click **Start**.

Flash Memory Programming 内の設定は **All Erase**、**Programming**、**Verify with SUM**、**File Compare** にチェックを入れます。
Recover Process by Programming Error 内の設定は **Manual** にチェックを入れます。
Start をクリックします。

Auto Programming

Flash Memory Programming

- ☒ All Erase
- ☒ Programming
- ☒ Verify with SUM
- ☒ File Compare

Recover Process by Programming Error

☐ Auto Retry Number times

☒ **Manual**

Execute Result

Complete: Recover Error:

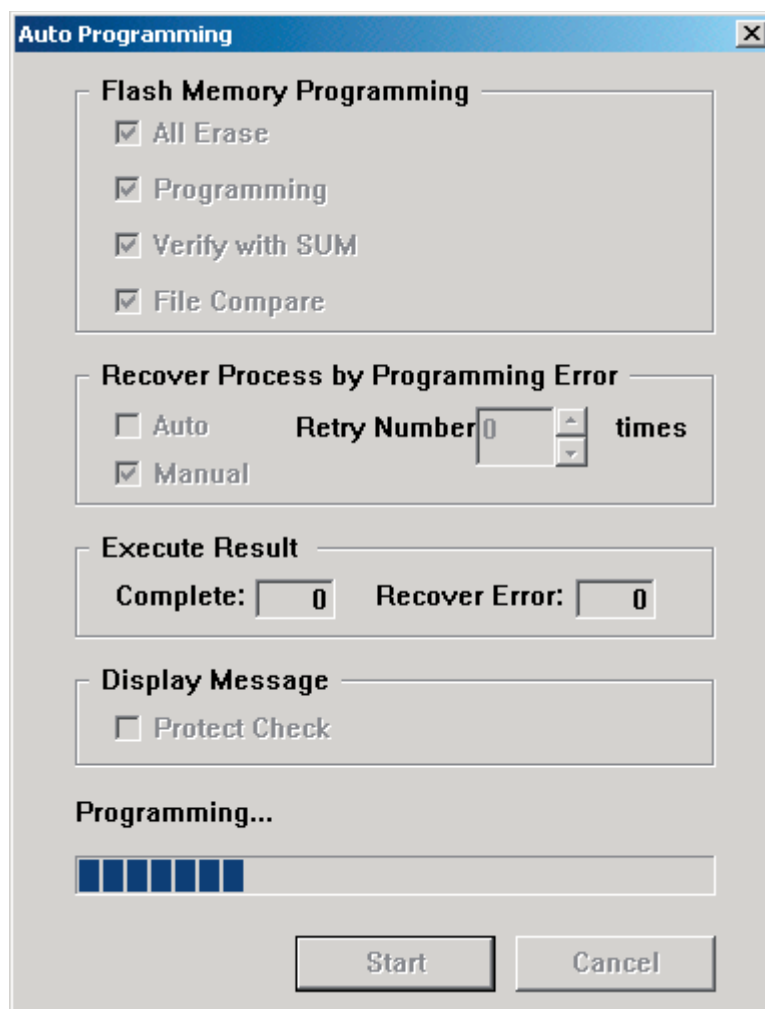
Display Message

☐ Protect Check

Start **Cancel**

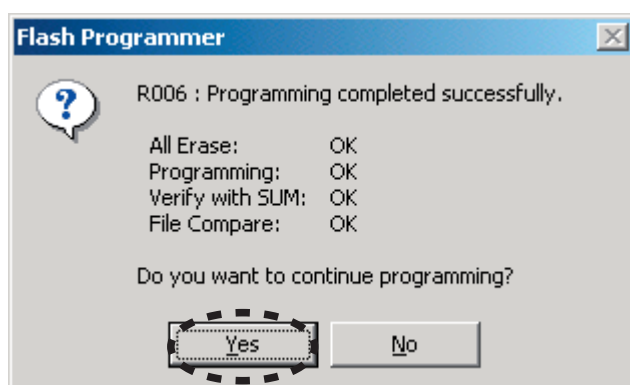
Writing data is written into the microprocessor (Q201).

Microprocessor (Q201) への書き込みが行われます。



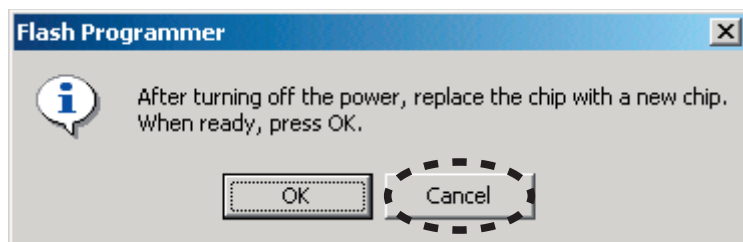
Click **Yes**, when writing is successful.

書き込みが成功すると下記のような画面が出ますので **Yes** をクリックします。



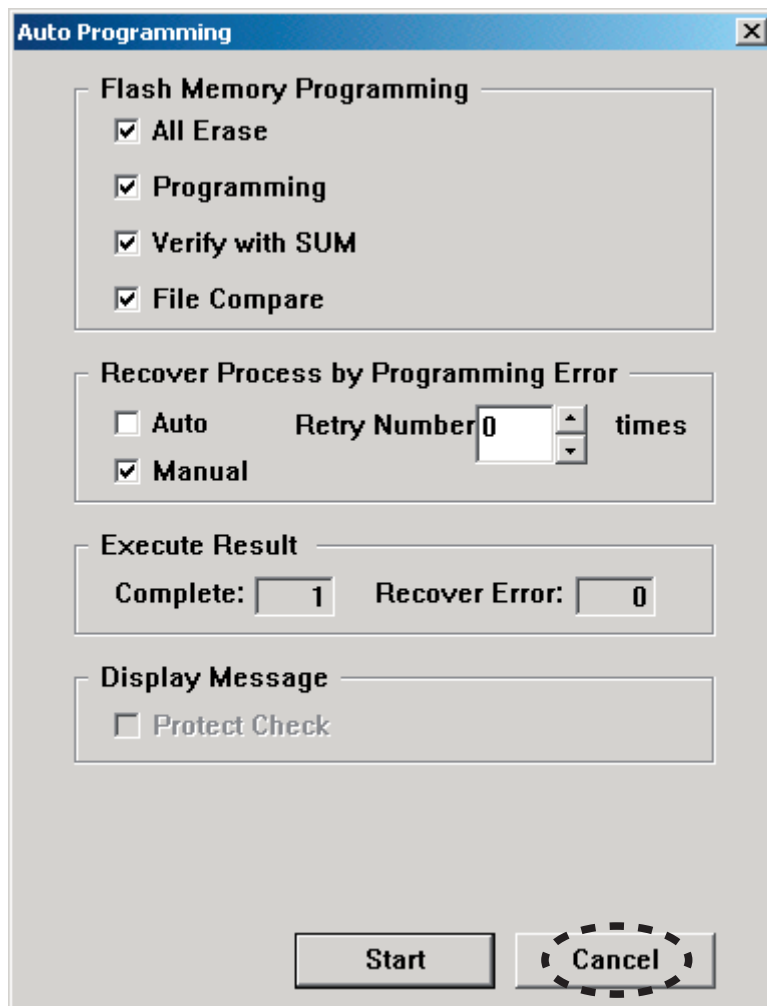
Click **Cancel**.

Cancel をクリックし終了します。



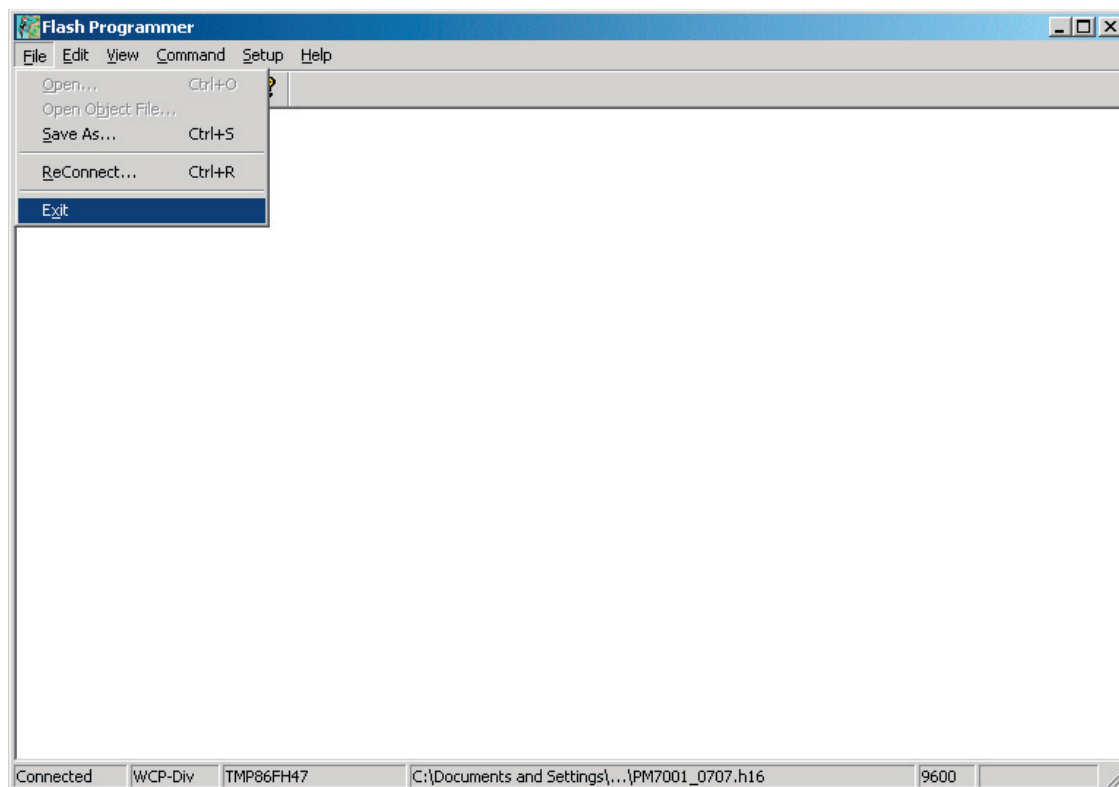
Click **Cancel**.

Cancel をクリックします。



Select the **Exit** in **File**, and finish.

File から **Exit** を選び、終了します。



Press the **POWER ON/OFF** button, and turn off the unit.

Disconnect each cable.

Check the software version.

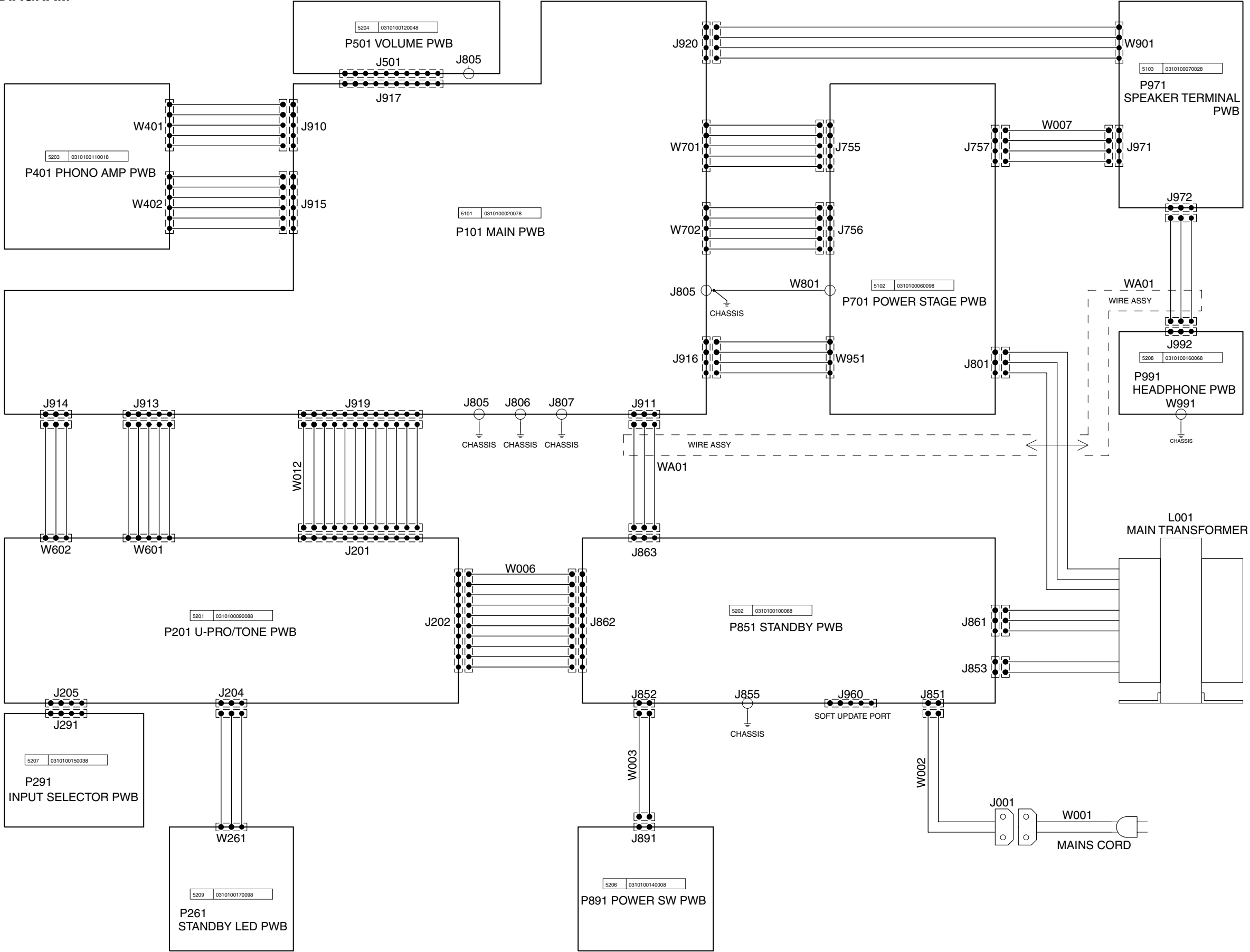
Refer to "**3. SERVICE MODE**" on page 4.

