

Service Manual

Amplifier

SE-HD550

Colour

(N).....Gold Type

Areas

(E).....Europe.

(EB).....Great Britain.

(EG).....Germany, Italy, France.

(EP).....Russia.

Service Schematics

This publication consists of schematics for product identified in the schematics. It is not intended as a substitute for a service manual, which is available from MATSUSHITA in CD or print format. For proper repair instructions it is necessary to consult the CD or print version of the full service manual.

Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

| System | SC-HD550 |
|---------------|-----------------|
| Tuner | ST-HD550 |
| Amplifier | SE-HD550 |
| CD Player | SL-HD550 |
| Cassette Deck | RS-HD550 |
| Speakers* | SB-HD550 |

*: Made in Spain.

Specifications

Amplifier section (Low frequency)

Power output:

DIN 1 kHz, THD 1 %, both channels driven; 2×11 W (6 Ω)

RMS 1 kHz, THD 10 %, both channels driven; 2×15 W (6 Ω)

Total harmonic distortion:

Half power at 1 kHz; 0.07 % (6 Ω)

Load impedance: 6 Ω

Amplifier section (High frequency)

Power output:

DIN 10 kHz, THD 1 %, both channels driven; 2×7 W (6 Ω)

RMS 10 kHz, THD 10 %, both channels driven; 2×10 W (6 Ω)

Load impedance: 6 Ω

S/N: 78 dB

Rated power, 2 V input, VGCA ON; 98 dB

Headphones

Jack type: 3.5 mm STEREO

Load impedance: 16 – 32 Ω

General

Power supply:

(E), (EG), (EP) areas; AC 230 V, 50 Hz

(EB) area; AC 230 – 240 V, 50 Hz

Power consumption: 79 W

STANDBY condition: 0.9 W

Dimensions (W×H×D): 210×104.8×273 mm

Mass: 3.3 kg

Notes: Specifications are subject to change without notice.

Mass and dimensions are approximate.

Total harmonic distortion is measured by the digital spectrum analyzer.

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Technics®

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


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1 Schematic Diagram Notes

- This schematic diagram may be modified at any time with the development of new technology.


Notes:

| | |
|---------------|---|
| S501: | Power standby/on switch ( /I) |
| S503: | Bass down switch (BASS ) |
| S504: | Bass up switch (BASS ) |
| S505: | VGCA (variable gain control amplifier) switch (VGCA) |
| S506: | Treble down switch (TREBLE ) |
| S507: | Treble up switch (TREBLE ) |
| VR501: | Input selector VR (INPUT SELECTOR) |
| VR502: | Volume control VR (VOLUME) |

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

No mark : Power ON

- Important safety notice:

Components identified by  mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

- The supply part number is described alone in the replacement parts list.

• Caution!

IC and LSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.



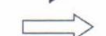
Cover the parts boxes made of plastics with aluminum foil.

Ground the soldering iron.

Put a conductive mat on the work table.

Do not touch the legs of IC or LSI with the fingers directly.

