ORDER NO. SD8001-1662

Service Manual

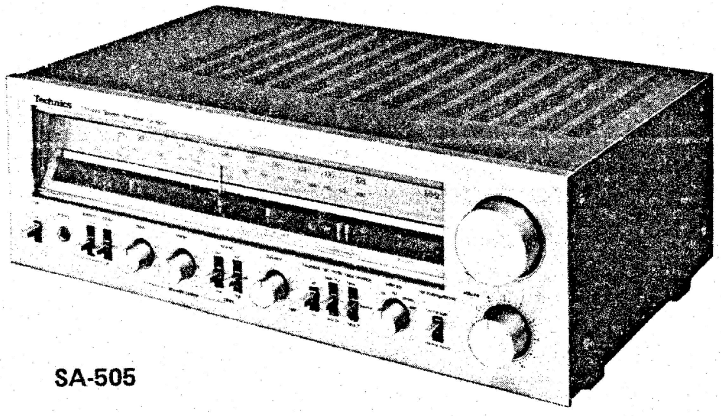
FM/AM Stereo Receiver

SA-505

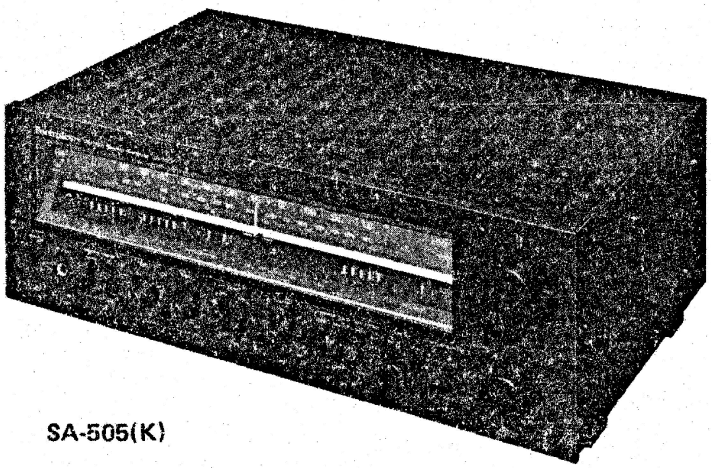
[E], [EG], [XGF], [XGH],
[EB], [XE], [XA], [XAL]

SA-505(K)

[E], [XGH]



SA-505



SA-505(K)

***The colors of this model include silver and black. The black type model is provided with (K) in the Service Manual.**

Areas

- * [E] and [EG] are available in Scandinavia and European.
- * [XGF] is available in France.
- * [XGH] is available in Holland.
- * [EB] is available in Belgium.
- * [XE] is available in United Kingdom.
- * [XA] is available in Asia, Latin America, Middle East and Africa.
- * [XAL] is available in Australia.

CONTENTS

TECHNNICAL SPECIFICATIONS

Specifications are subject to change without notice for further improvement.

[DIN 45 500]