本機の電源スイッチを切り、ケーブルを外します。

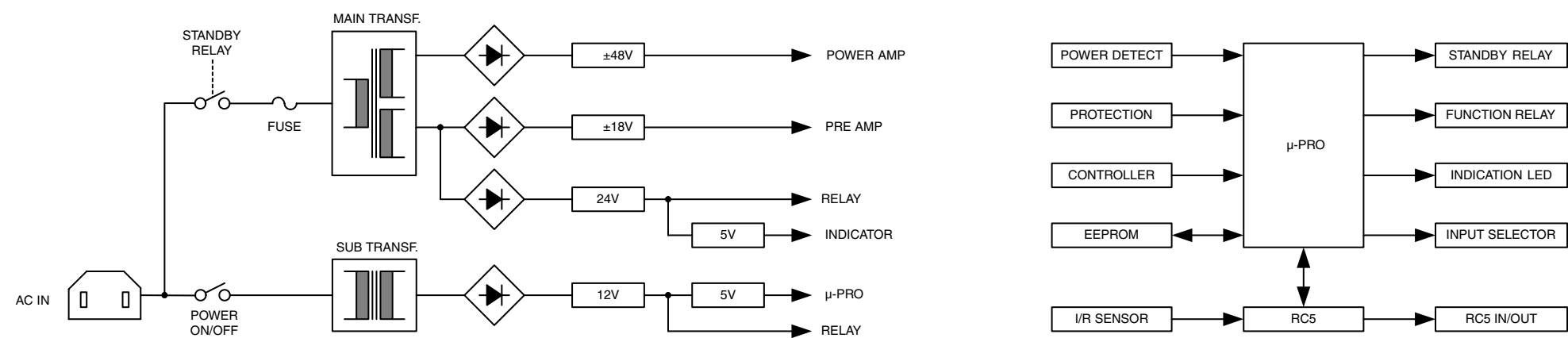
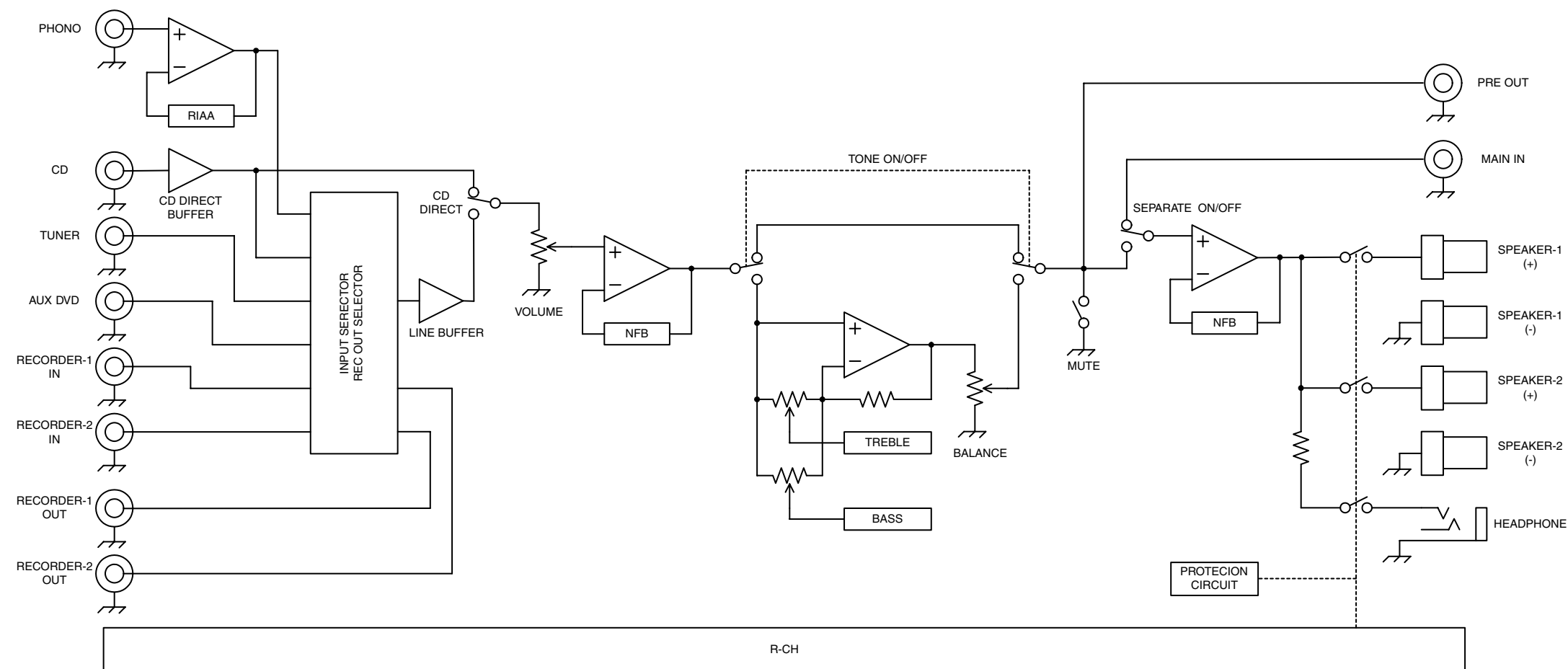
Software の Version 確認をしてくださ

4 ページの "**3. SERVICE MODE**" で確認します。

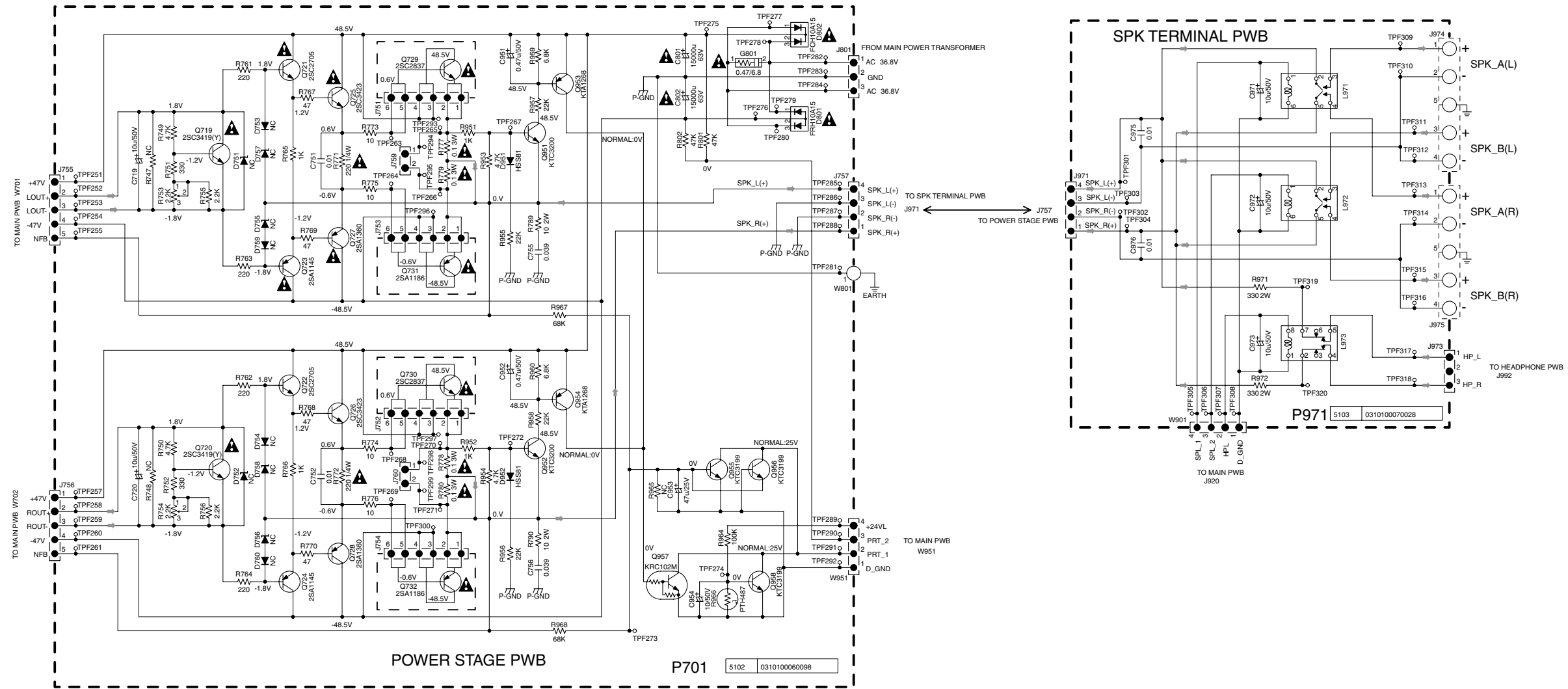
5. WIRING DIAGRAM



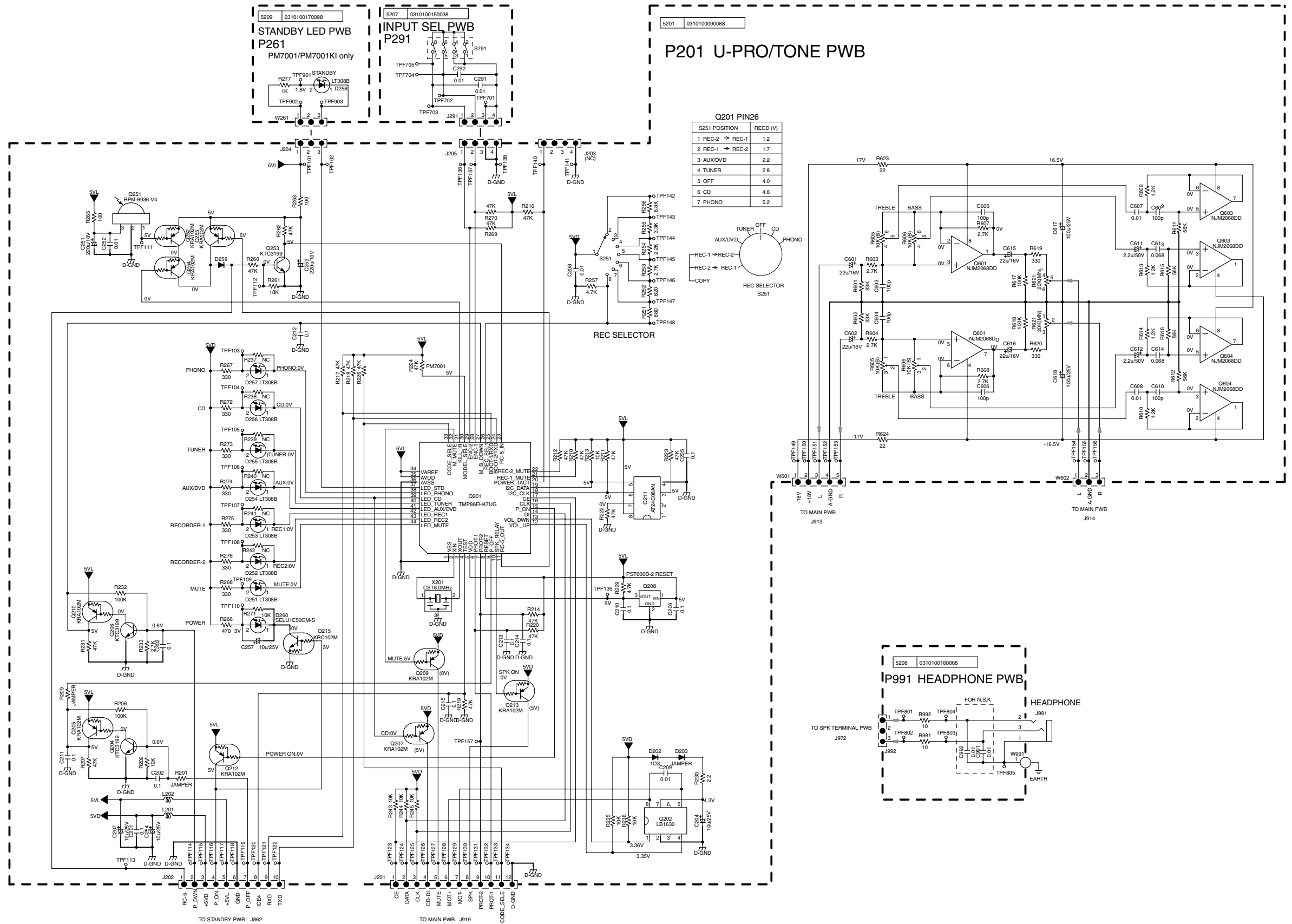
6. BLOCK DIAGRAM

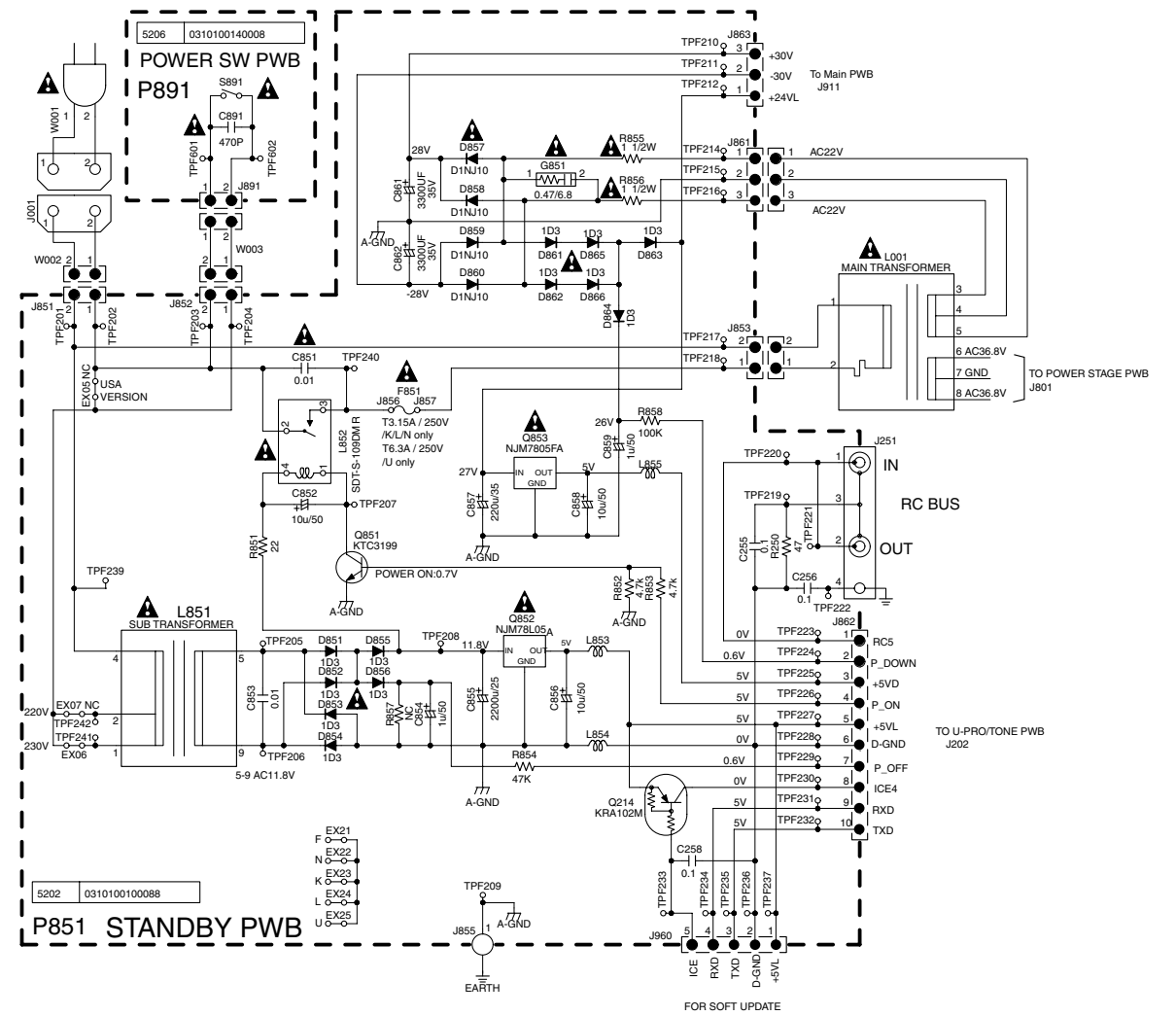
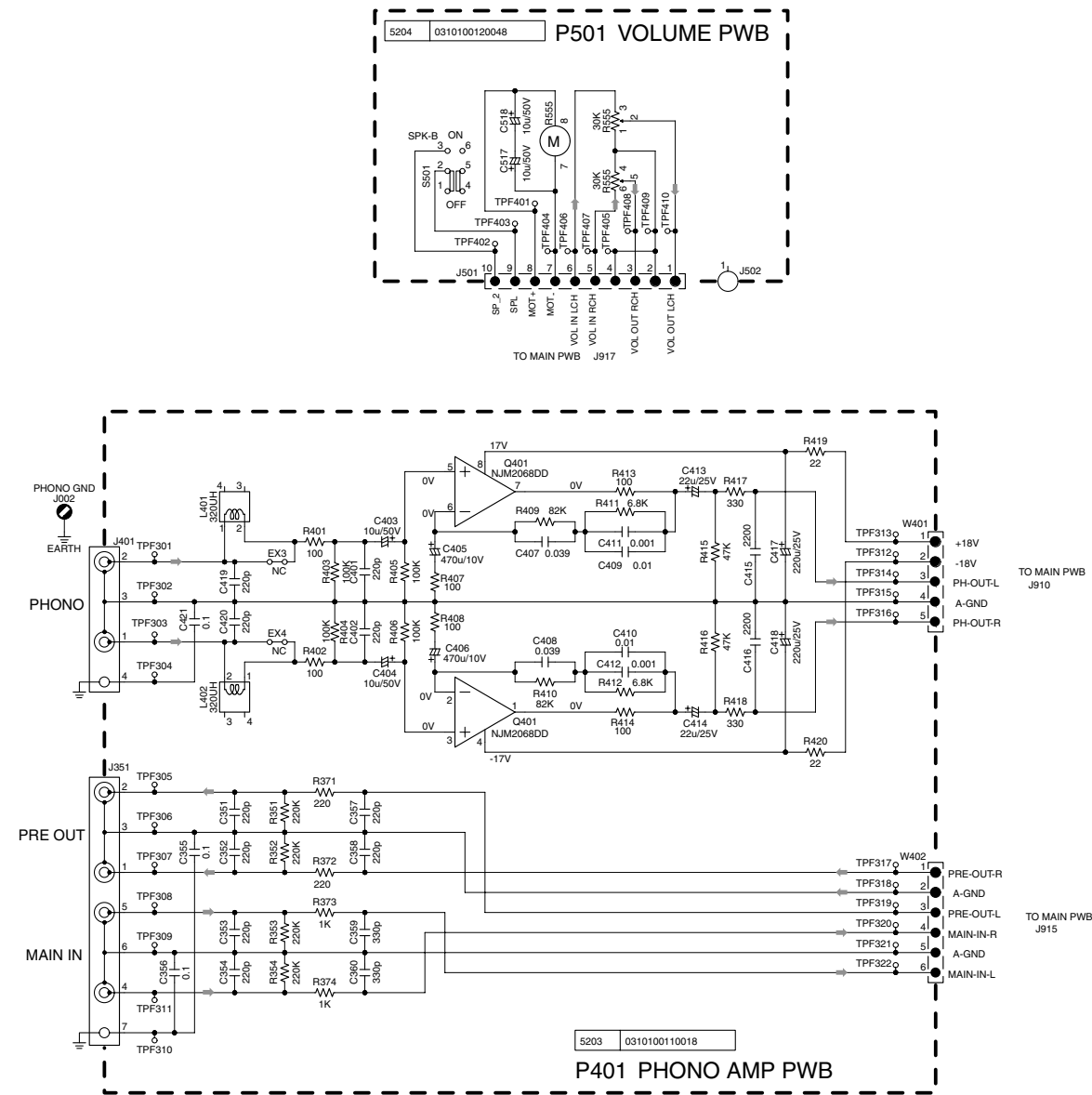