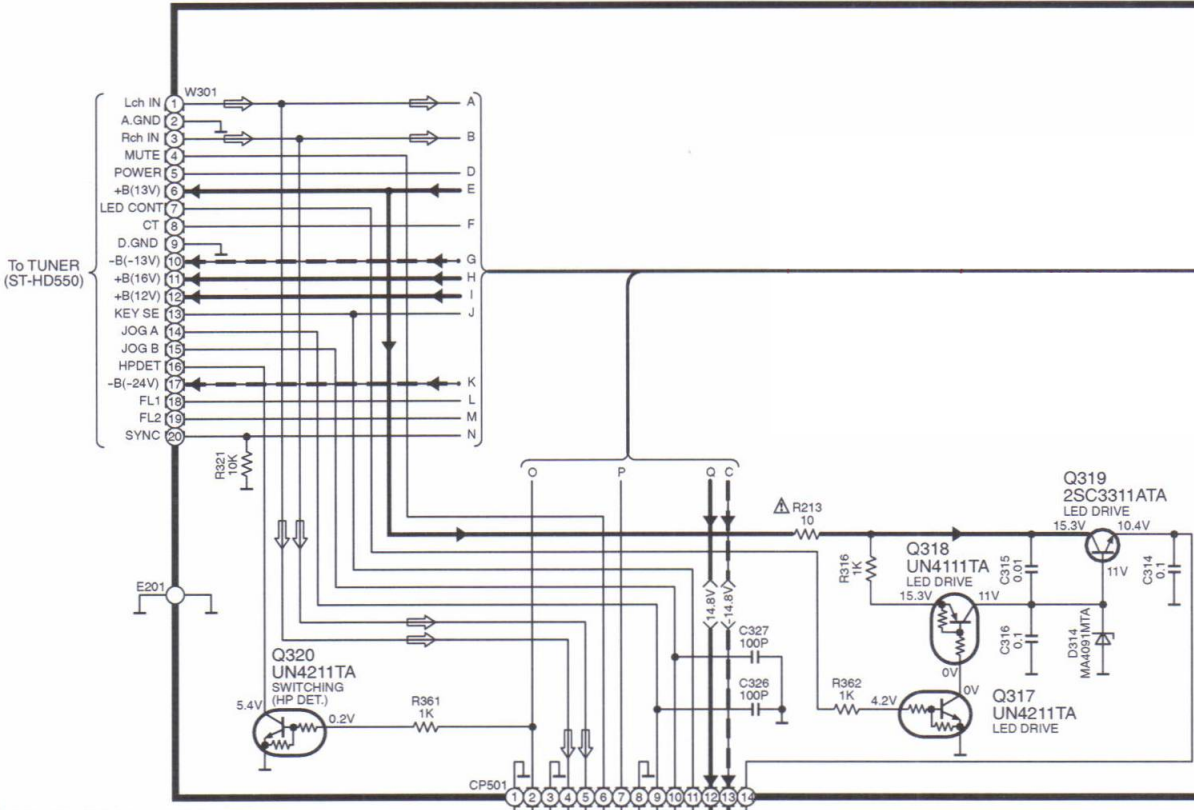
- Voltage and signal line

| | |
|---|-------------------------|
|  | : Positive voltage line |
|  | : Negative voltage line |
|  | : Audio signal line |