AMPLIFIER SECTION

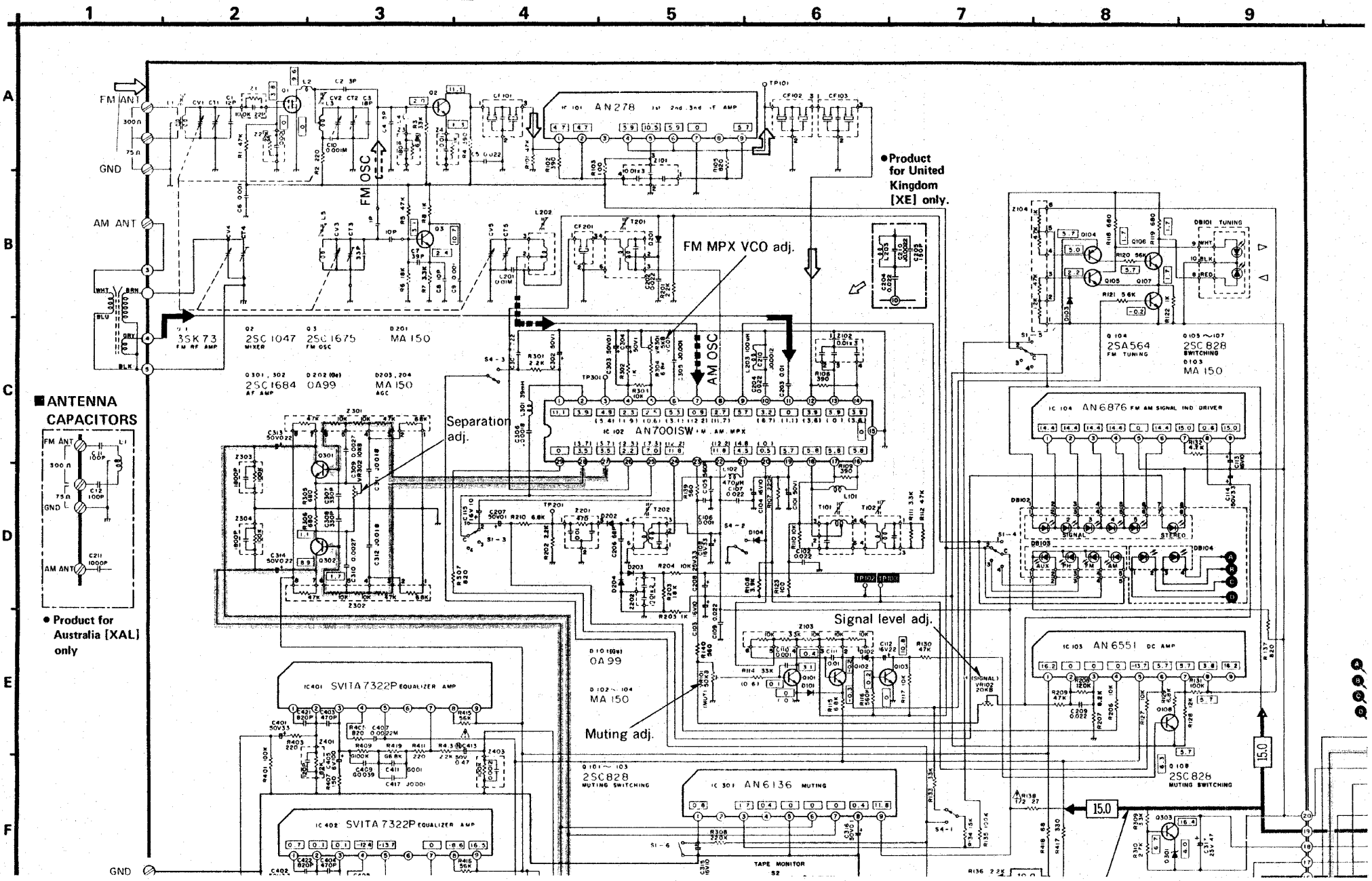
20 Hz ~ 20 kHz continuous power output both channels driven		2 x 63W (4Ω), 2 x 63W (8Ω)
40 Hz ~ 16 kHz continuous power output both channels driven		2 x 63W (4Ω), 2 x 63W (8Ω)
1 kHz continuous power output both channels driven		2 x 80W (4Ω), 2 x 70W (8Ω)
Total harmonic distortion		
rated power at 20 Hz ~ 20 kHz		0.08% (4Ω), 0.04% (8Ω)
rated power at 40 Hz ~ 16 kHz		0.08% (4Ω), 0.04% (8Ω)
rated power at 1 kHz		0.04% (4Ω), 0.04% (8Ω)
half power at 20 Hz ~ 20 kHz		0.02% (8Ω)
half power at 1 kHz		0.009% (8Ω)
−26 dB power at 1 kHz		0.1% (4Ω)
50 mW power at 1 kHz		0.15% (4Ω)
Intermodulation distortion		
rated power at 250 Hz: 8 kHz= 4:1, 4Ω		0.08%
rated power at 60 Hz: 7 kHz=4:1, SMPTE, 8Ω		0.04%
Power bandwidth both channels driven, −3 dB		10 Hz ~ 35 kHz (4Ω)
Damping factor		17(4Ω), 34(8Ω)
Input sensitivity and impedance	PHONO	2.5 mV/47kΩ
	AUX	150 mV/27kΩ
	TAPE 2	150 mV/27kΩ
	TAPE 1 REC/PLAY	180 mV/27kΩ
PHONO maximum input voltage (1 kHz, RMS)		150 mV
S/N		
rated power (4Ω)	PHONO	70 dB (80 dB, IHF, A, 8Ω)
	AUX	88 dB (95 dB, IHF, A, 8Ω)
−26 dB power (4Ω)	PHONO	64 dB
	AUX	66 dB
50 mW power (4Ω)	PHONO	60 dB
	AUX	60 dB
Frequency response	PHONO	RIAA standard curve ±0.3 dB (30 Hz ~ 15 kHz)
	AUX	7 Hz ~ 50 kHz (−1 dB) ±0.2 dB (20 Hz ~ 20 kHz)

