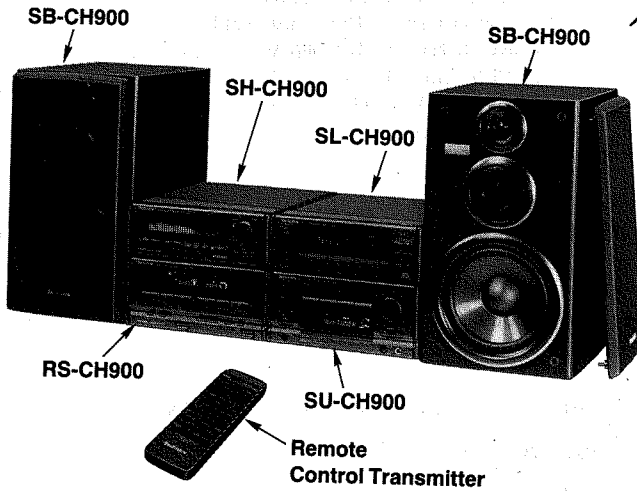


Service Manual

Amplifier

Amplifier

SU-CH900



Color

(K) Black Type

Areas

| Country Code | Area | Color |
|--------------|---|-------|
| (E) | Continental Europe. | (K) |
| (EB) | Great Britain. | |
| (EG) | Germany and Italy. | |
| (GC) | Asia, Latin America, Middle Near East and Africa. | |
| (GN) | Oceania. | |

System: SC-CH900

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

SPECIFICATIONS

MAIN AMP. SECTION

| | |
|---------------------------------------|-------------|
| Power output | |
| DIN 1 kHz THD 1%, both channel driven | |
| FRONT | 2×50 W (6Ω) |
| REAR | 2×5 W (8Ω) |
| Total harmonic distortion | |
| Rated power at 1 kHz | |
| FRONT | 1% (6Ω) |
| REAR | 1% (8Ω) |
| Half power at 1 kHz | |
| FRONT | 0.07% (6Ω) |
| Headphones output level/impedance | 351 mV/240Ω |
| Load impedance | |
| FRONT | 6Ω |
| REAR | 8Ω |

PRE AMP. SECTION

| | |
|-----------------------------|----------------------|
| Input sensitivity/impedance | |
| FRONT | 200 mV/47 kΩ |
| REAR | 200 mV/47 kΩ |
| CENTER | 200 mV/47 kΩ |
| MIC | 0.7 mV/12 kΩ |
| S/N (rated power) FRONT | 84 dB (IHF, A 88 dB) |
| Frequency response | |
| FRONT | 30 Hz–30 kHz (–3 dB) |
| Muting | –20 dB |
| Loudness (vol. –30 dB) | 60 Hz, +5 dB |
| Channel separation (1 kHz) | 57 dB |

VIDEO SECTION

| | |
|-------------|-----------|
| Video out | |
| MONITOR OUT | 1 Vpp/75Ω |
| VCR OUT | 1 Vpp/75Ω |

TIMER SECTION

| | |
|-----------|--|
| Clock | Quartz-lock type, 24-hour indication |
| Functions | 24-hour programmable; Sleep (120 min. 1 min. intervals). Weekly (1 time), Once (1 time). |
| Setting | 1 minute–23 hours 59 minutes (1 min.) |

GENERAL

| | |
|---|---|
| Power consumption | 330 W |
| Power supply | |
| For Continental Europe, Germany and Italy | AC 50 Hz/60 Hz, 230 V |
| For Great Britain and Oceania | AC 50 Hz/60 Hz, 230 V~240 V |
| For Others | AC 50 Hz/60 Hz, 110 V/127 V/220 V/240 V |
| Dimensions (W×H×D) | 230×110×346 mm |
| Weight | 5.8 kg |

Notes:

