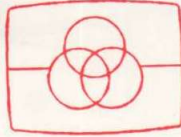


# Hi-Fi Stereo Amplifier

FA741/00

FA761/00

Service  
Service  
Service



Free service manuals  
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# Service Manual

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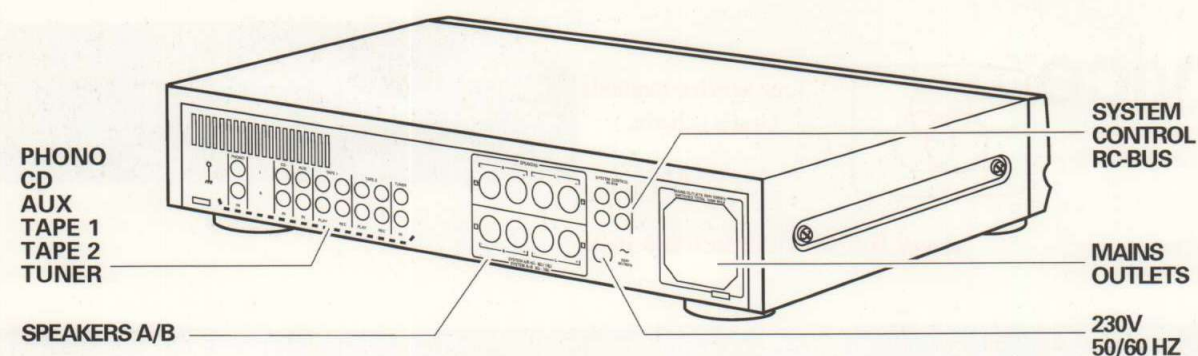


**PHILIPS**



## CONNECTIONS AND CONTROLS

### INSTALLATION



#### Connecting programme sources

Before connecting any programme sources, always switch any other connected units off. In addition, note the correct connection of the stereo channels: R: right (red), L: left (white).

**PHONO**.....Connect your analog record player to the PHONO sockets.

If your record player is provided with a separate earth cable, connect the cable to the earthing screw.

**CD**.....Connect your CD player to the CD sockets.

**AUX**.....Other signal sources, such as a DSR tuner, TV, etc., can be connected to the AUX sockets.

**TAPE 1**.....Connect the LINE IN sockets of your cassette deck, tape recorder or DAT recorder to the sockets TAPE 1 OUT. Connect the LINE OUT sockets of your cassette deck, tape recorder or DAT recorder to the sockets TAPE 1 IN.

**TAPE 2**.....Connect the LINE IN sockets of your DCC or video recorder to the sockets TAPE 2 OUT. Connect the LINE OUT sockets of your DCC or video recorder to the sockets TAPE 2 IN.

**TUNER**.....Connect your TUNER to the TUNER sockets. If you want to connect a DSR (Digital Satellite Radio) TUNER, connect it to the AUX-sockets.

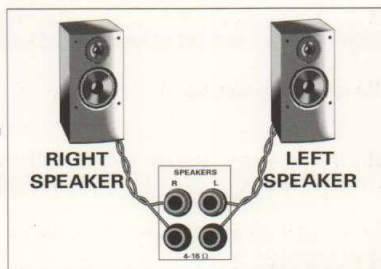
#### Connecting the speakers (only FA 741)

In order to take full advantage of your unit's superior play-back quality and overall performance, only quality speakers with corresponding load ratings should be used. Speakers should thus have an impedance of 4 to 16Ω. Maximum amplifier output is achieved with 4Ω speakers. In addition, always make sure that speaker wires are properly and tightly twisted to avoid protruding individual wires. These can cause shorts.

#### Important:

In addition, proper speaker connection is also important for quality sound. As seen from the listener, the right speaker must be connected to the right terminal (right channel) and the left speaker to the left terminal (left channel).

- One of the wires of a loudspeaker cable is marked, e.g. with a colour or rib. Connect the marked wire to the red terminal, the non-marked wire to the black one.
- Make sure that all loudspeakers are connected in the same way.



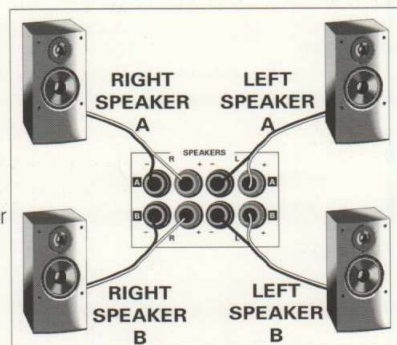
#### Connecting the speakers (only FA 761)

In order to take full advantage of your unit's superior play-back quality and overall performance, only quality speakers with corresponding load ratings should be used. When using one pair of speakers, they should thus have an impedance of 4 to 16Ω. In case you are connecting two pairs of speakers these should have an impedance of 8 to 16Ω. In addition, always make sure that speaker wires are properly and tightly twisted to avoid protruding individual wires. These can cause shorts.

#### Important:

In addition, proper speaker connection is also important for quality sound. As seen from the listener, the right speaker must be connected to the right terminal (right channel) and the left speaker to the left terminal (left channel).

- One of the wires of a loudspeaker cable is marked, e.g. with a colour or rib. Connect the marked wire to the red terminal, the non-marked wire to the black one.
- Make sure that all loudspeakers are connected in the same way.



#### RC-bus line connection

If you would like to remotely control other units of this series (for example, tuner, CD player), these units must be connected by means of the RC-BUS connection.

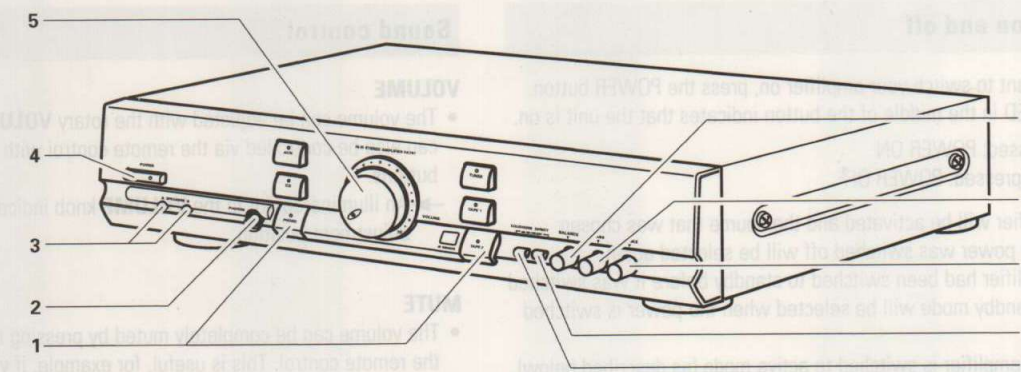
- Connect the cinch cable (orange jack) to the RC-BUS socket.

#### A.C. outlets

Up to three further units can be switched on and off via the amplifier. The power supply cables of the units must be connected to the A.C. outlets of the amplifier. These AC outlets are originally intended for the connection of a tuner, CD player and cassette deck, but you can also connect other units in your system.

- When other units are connected to the AC outlets, please make sure that the total sum of the power consumption of the connected units does not exceed 100 W, otherwise defects may occur.
- Do not connect a TV receiver to any of the AC outlets of the units in your system.
- To use this capability, ensure that the power switches of the connected units are switched to the ON position. The amplifier's power switch can then be used as the main switch for all the units.

## OPERATING ELEMENTS



#### Front of the amplifier

##### 1 SOURCE SELECTION:

- AUX**.....This switch is used to select the AUX (auxiliary) input.
- CD**.....This switch is used for selecting the CD (Compact Disc) input.
- PHONO**.....This switch is used to select the PHONO input.
- TUNER**.....This switch is used to select the TUNER (radio) input.
- TAPE 1**.....This switch is used to select the TAPE 1 (cassette deck) input.
- TAPE 2**.....This switch is used to select the TAPE 2 (cassette deck) input.

##### 2 PHONES

This socket is for connecting standard stereo headphones with a 6.3 mm jack. Volume is adjusted with the rotary VOLUME knob.

The amplifier's speaker outputs are automatically switched off when the headphone jack is inserted, and are automatically switched on again when it is removed.

##### 3 (only FA 761)

- SPEAKERS A**.....This switch is used to switch the speakers connected to the SPEAKERS A terminals on and off.
- SPEAKERS B**.....This switch is used to switch the speakers connected to the SPEAKERS B terminals on and off.

##### 4 POWER

This button is used for switching the amplifier on and off. When the power is switched off, the set is separated from the mains supply. (no power consumption).

##### 5 VOLUME

This control is used for adjusting the volume.

##### 6 BALANCE

This control is used to adjust the sound balance between the left and right channels.

##### 7 BASS

This is to adjust the bass tones.

##### 8 TREBLE

This is to adjust the high tones.

##### 9 DIRECT ON/OFF

This switch is used to bypass the BASS and TREBLE controls.

##### 10 LOUDNESS ON/OFF

This switch is used during playback to adapt the volume level to individual hearing sensitivity.

#### Remote Control

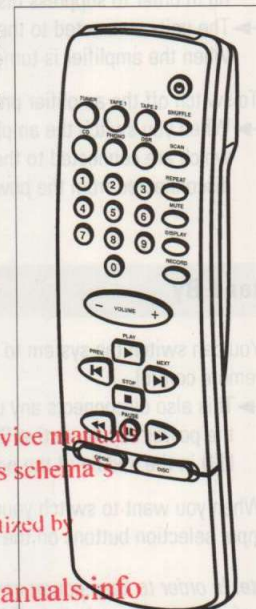
##### Changing the batteries

If the range of your infrared remote control seems to decrease, or if certain individual functions can no longer be carried out, you should replace the batteries.

Two mignon 1.5 Volt LR03 size AAA are required.

- To change the batteries, open the compartment on the back of the remote control. Ensure that the batteries are inserted properly (note the markings in the compartment).

And in the interest of the environment: Remember that batteries must always be disposed of properly.



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⏻ – This button is used to switch the unit to STAND BY.

**TUNER, TAPE 1, TAPE 2, CD, PHONO, DSR input selection buttons** – These buttons are used for selecting the various programme sources and for switching the unit on from STAND BY.

**10-button keypad** for directly selecting stations (TUNER, DSR) or tracks (CD).

**MUTE** – This button is used for muting the speakers.

**DISPLAY** – This button is used to toggle the display modes of the active source.

**VOLUME +/-** – These buttons are used for controlling the volume of the amplifier.

**TUNER buttons** (◀, ▶, ⏪, ⏩) – These buttons are used for controlling the basic functions of a connected PHILIPS tuner or PHILIPS DSR receiver.

**CD control buttons** (▶, ■, ◀, ⏪, ⏩, II, ⏪, ⏩, SHUFFLE, SCAN, REPEAT, OPEN, DISC) – These buttons are used for controlling the basic functions of a connected PHILIPS CD player.

**TAPE control buttons** (▶, ■, II, ⏪, ⏩, RECORD) – These buttons are used for controlling the basic functions of a connected PHILIPS cassette deck.



## OPERATION

### Switching on and off

- When you want to switch your amplifier on, press the **POWER** button. The yellow LED in the middle of the button indicates that the unit is on.
  - button depressed: POWER ON
  - button not depressed: POWER OFF
- The amplifier will be activated and the source that was chosen before the power was switched off will be selected again.
- If the amplifier had been switched to standby before it was switched off, the standby mode will be selected when the power is switched back on.
- When the amplifier is switched to active mode (as described below), the respective indicators and the LED in the power knob light up.
- The amplifier is muted for approximately 3 seconds when it is turned on in order to suppress disturbing initial signal noise.
- The units connected to the AC outputs are also provided with power when the amplifier is turned on.
- To switch off the amplifier press the **POWER** button again.
  - When you switch the amplifier off with **POWER**, all auxiliary units which are connected to the amplifier via the AC outlets are disconnected from the power supply.

### Stand By

- You can switch the system to **STAND BY** with the **⏻** button on the remote control.
  - This also disconnects any units connected to the a.c. outputs from the power supply. Active **STAND BY** mode is indicated by the yellow LED in the middle of the power button.
- When you want to switch your system on again, simply press one of the input selection buttons on the unit or on the remote control.

**Note:** In order to keep power consumption below 1W a stand-by transformer has been built in (FA761 only).  
The choice for this option is a consequence of Philips's environmental policy targeting to reduce unnecessary power consumption.

### Source Selection

- To select a listening source, press either the corresponding button on the unit or the corresponding button on the remote control.
  - The yellow LED next to the respective button on the amplifier comes on.

### Switching the speakers on and off (only FA 761)

- Use the **SPEAKERS A, B** buttons to switch the the speakers connected to the **SPEAKERS A** and the **SPEAKERS B** terminals on and off. You can also switch both speaker systems on and off at the same time.

### Sound control

#### VOLUME

- The volume can be adjusted with the rotary **VOLUME** knob. The volume can also be controlled via the remote control with the **VOLUME +/-** buttons.
  - An illuminated dot in the **VOLUME** knob indicates the respective adjustment position.

#### MUTE

- The volume can be completely muted by pressing the **MUTE** button on the remote control. This is useful, for example, if you want to take a telephone call and do not want to be distracted by music, news, etc., from your system. If the muting function is used when recording a tape, this has no effect on the subsequent recording volume level as only the speakers are muted.
  - The click you hear when you press the **MUTE** button comes from the relay which mutes the speakers.
  - The LED in the volume knob blinks when the **MUTE** function is active.
- The **MUTE** function can be deactivated by pressing the **MUTE** button again or by pressing the **VOLUME +** button on the remote control or any one of the input selection buttons.

#### BASS, TREBLE

- The **BASS** and **TREBLE** controllers can be used to individually adjust the higher and lower frequencies from the sound of your speakers. In this way, you can compensate for surrounding acoustic irregularities which may be caused, for example, by sound reflection behaviour on walls with relatively large, empty surface areas, or "damping" caused by furniture or other objects.

#### LOUDNESS ON/OFF

- Pressing the **LOUDNESS ON/OFF** button slightly accentuates the lower and higher frequencies which renders a more balanced overall sound during quieter passages. Its effectiveness depends in turn on the setting of the volume knob. The sound is thus optimally adapted to human hearing sensitivity, which is also dependent on the respective volume.
- If you have connected speakers which exhibit a great deal of bass, **LOUDNESS ON/OFF** should always remain off to achieve a more linear acoustic pattern. In this way, you compensate for excessive emphasis of the lower frequencies.