7. SCHEMATIC DIAGRAM

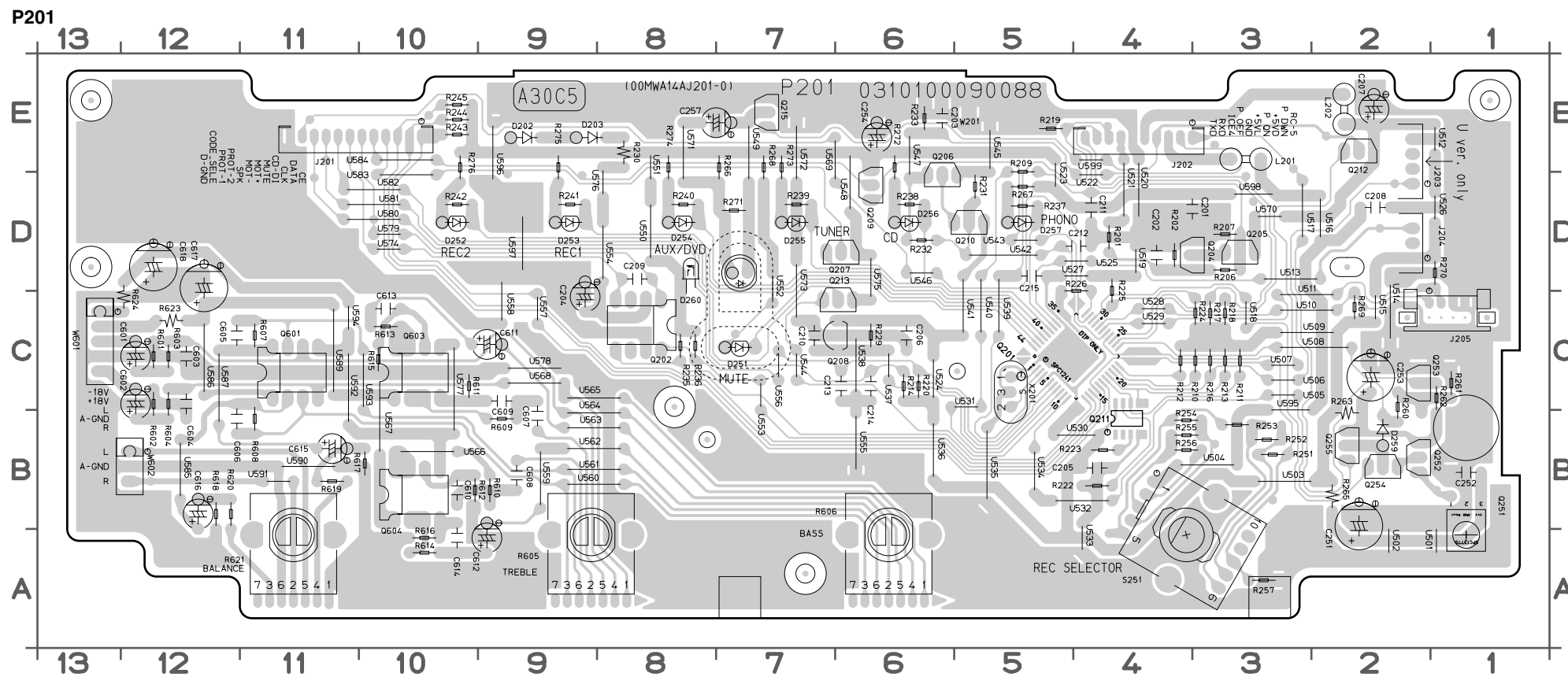


P101
MAIN PWB

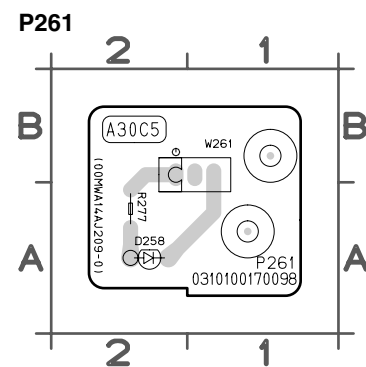




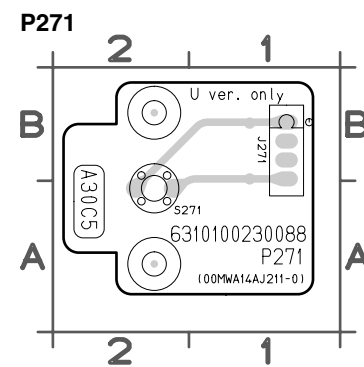
8. PARTS LOCATION



C201	D4	D257	D5	R222	B4	R603	C12	U525	D4	U571	D8
C202	D4	D259	B2	R223	B4	R604	B12	U526	D1	U572	D7
C203	E6	D260	D7	R224	C3	R605	A9	U527	D4	U573	C7
C204	C9	J201	E10	R225	D4	R606	A6	U528	C4	U574	D10
C205	B4	J202	E4	R226	D4	R607	C11	U529	C4	U575	C6
C206	C6	J203	D2	R229	C6	R608	B11	U530	B4	U576	D8
C207	E2	J204	D2	R230	E8	R609	B9	U531	C5	U577	B10
C208	D2	J205	C1	R231	D5	R610	B9	U532	B4	U578	C9
C209	D8	L201	E3	R232	D6	R611	C10	U533	A4	U579	D10
C210	C7	L202	E2	R233	E6	R612	B10	U534	B5	U580	D10
C211	D4	Q201	C4	R235	C8	R613	C10	U535	B5	U581	D10
C212	D4	Q202	C8	R236	C8	R614	A10	U536	B6	U582	D10
C213	C6	Q204	D4	R237	D5	R615	C10	U537	C6	U583	D10
C214	C6	Q205	D3	R238	D6	R616	A10	U538	C6	U584	E10
C215	D5	Q206	D6	R239	D7	R617	B10	U539	C5	U585	B12
C251	A2	Q207	D6	R240	D8	R618	B12	U540	C5	U586	C12
C252	B1	Q208	C6	R241	D9	R619	B11	U541	C5	U587	B12
C253	C2	Q209	D6	R242	D10	R620	B12	U542	D5	U589	C11
C254	E6	Q210	D5	R243	E10	R621	A11	U543	D5	U590	B11
C257	E8	Q211	B4	R244	E10	R623	C12	U544	C7	U591	B11
C601	C12	Q212	E2	R245	E10	R624	C12	U545	E5	U592	B11
C602	B12	Q213	C6	R251	B3	S251	A4	U546	D6	U593	C10
C603	C12	Q215	E7	R252	B3	U501	A1	U547	D6	U594	C11
C604	B12	Q251	A1	R253	B3	U502	A2	U548	D6	U595	C2
C605	C12	Q252	B2	R254	B3	U503	B2	U549	D7	U596	D9
C606	B12	Q253	C2	R255	B3	U504	B3	U550	D8	U597	D9
C607	B9	Q254	B2	R256	B3	U505	C3	U551	D8	U598	D3
C608	B9	Q255	B2	R257	A3	U506	C3	U552	C7	U599	E4
C609	C9	Q601	C11	R260	B2	U507	C3	U553	C7	W201	E5
C610	B10	Q603	C10	R261	C1	U508	C2	U554	D8	W601	C13
C611	C10	Q604	B10	R262	B1	U509	C2	U555	B6	W602	B12
C612	A9	R201	D4	R263	B2	U510	C2	U556	C7	X201	C5
C613	C10	R202	D4	R265	B2	U511	C2	U557	C9		
C614	A10	R206	D3	R266	E7	U512	E1	U558	C9		
C615	B11	R207	D3	R267	D5	U513	D2	U559	B9		
C616	B12	R209	E5	R268	E7	U514	C2	U560	B8		
C617	C12	R210	C3	R269	C2	U515	C2	U561	B8		
C618	D12	R211	C3	R270	D1	U516	D2	U562	B8		
D202	E9	R212	C4	R271	D7	U517	D3	U563	B8		
D203	E9	R213	C3	R272	E6	U518	C3	U564	B8		
D251	C7	R214	C6	R273	E7	U519	D4	U565	C8		
D252	D10	R216	C3	R274	E8	U520	D4	U566	B10		
D253	D9	R217	C3	R275	E9	U521	D4	U567	B10		
D254	D8	R218	C3	R276	E10	U522	D4	U568	C9		
D255	D7	R219	E5	R601	C12	U523	D5	U569	D7		
D256	D6	R220	C6	R602	B12	U524	C6	U570	D3		



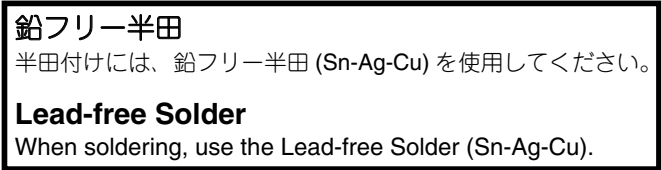
D258	A2
R277	A2
W261	B2



J271 B1
S271 A2

鉛フリー半田
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

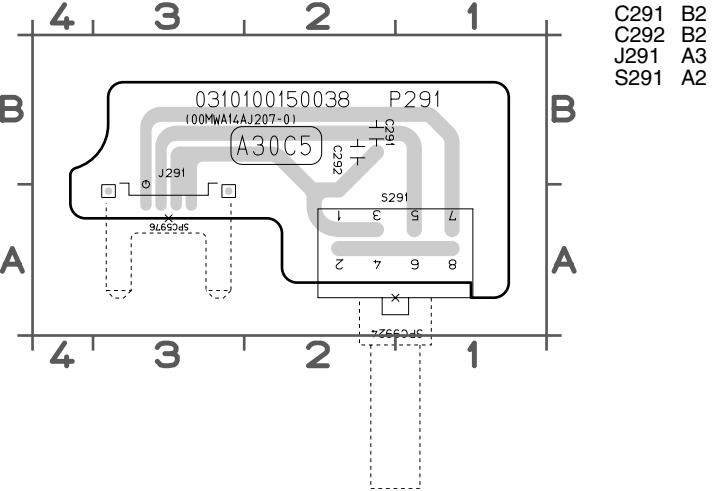
Lead-free Solder
When soldering, use the Lead-free Solder (Sn-Ag-Cu).