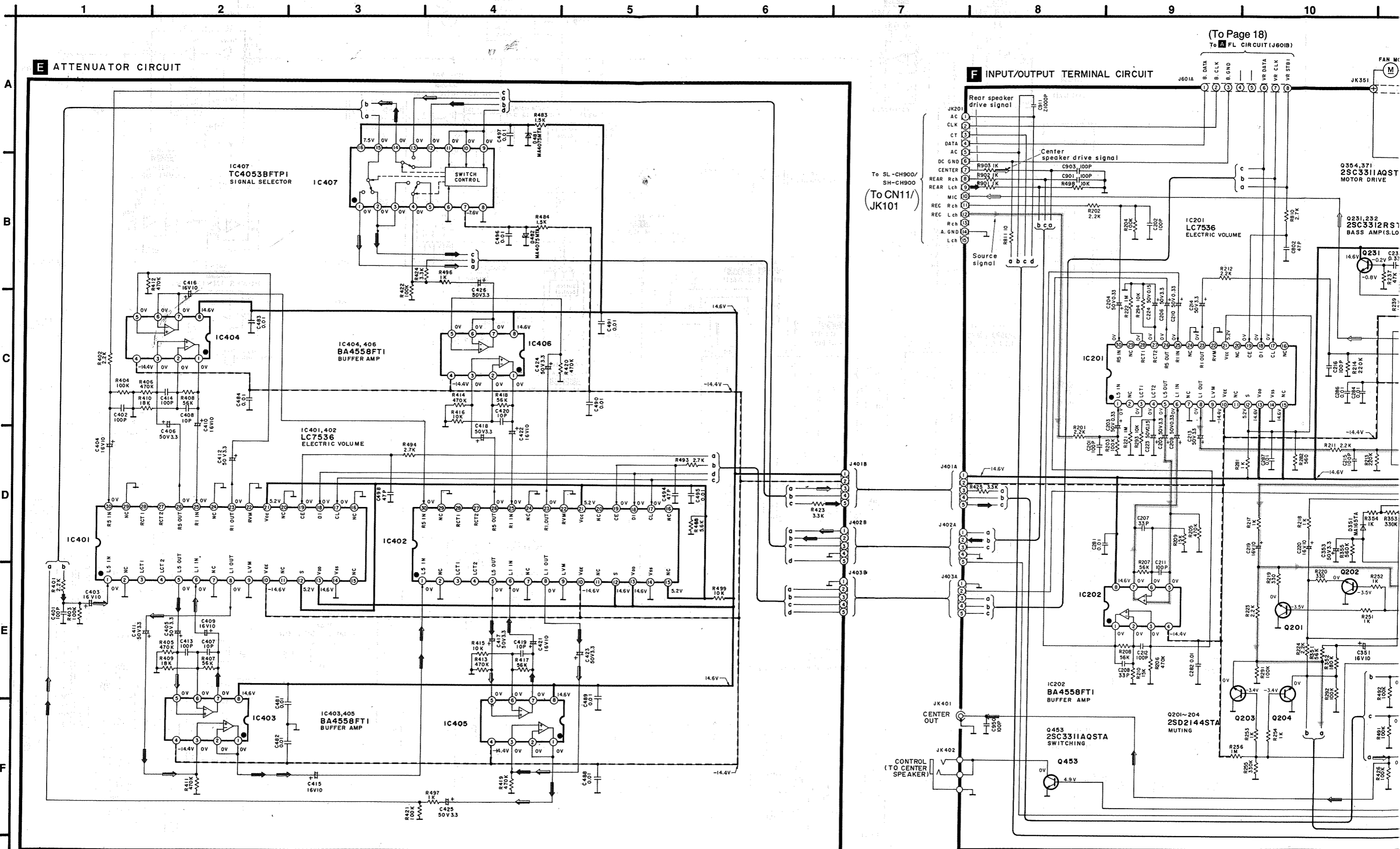
- Specifications are subject to change without notice.
- Weight and dimensions are approximate.
- Total harmonic distortion is measured by the digital spectrum analyzer.