#### DIRECT ON/OFF

- The **DIRECT ON/OFF** switch can be used to deactivate the bass and treble control without changing the respective settings. This function merely bypasses the signal path through the bass and treble controls ensuring that the original sound is reproduced with the highest fidelity.

#### BALANCE

- For effective stereo playback, it is important that the sound emanates equally from both speakers. Acoustic equilibrium can be distorted by furniture groups or the listener's position in a room, thus distorting the impression of stereo sound.

The **BALANCE** controller can compensate for such distortions.



SPECIFICATION

**FA 741**

**Output power (DIN45500)**  
 Music (4Ω): 2 x 100W  
 Nominal (4Ω, 0.7% distortion, 1kHz): 2 x 50W  
 Nominal (8Ω, 0.7% distortion, 1kHz): 2 x 40W

**Input sensitivity / Impedance**  
 Line IN: 180mV / 47kΩ  
 Phono MM: 1.8mV / 47kΩ

**Distortion**  
 Nominal power -1dB, 8Ω, 1kHz: ≤ 0.01%

**Signal-to-noise ratio:** ≥ 94dB

**Power bandwidth:** < 10Hz ... > 100000Hz

**Frequency response**  
 Line IN: < 5Hz ... > 100000Hz  
 Phono MM: 20 ... 30000Hz

**Stereo crosstalk**  
 1kHz: > 60dB

**Damping factor (8Ω, 1kHz):** > 60

**Power supply**  
 Voltage: 230 V~  
 Frequency: 50/60Hz  
 Power consumption: < 230W  
 Standby power consumption: 12W

**Dimensions**  
 W x H x D: 435 x 75 (+12) x 300mm

**FA 761**

**Output power (DIN45500)**  
 Music (4Ω): 2 x 120W  
 Nominal (4Ω, 0.7% distortion, 1kHz): 2 x 70W  
 Nominal (8Ω, 0.7% distortion, 1kHz): 2 x 50W

**Input sensitivity / Impedance**  
 Line IN: 180mV / 47kΩ  
 Phono MM: 1.8mV / 47kΩ

**Distortion**  
 Nominal power -1dB, 8Ω, 1kHz: ≤ 0.008%

**Signal-to-noise ratio:** ≥ 97dB

**Power bandwidth:** < 10Hz ... > 100000Hz

**Frequency response**  
 Line IN: < 5Hz ... > 100000Hz  
 Phono MM: 20 ... 30000Hz

**Stereo crosstalk**  
 1kHz: > 60dB

**Damping factor (8Ω, 1kHz):** > 100

**Power supply**  
 Voltage: 230 V~  
 Frequency: 50/60Hz  
 Power consumption: < 320W  
 Standby power consumption: < 1W

**Dimensions**  
 W x H x D: 435 x 75 (+12) x 300mm

SERVICING HINTS

1. ESD

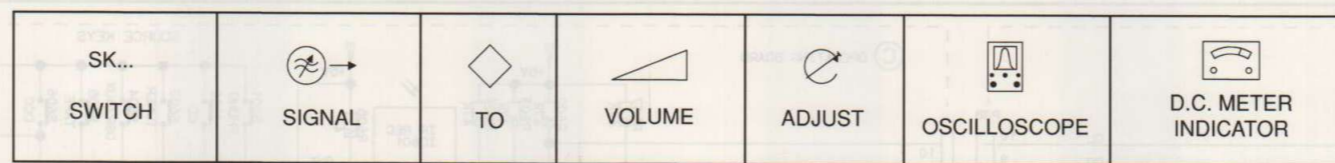


All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.  
 When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

2. Warning

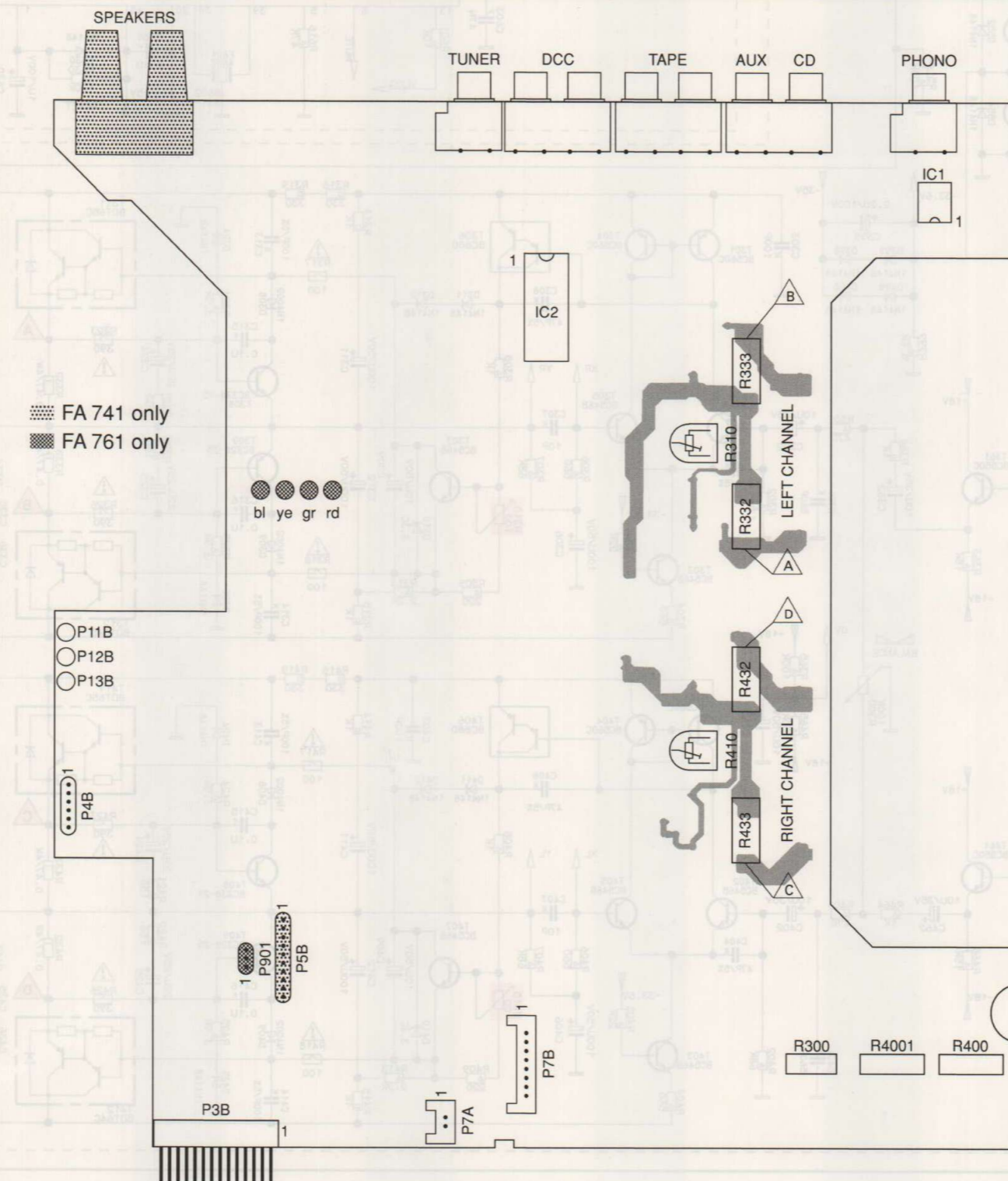
If the set is connected to mains voltage, there is a risk of shock-hazard voltages after the set is decased.

AMPLIFIER ALIGNMENT

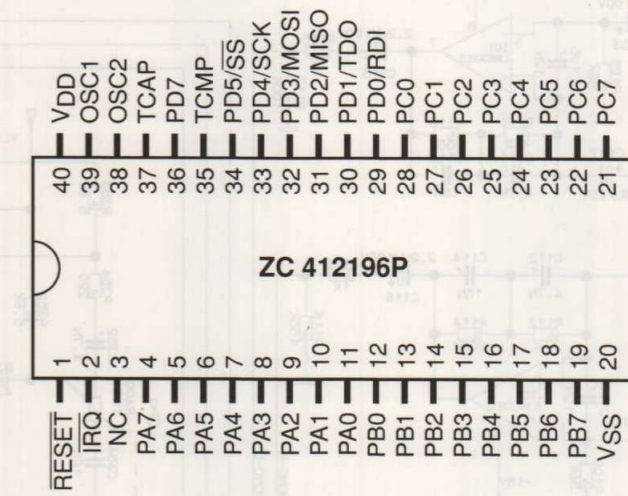


**IDLING CURRENT**

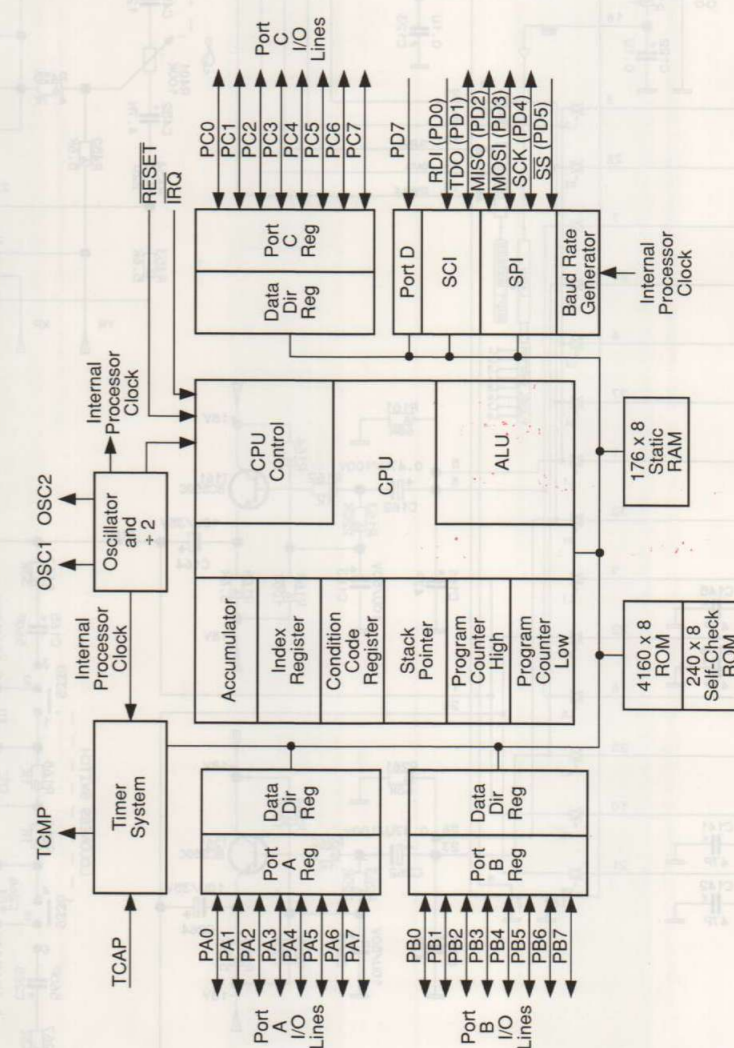
			Lch R 310	↔	6mV ±0.5mV FA 741 5mV ±0.2mV FA 761
		min.	Rch R 410	↔	6mV ±0.5mV FA 741 5mV ±0.2mV FA 761



