

Service Manual

Stereo Integrated DC Amplifier



SU-V2

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

SU-V2(K)

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

* The cabinet, front panel and knob are available in both color and silver type. The black type model is provided with [K] in the Service Manual.

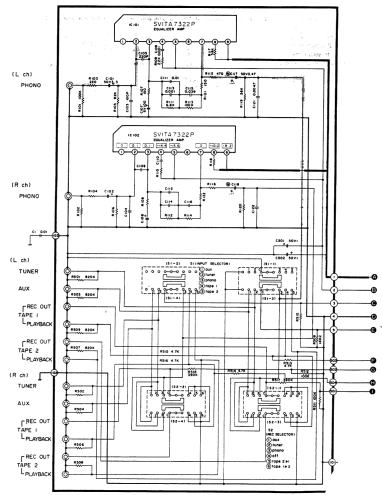
Area
 * [E] and [EG] are available in Scandinavia and European except Belgium, United Kingdom, Switzerland, Ireland and France.
 * [X] is available in Australia or France.
 * [E] is available in Denmark.
 * [EG] is available in Belgium.
 * [K] is available in United Kingdom.
 * [XA] is available in Asia, Latin America, Middle East and Africa.
 * [XAL] is available in Australia.

TECHNICAL SPECIFICATIONS (DIN 45 500)		Specifications are subject to change without notice for further improvement.	
AMPLIFIER SECTION			
20 Hz - 20 kHz continuous power output both channels driven	2 × 45W (K)	Dynamic range	20 (K), 20 (K)
60 Hz - 16 kHz continuous power output both channels driven	2 × 45W (K)	Input sensitivity and impedance	0.5 mV (47k)
1 kHz continuous power output both channels driven	2 × 45W (K)	TUNER, AUX	100 mV (27k)
Total harmonic distortion	0.02% (K)	TAPE, REC-PLAY	100 mV (27k)
rated power at 20 Hz - 20 kHz	0.02% (K)	FM	100 mV (27k)
rated power at 60 Hz - 16 kHz	0.02% (K)	FM/DC maximum input voltage (1 kHz, RMS)	50 mV
rated power at 1 kHz	0.02% (K)	SN	
rated power at 20 Hz - 20 kHz	0.02% (K)	RMS power (K)	73 dB (Inf. A, 95 dB)
rated power at 1 kHz	0.02% (K)	TUNER, AUX	85 dB (Inf. A, 95 dB)
20 dB power at 1 kHz	0.7% (K)	PHONO	63 dB
50 dB power at 1 kHz	0.17% (K)	TUNER, AUX	68 dB
intermodulation distortion	0.02%	PHONO	60 dB
rated power at 500 Hz, 4 kHz (1:1, 4:1)	0.02%	TUNER, AUX	60 dB
rated power at 60 Hz, 7 kHz (4:1, SMPTE, 4:1)	0.02%	Frequency response	RIAA standard curve
Power bandwidth	(FWD) 0.02% 5 Hz - 30 kHz (K)	PHONO	±0.8 dB (20 Hz-10 kHz)
both channels driven, -3 dB	(REV) 0.02% 5 Hz - 30 kHz (K)	TUNER, AUX, TAPE	±0.8 dB (100 Hz-10 kHz)
Residual hum and noise	(FWD) 0.02% 5 Hz - 30 kHz (K)		±0.8 dB (100 Hz-10 kHz)
	(REV) 0.02% 5 Hz - 30 kHz (K)		
	-0.5 mV		
		Tone controls	
		BASS	90 Hz, +10 dB - -10 dB
		TREBLE	20 kHz, +10 dB - -10 dB
		Subsonic filter	20 Hz, -6 dB/oct
		High-cut filter	7 kHz, -6 dB/oct
		Loudness control (volume at 30 dB)	60 Hz, +3 dB
		Output voltage and impedance	100 mV
		REC-PLAY	20 mV (27k)
		TAPE, REC-PLAY	1.1 dB
		Channel balance, AUX 20 Hz - 6,300 Hz	1.1 dB
		Channel separation, AUX 1 kHz	51 dB