| System | Tuner/CD player | Sound Processor | Amplifier | Cassette Deck | Speakers |
|----------|-----------------|-----------------|-----------|---------------|-----------|
| SC-CH900 | SL-CH900 | SH-CH900 | SU-CH900 | RS-CH900 | *SB-CH900 |

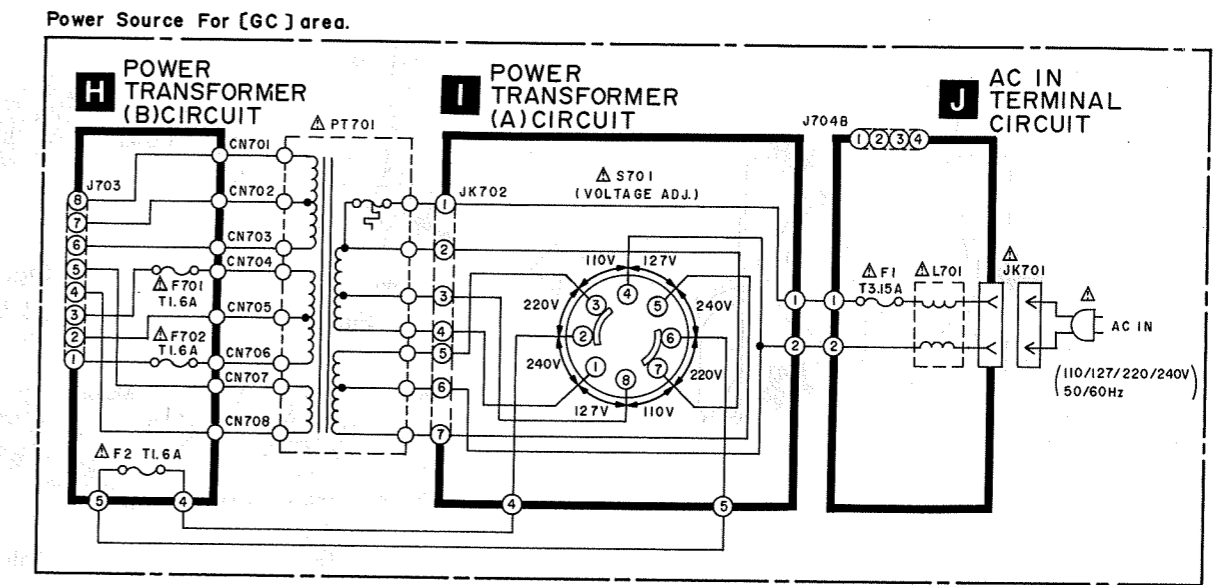
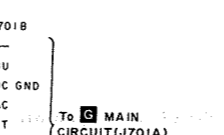
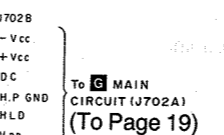
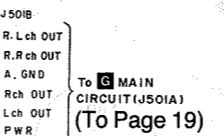
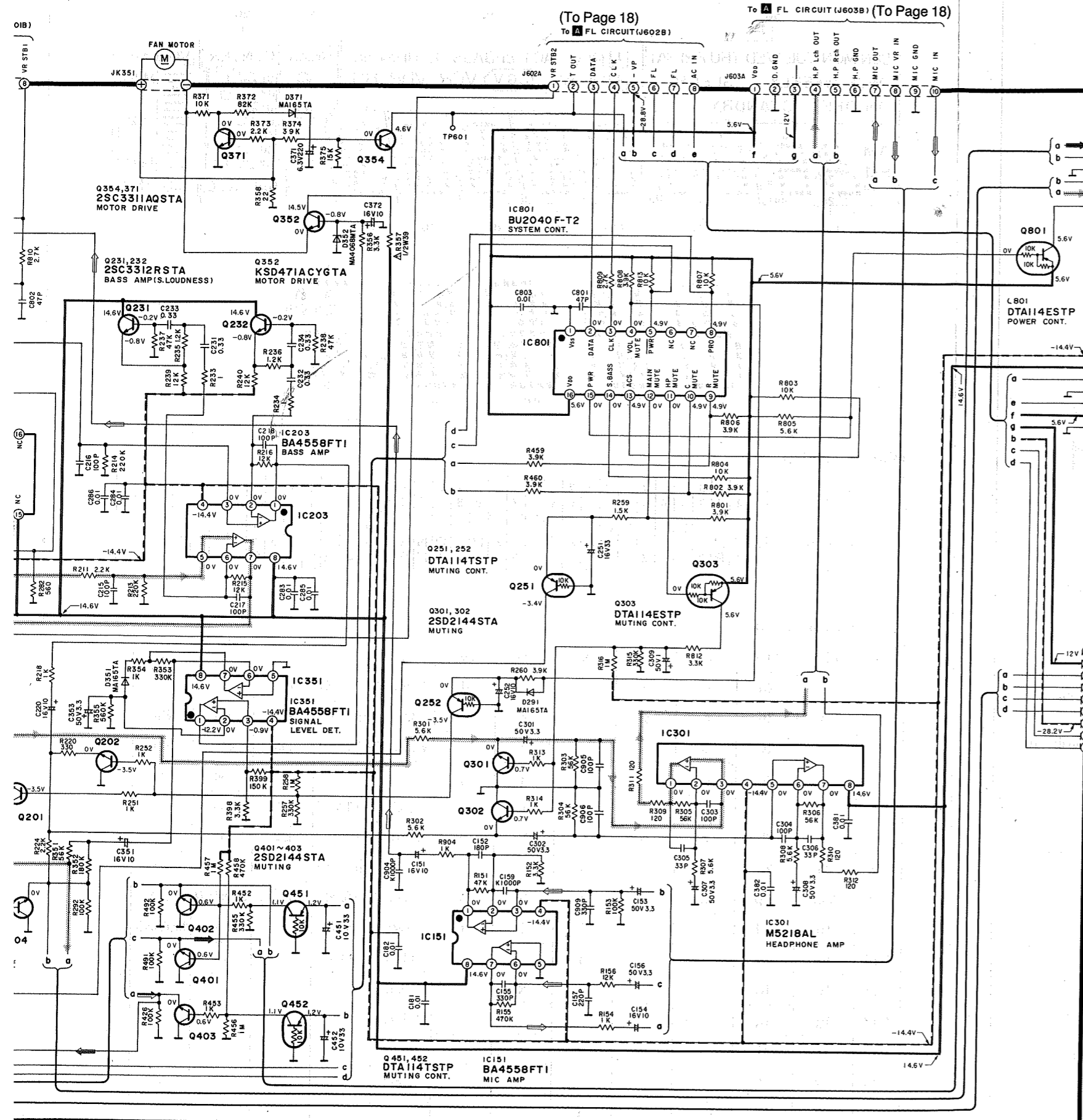
* (E), (EB), (EG) areas... Made in PAES