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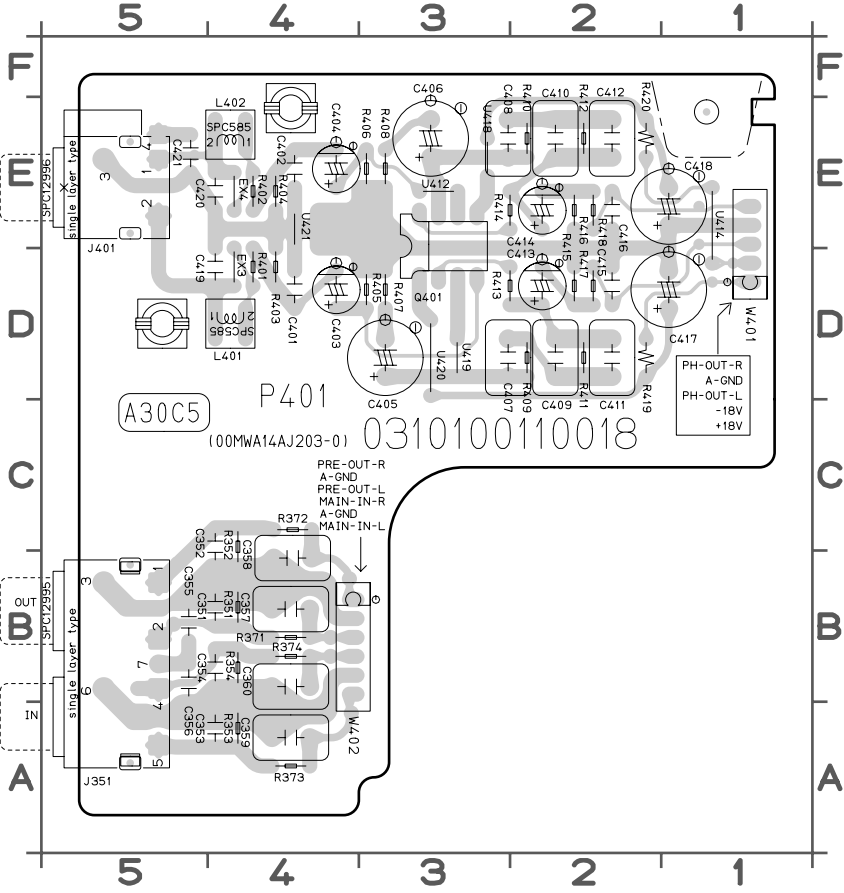
C301	B14	D803	H4	Q907	H8	R533	D8	R904	G8	U178	E15
C302	A14	D804	H4	Q908	H8	R534	B8	R905	G9	U179	D15
C303	A15	D805	H4	Q909	G8	R535	C8	R906	H9	U18	I5
C304	A15	D806	H4	Q910	H8	R536	A8	R908	I8	U180	G13
C305	B13	D901	H9	Q911	I8	R537	C8	R909	H8	U181	E15
C306	B13	D902	H9	Q912	G8	R538	B8	R910	G8	U182	G15
C307	C11	EX11	I15	Q915	I14	R539	C8	R925	C9	U183	A15
C309	C10	EX12	I15	Q916	C9	R540	B8	R926	H14	U184	A9
C310	D10	EX13	I15	R301	A15	R541	C8	R927	I13	U185	I2
C313	C13	EX14	I15	R302	A15	R542	B8	R928	I13	U187	G15
C314	A13	EX15	I14	R303	B15	R543	C8	R929	I13	U19	G4
C317	A15	J301	B16	R304	B15	R544	B8	S701	E1	U2	C2
C318	B15	J302	C16	R305	C15	R545	C4	S901	B1	U20	A5
C319	B15	J303	D16	R306	B15	R546	B4	S902	G16	U21	C5
C320	D15	J304	E16	R307	D15	R547	D6	S903	I16	U22	E5
C321	D15	J805	E9	R308	C15	R548	B6	U1	C2	U23	F5
C322	E15	J806	I2	R309	D15	R549	D7	U10	E3	U24	E5
C323	F15	J807	I16	R310	D15	R550	B7	U100	B10	U25	B6
C325	A15	J910	D10	R311	E15	R551	D8	U101	A10	U26	C6
C326	A15	J911	I3	R312	E15	R552	B8	U102	B10	U27	A6
C327	B15	J913	C2	R313	F15	R553	C8	U103	G10	U28	B6
C328	B15	J914	C2	R314	F15	R554	A8	U104	H11	U29	C6
C329	C15	J915	F14	R315	E15	R557	C7	U105	H11	U3	F2
C330	B15	J916	G9	R316	D15	R558	B7	U106	C11	U30	C6
C331	D15	J917	D3	R317	F15	R559	C8	U107	A11	U31	G6
C332	C15	J919	H2	R318	E15	R560	B8	U108	B11	U32	G6
C333	E15	J920	I13	R319	B15	R561	D5	U109	F11	U33	H6
C334	D15	L901	G13	R320	A15	R562	B5	U11	E3	U34	B6
C335	E15	L902	C9	R321	A15	R563	D5	U110	F11	U35	B6
C336	E15	L903	I2	R322	A15	R564	B5	U111	G11	U36	C6
C337	F15	Q302	D14	R323	B13	R565	B3	U112	F11	U37	C6
C338	F15	Q303	D12	R324	B13	R566	B3	U113	A11	U38	I6
C341	B12	Q305	C14	R325	B13	R567	C2	U114	B11	U39	F6
C342	B12	Q306	B14	R326	A13	R568	C2	U115	C11	U4	D2
C343	C12	Q307	B14	R327	B13	R701	F5	U116	D11	U40	F6
C344	A12	Q308	A14	R328	B13	R702	F12	U117	F11	U41	G6
C345	B10	Q309	C14	R329	B13	R703	F6	U118	H11	U42	F7
C346	B10	Q310	B14	R330	A13	R704	F12	U119	G11	U43	F7
C347	C10	Q311	B14	R331	A12	R705	F5	U12	E4	U44	H7
C348	A10	Q312	A14	R332	B12	R706	F12	U120	C11	U45	H7
C505	C4	Q313	C11	R333	B12	R707	F7	U121	G11	U46	C7
C506	A4	Q314	B11	R334	B12	R708	F10	U122	C11	U47	G7
C507	C4	Q315	B11	R335	B12	R709	G6	U123	I11	U48	A7
C508	B4	Q316	A11	R336	B12	R710	G11	U124	C12	U49	I7
C509	C7	Q317	C11	R337	B12	R711	F6	U125	C12	U5	C3
C510	B7	Q318	B11	R338	B12	R712	F11	U126	C12	U50	H7
C511	C8	Q319	B11	R339	B12	R713	G13	U127	D12	U51	H7
C512	B8	Q320	A11	R340	A12	R714	G13	U128	C12	U52	I7
C513	C3	Q501	C4	R341	C11	R715	G15	U129	D12	U53	F7
C514	B3	Q502	B4	R342	B11	R716	G15	U13	D3	U54	I7
C515	C3	Q503	C5	R343	B11	R719	F6	U130	F12	U55	F7
C516	B3	Q504	B5	R344	A11	R720	F11	U131	C12	U56	F7
C519	C5	Q505	C5	R345	C11	R721	G6	U132	F12	U57	B8
C520	B5	Q506	B5	R346	B11	R722	G11	U133	D12	U58	C8
C521	C5	Q507	C6	R347	B11	R723	G5	U134	B12	U59	I8
C522	B5	Q508	B6	R348	A11	R724	G12	U135	B12	U6	E3
C701	F5	Q509	C6	R349	A10	R725	G5	U136	C12	U60	F8
C702	F12	Q510	B6	R350	B10	R726	G12	U137	C12	U61	G8
C703	H7	Q511	C7	R355	C11	R727	G7	U138	A12	U62	H8
C704	H10	Q512	B7	R356	C10	R728	G11	U139	B12	U63	I8
C705	F7	Q513	C7	R357	C10	R729	G7	U14	E4	U64	F8
C706	F10	Q514	B7	R358	D10	R730	G10	U140	D12	U65	H8
C707	G5	Q515	C7	R359	C11	R731	H6	U141	D13	U66	D8
C708	G12	Q516	B7	R360	B11	R732	H11	U142	D13	U67	B8
C709	G6	Q517	C7	R361	B11	R733	H6	U143	E13	U68	A8
C710	G12	Q518	B7	R362	A11	R734	H11	U144	D13	U69	C8
C713	G6	Q519	C8	R363	B14	R735	H7	U145	E13	U7	E3
C714	G12	Q520	B8	R364	B14	R736	H10	U146	D13	U70	G8
C715	H6	Q521	C8	R365	B14	R737	H7	U147	B13	U71	F8
C716	H12	Q522	B8	R366	A14	R738	H10	U148	C13	U72	F8
C729	F7	Q701	F6	R367	B10	R739	H6	U149	E13	U73	D8
C730	F11	Q702	F11	R368	B10	R740	H11	U15	E4	U74	C9
C803	G4	Q703	G7	R369	D14	R741	H6	U150	D13	U75	H9
C804	G4	Q704	G11	R370	C14	R742	H11	U151	C13	U76	F9
C805	G4	Q705	G7	R501	C5	R743	H7	U152	D13	U77	F9
C806	G3	Q706	G10	R502	B5	R744	H10	U153	A13	U78	C9
C807	H4	Q707	G7	R503	C5	R745	H7	U154	B13	U79	C9
C808	H4	Q708	G11	R504	B5	R746	H10	U155	D13	U8	C3
C812	H5	Q709	G7	R505	C4	R757	H5	U156	D13	U80	D9
C901	G8	Q710	G10	R506	B4	R758	H12	U157	E13	U81	D9
C902	G9	Q711	H7	R507	C4	R759	H5	U158	A13	U82	D9
C903	F8	Q712	H11	R508	B4	R760	H12	U159	B13	U83	E9
C904	H9	Q713	H7	R509	C5	R793	G7	U16	E4	U84	E9
C905	H8	Q714	H11	R510	B5	R794	G11	U160	D13	U85	E9
C906	G9	Q715	H7	R513	C6	R795	G7	U161	E13	U86	F9
C907	G9	Q716	H10	R514	B6	R796	G10	U162	C13	U87	A9
C908	G3	Q717	H7	R515	C6	R803	G4	U163	C14	U88	B9
C930	C9	Q718	H10	R516	B6	R804	G3	U164	A14	U89	E9
C931	H14	Q741	G7	R517	C7	R805	H5	U165	B14	U9	B3
D301	C10	Q742	G11	R518	B7	R806	H3	U166	D14	U90	E9
D501	C6	Q743	G7	R519	C7	R807	H4	U167	I14	U91	G9
D502	B6	Q744	G10	R520	B7	R808	H3	U168	C14	U92	B10
D503	C6	Q801	F4	R521	C6	R809	H4	U169	D14	U93	E9
D504	B6	Q802	F3	R522	B6	R810	H3	U17	E4	U94	I10
D701	G5	Q803	H4	R523	C6	R811	I4	U170	H14	U95	F10
D702	G12	Q804	H3	R524	B6	R812	I4	U171	D14	U96	F10
D703	G6	Q901	F8	R525	C7	R820	I4	U172	D14	U97	C10
D704	G12	Q902	F8	R526	B7	R821	G4	U173	C14	U98	H10
D705	H6	Q903	F9	R527	C7	R822	G3	U174	D14	U99	D10
D706	H11	Q904	F9	R528	B7	R901	G8	U175	E14	W701	I6
D707	H6	Q905	H9	R531	C7	R902	G8	U176	C14	W702	I11
D708	H11	Q906	G9	R532	B7	R903	G8	U177	C14		

P291



C291 B2
C292 B2
J291 A3
S291 A2

P401



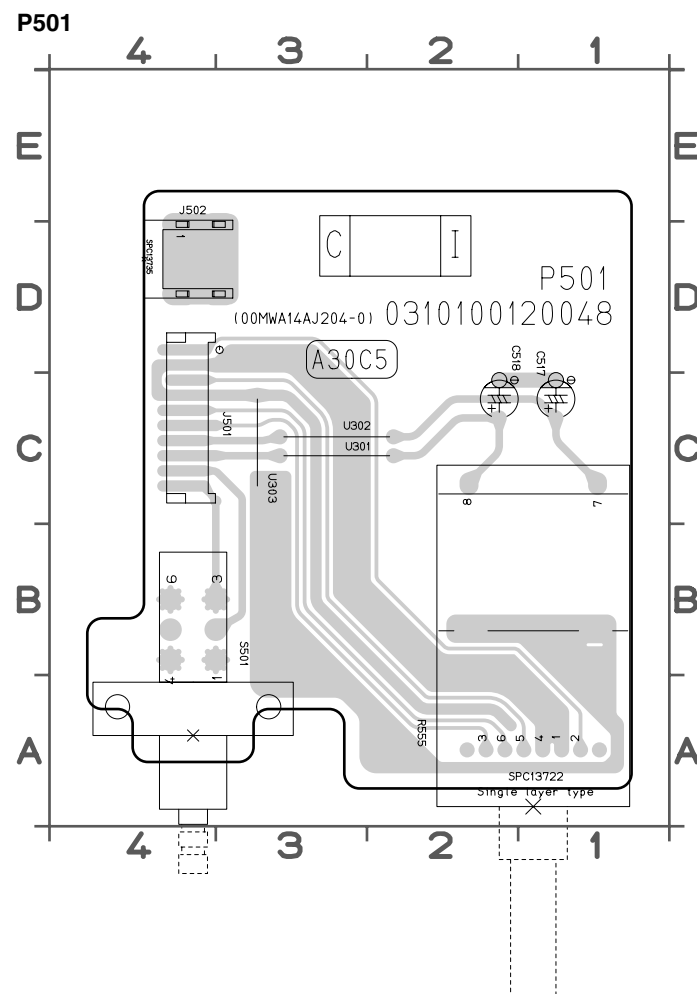
C351 B4
C352 B4
C353 A4
C354 B4
C355 B5
C356 B5
C357 B4
C358 B4
C359 A4
C360 B4
C401 D4
C402 E4
C403 D4
C404 E4
C405 D3
C406 E3
C407 D3
C408 E3
C409 D2
C410 E2
C411 D2
C412 E2
C413 D2
C414 E2
C415 D2
C416 E2
C417 D1
C418 E1
C419 D4
C420 E4
C421 E5
EX3 D4
EX4 E4
J351 B5
J401 E5
L401 D4
L402 E4
Q401 E3
R351 B4
R352 B4
R353 A4
R354 B4
R371 B4
R372 C4
R373 A4
R374 B4
R401 D4
R402 E4
R403 D4
R404 E4
R405 D3
R406 E3
R407 D3
R408 E3
R409 D2
R410 E2
R411 D2
R412 E2
R413 D3
R414 E3
R415 D2
R416 E2
R417 D2
R418 E2
R419 D2
R420 E2
U412 E3
U414 D1
U418 E3
U419 D3
U420 D3
U421 E4
W401 D1
W402 B4

鉛フリー半田

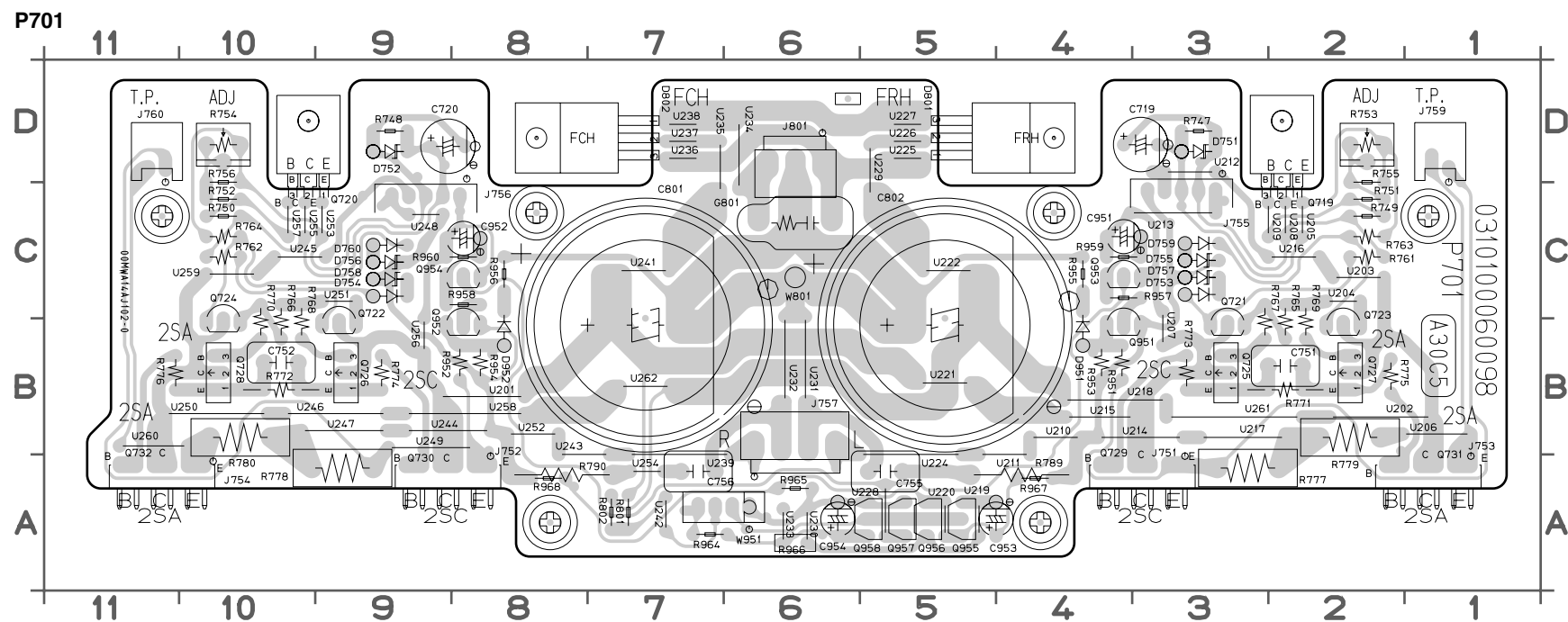
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

Lead-free Solder

When soldering, use the Lead-free Solder (Sn-Ag-Cu).