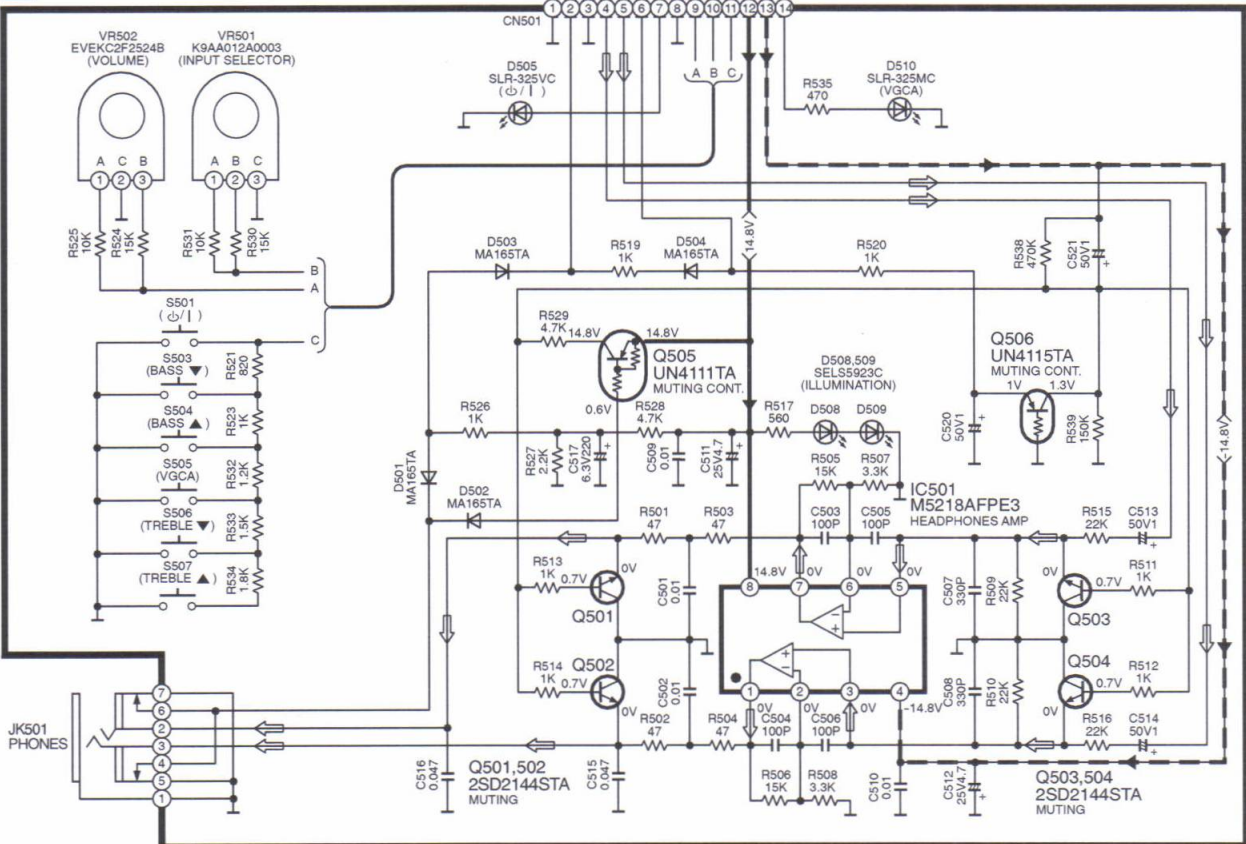
2 Schematic Diagram

A POWER SUPPLY CIRCUIT

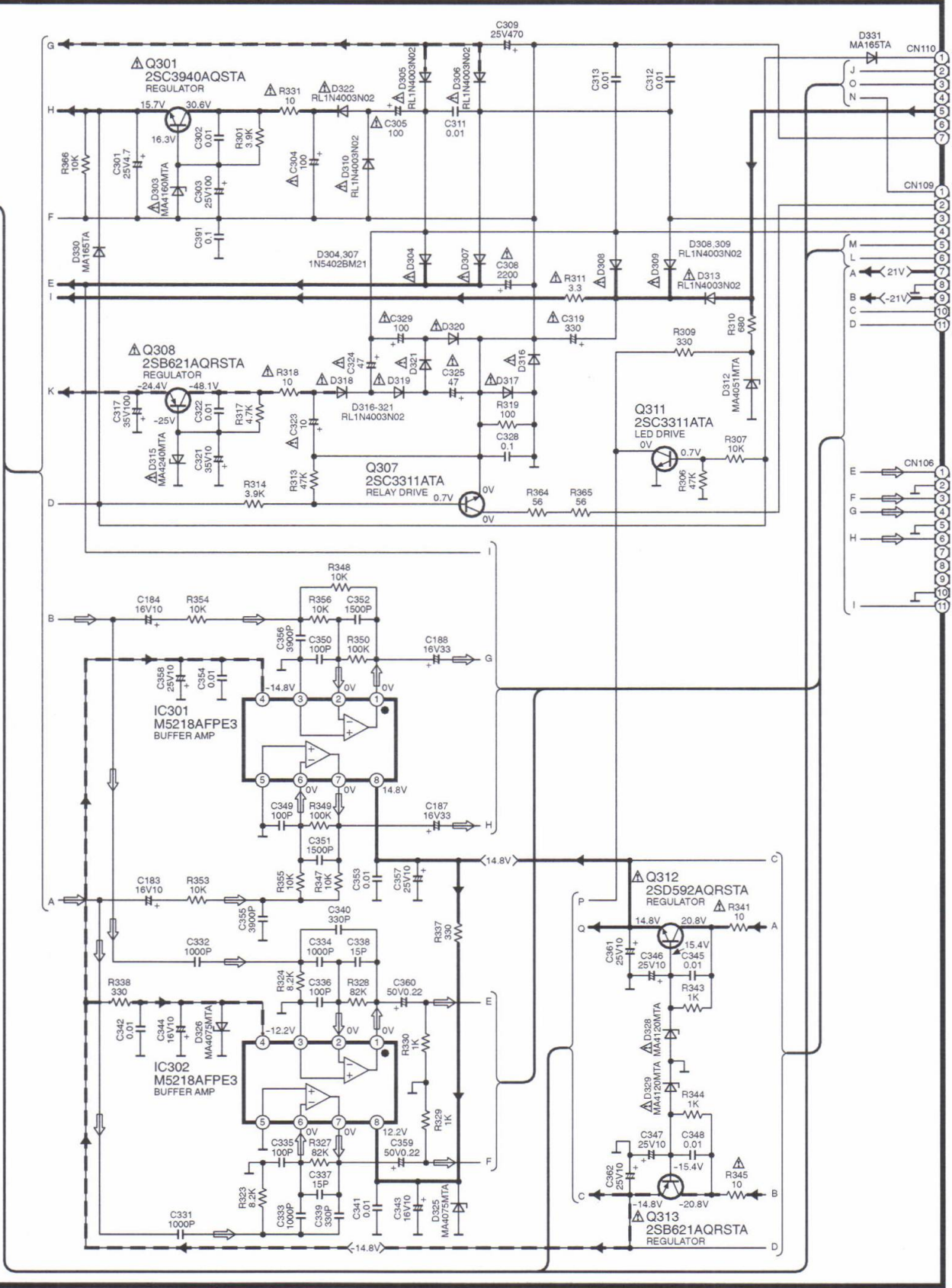
→ : POSITIVE VOLTAGE LINE
 - - - : NEGATIVE VOLTAGE LINE