IC BLOCK DIAGRAM

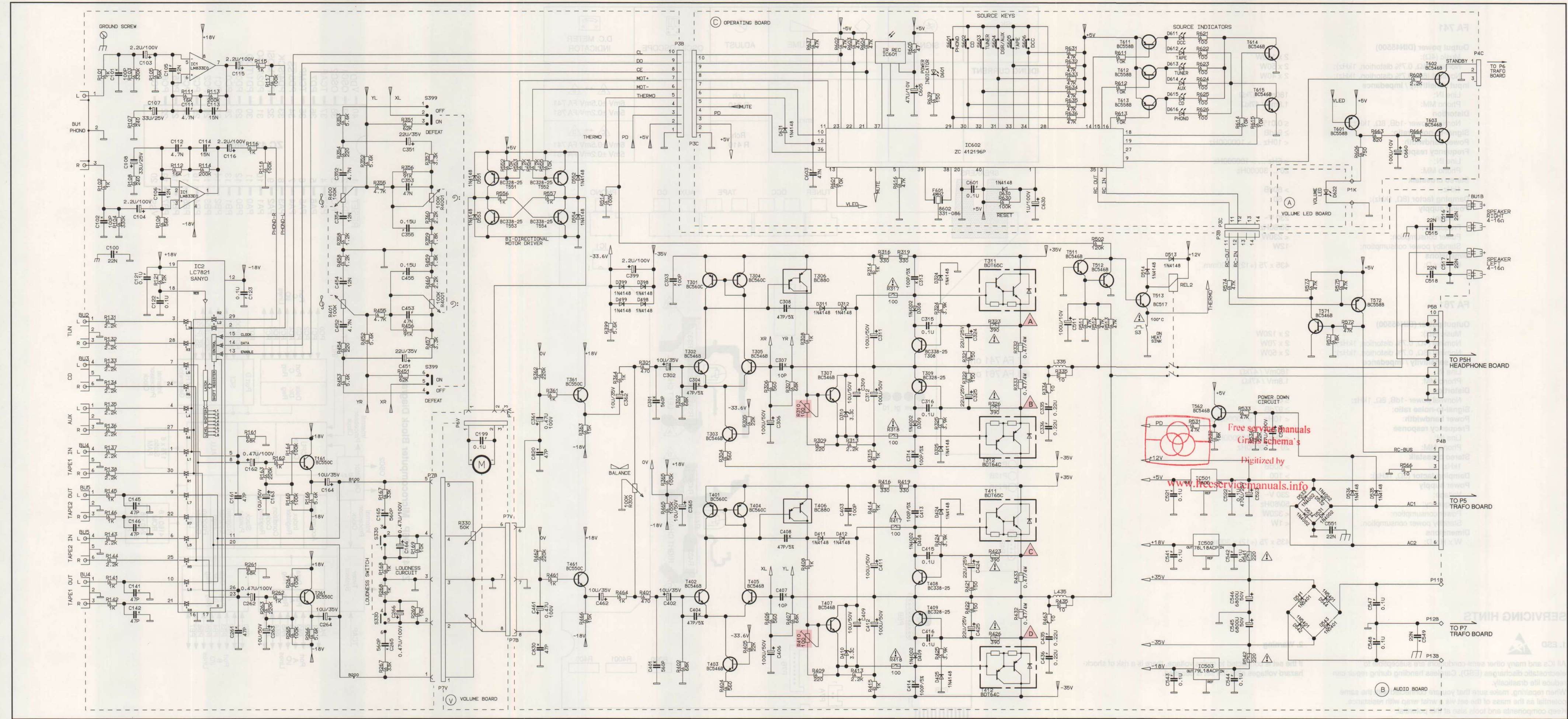


ZC 412196P Microcomputer Block Diagram



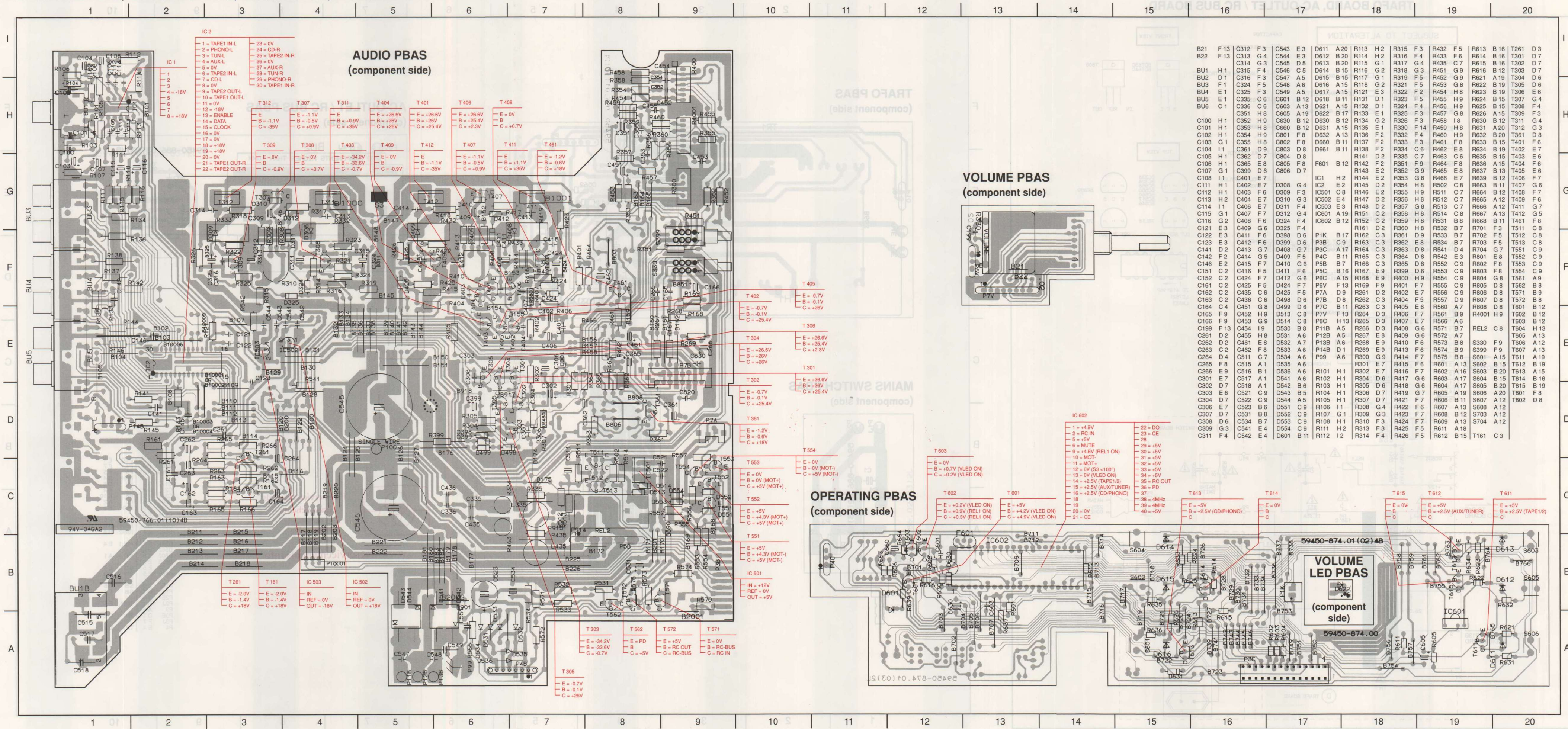


CIRCUIT DIAGRAM FA 741: AUDIO BOARD, OPERATING BOARD, VOLUME BOARD, VOLUME LED BOARD





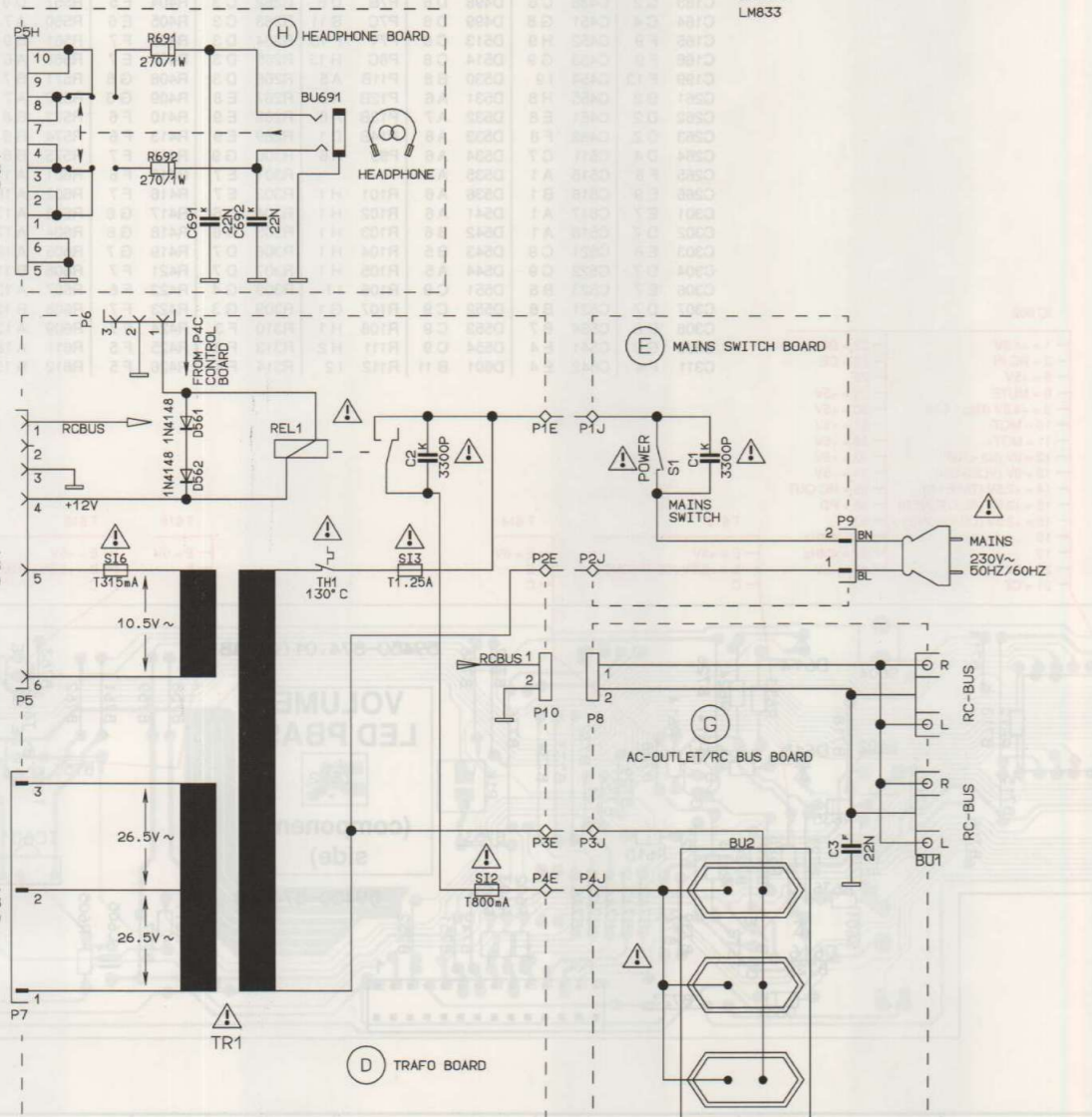
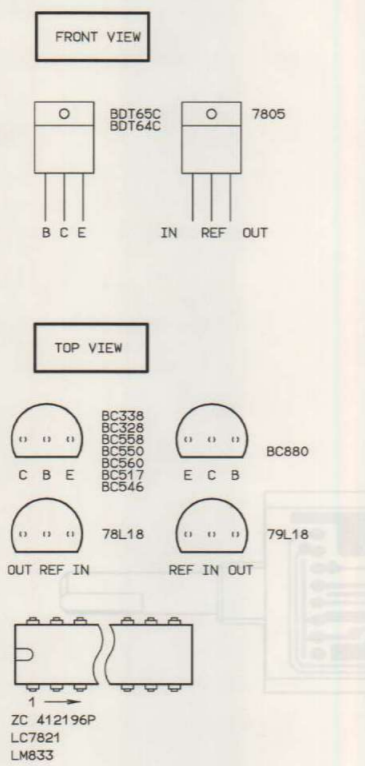
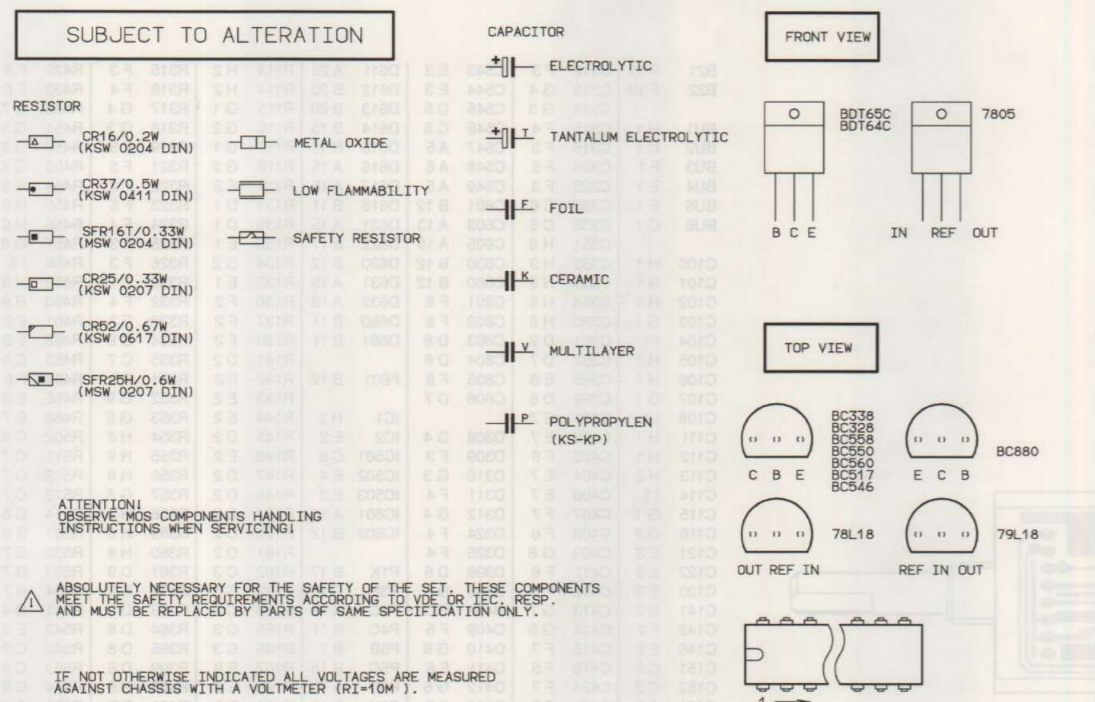
FA 741: AUDIO PBAS, OPERATING PBAS, VOLUME PBAS, VOLUME LED PBAS