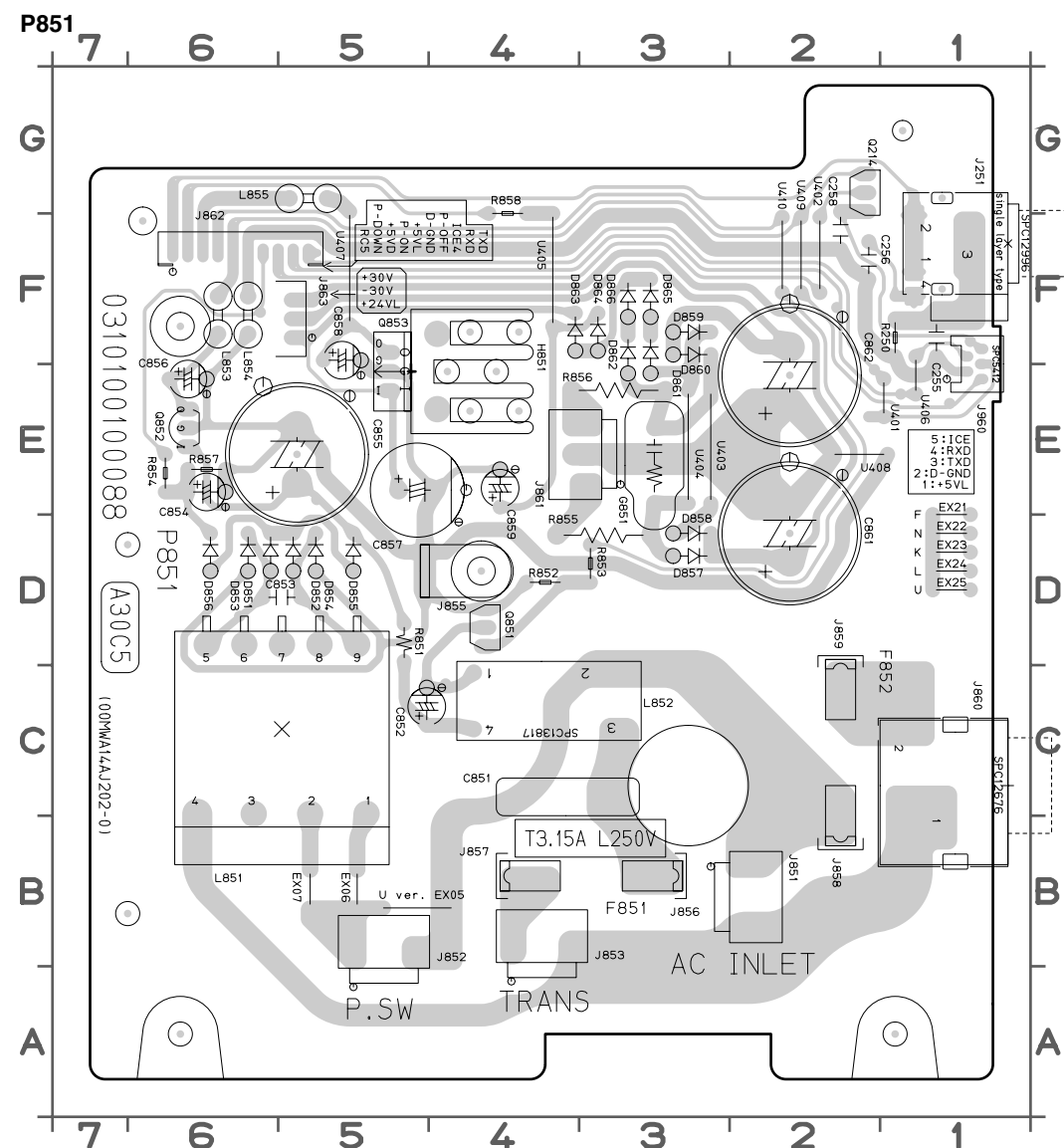
- C517 C1
- C518 C2
- J501 D4
- J502 D4
- R555 A1
- S501 A4
- U301 C2
- U302 C2
- U303 C3



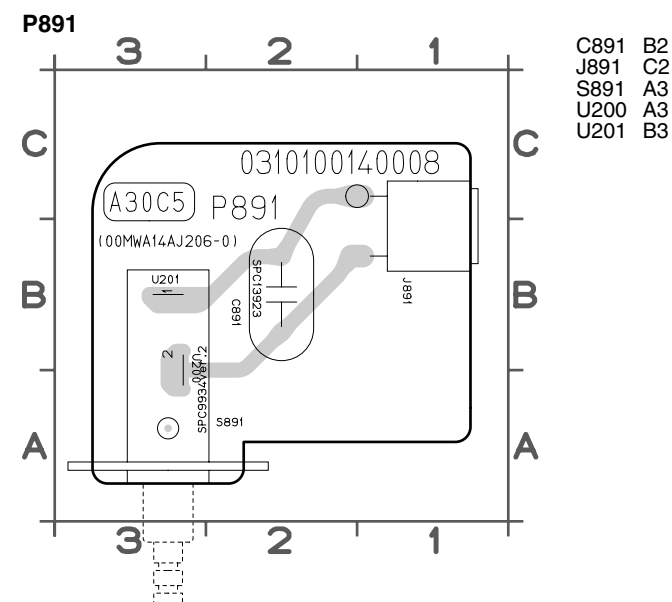
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|----------|----------|----------|---------|---------|----------|
| C719 D4 | J753 A1 | R750 C10 | R801 A7 | U213 C3 | U244 B8 |
| C720 D9 | J754 A10 | R751 C2 | R802 A7 | U214 B3 | U245 C9 |
| C751 B2 | J755 C3 | R752 C10 | R951 B4 | U215 B3 | U246 B9 |
| C752 B10 | J756 C8 | R753 D2 | R952 B8 | U216 C2 | U247 B9 |
| C755 A5 | J757 B6 | R754 D10 | R953 B4 | U217 B2 | U248 C9 |
| C756 A7 | J759 D1 | R755 D2 | R954 B8 | U218 B3 | U249 B8 |
| C801 B7 | J760 D11 | R756 D10 | R955 C4 | U219 A5 | U250 B10 |
| C802 B5 | J801 D6 | R761 C2 | R956 C8 | U220 A5 | U251 C9 |
| C951 C4 | Q719 C2 | R762 C10 | R957 C3 | U221 B5 | U252 B8 |
| C952 C9 | Q720 C10 | R763 C2 | R958 C8 | U222 C5 | U253 C9 |
| C953 A5 | Q721 B3 | R764 C10 | R959 C3 | U224 B5 | U254 A7 |
| C954 A6 | Q722 B9 | R765 B2 | R960 C8 | U225 D5 | U255 C10 |
| D751 D3 | Q723 B2 | R766 B10 | R964 A6 | U226 D5 | U256 B9 |
| D752 D9 | Q724 B10 | R767 B3 | R965 A6 | U227 D5 | U257 C10 |
| D753 C3 | Q725 B3 | R768 B10 | R966 A6 | U228 A5 | U258 B8 |
| D754 C9 | Q726 B9 | R769 B2 | R967 A4 | U229 C5 | U259 C10 |
| D755 C3 | Q727 B2 | R770 B10 | R968 A8 | U230 A6 | U260 B10 |
| D756 C9 | Q728 B10 | R771 B2 | U201 B8 | U231 B6 | U261 B2 |
| D757 C3 | Q951 B4 | R772 B10 | U202 B1 | U232 B6 | U262 B7 |
| D758 C9 | Q952 B8 | R773 B3 | U203 C2 | U233 A6 | W801 C6 |
| D759 C3 | Q953 C4 | R774 B9 | U204 C2 | U234 C6 | W951 A6 |
| D760 C9 | Q954 C8 | R775 B2 | U205 C2 | U235 C7 | |
| D801 D5 | Q955 A5 | R776 B11 | U206 B1 | U236 D7 | |
| D802 D7 | Q956 A5 | R777 A2 | U207 B3 | U237 D7 | |
| D951 B4 | Q957 A5 | R778 A9 | U208 C2 | U238 D7 | |
| D952 B8 | Q958 A5 | R779 B2 | U209 C3 | U239 B6 | |
| G801 C6 | R747 D3 | R780 B10 | U210 B4 | U241 C7 | |
| J751 A3 | R748 D9 | R789 A4 | U211 B4 | U242 A7 | |
| J752 A8 | R749 C2 | R790 A7 | U212 D3 | U243 B7 | |

鉛フリー半田
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

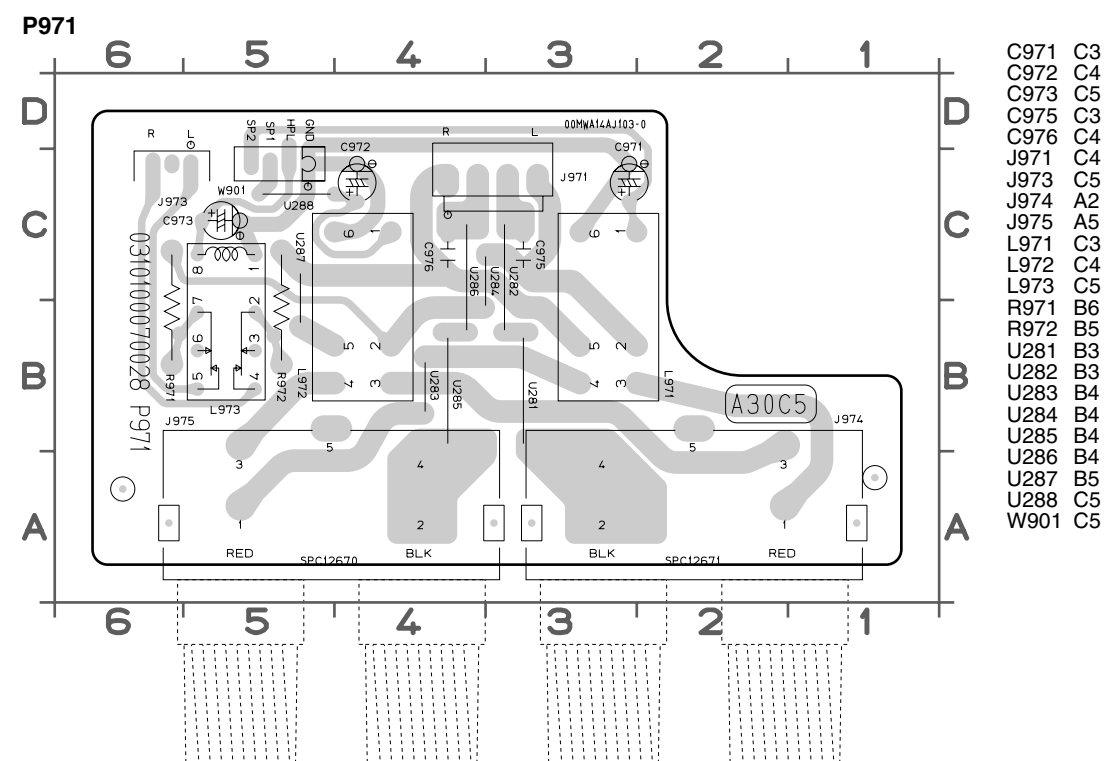
Lead-free Solder
When soldering, use the Lead-free Solder (Sn-Ag-Cu).



C255	F1	D866	F3	Q214	G2
C256	F2	EX05	B4	Q851	D4
C258	F2	EX06	B5	Q852	E6
C851	C3	EX07	B5	Q853	E5
C852	C5	EX21	E1	R250	F1
C853	D5	EX22	D1	R851	D5
C854	E6	EX23	D1	R852	D4
C855	E5	EX24	D1	R853	D3
C856	E6	EX25	D1	R854	E6
C857	E5	G851	E3	R855	D3
C858	F5	J251	F1	R856	E3
C859	E4	J851	B2	R857	E6
C861	D2	J852	B5	R858	G4
C862	E2	J853	B4	U401	E1
D851	D6	J855	D4	U402	F2
D852	D5	J856	B3	U403	E3
D853	D6	J857	B4	U404	E3
D854	D5	J858	B2	U405	F4
D855	D5	J859	C2	U406	E1
D856	D6	J860	C1	U407	F5
D857	D3	J861	E3	U408	E1
D858	D3	J862	F6	U409	F2
D859	F3	J863	F5	U410	F2
D860	F3	J960	E1		
D861	E3	L851	C5		
D862	E3	L852	C4		
D863	F4	L853	F6		
D864	F3	L854	F6		
D865	F3	L855	G5		



C891	B2
J891	C2
S891	A3
U200	A3
U201	B3



C971	C3
C972	C4
C973	C5
C975	C3
C976	C4
J971	C4
J973	C5
J974	A2
J975	A5
L971	C3
L972	C4
L973	C5
R971	B6
R972	B5
U281	B3
U282	B3
U283	B4
U284	B4
U285	B4
U286	B4
U287	B5
U288	C5
W901	C5

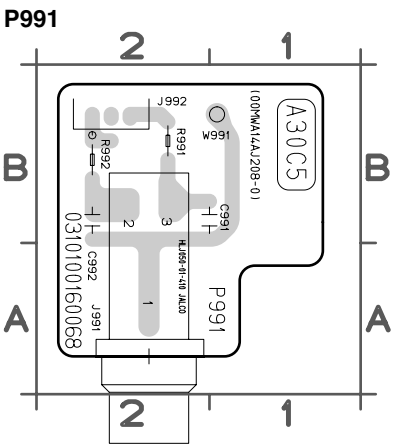
鉛フリー半田
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

Lead-free Solder
When soldering, use the Lead-free Solder (Sn-Ag-Cu).