 ⇨ : AUDIO SIGNAL LINE



B OPERATION CIRCUIT

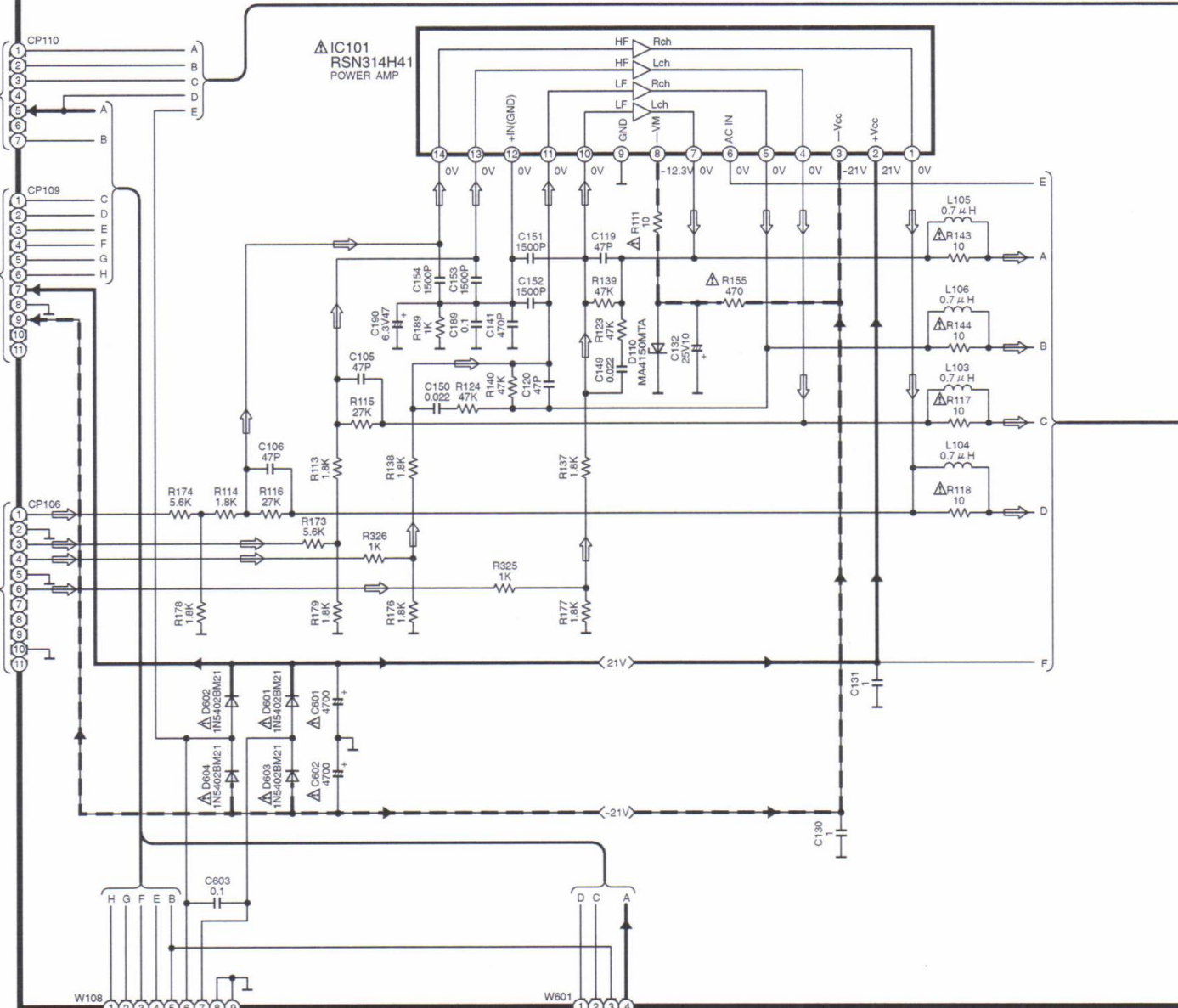


→ : POSITIVE VOLTAGE LINE - - - - - : NEGATIVE VOLTAGE LINE ⇨ : AUDIO SIGNAL LINE