B21	F 13	C312	F 3	C543	E 3	D611	A 20	R113	H 2	R315	F 3	R432	F 5	R613	B 16	T261	D 3
B22	F 13	C313	G 4	C544	E 3	D612	B 20	R114	H 2	R316	F 4	R433	F 6	R614	B 16	T301	D 7
BU1	H 1	C314	G 3	C545	D 5	D613	B 20	R115	G 1	R317	G 4	R435	C 7	R615	B 16	T302	D 7
BU2	D 1	C315	F 4	C546	C 5	D614	B 15	R116	G 2	R318	G 3	R451	G 9	R616	B 12	T303	D 7
BU3	F 1	C316	F 3	C547	A 5	D615	B 15	R117	G 1	R319	F 5	R452	G 8	R621	A 19	T304	D 6
BU4	E 1	C317	F 3	C548	A 5	D616	A 15	R118	G 2	R322	F 2	R454	H 8	R622	B 19	T305	D 6
BU5	E 1	C318	C 6	C601	B 12	D618	B 11	R131	D 1	R323	F 5	R455	H 9	R624	B 15	T307	G 4
BU6	C 1	C319	C 6	C603	A 13	D621	A 15	R132	D 1	R324	F 4	R456	H 9	R625	B 15	T308	F 3
C100	H 1	C352	H 8	C630	B 12	D630	B 12	R134	G 2	R326	F 3	R458	H 8	R630	B 12	T311	G 4
C101	H 1	C353	H 8	C660	B 12	D631	A 15	R135	E 1	R330	F 14	R459	H 8	R631	A 20	T312	G 3
C102	H 1	C354	H 8	C801	F 8	D632	A 13	R136	F 2	R332	F 4	R460	H 9	R632	B 20	T361	D 8
C103	G 1	C355	H 8	C802	F 8	D660	B 11	R137	F 2	R333	F 3	R461	F 8	R633	B 15	T401	F 6
C104	I 1	C361	D 9	C803	D 8	D661	B 11	R138	F 2	R334	C 6	R462	E 8	R634	B 19	T402	E 7
C105	H 1	C362	D 9	C804	D 8			R141	D 2	R335	C 7	R463	C 6	R635	B 15	T403	E 6
C106	H 1	C365	E 8	C805	F 8	F601	B 12	R142	F 2	R351	F 9	R464	F 8	R636	A 15	T404	F 6
C107	G 1	C399	D 6	C806	D 7			R143	E 2	R352	G 9	R465	E 8	R637	B 13	T405	E 6
C108	I 1	C401	E 7					R144	E 2	R353	G 8	R466	E 7	R639	B 12	T406	F 7
C111	H 1	E02	E 7	D308	G 4	IC2	E 2	R145	D 2	R354	H 8	R502	C 8	R663	B 11	T407	G 6
C112	H 1	E03	F 6	D309	F 3	IC501	C 8	R146	E 2	R355	H 9	R511	C 7	R664	B 12	T408	F 7
C113	H 2	E04	F 7	D310	G 3	IC502	E 4	R147	D 2	R356	H 8	R512	C 7	R665	A 12	T409	F 6
C114	I 1	E05	E 7	D311	F 4	IC503	E 3	R148	D 2	R357	H 8	R513	C 7	R666	A 12	T411	G 7
C115	G 1	E06	F 7	D312	G 4	IC601	A 19	R151	C 2	R358	H 8	R514	C 8	R667	A 13	T412	G 5
C116	G 2	E08	F 6	D324	F 4	IC602	B 12	R152	C 2	R359	H 8	R531	B 8	R668	B 11	T461	F 8
C121	E 3	E09	G 6	D325	F 4			R161	D 2	R360	H 8	R532	B 7	R701	F 3	T511	C 8
C122	E 3	E11	F 6	D398	D 6	P1K	B 17	R162	C 3	R361	D 9	R533	B 7	R702	F 5	T512	C 8
C123	E 3	E12	F 6	D399	D 6	P3B	C 9	R163	C 3	R362	D 8	R534	B 7	R703	F 5	T513	C 8
C141	D 2	E13	G 7	D408	G 7	P3C	A 17	R164	C 3	R363	D 8	R541	D 4	R704	G 7	T551	C 9
C142	F 2	E14	G 5	D409	F 5	P4C	B 11	R165	C 3	R364	D 8	R542	E 3	R801	E 8	T552	C 9
C146	E 2	E15	F 7	D410	G 6	P5B	B 7	R166	C 3	R365	D 8	R552	C 9	R802	F 8	T553	C 9
C151	C 2	E16	F 5	D411	F 6	P5C	B 16	R167	E 9	R399	D 6	R553	C 9	R803	F 8	T554	C 9
C152	C 2	E17	F 7	D412	G 6	P6C	A 15	R168	E 9	R400	H 9	R554	C 9	R804	G 8	T561	A 9
C161	C 2	E18	F 5	D424	F 7	P6V	F 13	R169	F 9	R401	F 7	R555	C 9	R805	D 8	T562	B 8
C162	C 2	E19	C 6	D425	F 6	P7A	D 9	R261	D 2	R402	F 7	R556	C 9	R806	D 8	T571	B 9
C163	C 2	E20	C 6	D428	D 6	P7B	D 8	R262	C 3	R404	F 5	R557	D 9	R807	D 8	T572	B 8
C164	C 4	E21	G 8	D499	D 6	P7C	B 11	R263	C 3	R405	E 6	R560	A 7	R808	D 8	T601	B 12
C165	F 9	E22	H 9	D513	C 8	P7V	F 13	R264	D 3	R406	F 7	R561	B 9	R809	H 9	T602	B 12
C166	F 9	E23	G 9	D514	C 8	P8C	H 13	R265	D 3	R407	E 7	R566	A 6	R810	E 7	T603	B 12
C199	F 13	E24	I 9	D530	B 8	P11B	A 5	R266	D 3	R408	G 6	R571	B 7	REL2	C 8	T604	H 13
C261	D 2	E25	H 8	D531	A 6	P12B	A 5	R267	E 8	R409	G 6	R572	A 7			T605	A 13
C262	D 2	E26	E 8	D532	A 7	P13B	A 6	R268	E 9	R410	F 6	R573	B 8	S330	F 9	T606	A 12
C263	C 2	E27	F 8	D533	A 6	P14B	D 1	R269	E 9	R413	F 6	R574	B 9	S399	F 9	T607	A 13
C264	D 4	E28	C 7	D534	A 6	P99	A 6	R300	G 9	R414	F 7	R575	B 8	S601	A 15	T611	A 19
C265	F 8	E29	A 1	D535	A 6	R301	E 7	R301	E 7	R415	F 6	R601	A 13	S602	B 15	T612	B 19
C266	E 9	E30	B 1	D536	A 6	R101	H 1	R302	F 7	R416	F 7	R602	A 16	S603	B 20	T613	A 15
C301	E 7	E31	A 1	D541	A 6	R102	H 1	R304	D 6	R417	G 6	R603	A 17	S604	B 15	T614	B 16
C302	D 7	E32	A 1	D542	B 6	R103	H 1	R305	D 6	R418	G 6	R604	A 17	S605	B 20	T615	B 19
C303	E 6	E33	C 9	D543	B 5	R104	H 1	R306	D 7	R419	G 7	R605	A 19	S606	A 20	T801	F 8
C304	D 7	E34	C 9	D544	A 5	R105	H 1	R307	D 7	R421	F 7	R606	B 11	S607	A 12	T802	D 8
C306	E 7	E35	B 6	D551	C 9	R106	I 1	R308	G 4	R422	F 6	R607	A 13	S608	A 12		
C307	D 7	E36	B 8	D552	C 9	R107	G 1	R309	G 3	R423	F 7	R608	B 12	S703	A 12		
C308	D 6	E37	B 7	D553	C 9	R108	H 1	R310	F 3	R424	F 7	R609	A 13	S704	A 12		
C309	G 3	E38	E 4	D554	C 9	R111	H 2	R313	F 3	R425	F 6	R611	A 18				
C311	F 4	E39	E 4	D601	B 11	R112	I 2	R314	F 4	R426	F 5	R612	B 15	T161	C 3		

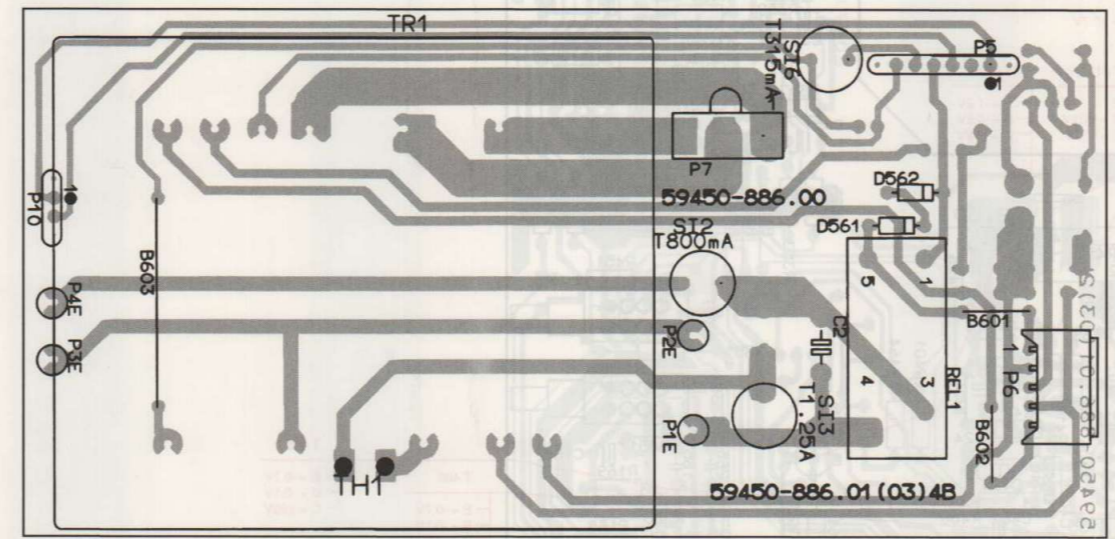


# CIRCUIT DIAGRAM FA 741: HEADPHONE BOARD, MAINS SWITCH BOARD, TRAF0 BOARD, AC-OUTLET / RC BUS BOARD

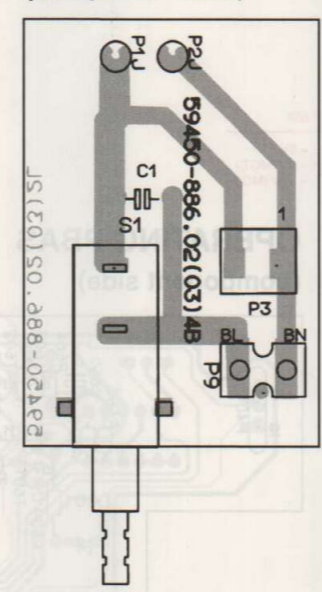


# FA 741: HEADPHONE PBAS, TRAF0 PBAS, MAINS SWITCH PBAS, AC-OUTLET / RC BUS PBAS

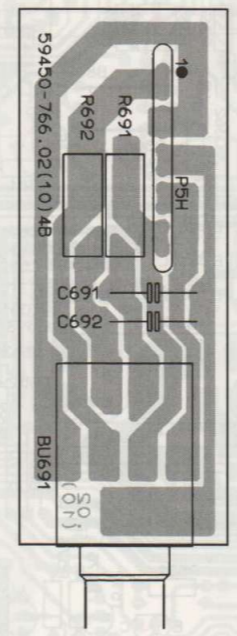
## TRAF0 PBAS (component side)



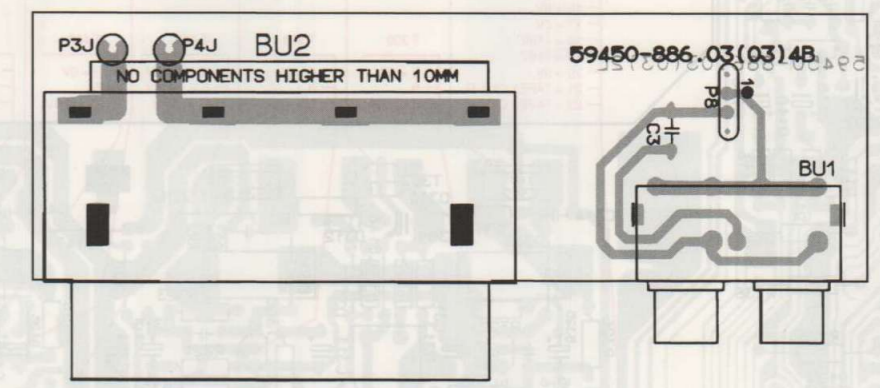
## MAINS SWITCH PBAS (component side)



## HEADPHONE PBAS (component side)



## AC-OUTLET / RC BUS PBAS (component side)

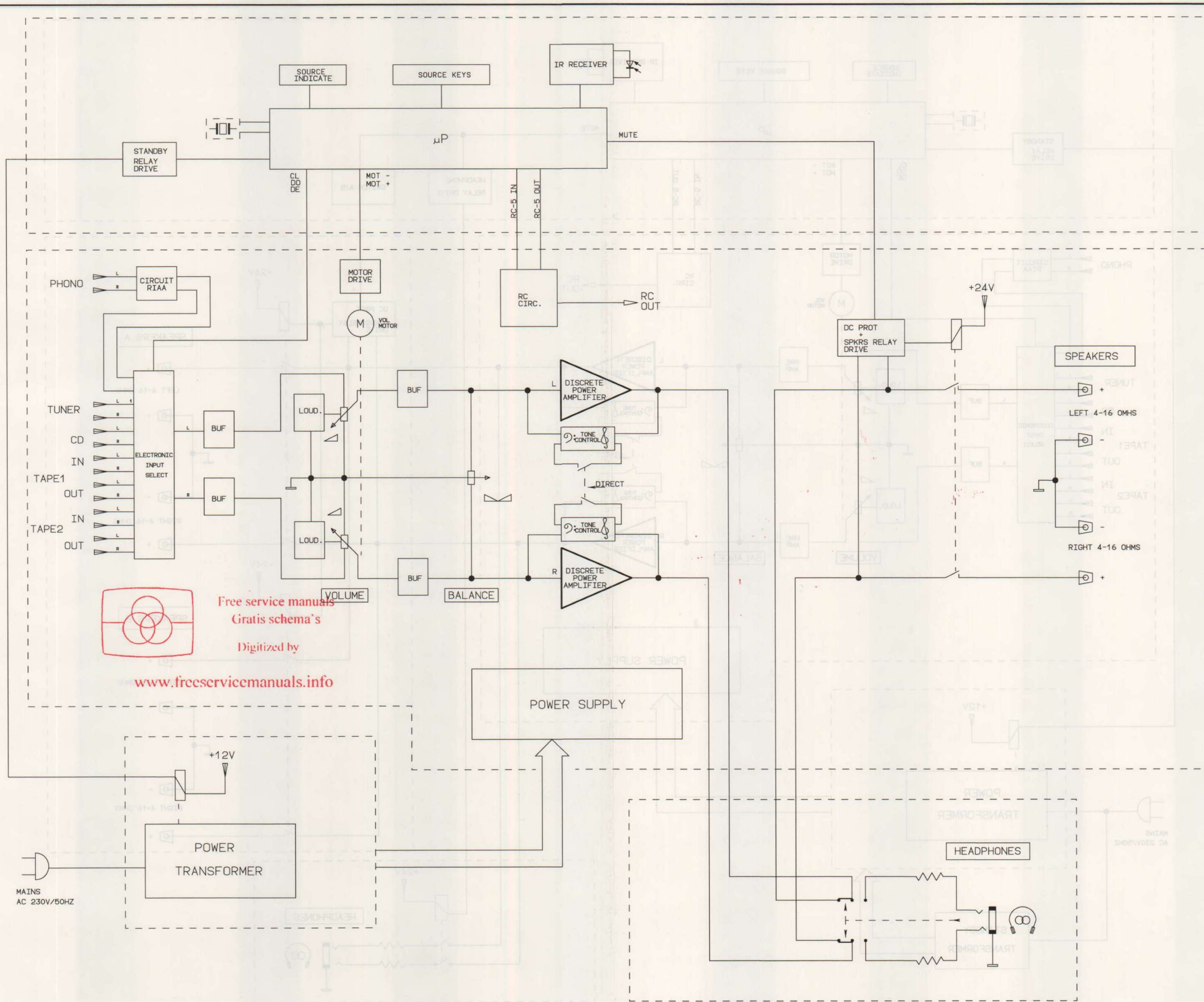


BU1	E 10	P4E	E 1
BU2	E 8	P4J	F 7
BU691	A 4	P5	F 5
		P5H	B 4
C1	B 1	P6	D 5
C2	D 4	P7	E 4
C3	E 9	P8	E 10
C802	E 5	P9	A 2
C803	E 5	P10	E 1
C804	E 5		
C805	E 5	R643	F 5
C691	B 4	R691	B 4
C692	A 4	R692	B 4
D561	E 4	REL1	E 4
D562	E 4	S1	A 1
D602	E 5		
D603	E 5		
D604	E 5	S12	E 4
D605	F 5	S13	D 4
		S14	D 4
P1E	D 3	S15	E 5
P1J	B 1	S16	F 4
P2E	D 3		
P2J	B 1	T601	E 5
P3	A 2		
P3E	D 1	TH1	D 2
P3J	F 7		
P4	E 4	TR1	D 2