Technics

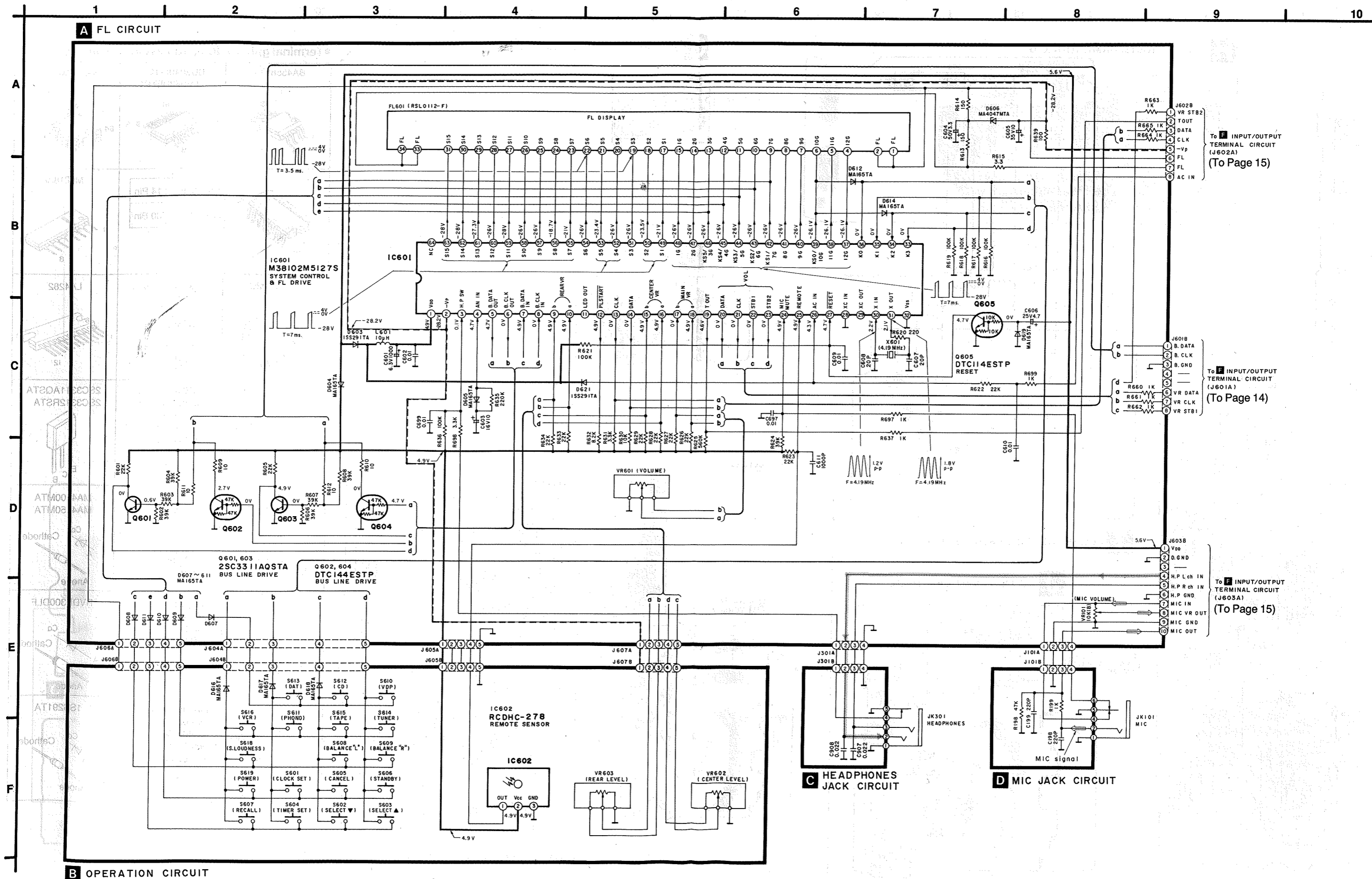
■ SCHEMATIC DIAGRAM (Input/Output Terminal Attenuator/Power Transformer/AC IN circuit) (Parts list on pages 27~30)



10 11 12 13 14 15 16 17 18 19



SCHEMATIC DIAGRAM (Operation/FL/Headphones/Mic/Main/Power Transformer/AC IN circuit) (Parts list on pages 27-30)