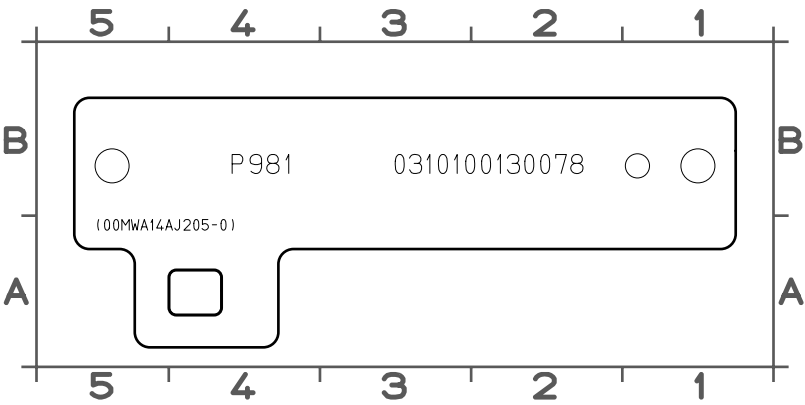
9. MICROPROCESSOR AND IC DATA

Q201 : TMP86FH47UG

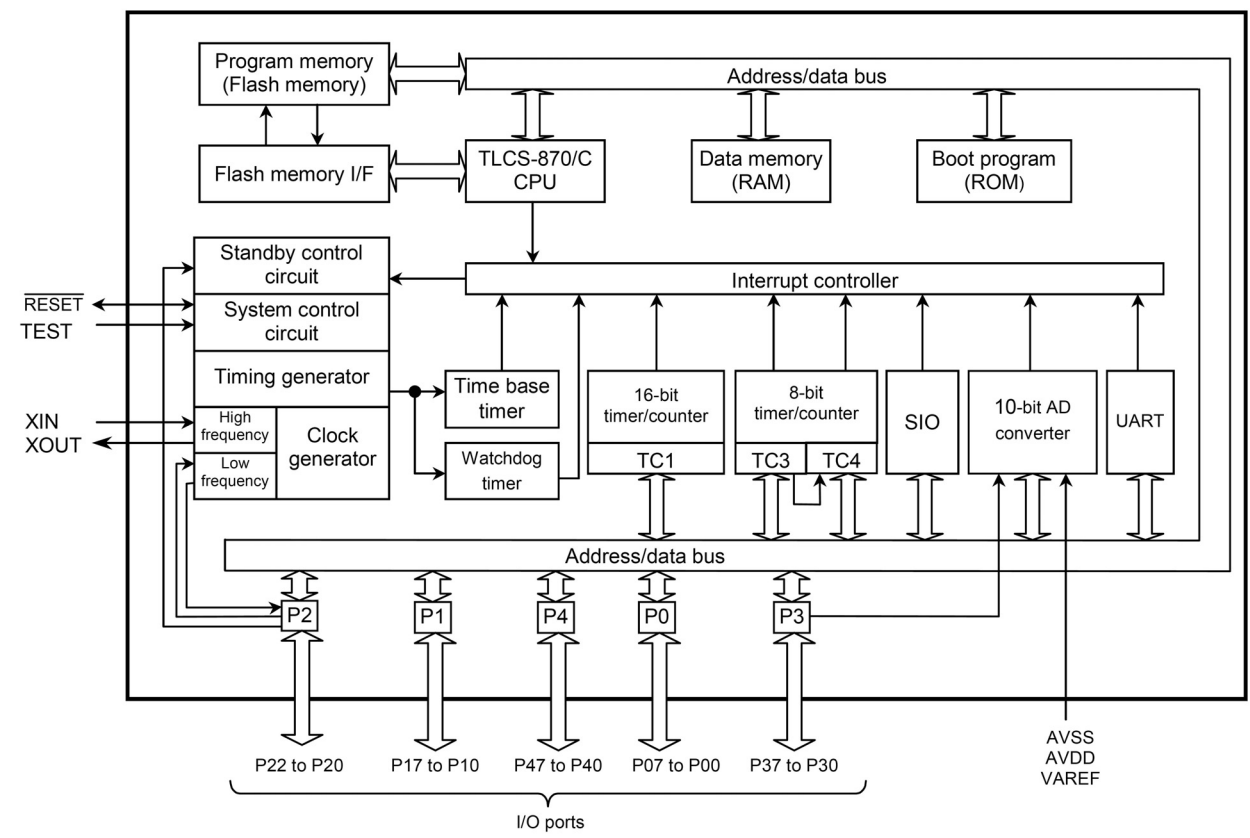
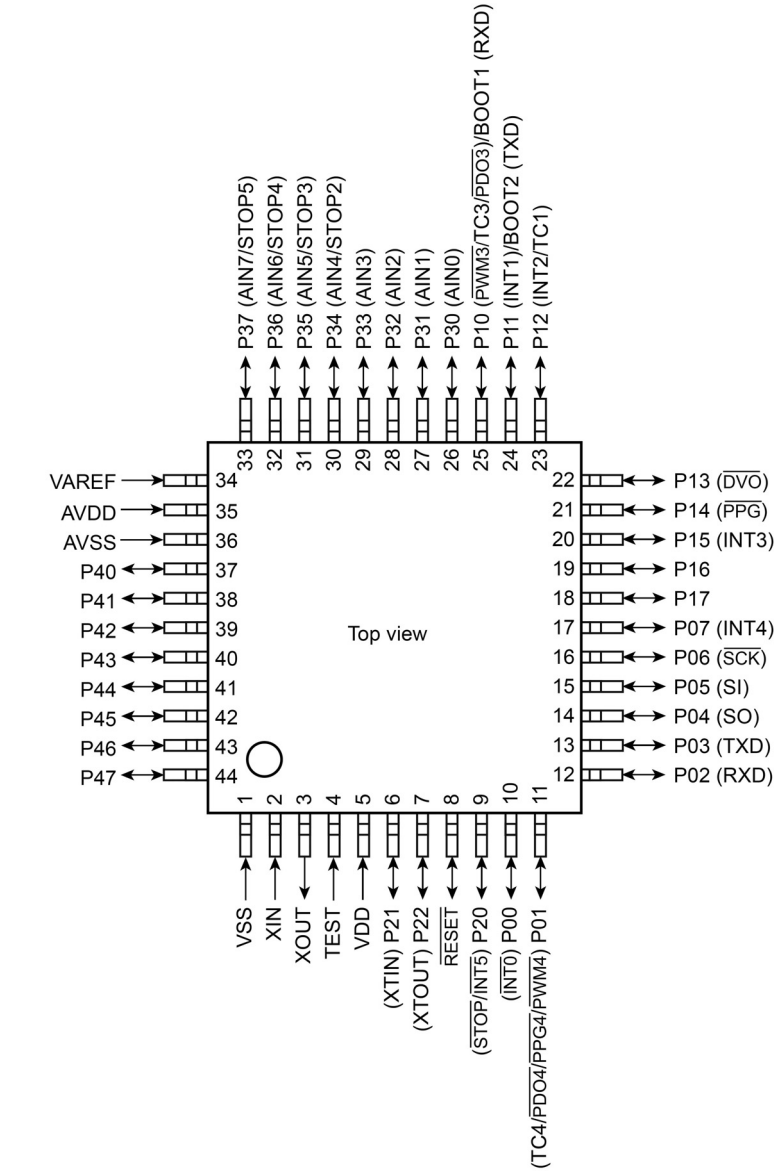
Pin No.	Port name	I/O	use	Port Setting				Note
				Name	Act.	Init.	STBY	
1	VSS	-	-	VSS	-	-	-	0 V
2	XIN	I	I		-	-	-	8M Clock in
3	XOUT	O	O		-	-	-	8M Clock out
4	TEST	I	I		H	L	L	L->H : PROM Mode
5	VDD	-	-	VDD	-	-	-	
6	P21 (XTIN)	I/O	I	PROTECT_1	L	H	H	DC Vol/Over Current
7	P22 (XTOUT)	I/O	I	PROTECT_2	L	H	H	Vol. Abnormal Detect
8	RESET	I/O	I		L	-	H	u-com Reset port
9	P20 (STOP/INT5)	I/O	I	P_OFF	L	H	L	Detect Power Off
10	P00 (INT0)	I/O	O	SPK	L	H	H	Spk Relay ON
11	P01 (TC4/PD04/PPG4/PWM4)	I/O	O	RC-5_OUT	L	H	H	RC-5 Output
12	P02 (RXD)	I/O	O	VOL_UP	L	H	H	Volume up
13	P03 (TXD)	I/O	O	VOL_DOWN	L	H	H	Volume down
14	P04 (SO)	I/O	O	DI	-	L	L	Data (LC78212)
15	P05 (SI)	I/O	O	P_ON	L	H	H	Primary Relay ON
16	P06 (SCK)	I/O	O	CLK	-	-	L	Clock (LC78212)
17	P07 (INT4)	I/O	O	CE	H	L	L	CE (LC78212)
18	P17	I/O	O	IIC_CLOCK	-	L	L	I2C (EEPROM) (Pull up)
19	P16	I/O	I/O	IIC_DATA	-	L	L	I2C (EEPROM) (Pull up)
20	P15 (INT3)	I/O	I	POWER_TACT	L	H	H	U ver. Power SW
21	P14 (PPG)	I/O	O	REC1_MUTE	L	H	L	Not USE (Pull Up)
22	P13 (DVO)	I/O	O	REC2_MUTE	L	H	L	Not USE (Pull Up)
23	P12 (INT/TC1)	I/O	I	RC-5_IN	L	H	H	RC-5 Input
24	P11 (INT1)(BOOT2)	I/O	I/O	Boot2/TXD	-	-	-	Communication (Pull Up)
25	P10 (PWM3/TC3/PD03)(BOOT1)	I/O	I/O	Boot1/RXD	-	-	-	Communication (Pull Up)
26	P30 (AIN0)	I/O	I	REC_SEL_1	-	-	-	Rec out sel A/D
27	P31 (AIN1)	I/O	I	M_B_DOWN	L	H	H	Main B Down
28	P32 (AIN2)	I/O	I	ENC_1	L	H	H	Input Sel. Rotary Enc.
29	P33 (AIN3)	I/O	I	ENC_2	L	H	H	Input Sel. Rotary Enc.
30	P34 (AIN4/STOP2)	I/O	I	MODEL_SELE	-	-	-	PM7001:H/PM8001:L
31	P35 (AIN5/STOP3)	I/O	O	KILL IR	H	L	L	RC-5 Kill
32	P36 (AIN6/STOP4)	I/O	O	M_MUTE	H	L	L	Manual Mute
33	P37 (AIN7/STOP5)	I/O	I	CODE_SEL	L	H	L	Code Sele. H : 16/L : ?
34	VAREF	-	-	VAREF	-	-	-	A/D Reference
35	AVDD	-	-	AVDD	-	-	-	
36	AVSS	-	-	AVSS	-	-	-	0 V
37	P40	I/O	O	LED_STANDBY	L	H	L	Standby LED
38	P41	I/O	O	LED_PHONO	L	H	H	Phono LED
39	P42	I/O	O	LED_CD	L	H	H	CD LED
40	P43	I/O	O	LED_TUNER	L	H	H	Tuner LED
41	P44	I/O	O	LED_AUX/DVD	L	H	H	AUX/DVD LED
42	P45	I/O	O	LED_REC1	L	H	H	Rec 1 LED
43	P46	I/O	O	LED_REC2	L	H	H	Rec 2 LED
44	P47	I/O	O	LED_MUTE	L	H	H	Mute LED



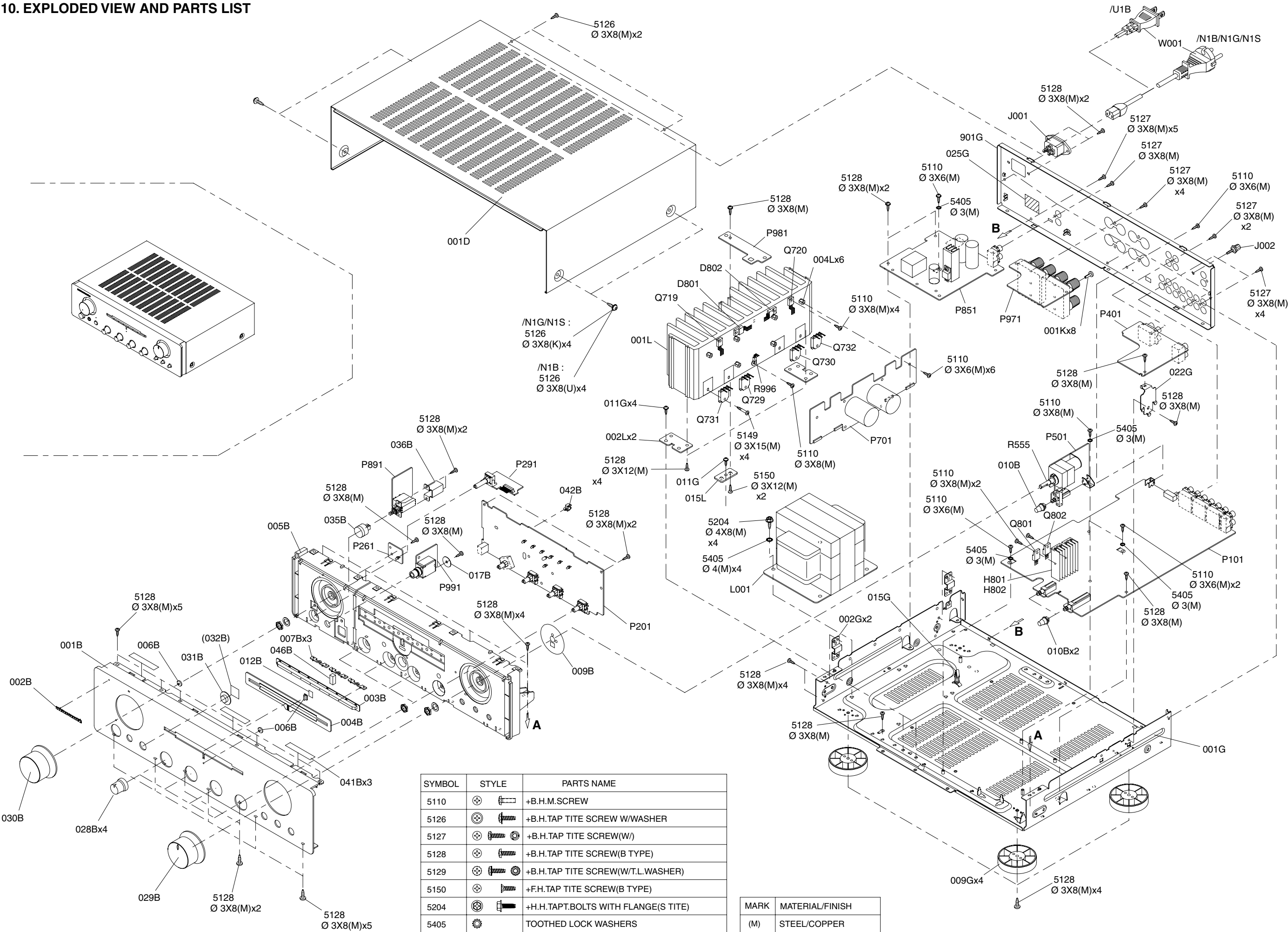
C991 B2
C992 B2
J991 A2
J992 B2
R991 B2
R992 B2
W991 B1



鉛フリー半田
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。
Lead-free Solder
When soldering, use the Lead-free Solder (Sn-Ag-Cu).