Technics

Matsumita Electric Trading Co., Ltd.
P.O. Box 298, Central, Osaka, Japan

Relative input level and impedance	420 mV (20k)	Dimension (W x H x D)	420 x 140 x 107 mm
Load impedance	40-160	Weight	(16-15.10' - 5-19.22' - 10-1.8')
MAIN and REMOTE	80-160		9.8 kg
MAIN and REMOTE	80-160		(19.7 lb)
GENERAL		Note	Total harmonic distortion is measured by the digital spectrum analyzer (HP 3045 system).
Power consumption	500W		
Power supply	AC 50 Hz/60 Hz, 110V/120V/220V/240V		
TECHNISCHE DATEN Spezifikationen können ohne vorherige Ankündigung geändert werden.			
(DIN 45 500)			
VERSTÄRKERTEIL			
Quartett-Ausgangsimpedanz bei 20 Hz - 20 kHz	2 - 45W (4 D)	-26 dB Leistung (4 D)	63 dB
beide Kanäle ausgeglichen	2 - 45W (8 D)	Phono	63 dB
Quartett-Ausgangsimpedanz bei 40 Hz - 16 kHz	2 - 45W (4 D)	Tuner, Aux	60 dB
beide Kanäle ausgeglichen	2 - 45W (8 D)	Spiegel-Leistung (4 D)	60 dB
Quartett-Ausgangsimpedanz bei 1 kHz	2 - 55W (4 D)	Phono	60 dB
beide Kanäle ausgeglichen	2 - 45W (8 D)	Tuner, Aux	60 dB
Gesamtwirkfaktor	0,02% (4 D)	Freisprechtgang	
Nennleistung bei 20 Hz - 20 kHz	0,02% (8 D)	Phono	RMA-Spannungswert -0 dB (20 Hz) - 1,5 V RMS -6 dB (100 kHz) - 0,3 dB +0 dB - 0,3 dB (20 Hz) - 20 kHz
Nennleistung bei 40 Hz - 16 kHz	0,02% (8 D)	Tuner, Aux, Tape	
Nennleistung bei 1 kHz	0,02% (8 D)	Klingregler	50 Hz - 10 dB - 10 dB
Halbe Nennleistung bei 20 Hz - 20 kHz	0,02% (8 D)	Bassregler (BASS)	20 kHz - 10 dB - 10 dB
Halbe Nennleistung bei 1 kHz	0,02% (8 D)	Höhenregler (TREBLE)	20 kHz - 10 dB - 10 dB
26 dB Leistung bei 1 kHz	0,1% (4 D)	Turbofilter	20 Hz - 6 dB (5/4)
50 dB Leistung bei 1 kHz	0,1% (4 D)	Headliner	7 dB - 6 dB (5/4)
Intermodulationsfaktor	0,1% (4 D)	Gleichrichtige Lautstärkeregler (Loudness)	Über 30 dB Ausgangsimpedanz
Nennleistung bei 220 Hz 8 kHz - 4:1, 4:1	0,02%	Ausgangsimpedanz und -impedanz	50 Hz - 18 dB
Nennleistung bei 60 Hz 7 kHz - 4:1, nach SMPTE 8 D	0,02%	Ausnahmswidergabe (TAPE 1 REC PLAY)	150 mV
Leistungsbandsbreite	10,0%	Tape 1 Aufnahme/Wiedergabe (TAPE 1 REC PLAY)	80 mV
beide Kanäle ausgeglichen bei -3 dB	(THD 0,02%) 5 Hz - 20 kHz (4 D)	Kopfhörerpegel und -impedanz	1 - 95
Beitrag zum Gesamt-TD	(THD 0,02%) 5 Hz - 20 kHz (8 D)	Überspannungsfähigkeit (Aux, 1 kHz)	120 mV/100 D
Dämpfungsfaktor	25 (4 D); 30 (8 D)	Leistungsbandsbreite	10,0%
Eingangsimpedanz und -impedanz	2,5 mV/17 kΩ	Leistungsbandsbreite	10,0%
Phono	150 mV/27 kΩ	Leistungsbandsbreite	10,0%
Tuner, Aux	150 mV/27 kΩ	Leistungsbandsbreite	10,0%
Tape 1 Aufnahme/Wiedergabe (TAPE 1 REC PLAY)	150 mV/27 kΩ	Leistungsbandsbreite	10,0%
Tape 2 (TAPE 2)	150 mV/27 kΩ	Leistungsbandsbreite	10,0%
Maximaler TA-Eingangsimpedanz (1 kHz, 40 Hz)	150 mV	Leistungsbandsbreite	10,0%
Charakteristik	73 dB (nach IEC A 80 dB)	Leistungsbandsbreite	10,0%
Phono	80 dB (nach IEC A 78 dB)	Leistungsbandsbreite	10,0%
Tuner, Aux	80 dB (nach IEC A 78 dB)	Leistungsbandsbreite	10,0%
DONNEES TECHNIQUES Selon le charactere des elements			
(DIN 45 500)			
SECTION AMPLIFICATEUR			
Puissance de sortie continue de 20 Hz - 20 kHz	2 - 45W (4D)	Distorsion harmonique totale	0,02% (4D)
les deux canaux en circuit	2 - 45W (8D)	a puissance nominale (20 Hz - 20 kHz)	0,02% (8D)
Puissance de sortie continue de 40 Hz - 16 kHz	2 - 45W (4D)	a puissance nominale (40 Hz - 16 kHz)	0,02% (4D)
les deux canaux en circuit	2 - 45W (8D)	a puissance nominale (1 kHz)	0,02% (8D)
Puissance de sortie continue a 1 kHz	2 - 55W (4D)	a demi-puissance (20 Hz - 20 kHz)	0,02% (4D)
les deux canaux en circuit	2 - 45W (8D)	a demi-puissance (1 kHz)	0,02% (8D)
		puissance de -26 dB a 1 kHz	0,1% (4D)
		puissance de 50 mW a 1 kHz	0,1% (4D)