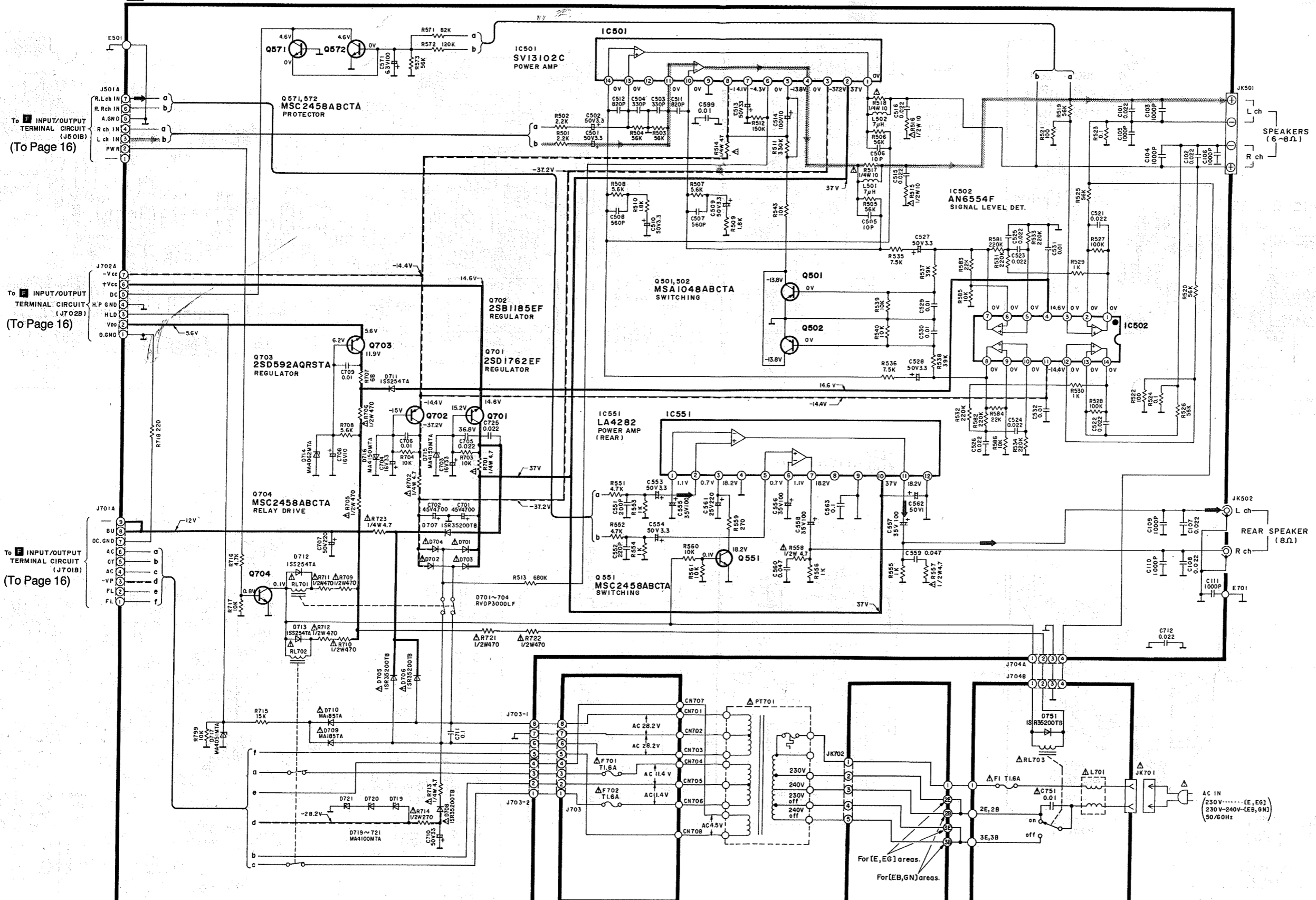


To INPUT/OUTPUT TERMINAL CIRCUIT (J602A) (To Page 15)

To INPUT/OUTPUT TERMINAL CIRCUIT (J601A) (To Page 14)

To INPUT/OUTPUT TERMINAL CIRCUIT (J603A) (To Page 15)