10. EXPLODED VIEW AND PARTS LIST



PWB NAME	POS. NO.	VERS. COLO	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
	001B	/U1B		00M14AJ248010	FRONT PANEL	FRONT PANEL (BL)PM7001
	002B	/U1B		00M14AJ251010	BADGE	MZ BADGE(GL)
	003B	/U1B		00M14AJ063110	ESCUTCHEON	CENTER ESC.(GL)
	004B	/U1B		00M14AJ259010	BUSHING	CENTER ESC.BUSH(BL)
	005B	/U1B		00M14AJ105020	CHASSIS	FRONT MOLD CHASSIS(BL)
	006B			00M14AJ355010	LENS	LED LENS (FAMILY)
	007B			00M14AJ355020	LENS	LED LENS (CENTER ESC.LENS)
	010B	/U1B		00M14AJ270020	BUTTON	FUNCTION BUTTON (BL)
	028B	/U1B		00M14AJ154500	KNOB	TONE/REC SELCTOR KNOB ASSY (BL)
	029B	/U1B		00M14AJ154020	KNOB	MASTER VOLUME KNOB POINTER (BL)
	030B	/U1B		00M14AJ154010	KNOB	INPUT SELECTOR KNOB (BL)
	031B	/U1B		00M14AJ355030	LENS	IR LENS (BL)
	035B	/U1B		00M14AJ270010	BUTTON	POWER BUTTON(BL)
	009G	/U1B		00M14AJ057110	LEG	LEGS (GOLD)
	▲ J001			0410500010090	TERMINAL	! MC991874 MAINS INLET
	J002			0460100070040	TERMINAL	T12-159-N001 GND TERMINAL
	▲ L001	/U1B		101010014008M	TRANSF.	# POWER TRANSFORMER FOR 120V
	P101			nsp	PWB ASSY	MAIN PWB (P101)
	P201			nsp	PWB ASSY	U-PRO/TONE PWB (P201)
	P261			nsp	PWB ASSY	STANDBY LED PWB (P261)
	P291			nsp	PWB ASSY	INPUT SEL PWB (P291)
	P401			nsp	PWB ASSY	PHONO AMP PWB (P401)
	P501			nsp	PWB ASSY	VOLUME PWB (P501)
	P701			nsp	PWB ASSY	POWER STAGE PWB (P701)
	P851			nsp	PWB ASSY	STANDBY PWB (P851)
	P891			nsp	PWB ASSY	POWER SW PWB (P891)
	P971			nsp	PWB ASSY	SPK TERMINAL PWB (P971)
	P991			nsp	PWB ASSY	HEADPHONE PWB (P991)
PACKING						
	001T	/U1B		00M14AJ851250	USER GUIDE	USER GUIDE U
	▲ W001	/U1B		611050010006S	MAINS CORD	# MAINS CORD UL/CSA 10A 125V
	Z001			3070100010088	UNIT KIT	REMOTE CONTROLLER RC4001PM
NOT STANDARD SPARE PART						
	001S			00M14AJ801010	PACKING CASE	PACKING CASE PM7001
	002S			00M14AJ809010	CUSHION	CUSHION(L/R)
	001D	/U1B		00M14AJ257010	LID	TOP COVER SLIT TYPE (BL)

NOTE : "nsp" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

11. ELECTRICAL PARTS LIST

PARTS INFORMATION

RESISTORS

- 1) 00MGD05 × × × 140, Carbon film fixed resistor, ±5% 1/4W
 2) 00MGD05 × × × 160, Carbon film fixed resistor, ±5% 1/6W

① — Resistance value

Examples ;

① Resistance value

0.1 Ω 001	10 Ω 100	1 kΩ 102	100 kΩ 104
0.5 Ω 005	18 Ω 180	2.7 kΩ 272	680 kΩ 684
1 Ω 010	100 Ω 101	10 kΩ 103	1 MΩ 105
6.8 Ω 068	390 Ω 391	22 kΩ 223	4.7 MΩ 475

Note : Please distinguish 1/4W from 1/6W by the shape of parts used actually.

CAPACITORS

CERAMIC CAP.

- 3) 00MDD1 × × × × 370 Ceramic capacitor
 Disc type
 Temp.coef.P350 ~N1000, 50V
- ② — Capacity value
 ③ — Tolerance

Examples ;

② Tolerance (Capacity deviation)

±0.25 pF 0
±0.5 pF 1
±5% 5

* Tolerance of COMMON PARTS handled here are as follows :

0.5 pF ~ 5 pF ±0.25 pF
6 pF ~ 10 pF ±0.5 pF
12 pF ~ 560 pF ±5%

③ Capacity value

0.5 pF 005	3 pF 030	100 pF 101
1 pF 010	10 pF 100	220 pF 221
1.5 pF 015	47 pF 470	560 pF 561

CERAMIC CAP.

- 4) 00MDK16 × × × 300, High dielectric constant ceramic capacitor
 Disc type
 Temp.chara. 2B4, 50V
- ④ — Capacity value

Examples ;

④ Capacity value

100 pF 101	1000 pF 102	10000 pF 103
470 pF 471	2200 pF 222	

ELECTROLY CAP. (⏏)

- 5) 00MEA × × × × × 10, Electrolytic capacitor
 One-way lead type, Tolerance ±20%
- ⑤ — Capacity value
 ⑥ — Working voltage

Examples ;

⑤ Capacity value

0.1 μF 104	4.7 μF 475	100 μF 107
0.33 μF 334	10 μF 106	330 μF 337
1 μF 105	22 μF 226	1100 μF 118
		2200 μF 228

⑥ Working voltage

6.3V 006	25V 025
10V 010	35V 035
16V 016	50V 050

FILM CAP. (⏏)

- 6) 00MDF15 × × × 350 Plastic film capacitor
 One-way type, Mylar ±5% 50V
 00MDF15 × × × 310 Plastic film capacitor
 One-way type, Mylar ±10% 50V
- ⑦ — Capacity value

Examples ;

⑦ Capacity value

0.001 μF (1000 pF) 102	0.1 μF 104
0.0018 μF 182	0.56 μF 564
0.01 μF 103	1 μF 105
0.015 μF 153	

NOTE ON SAFETY FOR FUSIBLE RESISTOR :

The suppliers and their type numbers of fusible resistors are as follows;

1. KOA Corporation

Part No. (MJI)	Type No. (KOA)	Description
00MNH05 × × × 140	RF25S × × × × ΩJ	(±5% 1/4W)
00MNH05 × × × 120	RF50S × × × × ΩJ	(±5% 1/2W)
00MNH85 × × × 110	RF73B2A × × × × ΩJ	(±5% 1/10W)
00MNH95 × × × 140	RF73B2E × × × × ΩJ	(±5% 1/4W)

* Resistance value (0.1 Ω – 10 kΩ)

2. Matsushita Electronic Components Co., Ltd

Part No. (MJI)	Type No. (MEC)	Description
00MNF05 × × × 140	ERD-2FCJ × × ×	(±5% 1/4W)
00MRF05 × × × 140		
00MNF02 × × × 140	ERD-2FCG × × ×	(±2% 1/4W)
00MRF02 × × × 140		

* Resistance value

Examples ;

* Resistance value

0.1 Ω 001	10 Ω 100	1 kΩ 102	100 kΩ 104
0.5 Ω 005	18 Ω 180	2.7 kΩ 272	680 kΩ 684
1 Ω 010	100 Ω 101	10 kΩ 103	1 MΩ 105
6.8 Ω 068	390 Ω 391	22 kΩ 223	4.7 MΩ 475

ABBREVIATION AND MARKS

ANT. : ANTENNA	BATT. : BATTERY
CAP. : CAPACITOR	CER. : CERAMIC
CONN. : CONNECTING	DIG. : DIGITAL
HP : HEADPHONE	MIC. : MICROPHONE
μ-PRO : MICROPROCESSOR	REC. : RECORDING
RES. : RESISTOR	SPK : SPEAKER
SW : SWITCH	TRANSF. : TRANSFORMER
TRIM. : TRIMMING	TRS. : TRANSISTOR
VAR. : VARIABLE	X'TAL : CRYSTAL

NOTE ON FUSE :

Regarding to all parts of parts code **00MFS20xxx2xx**, replace only with Wickmann-Werke GmbH, Type 372 non glass type fuse.

NOTE ON SAFETY :

Symbol  Fire or electrical shock hazard. Only original parts should be used to replaced any part marked with symbol . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

安全上の注意 :

 がついている部品は、安全上重要な部品です。必ず指定されている部品番号の部品を使用して下さい。

PWB NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
					MAIN PWB P101 (0310100020078)	
P101	C303			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P101	C304			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P101	C305			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P101	C306			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P101	C307			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P101	C313			1340100425080	ELECT. CAP.	RA2-25V220ME3#8-T2
P101	C314			1340100425080	ELECT. CAP.	RA2-25V220ME3#8-T2
P101	C343			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P101	C344			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P101	C345			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P101	C346			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P101	C347			1340100425080	ELECT. CAP.	RA2-25V220ME3#8-T2
P101	C348			1340100425080	ELECT. CAP.	RA2-25V220ME3#8-T2
P101	C505			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P101	C506			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P101	C511			1340500084070	ELECT. CAP.	ROS-16V470MG3#PE-T2
P101	C512			1340500084070	ELECT. CAP.	ROS-16V470MG3#PE-T2
P101	C513			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P101	C514			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P101	C515			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P101	C516			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P101	C521			1340100455070	ELECT. CAP.	RA2-25V101MF3#8-T2
P101	C522			1340100455070	ELECT. CAP.	RA2-25V101MF3#8-T2
P101	C701			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P101	C702			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P101	C705			1340100455070	ELECT. CAP.	RA2-25V101MF3#8-T2
P101	C706			1340100455070	ELECT. CAP.	RA2-25V101MF3#8-T2
P101	C707			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P101	C708			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P101	C709			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P101	C710			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P101	C713			1340100865080	ELECT. CAP.	RA2-63V221MH5#8-S1
P101	C714			1340100865080	ELECT. CAP.	RA2-63V221MH5#8-S1
P101	C715			1340100865080	ELECT. CAP.	RA2-63V221MH5#8-S1
P101	C716			1340100865080	ELECT. CAP.	RA2-63V221MH5#8-S1
P101	C803			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P101	C804			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P101	C805			1340100455070	ELECT. CAP.	RA2-25V101MF3#8-T2
P101	C806			1340100455070	ELECT. CAP.	RA2-25V101MF3#8-T2
P101	C812			1340100595060	ELECT. CAP.	RA2-35V221MH3#8-T2
P101	C901			1340100665040	ELECT. CAP.	RA2-50V010ME3E#8-T2
P101	C902			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P101	C930			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P101	C931			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P101	D301			00D2760401905	DIODE	1SS133T77
P101	D501			00D2760401905	DIODE	1SS133T77
P101	D502			00D2760401905	DIODE	1SS133T77
P101	D503			00D2760401905	DIODE	1SS133T77
P101	D504			00D2760401905	DIODE	1SS133T77
P101	D701			00D2760645907	DIODE	MTZJ18A T77
P101	D702			00D2760645907	DIODE	MTZJ18A T77
P101	D703			00D2760645907	DIODE	MTZJ18A T77
P101	D704			00D2760645907	DIODE	MTZJ18A T77
P101	D705			00D2760401905	DIODE	1SS133T77
P101	D706			00D2760401905	DIODE	1SS133T77
P101	D707			00D2760401905	DIODE	1SS133T77
P101	D708			00D2760401905	DIODE	1SS133T77
P101	D803			00D2760645910	DIODE	MTZJ20A T77
P101	D804			00D2760645910	DIODE	MTZJ20A T77
P101	D805			00D2760401905	DIODE	1SS133T77
P101	D806			00D2760401905	DIODE	1SS133T77
P101	D901			00D2760401905	DIODE	1SS133T77
P101	D902			00D2760401905	DIODE	1SS133T77
P101	J301			0460100020090	TERMINAL	YKC21-3446
P101	J302			0460100030020	TERMINAL	YKC21-3077
P101	J303			0460100030020	TERMINAL	YKC21-3077

NOTE : "nsp" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

PWB NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P101	J304			0460100030020	TERMINAL	YKC21-3077
P101	J917			0450100010030	CONN.	B10P-MQ-C
P101	L901			0820100020050	RELAY	MR82-24USR
P101	L902			0820100020050	RELAY	MR82-24USR
P101	L903			1190100014090	COIL	BL02RN2R1N1A FERRITE BEAD
P101	Q302			2340100017040	IC	LC78212
P101	Q303			2340100017040	IC	LC78212
P101	Q305			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q306			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q307			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q308			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q309			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q310			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q311			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q312			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q313			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q314			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q315			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q316			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q317			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q318			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q319			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q320			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q501			00D2630609002	IC	NJM2068DDC +T
P101	Q502			00D2630609002	IC	NJM2068DDC +T
P101	Q503			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q504			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q505			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q506			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q507			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q508			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q509			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q510			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q511			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q512			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q513			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q514			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q515			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q516			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q517			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q518			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q519			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q520			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q521			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q522			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q701			00D2630609002	IC	NJM2068DDC +T
P101	Q702			00D2630609002	IC	NJM2068DDC +T
P101	Q703			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q704			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q705			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q706			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q707			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q708			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q709			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q710			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q711			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q712			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q713			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q714			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q715			00D2710168900	TRS.	2SA1145 (O)/(Y)TPE6
P101	Q716			00D2710168900	TRS.	2SA1145 (O)/(Y)TPE6
P101	Q717			00D2730281906	TRS.	2SC2705 (O)/(Y)TPE6
P101	Q718			00D2730281906	TRS.	2SC2705 (O)/(Y)TPE6
P101	Q741			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q742			2130500020050	TRS.	KTC3200 RANK=GR
P101	Q743			2110500020090	TRS.	KTA1268 RANK=GR
P101	Q744			2110500020090	TRS.	KTA1268 RANK=GR