■ SCHEMATIC DIAGRAM

Notes:

1. S1: (1) Interlock switch, "before" position.
(2) Interlock switch, "after" position.
(3) Interlock switch, "power" position.
2. S2: (1) Interlock switch, "power" position.
(2) Interlock switch, "before" position.
(3) Interlock switch, "after" position.
3. S3: (1) Interlock switch, "power" position.
(2) Interlock switch, "before" position.
(3) Interlock switch, "after" position.
4. S4: (1) Interlock switch, "power" position.
(2) Interlock switch, "before" position.
(3) Interlock switch, "after" position.
5. S5: (1) Interlock switch, "power" position.
(2) Interlock switch, "before" position.
(3) Interlock switch, "after" position.
6. S6: (1) Interlock switch, "power" position.
(2) Interlock switch, "before" position.
(3) Interlock switch, "after" position.
7. S7: (1) Interlock switch, "power" position.
(2) Interlock switch, "before" position.
(3) Interlock switch, "after" position.
8. S8: (1) Interlock switch, "power" position.
(2) Interlock switch, "before" position.
(3) Interlock switch, "after" position.
9. S9: (1) Interlock switch, "power" position.
(2) Interlock switch, "before" position.
(3) Interlock switch, "after" position.
10. S10: (1) Interlock switch, "power" position.
(2) Interlock switch, "before" position.
(3) Interlock switch, "after" position.
11. S11: (1) Interlock switch, "power" position.
(2) Interlock switch, "before" position.
(3) Interlock switch, "after" position.
12. A: Indicates that only parts specified by the manufacturer be used for safety. There may exist some errors in the voltage values on the line items as indicated. Therefore, the voltage values on the line items shall be checked. Therefore, there may exist some errors in the voltage values, depending on the internal.
13. A: Indicates that only parts specified by the manufacturer be used for safety. There may exist some errors in the voltage values on the line items as indicated. Therefore, the voltage values on the line items shall be checked. Therefore, there may exist some errors in the voltage values, depending on the internal.
14. ---: Shows signal lines of left channel.
15. ---: Positive (+) voltage lines.

• Power source circuits for [XAL] and [XA] [XA] Available in Asia, Latin America, Middle East and Africa.

[XAL] Available in Australia.