G MAIN CIRCUIT



H POWER TRANSFORMER (B) CIRCUIT

I POWER TRANSFORMER (A) CIRCUIT

J AC IN TERMINAL CIRCUIT

Notes:

- S601 : CLOCK SET switch
- S602 : SELECT (▼) switch
- S603 : SELECT (▲) switch
- S604 : TIMER SET switch
- S605 : CANCEL switch
- S606 : STANDBY switch
- S607 : RECALL switch
- S608 : BALANCE (L) switch
- S609 : BALANCE (R) switch
- S610 : Input select (VDP) switch
- S611 : Input select (PHON) switch
- S612 : Input select (CD) switch
- S613 : Input select (DAT) switch
- S614 : Input select (TUNE) switch
- S615 : Input select (TAPE) switch
- S616 : Input select (VCR) switch
- S618 : S. LOUDNESS switch
- S619 : POWER switch
- S701 : VOLTAGE SELECT switch (110 V/127 V/220 V)

Indicated voltage values are the signal voltage values measured with an electronic circuit tester (high-impedance). Therefore, there may exist some error due to the internal impedance of the DC circuit.

- ▬ : Positive voltage line
- ▬ : Negative voltage line
- ▬ : Mic signal line
- ▬ : Source signal line
- ▬ : Rear speaker drive
- ▬ : Center speaker drive

Important safety notice:
Components identified by Δ mark are safety-related components. When replacing any of these components, be sure to use the same type and specification.

This schematic diagram may be new technology.

Caution!
IC and LSI are sensitive to static electricity. Secondary trouble can be prevented by the following:
•Cover the parts boxes made of plastic with an antistatic bag.
•Ground the soldering iron.
•Put a conductive mat on the work table.
•Do not touch the legs of IC or LSI with your hands.

The supply part number is described in the table below.

| Ref. No. | Production Part |
|----------|-----------------|
| IC151 | BA4558FT |
| IC202 | |
| IC203 | |
| IC351 | |
| IC403 | |
| IC406 | M5218AL |
| IC301 | |

TechInfo Sheet

fax: 01344 853689

Audio Visual

email: av.technical@mail.panasonic.co.uk

Product Group: HiFi Mini

Model: SU-CH900

Date: 14/12/99

Revision No: 01

Document No: 01

Subject: Unit Cuts Out

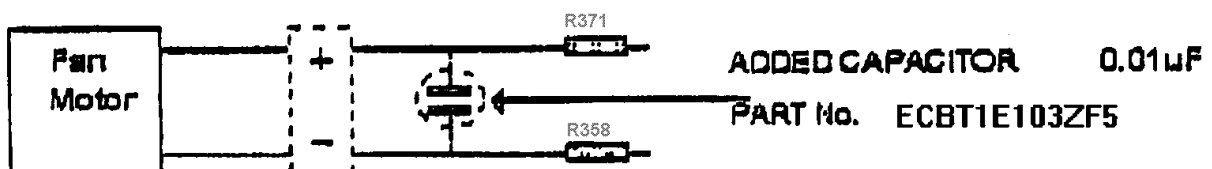
SYMPTOM: The unit turns off unexpectedly during normal operation and an indication of "E—" lights on the main display.

CAUSE: One of the following may cause the cut out.

1. A defective fan motor (coil shorted, disconnected or clogged commutator).
2. A faulty detector circuit (short or disconnection).
3. Smoothing capacitor (C571) used in fault detector circuit of output IC is possibly dry joint. The problem is liable to occur when the output is high.

REMEDY:

1. Defective fan motor: Replace the fan motor Part No. SYE1128-4 unless the resistance across both ends of the coil is between 20 and 30 Ohms.
2. Incorrect action of fan motor circuit: Mount a capacitor across both ends of the fan motor.



3. Poorly soldered C571, re-solder this capacitor.

NB Due to the nature of the problem, it is recommended that all of the three remedies above are carried out simultaneously