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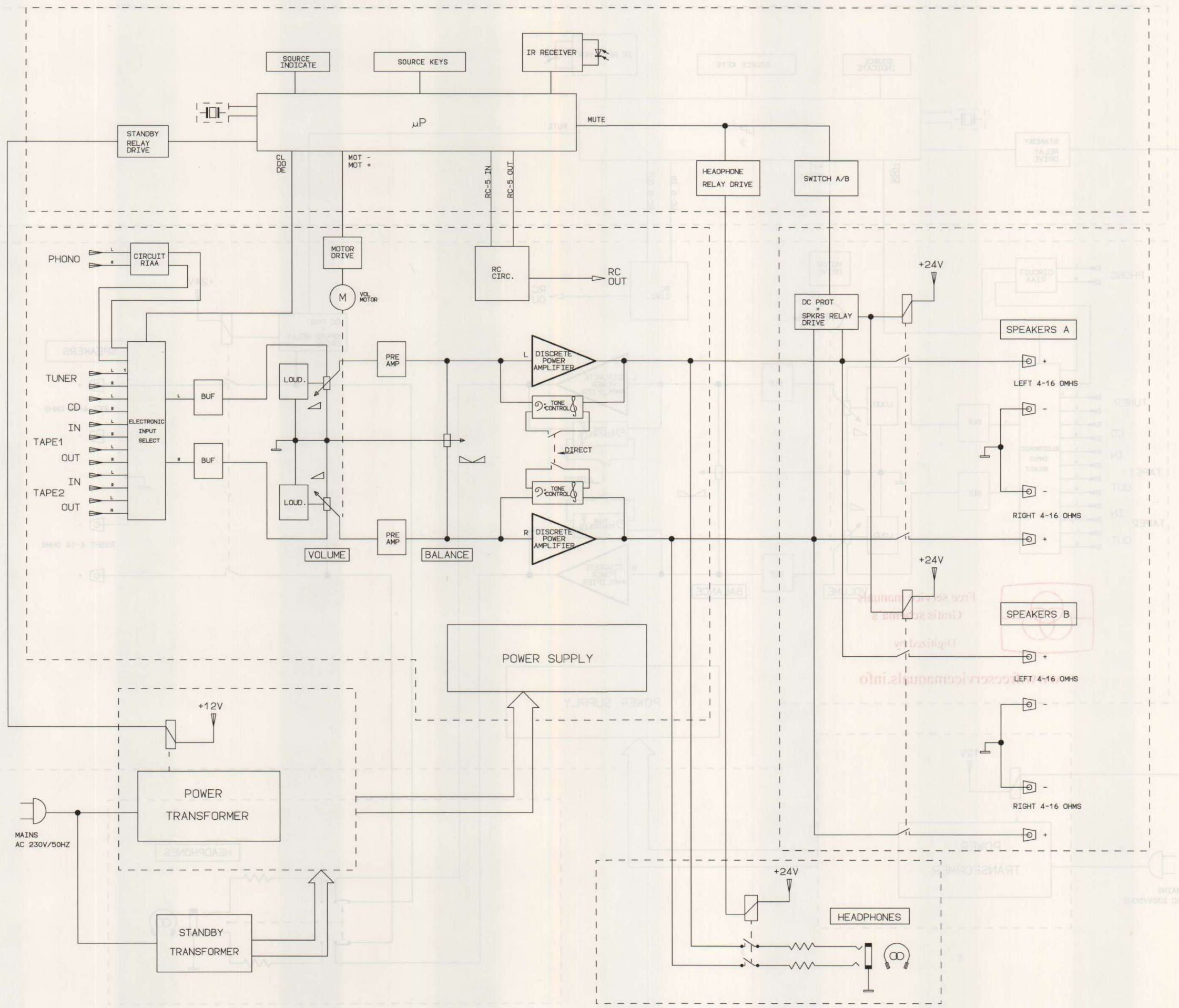
BLOCK DIAGRAM FA 741



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 Digitized by  
 www.freeservicemanuals.info

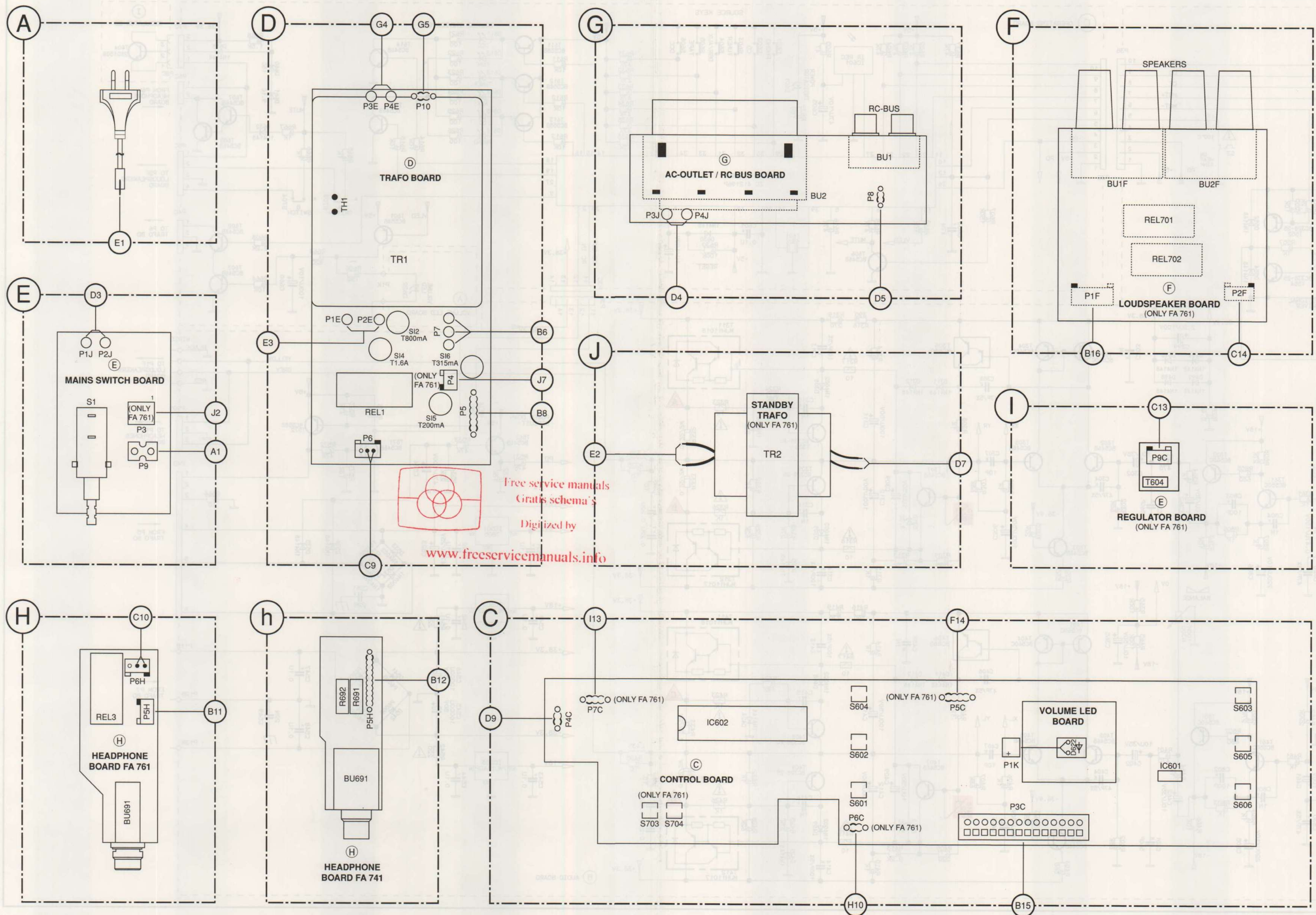


BLOCK DIAGRAM FA 761



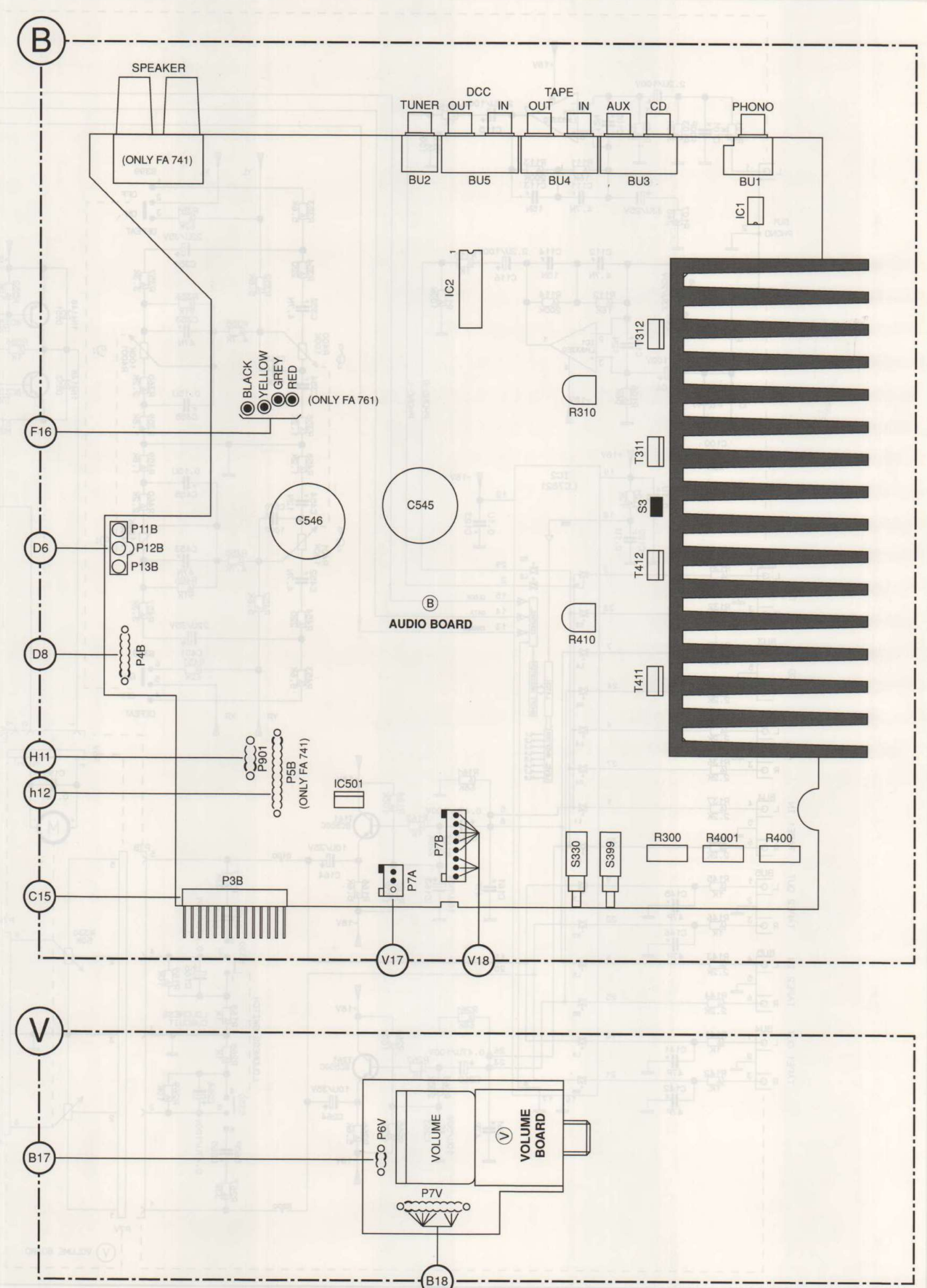


WIRING DIAGRAM



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 Grátis schema's  
 Digitized by  
 www.freesevicemanuals.info