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PWB NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P101	▲ Q801			2140500010050	TRS.	! 2SD1415A
P101	▲ Q802			2120500010090	TRS.	! 2SB1020A
P101	Q803			2110500010060	TRS.	KTA1267 RANK=Y
P101	Q804			2130500010020	TRS.	KTC3199 RANK=Y
P101	Q901			2130500010020	TRS.	KTC3199 RANK=Y
P101	Q902			2130500010020	TRS.	KTC3199 RANK=Y
P101	Q903			2130500010020	TRS.	KTC3199 RANK=Y
P101	Q904			2130500010020	TRS.	KTC3199 RANK=Y
P101	Q905			2110500010060	TRS.	KTA1267 RANK=Y
P101	Q906			00D2690206908	TRS.	KRC102M-AT(10K-10K)
P101	Q907			00D2690204900	TRS.	KRA102M-AT(10K-10K)
P101	Q908			00D2690206908	TRS.	KRC102M-AT(10K-10K)
P101	Q909			00D2690206908	TRS.	KRC102M-AT(10K-10K)
P101	Q910			00D2690206908	TRS.	KRC102M-AT(10K-10K)
P101	Q911			2110500010060	TRS.	KTA1267 RANK=Y
P101	Q912			00D2690206908	TRS.	KRC102M-AT(10K-10K)
P101	Q915			00D2690206908	TRS.	KRC102M-AT(10K-10K)
P101	Q916			00D2690206908	TRS.	KRC102M-AT(10K-10K)
P101	▲ R757			1210500024030	RES.	! CFP1/4CGTA100J
P101	▲ R758			1210500024030	RES.	! CFP1/4CGTA100J
P101	▲ R759			1210500024030	RES.	! CFP1/4CGTA100J
P101	▲ R760			1210500024030	RES.	! CFP1/4CGTA100J
P101	▲ R821			1210100054040	RES.	! CFPS1/4CMHTA-4R7J
P101	▲ R822			1210100054040	RES.	! CFPS1/4CMHTA-4R7J
P101	S701			0650100030030	SW	SPUN19
P101	S901			0650100020000	SW	SPUN194900
P101	S902			0640100010040	SW	SSSU122P09N-1
					U-PRO/TONE PWB P201 (0310100090088)	
P201	C204			1340101274090	ELECT. CAP.	RC2-25V100ME1#-T2
P201	C207			1340101274090	ELECT. CAP.	RC2-25V100ME1#-T2
P201	C251			1340101184050	ELECT. CAP.	RC2-10V221MG1#-T2
P201	C253			1340101184050	ELECT. CAP.	RC2-10V221MG1#-T2
P201	C254			1340101274090	ELECT. CAP.	RC2-25V100ME1#-T2
P201	C257			1340101274090	ELECT. CAP.	RC2-25V100ME1#-T2
P201	C601			1340101204080	ELECT. CAP.	RC2-16V220ME1#-T2
P201	C602			1340101204080	ELECT. CAP.	RC2-16V220ME1#-T2
P201	C611			1340101434010	ELECT. CAP.	RC2-50V2R2MD1#-T2
P201	C612			1340101434010	ELECT. CAP.	RC2-50V2R2MD1#-T2
P201	C615			1340101204080	ELECT. CAP.	RC2-16V220ME1#-T2
P201	C616			1340101204080	ELECT. CAP.	RC2-16V220ME1#-T2
P201	C617			1340101314080	ELECT. CAP.	RC2-25V101MG1#-T2
P201	C618			1340101314080	ELECT. CAP.	RC2-25V101MG1#-T2
P201	D202			2030500013020	DIODE	1D3 1A/200V
P201	D251			2630100010090	L.E.D.	LT3D8B RED LED
P201	D252			2630100010090	L.E.D.	LT3D8B RED LED
P201	D253			2630100010090	L.E.D.	LT3D8B RED LED
P201	D254			2630100010090	L.E.D.	LT3D8B RED LED
P201	D255			2630100010090	L.E.D.	LT3D8B RED LED
P201	D256			2630100010090	L.E.D.	LT3D8B RED LED
P201	D257			2630100010090	L.E.D.	LT3D8B RED LED
P201	D259			00D2760401905	DIODE	1SS133T77
P201	▲ D260			00D3939576903	DISPLAY	! SELU1E10CXM-S BLUE LED
P201	J205			0440100450000	CONN.	TSK-B04X-A1
P201	L201			1190100014090	COIL	BL02RN2R1N1A FERRITE BEAD
P201	L202			1190100014090	COIL	BL02RN2R1N1A FERRITE BEAD
P201	Q201			2439100016008	U-PRO	TMP86FH47UG WITHOUT SOFTWARE
P201	Q202			2350100037030	IC	LB1630 MOTOR DRIVE IC
P201	Q204			2130500010020	TRS.	KTC3199 RANK=Y
P201	Q205			00D2690204900	TRS.	KRA102M-AT(10K-10K)
P201	Q206			2130500010020	TRS.	KTC3199 RANK=Y
P201	Q207			00D2690204900	TRS.	KRA102M-AT(10K-10K)
P201	Q208			2350100024030	IC	PST600D-2 RESET IC
P201	Q209			00D2690204900	TRS.	KRA102M-AT(10K-10K)
P201	Q210			00D2690204900	TRS.	KRA102M-AT(10K-10K)
P201	Q211			2469100015000	IC	AT24C08AN-10SU-2.7 EEPROM
P201	Q212			00D2690204900	TRS.	KRA102M-AT(10K-10K)
P201	Q213			00D2690204900	TRS.	KRA102M-AT(10K-10K)

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PWB NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P201	Q215			00D2690206908	TRS.	KRC102M-AT(10K-10K)
P201	Q251			2620100010060	PHOTO UNIT	RPM6936-V4 (IR SENSOR)
P201	Q252			00D2690204900	TRS.	KRA102M-AT(10K-10K)
P201	Q253			2130500010020	TRS.	KTC3199 RANK=Y
P201	Q254			00D2690204900	TRS.	KRA102M-AT(10K-10K)
P201	Q255			00D2690204900	TRS.	KRA102M-AT(10K-10K)
P201	Q601			00D2630609002	IC	NJM2068DDC +T
P201	Q603			00D2630609002	IC	NJM2068DDC +T
P201	Q604			00D2630609002	IC	NJM2068DDC +T
P201	R605			0750100020070	VAR. RES.	4K14K124003J
P201	R606			0750100020070	VAR. RES.	4K14K124003J
P201	R621			0750100030000	VAR. RES.	RK14K1240D0P
P201	S251			0630100010010	ROTARY SW	SRBV17-F0020-11
P201	X201			142010004507S	FILTER	CSTLS8M00G53
					STANDBY LED PWB P261 (0310100170098)	
P261	D258			2630100010090	L.E.D.	LT3D8B RED LED
					INPUT SEL PWB P291 (0310100150038)	
P291	J291			0440100470060	CONN.	TSK-B04P-A1
P291	S291			0630100020040	ROTARY SW	SRRSIC
					PHONO AMP PWB P401 (0310100110018)	
P401	C403			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P401	C404			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P401	C405			1340100235070	ELECT. CAP.	RA2-10V471MG3#8-T2
P401	C406			1340100235070	ELECT. CAP.	RA2-10V471MG3#8-T2
P401	C413			1340100425080	ELECT. CAP.	RA2-25V220ME3#8-T2
P401	C414			1340100425080	ELECT. CAP.	RA2-25V220ME3#8-T2
P401	C417			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P401	C418			1340100465000	ELECT. CAP.	RA2-25V221MG3#8-T2
P401	J351			0460100030020	TERMINAL	YKC21-3077
P401	J401			0460100050080	TERMINAL	YKC21-3082:2L2 FG NI
P401	L401			1150100010018	COIL	320 MH CHOKE COIL (TOROIDAL)
P401	L402			1150100010018	COIL	320 MH CHOKE COIL (TOROIDAL)
P401	Q401			00D2630609002	IC	NJM2068DDC +T
					VOLUME PWB P501 (0310100120048)	
P501	C517			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P501	C518			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P501	J501			0450100030090	CONN.	10MQ-ST-L
P501	R555			0753100010018	VAR. RES.	RK16812MG
P501	S501			0650100010070	SW	SPUN126800 PUSH SWITCH FOR ALPS
					POWER STAGE PWB P701 (0310100060098)	
P701	C719			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P701	C720			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P701	▲ C801			1340500010008	ELECT. CAP.	! 15000UF/63V(MARANTZ ORIGINAL)
P701	▲ C802			1340500010008	ELECT. CAP.	! 15000UF/63V(MARANTZ ORIGINAL)
P701	C951			1340100655010	ELECT. CAP.	RA2-50VR47ME3#8-T2
P701	C952			1340100655010	ELECT. CAP.	RA2-50VR47ME3#8-T2
P701	C953			1340100445040	ELECT. CAP.	RA2-25V470ME3#8-T2
P701	C954			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P701	▲ D801			2040500030040	DIODE	! FRH10A15
P701	▲ D802			2040500020010	DIODE	! FCH10A15
P701	D951			2010500013060	DIODE	HSS81150V 150MA
P701	D952			2010500013060	DIODE	HSS81150V 150MA
P701	▲ G801			1890100010020	CAP.COMP.	! RFD2B474K 0.47UF+6.8OHM
P701	J751			0450100020060	CONN.	IMSA-1068-06Z042 6P
P701	J752			0450100020060	CONN.	IMSA-1068-06Z042 6P
P701	J753			0450100020060	CONN.	IMSA-1068-06Z042 6P
P701	J754			0450100020060	CONN.	IMSA-1068-06Z042 6P
P701	▲ KT01			2170500010040	TRS.	! 2SA1186/2SC2837 PAIR (Q729/Q731, Q730/Q732)
P701	Q719			2130500040010	TRS.	TRANSISTOR C3419 Y 40V 0.8A PC=1.2W (5W)
P701	Q720			2130500040010	TRS.	TRANSISTOR C3419 Y 40V 0.8A PC=1.2W (5W)
P701	Q721			00D2730281906	TRS.	2SC2705 (O)/(Y)TPE6
P701	Q722			00D2730281906	TRS.	2SC2705 (O)/(Y)TPE6
P701	Q723			00D2710168900	TRS.	2SA1145 (O)/(Y)TPE6
P701	Q724			00D2710168900	TRS.	2SA1145 (O)/(Y)TPE6
P701	Q725			00D2730333003	TRS.	2SC3423 (O/Y)
P701	Q726			00D2730333003	TRS.	2SC3423 (O/Y)
P701	Q727			00D2710202002	TRS.	2SA1360 (O/Y)

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PWB NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P701	Q728			00D2710202002	TRS.	2SA1360 (O/Y)
P701	▲ Q729			nsp	TRS.	! 2SC2837(R/O) PAIR WITH Q731 ORDER AT KT01
P701	▲ Q730			nsp	TRS.	! 2SC2837(R/O) PAIR WITH Q732 ORDER AT KT01
P701	▲ Q731			nsp	TRS.	! 2SA1186(R/O) PAIR WITH Q729 ORDER AT KT01
P701	▲ Q732			nsp	TRS.	! 2SA1186(R/O) PAIR WITH Q730 ORDER AT KT01
P701	Q951			2130500020050	TRS.	KTC3200 RANK=GR
P701	Q952			2130500020050	TRS.	KTC3200 RANK=GR
P701	Q953			2110500020090	TRS.	KTA1268 RANK=GR
P701	Q954			2110500020090	TRS.	KTA1268 RANK=GR
P701	Q955			2130500010020	TRS.	KTC3199 RANK=Y
P701	Q956			2130500010020	TRS.	KTC3199 RANK=Y
P701	Q957			00D2690206908	TRS.	KRC102M-AT(10K-10K)
P701	Q958			2130500010020	TRS.	KTC3199 RANK=Y
P701	R753			1610100010040	TRIM RES.	RH063LCJ3R
P701	R754			1610100010040	TRIM RES.	RH063LCJ3R
P701	▲ R771			1210500034060	RES.	! CFP1/4CGTA221J
P701	▲ R772			1210500034060	RES.	! CFP1/4CGTA221J
P701	R966			00D2790034054	VARISTOR	PTH9M04BC222TS2F333
					STANDBY PWB P851 (0310100100088)	
P851	▲ C851			1330500010070	FILM CAP.	! CF-MH22E103M-C
P851	C852			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P851	C854			1340100665040	ELECT. CAP.	RA2-50V010ME3E#8-T2
P851	▲ C855			1340100505090	ELECT. CAP.	! RA2-25V222MJ6#8
P851	C856			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P851	C857			1340100595060	ELECT. CAP.	RA2-35V221MH3#8-T2
P851	C858			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P851	C859			1340100665040	ELECT. CAP.	RA2-50V010ME3E#8-T2
P851	▲ C861			1340100645080	ELECT. CAP.	! RA2-35V332MK8#8-S1
P851	▲ C862			1340100645080	ELECT. CAP.	! RA2-35V332MK8#8-S1
P851	▲ D851			2030500013020	DIODE	! 1D3 1A/200V
P851	▲ D852			2030500013020	DIODE	! 1D3 1A/200V
P851	▲ D853			2030500013020	DIODE	! 1D3 1A/200V
P851	▲ D854			2030500013020	DIODE	! 1D3 1A/200V
P851	▲ D855			2030500013020	DIODE	! 1D3 1A/200V
P851	▲ D856			2030500013020	DIODE	! 1D3 1A/200V
P851	▲ D857			2040500043040	DIODE	! D1NJ10 100V 1A SBD
P851	▲ D858			2040500043040	DIODE	! D1NJ10 100V 1A SBD
P851	▲ D859			2040500043040	DIODE	! D1NJ10 100V 1A SBD
P851	▲ D860			2040500043040	DIODE	! D1NJ10 100V 1A SBD
P851	▲ D861			2030500013020	DIODE	! 1D3 1A/200V
P851	▲ D862			2030500013020	DIODE	! 1D3 1A/200V
P851	▲ D863			2030500013020	DIODE	! 1D3 1A/200V
P851	▲ D864			2030500013020	DIODE	! 1D3 1A/200V
P851	▲ D865			2030500013020	DIODE	! 1D3 1A/200V
P851	▲ D866			2030500013020	DIODE	! 1D3 1A/200V
P851	▲ F851	/U1B		0520100180090	FUSE	# 6.3A 250V BS LISTED
P851	▲ G851			1890100010020	CAP.COMP.	! 0.47UF+6.8OHM RFD2B474K
P851	J251			0460100040050	TERMINAL	YKC21-3046 2P CINCH
P851	▲ L851	/U1B		102010001005M	TRANSF.	# STANDBY TRANSFORMER FOR 120V
P851	▲ L852			0820100017050	RELAY	# SDT-S-109DMR TV-810A RELAY
P851	L853			1190100014090	COIL	BL02RN2R1N1A FERRITE BEAD
P851	L854			1190100014090	COIL	BL02RN2R1N1A FERRITE BEAD
P851	L855			1190100014090	COIL	BL02RN2R1N1A FERRITE BEAD
P851	Q214			00D2690204900	TRS.	KRA102M-AT(10K-10K)
P851	Q851			2130500010020	TRS.	KTC3199 RANK=Y
P851	▲ Q852			2310100014080	IC	! NJM78L05A
P851	▲ Q853			2310100020050	IC	! NJM7805FA +5V
P851	▲ R855			1210500010040	RES.	! CFPB1/2CL12.5A1R0J
P851	▲ R856			1210500010040	RES.	! CFPB1/2CL12.5A1R0J
					POWER SW PWB P981 (0310100140008)	
P891	▲ C891			1320500030000	CER. CAP.	! DE0910 B 471K -KX 470PF 250V
P891	▲ S891			0610500020060	SW	# ESB92S17B TV-5 STROKE=1.5MM
					SPK TERMINAL PWB P971 (0310100070028)	
P971	C971			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P971	C972			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P971	C973			1340100705030	ELECT. CAP.	RA2-50V100ME3E#8-T2
P971	J974			0460100010060	TERMINAL	T6549-D

NOTE : "nsp" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

PWB NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P971	J975			0460100060010	TERMINAL	T6549-E
P971	L971			0820100030080	RELAY	G5PA-28 5A/250VAC OMRON
P971	L972			0820100030080	RELAY	G5PA-28 5A/250VAC OMRON
P971	L973			0820100020050	RELAY	MR82-24USR
P991	P991				HEADPHONE PWB P991 (0310100160068)	
P991	J991	/U1B		6430100030070	TERMINAL	YKB-5807 HP JACK(GOLD)

NOTE : "nsp" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.