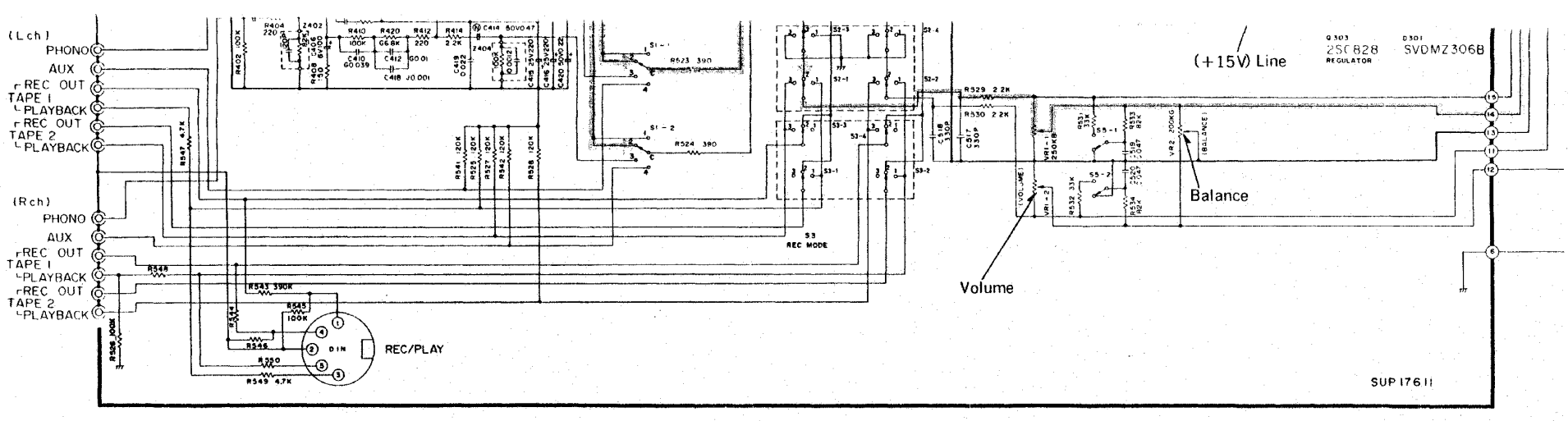
Technics

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

■ SCHEMATIC DIAGRAM...MODEL **SA-505**

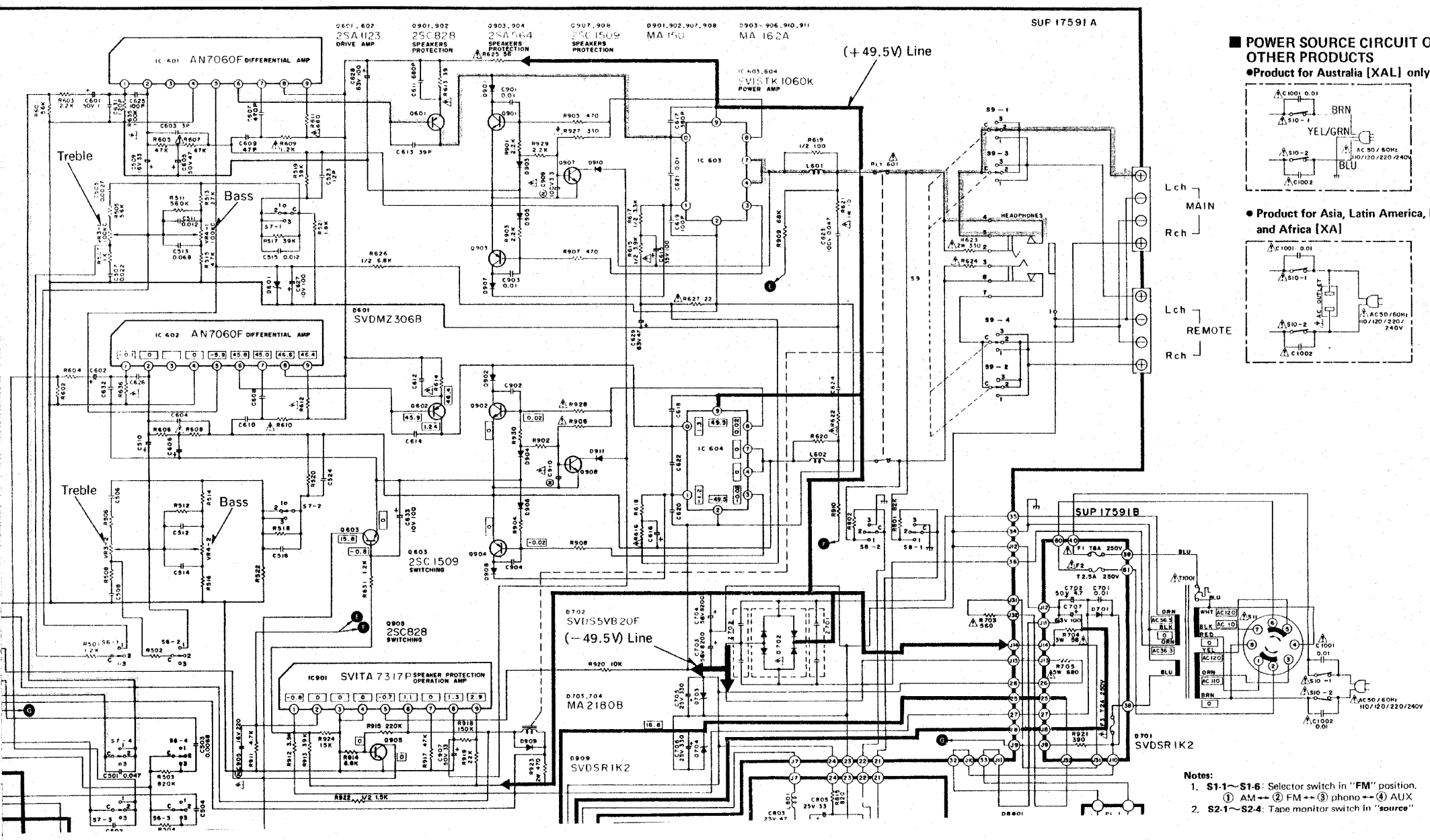
(This schematic diagram may be modified at any time with the development of new technology.)





Shorting Switch

This unit uses a shorting switch. As illustrated below, the circuit is shorted to the next circuit without be
In the circuit diagram, the shaded area represents the common terminal.