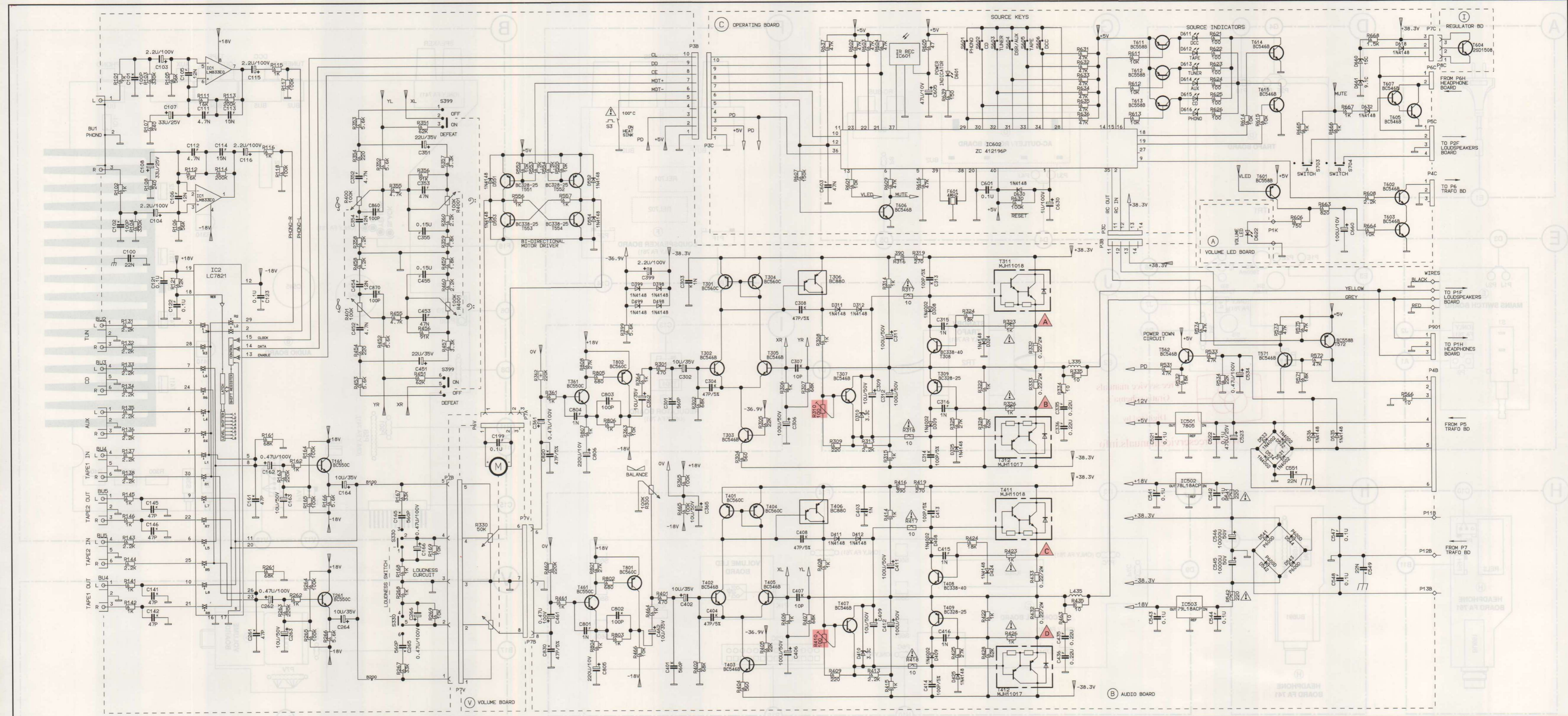
CIRCUIT DIAGRAM FA 761: AUDIO BOARD, OPERATING BOARD, VOLUME BOARD, VOLUME LED BOARD, REGULATOR BOARD





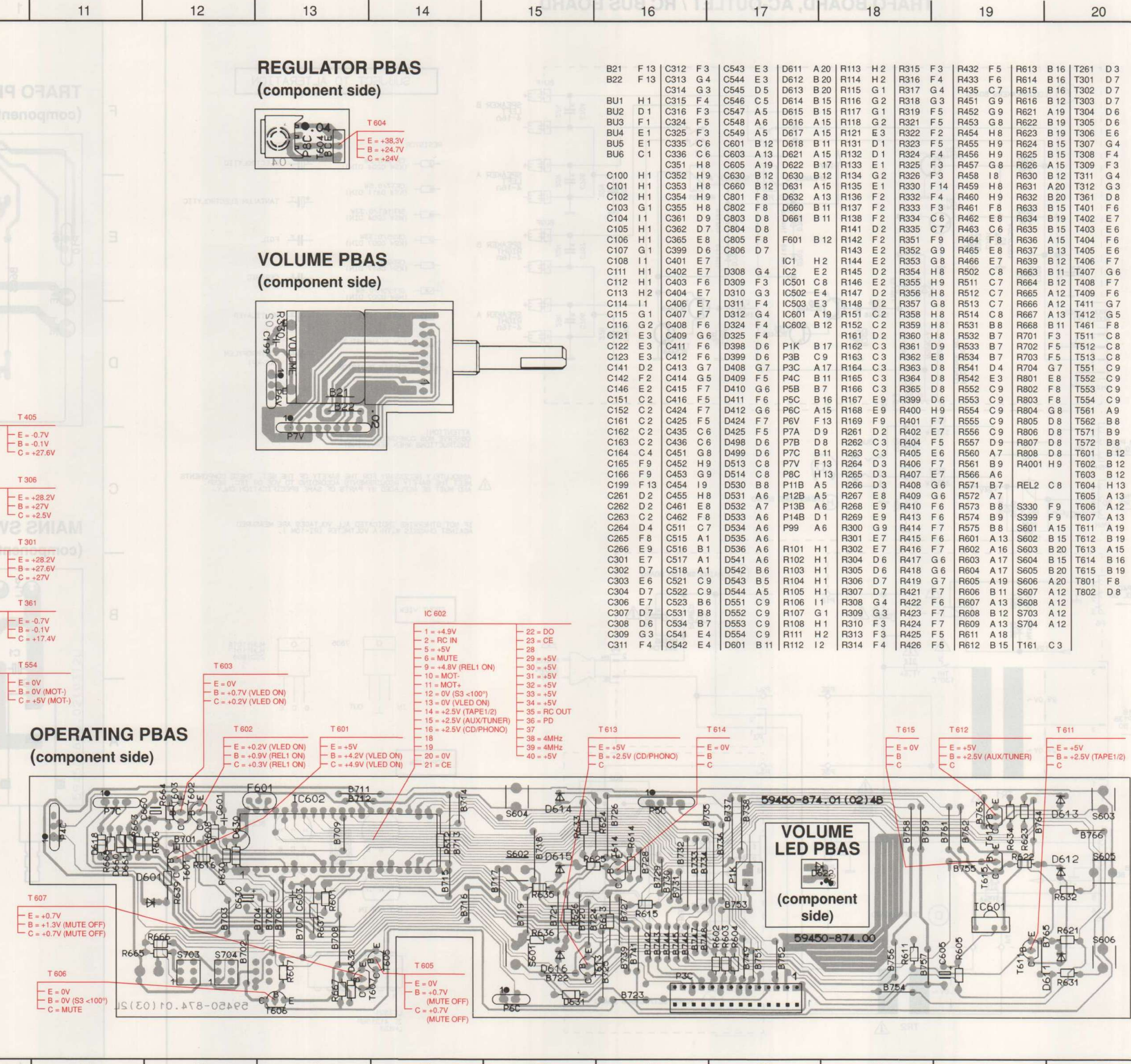
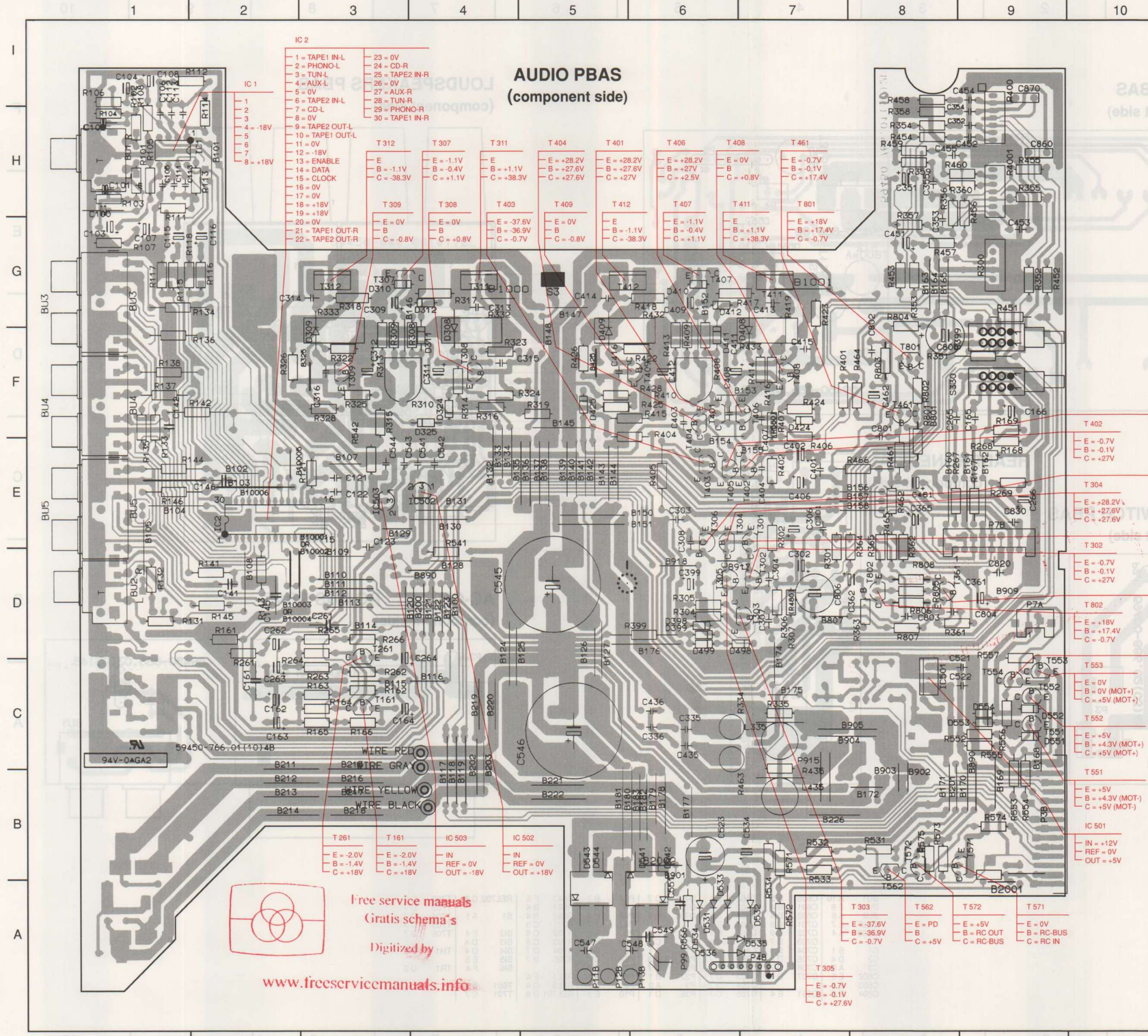
CIRCUIT DIAGRAM FA 761: AUDIO BOARD, OPERATING BOARD, VOLUME BOARD, VOLUME LED BOARD, REGULATOR BOARD