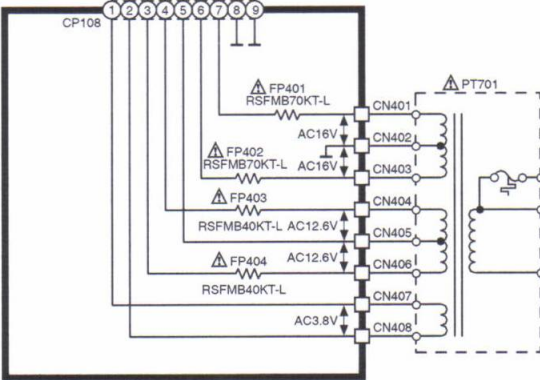


C MAIN CIRCUIT

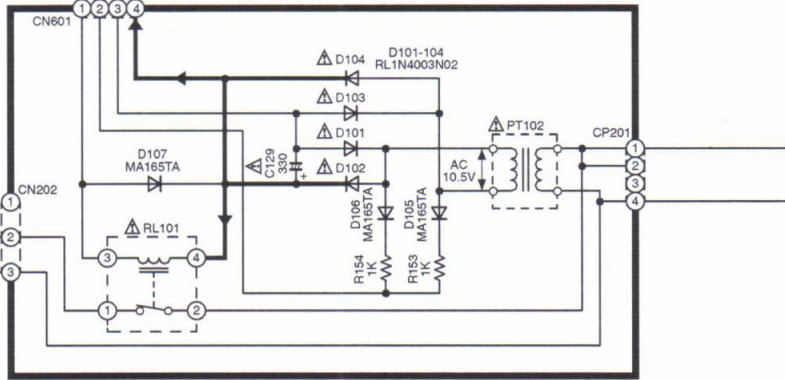
→ : POSITIVE VOLTAGE LINE
 - - - : NEGATIVE VOLTAGE LINE ⇨ : AUDIO SIGNAL LINE