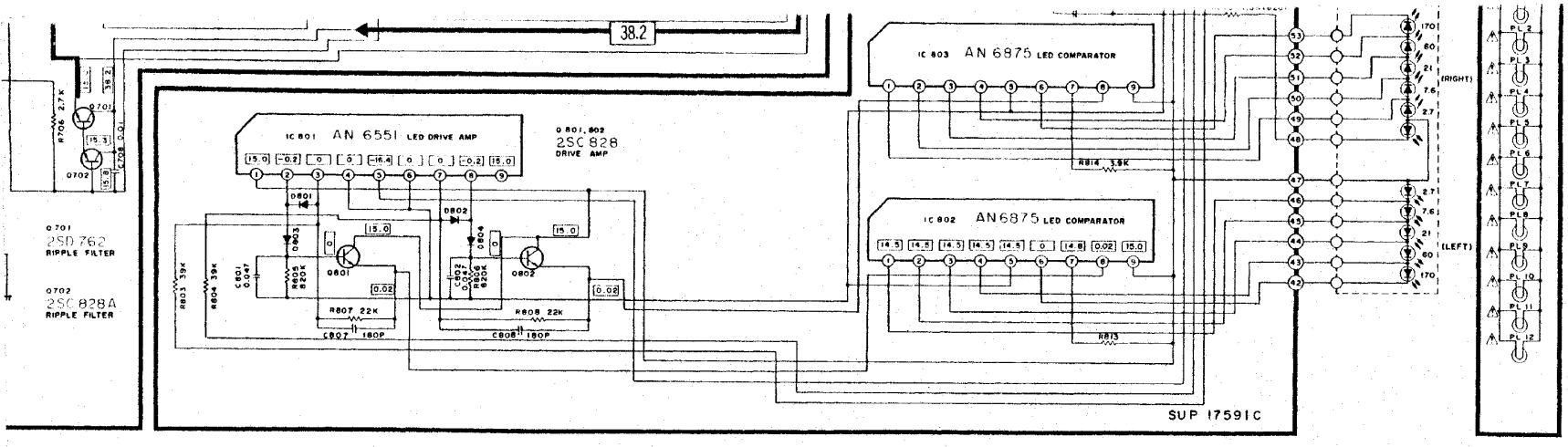
■ POWER SOURCE CIRCUIT OF OTHER PRODUCTS

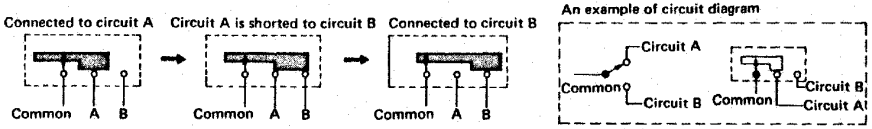
●Product for Australia [XAL] only

● Product for Asia, Latin America, Middle East and Africa [XA]

Notes:

1. **S1-1～S1-6**: Selector switch in "**FM**" position.
   ① AM ↔ ② FM ↔ ③ phono ↔ ④ AUX
2. **S2-1～S2-4**: Tape monitor switch in "**source**"





position.
(1) tape 1 ▶ 2 ↔ (2) source ↔ (3) tape 2 ▶ 1

3. **S3-1～S3-4**: Rec mode switch in **"source"** position. (1) tape 1 ↔ (2) source ↔ (3) tape2
4. **S4-1～S4-3**: FM muting/mode switch in **"ON/FM AUTO"** position.
5. **S5-1, S5-2**: Loudness switch in **"OFF"** position.
6. **S6-1～S6-4**: Boost/filter switch (high) in **"OFF"** position.
(1) high boost ↔ (2) off ↔ (3) high filter
7. **S7-1～S7-4**: Boost/filter switch (low) in **"OFF"** position.
(1) low boost ↔ (2) off ↔ (3) low filter
8. **S8**: Power display rang selector switch in **"X1"** position.
(1) X0. 1 ↔ (2) X1 ↔ (3) off
9. **S9**: Speaker selector switch in **"MAIN"** position.
(1) remote ↔ (2) main ↔ (3) main + remote
10. **S10**: Power source switch in **"ON"** position.
11. **S11**: Voltage adjuster switch in **"240V"** position.
240V ↔ 220V ↔ 110V ↔ 120V
12. ⚠ indicates that only parts specified by the manufacturer be used for safety.
13. 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.
▭ Not apply signal to set and muting switch to OFF condition.
( ) AM signal reception.
14. ⇨ AF signal lines ⇨ FM signal lines
➡ AM signal lines.