WIRING DIAGRAM



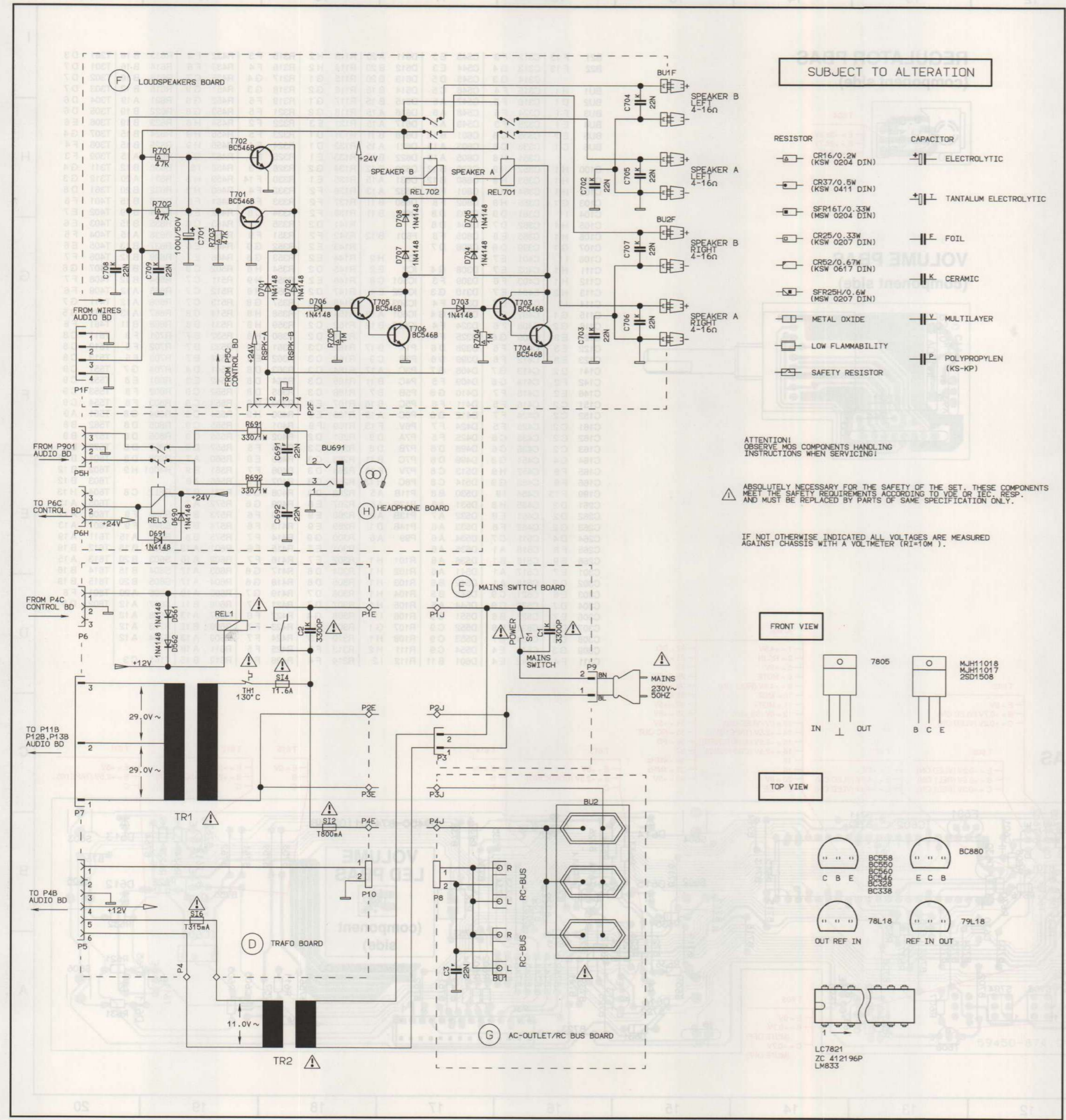


FA 761: AUDIO PBAS, OPERATING PBAS, VOLUME PBAS, VOLUME LED PBAS, REGULATOR PBAS

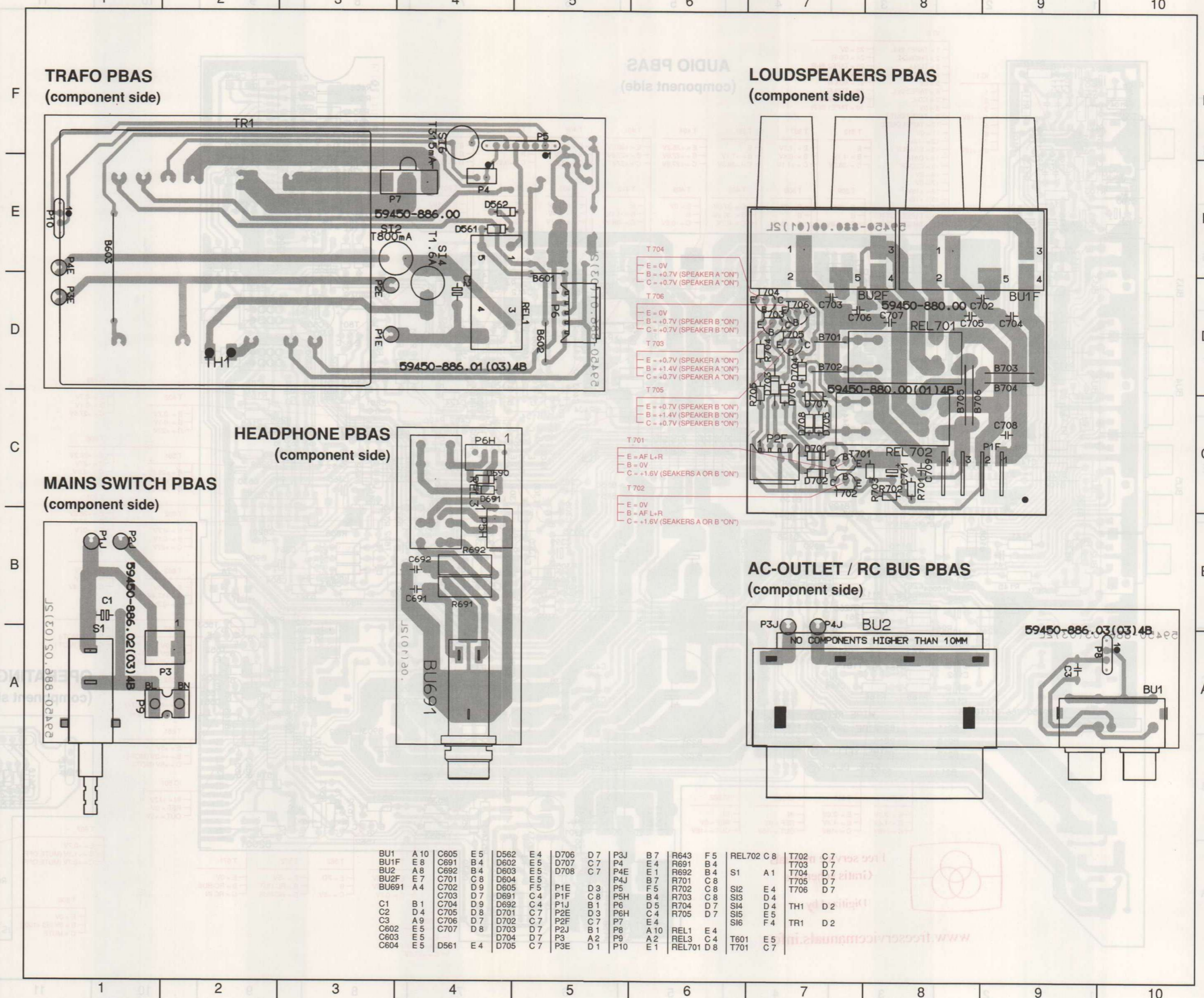




CIRCUIT DIAGRAM FA 761: HEADPHONE BOARD, MAINS SWITCH BOARD, LOUDSPEAKERS BOARD, TRAF0 BOARD, AC-OUTLET / RC BUS BOARD



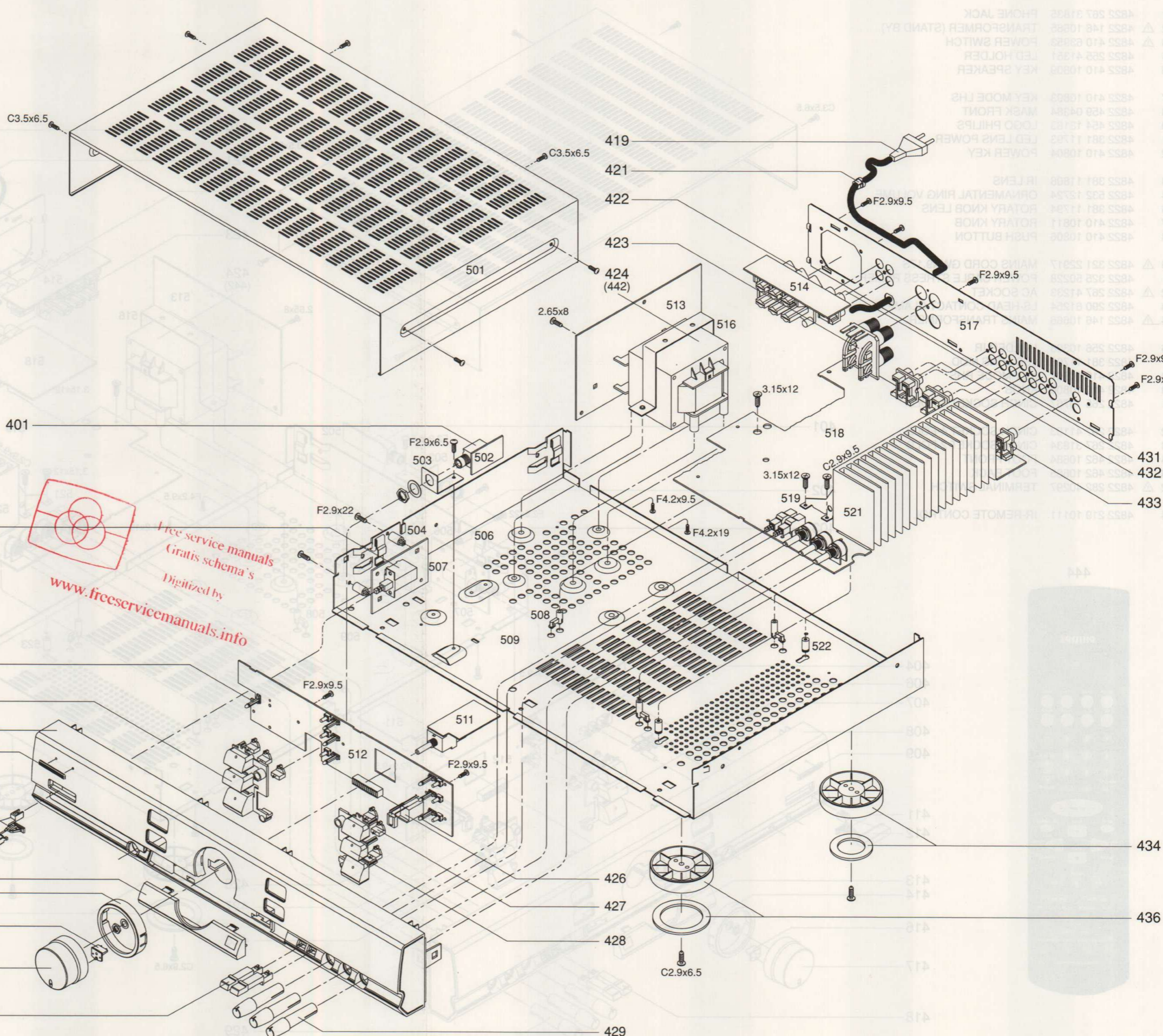
FA 761: HEADPHONE PBAS, TRAF0 PBAS, MAINS SWITCH PBAS, AC-OUTLET / RC BUS PBAS, LOUDSPEAKERS PBAS





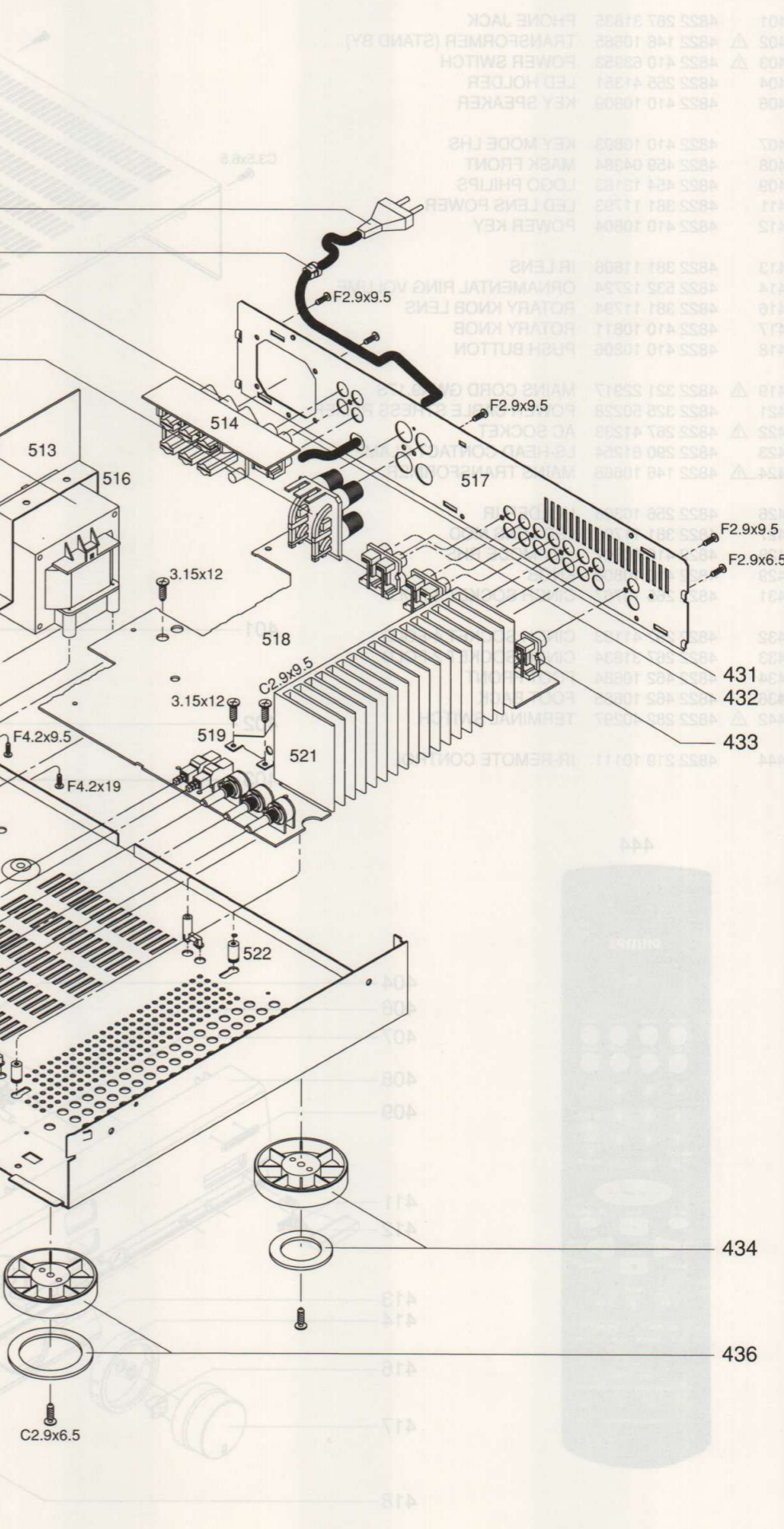
EXPLODED VIEW AND LIST OF MECHANICAL PARTS – FA 741

- 401 4822 267 31835 PHONE JACK
- 403  $\Delta$  4822 410 63953 POWER SWITCH
- 404 4822 255 41351 LED HOLDER
- 407 4822 410 10803 KEY MODE LHS
- 408 4822 459 04382 MASK FRONT
  
- 409 4822 454 13163 LOGO PHILIPS
- 411 4822 381 11793 LED LENS POWER
- 412 4822 410 10804 POWER KEY
- 413 4822 381 11806 IR LENS
- 414 4822 532 12724 ORNAMENTAL RING VOLUME
  
- 416 4822 381 11794 ROTARY KNOB LENS
- 417 4822 410 10805 ROTARY KNOB
- 418 4822 410 10806 PUSH BUTTON
- 419  $\Delta$  4822 321 22917 MAINS CORD GWN9.17S
- 421 4822 325 50228 POWER CABLE STRESS RELIEF
  
- 422  $\Delta$  4822 267 41233 AC SOCKET
- 423 4822 267 41185 LS-HEAD CONTACT CLAMP
- 424  $\Delta$  4822 146 10664 MAINS TRANSFORMER
- 426 4822 256 10308 HOLDER IR
- 427 4822 381 11795 LED LENS MODE
  
- 428 4822 410 10807 KEY MODE RHS
- 429 4822 410 10808 KNOB
- 431 4822 265 10767 CINCH SOCKET 4-FOLD
- 432 4822 267 41153 CINCH SOCKET 4-FOLD
- 433 4822 267 31834 CINCH SOCKET 2-FOLD
  
- 434 4822 462 10685 FOOT FRONT
- 436 4822 462 10684 FOOT BACK
- 442  $\Delta$  4822 282 40297 TERMINAL SWITCH
- 444 4822 219 10111 IR-REMOTE CONTROL



EXPLODED VIEW AND LIST OF MECHANICAL PARTS – FA 781

- 401 4822 267 31835 PHONE JACK
- 402  $\Delta$  4822 148 10285 TRANSFORMER (STAND BY)
- 403  $\Delta$  4822 410 63953 POWER SWITCH
- 404 4822 255 41351 LED HOLDER
- 407 4822 410 10803 KEY MODE LHS
- 408 4822 459 04382 MASK FRONT
  
- 409 4822 454 13163 LOGO PHILIPS
- 411 4822 381 11793 LED LENS POWER
- 412 4822 410 10804 POWER KEY
- 413 4822 381 11806 IR LENS
- 414 4822 532 12724 ORNAMENTAL RING VOLUME
  
- 416 4822 381 11794 ROTARY KNOB LENS
- 417 4822 410 10805 ROTARY KNOB
- 418 4822 410 10806 PUSH BUTTON
- 419  $\Delta$  4822 321 22917 MAINS CORD GWN9.17S
- 421 4822 325 50228 POWER CABLE STRESS RELIEF
  