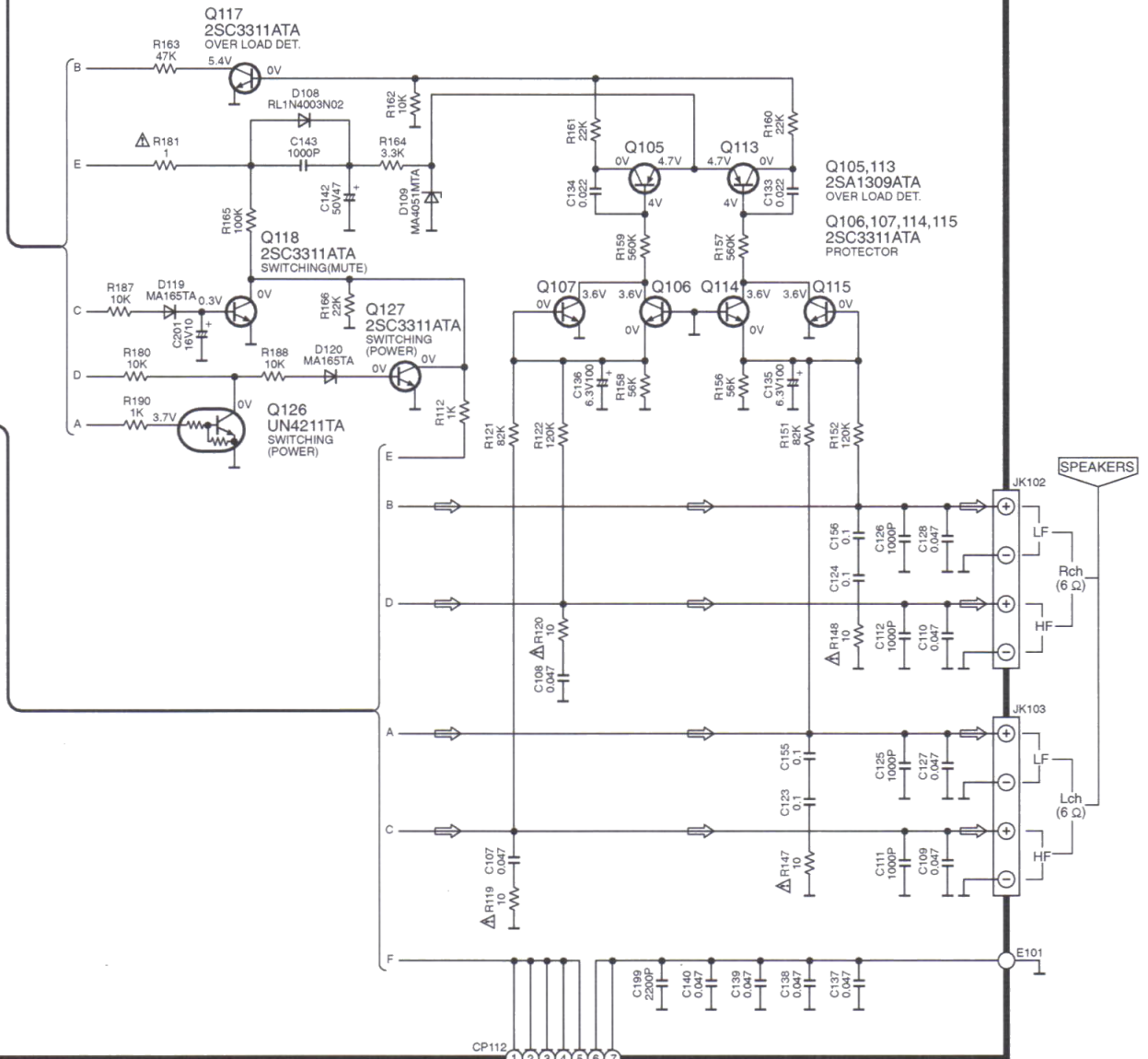
D POWER TRANSFORMER (1) CIRCUIT



E POWER TRANSFORMER(2) CIRCUIT



⇨ :AUDIO SIGNAL LINE



F AC IN CIRCUIT