- 422  $\Delta$  4822 267 41233 AC SOCKET
- 423 4822 267 41185 LS-HEAD CONTACT CLAMP
- 424  $\Delta$  4822 146 10664 MAINS TRANSFORMER
- 426 4822 256 10308 HOLDER IR
- 427 4822 381 11795 LED LENS MODE
  
- 428 4822 410 10807 KEY MODE RHS
- 429 4822 410 10808 KNOB
- 431 4822 265 10767 CINCH SOCKET 4-FOLD
- 432 4822 267 41153 CINCH SOCKET 4-FOLD
- 433 4822 267 31834 CINCH SOCKET 2-FOLD
  
- 434 4822 462 10685 FOOT FRONT
- 436 4822 462 10684 FOOT BACK
- 442  $\Delta$  4822 282 40297 TERMINAL SWITCH
- 444 4822 219 10111 IR-REMOTE CONTROL

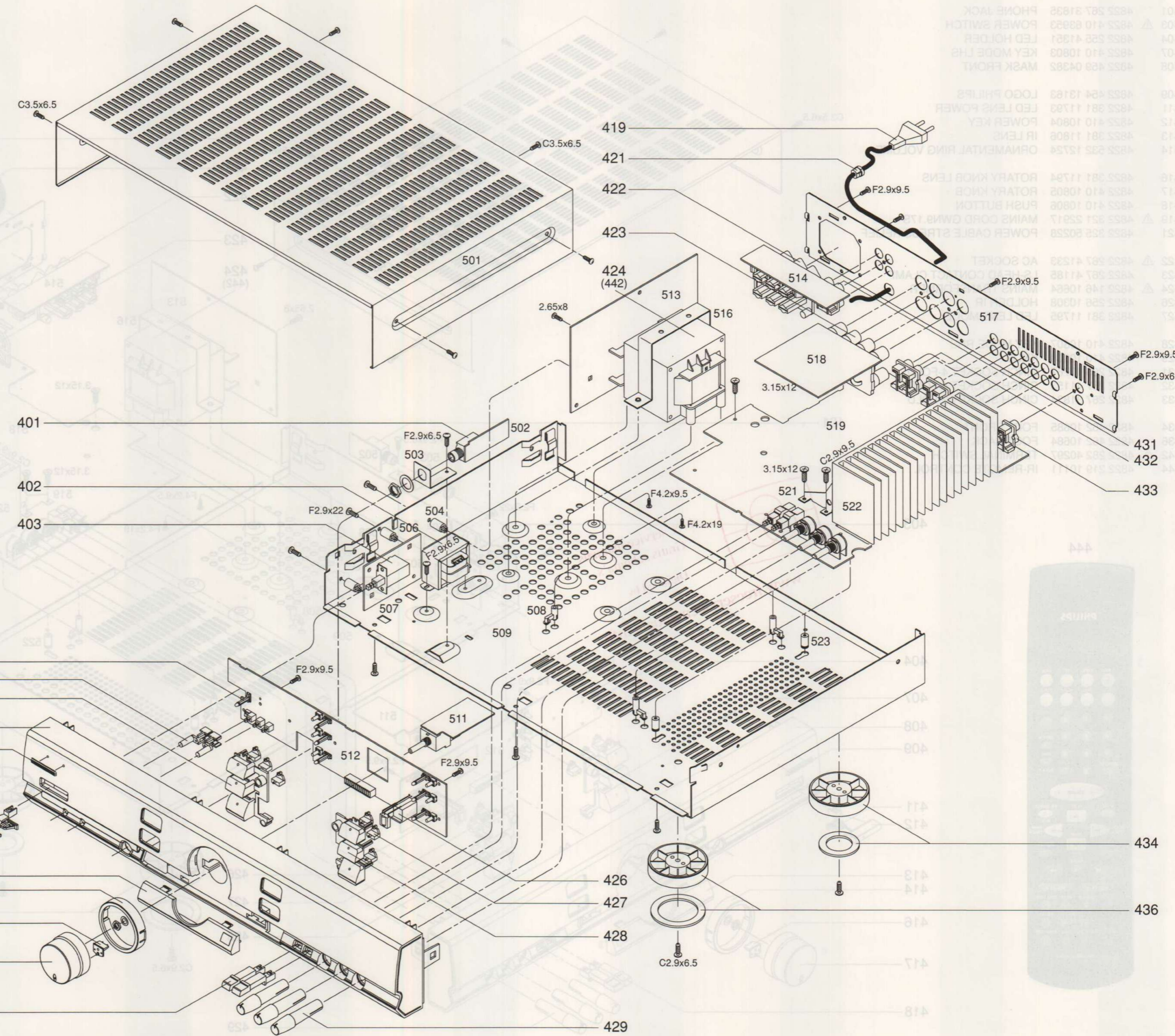




EXPLODED VIEW AND LIST OF MECHANICAL PARTS – FA 761


EXPLODED VIEW AND LIST OF MECHANICAL PARTS – FA 761

- 401 4822 267 31835 PHONE JACK
- 402  $\Delta$  4822 146 10665 TRANSFORMER (STAND BY)
- 403  $\Delta$  4822 410 63953 POWER SWITCH
- 404 4822 255 41351 LED HOLDER
- 406 4822 410 10809 KEY SPEAKER
  
- 407 4822 410 10803 KEY MODE LHS
- 408 4822 459 04384 MASK FRONT
- 409 4822 454 13163 LOGO PHILIPS
- 411 4822 381 11793 LED LENS POWER
- 412 4822 410 10804 POWER KEY
  
- 413 4822 381 11808 IR LENS
- 414 4822 532 12724 ORNAMENTAL RING VOLUME
- 416 4822 381 11794 ROTARY KNOB LENS
- 417 4822 410 10811 ROTARY KNOB
- 418 4822 410 10806 PUSH BUTTON
  
- 419  $\Delta$  4822 321 22917 MAINS CORD GWN9.17S
- 421 4822 325 50228 POWER CABLE STRESS RELIEF
- 422  $\Delta$  4822 267 41233 AC SOCKET
- 423 4822 290 61254 LS-HEAD CONTACT CLAMP
- 424  $\Delta$  4822 146 10666 MAINS TRANSFORMER
  
- 426 4822 256 10308 HOLDER IR
- 427 4822 381 11795 LED LENS MOD
- 428 4822 410 10807 KEY MODE RHS
- 429 4822 410 10808 KNOB
- 431 4822 265 10767 CINCH SOCKET 4-FOLD
  
- 432 4822 267 41153 CINCH SOCKET 4-FOLD
- 433 4822 267 31834 CINCH SOCKET 2-FOLD
- 434 4822 462 10684 FOOT FRONT
- 436 4822 462 10685 FOOT BACK
- 442  $\Delta$  4822 282 40297 TERMINAL SWITCH
  
- 444 4822 219 10111 IR-REMOTE CONTROL







**LIST OF ELECTRICAL PARTS – FA 741**



IC 1	4822 209 83163	LM833N
IC 2	4822 209 72748	LC7821
IC 501	5322 209 86518	MC7805CT
IC 502	4822 209 90579	MC78L18 ACP
IC 503	4822 209 90581	MC79L18 ACP
IC 601	4822 212 30842	TFMS5360 (IR-EYE)
IC 602	4822 209 15025	ZC412196 PMOT




4822 130 41096	BC550C
4822 130 61755	BC560C
4822 130 44461	BC546B
4822 130 63852	BC880
5322 130 44779	BC338-40
4822 130 40988	BC328-25
4822 130 62269	BDT65C
5322 130 61575	BDT64C
5322 130 44864	BC517
4822 130 44197	BC558B



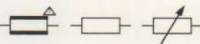
5322 130 30684	1N4002
4822 130 81781	Z-DIODE 3,3 B 0,5W
4822 130 30621	1N4148
5322 130 34939	1N5401
4822 130 83412	LED TLHY4405 TFK
4822 130 70034	LED TLHY4405 AS12



F601	4822 242 72527	CERAMIC RES. 4,0MHz
L335	4822 157 60207	HF-COIL




C1	△	4822 126 11805	3,3nF 20%
C2	△	4822 126 11805	3,3nF 20%
C545		4822 124 42455	6800µF 50V
C546		4822 124 42455	6800µF 50V



R300	4822 101 11691	POTENTIOMETER	
R310	4822 100 10075	100Ω TRIMPOT S10	
R317	△	4822 111 41024	100Ω 5% KSW SI B
R318	△	4822 111 41024	100Ω 5% KSW SI B
R323	△	4822 117 11898	390Ω 5% KSW SI A
R326	△	4822 117 11898	390Ω 5% KSW SI A
R330		4822 101 21253	POTENTIOMETER
R332		4822 117 12573	0,47Ω 10% MOW 0922
R333		4822 117 12573	0,47Ω 10% MOW 0922
R400		4822 101 11692	POTENTIOMETER
R401		4822 101 11692	POTENTIOMETER
R410		4822 100 10075	100Ω TRIMPOT S10
R417	△	4822 111 41024	100Ω 5% KSW SI B
R418	△	4822 111 41024	100Ω 5% KSW SI B
R423	△	4822 117 11898	390Ω 5% KSW SI A
R426	△	4822 117 11898	390Ω 5% KSW SI A
R432		4822 117 12573	0,47Ω 10% MOW 0922
R433		4822 117 12573	0,47Ω 10% MOW 0922
R541	△	4822 052 10221	220Ω 5% KSW SI A
R542	△	4822 052 10221	220Ω 5% KSW SI A

**MISCELLANEOUS**

RL1	△	4822 280 60594	RELAY G2R-1A 12V DC
RL2*		4822 280 60592	RELAY V23037-A0002-A102
		(*OPTIONAL) 4822 280 10317	RELAY G5Z 12V DC OMR
S3	△	4822 282 40298	THERMAL SWITCH 100° C
S330		4822 277 11646	SWITCH
S399		4822 277 11646	SWITCH
S601-606		4822 276 13293	SWITCH TACT
SI2	△	4822 071 58001	FUSE 800mA/T
SI3	△	4822 071 51252	FUSE 1,25A
SI6	△	4822 071 53151	FUSE 315mA
TH1	△	4822 282 40297	THERMAL SWITCH



F601	4822 242 72527	CERAMIC RES. 4,0MHz
L335	4822 157 60207	HF-COIL



## LIST OF ELECTRICAL PARTS – FA 761



IC 1	4822 209 83163	LM833N
IC 2	4822 209 72748	LC7821
IC 501	5322 209 86518	MC7805CT
IC 502	4822 209 90579	MC78L18 ACP
IC 503	4822 209 90581	MC79L18 ACP

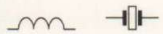
IC 601	4822 212 30842	TFMS5360 (IR-EYE)
IC 602	4822 209 15025	ZC412196P MOT



4822 130 41096	BC550C
4822 130 61755	BC560C
4822 130 44461	BC546B
4822 130 63852	BC880
5322 130 44779	BC338-40
4822 130 40988	BC328-25
4822 130 63851	MJH11018
4822 130 63849	MJH11017
4822 130 44197	BC558B
4822 130 61705	2SD1508



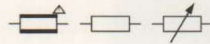
5322 130 30684	1N4002
4822 130 81781	Z-DIODE 3,3 B 0,5W
4822 130 30621	1N4148
4822 130 81614	MR752
4822 130 83412	LED TLHY4405 TFK
4822 130 70034	LED TLHY4405 AS12
4822 130 83968	Z-DIODE 15C 0,5W
4822 130 30862	BZX79-C9V1



F601	4822 242 72527	CERAMIC RES. 4,0MHZ
L335	4822 157 60207	HF-COIL
L435	4822 157 60207	HF-COIL



C1	△	4822 126 11805	3,3nF 20%
C2	△	4822 126 11805	3,3nF 20%
C545		4822 124 81237	10000µF 50V
C546		4822 124 81237	10000µF 50V



R300	4822 101 11691	POTENTIOMETER	
R310	4822 100 10075	100Ω TRIMPOT S10	
R316	△	4822 117 12571	390Ω 5% KSW 0207
R317	△	4822 116 81858	10Ω 5% KSW SI B
R318	△	4822 116 81858	10Ω 5% KSW SI B

R323	△	4822 117 11903	1kΩ 5% KSW SI B
R326	△	4822 117 11903	1kΩ 5% KSW SI B
R330		4822 101 21253	POTENTIOMETER
R332		4822 117 12572	0,22Ω 5% MOW 0617
R333		4822 117 12572	0,22Ω 5% MOW 0617

R334	△	4822 116 60562	10Ω 5% MOW 0922
R400		4822 101 11692	POTENTIOMETER
R401		4822 101 11692	POTENTIOMETER
R410		4822 100 10075	100Ω TRIMPOT S10
R416	△	4822 117 12571	390Ω 5% KSW 0207

R417	△	4822 116 81858	10Ω 5% KSW SI B
R418	△	4822 116 81858	10Ω 5% KSW SI B
R423	△	4822 117 11903	1kΩ 5% KSW SI B
R426	△	4822 117 11903	1kΩ 5% KSW SI B
R432		4822 117 12572	0,22Ω 5% MOW 0617

R433		4822 117 12572	0,22Ω 5% MOW 0617
R463	△	4822 116 60562	10Ω 5% MOW 0922
R541	△	4822 052 10221	220Ω 5% KSW SI A
R542	△	4822 052 10221	220Ω 5% KSW SI A

## MISCELLANEOUS

RL1	△	4822 280 60594	RELAY G2R-1A 12V DC
RL3		4822 101 11693	RELAY G5Z 24V DC OMR
RL701*		4822 280 10318	RELAY V23037-A0005-A102
RL702*		4822 280 10318	RELAY V23037-A0005-A102
(*OPTIONAL)		4822 101 11693	RELAY G5Z 24V DC OMR

S1	△	4822 410 63953	POWER SWITCH
S3	△	4822 282 40298	THERMAL SWITCH 100° C
S330		4822 277 11646	SWITCH
S399		4822 277 11646	SWITCH
S601-606		4822 276 13293	SWITCH TACT

S703-704		4822 277 11647	SWITCH
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SI2	△	4822 071 58001	FUSE 800mA/T
SI4	△	4822 252 11196	FUSE 1,6A/T
SI6	△	4822 071 53151	FUSE 315mA

TH1	△	4822 282 40297	THERMAL SWITCH
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