Technics

Stereo Integrated Amplifier SU-V500 SU-V300

Operating Instructions



The photograph shows the SU-V500 model.

The configuration of the ventilation holes differs according to area.

Note:

The "EB" indication shown on the packing case indicates United Kingdom.

Assigning the drift please read mese menucions comple

1111



E EB EO GC GN

RQT2378-B

Dear Customer

Thank you for purchasing this Technics product. For optimum performance and safety, please read these instructions carefully.

These operating instructions are applicable to the SU-V500 and SU-V300 models.

These operating instructions, however, fundamentally explain the operation of SU-V500 model.



(For areas except United Kingdom, Europe, Australia and N.Z.)

CAUTION: The AC voltage is different according to the area. Be sure to set the proper voltage in your area before use. (For details, please refer to the page 7.)

Contents

Caution for AC mains lead (For United Kingdom) Suggestions for safety Front panel controls Connections	4
Listening to Sound. To adjust the tone quality To adjust the sound balance When listening through headphones	8 9 9 9
Recording	10
Technical specifications	11
Troubleshooting guide Back cov	er

(For United Kingdom)

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362. Check for the ASTA mark (\bigoplus) or the BSI mark \bigoplus) on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced. If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UN-SUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELEC-TRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol $\frac{1}{2}$.

Before use

Remove the connector cover as follows.



How to replace the fuse

1. Remove the fuse cover with a screwdriver.



2. Replace the fuse and attach the fuse cover.



Placement

Avoid placing the unit in areas of:

- direct sunlight
- high temperature
- high humidity
- excessive vibration
- uneven surfaces. (Place the unit on a flat level surface).

Such conditions might damage the cabinet and/or other component parts and thereby shorten the unit's service life.

Ventilation

- Place the unit in a well ventilated position at least 10 cms away from wall surfaces etc.
- Ensure that curtains and similar materials do not obstruct the ventilation holes.

Stacking

Never place heavy items on top of the unit or the power cord.

Voltage

- It is very dangerous to use an AC power source of high voltage such as for an air conditioner.
- A fire might be caused by such a connection.
- A DC power source can not be used.

Be sure to check the power source carefully, especially on a ship or other place where DC is used.

Power cord protection

 Avoid cuts, scratches or poor connection of the AC mains cord, as this may result in fire or electric shock hazard.
 Excessive bending, pulling or slicing of the cord should also be

- avoided.
- Do not pull on the cord when you are disconnecting the power, as this could cause an electric shock. Grasp the plug firmly when you disconnect the power supply.
- Never touch the plug with wet hands or a serious electric shock could result.

Foreign materials

- Ensure that no foreign objects, such as needles, coins, screwdrivers etc, accidentally fall into the unit or through the ventilation holes.
- Otherwise, a serious electric shock or malfunction could occur. • Be extremely careful about spilling water or liquid on/into the
- unit, as a fire or electric shock could occur. (Disconnect the power plug and contact your dealer immediate-
- iy if this occurs.)
 Avoid spraying insecticides onto the unit as they contain flammable gases which can be ignited.
- Insecticides, alcohol, paint thinner and similar chemicals should never be used to clean the unit as they can cause flaking or cloudiness to the cabinet flnish.

Maintenance

Clean the cabinet, panel and controls with a soft cloth lightly molstened with mild detergent solution.

Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

Service

- Never attempt to repair, disassemble or reconstruct the unit if there seems to be a problem.
- A serious electric shock could result if you ignore this precautionary measure.
- If a problem occurs during operation (the sound is interrupted, indicators fail to illuminate, smoke is detected, etc) contact your dealer or Authorised Service Center immediately.
- Disconnect the power supply if the unit will not be used for a long time. Otherwise the operation life could be shortened.

Front panel controls



8

8

9

<u>No.</u>	Name	Ref. page
1 Power	"STANDBY () (ON"	witch

(POWER, STANDBY ()/ON) Press to switch the unit from on to standby mode or vice ver-

sa. In standby mode, the unit is still consuming a small amount of power.

② "STANDBY" indicator (STANDBY)

When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.

③ Operation indicator (OPERATION)

When the power is switched ON, this indicator illuminates after about 2 seconds when the unit is in the operating condition.

If an abnormal condition in the circuitry is detected, such as a short-circuit of the positive (+) and negative (-) wires from the speaker terminals, the protection circuit functions and this indicator will not illuminate.

4 Volume control (VOLUME)

5	SU-V500 only		
	Remote control signal receptor (SENSOR)		
	Receives the signals from the remote control.		
6	Headphones jack (PHONES)		

Na	. Name	Ref. page
1	Speaker select buttons/Indicators (SPEAKERS)	8
8	Tone controls (BASS/TREBLE)	9
9	Balance control (BALANCE)	9
10	Tone control button (TONE)	9
1	TAPE 1 MONITOR button/indicator (TAPE 1 MONITOR)	8,10
12	Input select buttons/indicators (INPUT SELECTOR)	8,10



To connect to each terminal



A "REMOTE CONTROL OUT" terminal SU-V500 only

Connect the connection cable for the remote control to a Technics tape deck and/or CD player (or CD changer) which has the appropriate remote control terminal as shown at the right.

If a tape deck is not being used, the CD player (or CD changer) can be connected directly (dotted line).

Note

For a tape deck and/or CD player (or CD changer) with a remote control sensor, this connection is not necessary.





📕 "B" terminais

For connection to a second pair of speakers.

Speaker impedance

- When only the "A" or only the "B" terminals are used: 4-16 ohms
- When both the "A" and the "B" terminals are used simultaneously: 8-16 ohms



To connect the AC power supply cord

FOR UNITED KINGDOM ONLY BE SURE TO READ THE CAUTION FOR THE AC POWER SUPPLY CORD ON PAGE 3 BEFORE CONNECTING THE AC POWER SUPPLY CORD.

For areas except United Kingdom, Europe, Australia and N.Z. SU-V500 cmlv

Be sure to set the voltage selector to "110 V - 127 V" or "220 V - 240 V" according to the area in which the unit will be used.

[Use a minus (-) screwdriver]



Note

Note that this unit will be seriously damaged if this setting is not made correctly.



(For areas except Australia and N.Z.) Insertion of Connector

Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing.

However there is no problem using the unit.



Note

The configuration of the AC power supply cord differs according to area.

-Not supplied for United Kingdom, Europe,-Australia and N.Z.

If the power plug will not fit your socket, use the power plug adaptor (included).



Listening to Sound



After listening is finished

Be sure to reduce the volume level, and turn the unit off by pressing POWER.

When tape 1 monitor indicator illuminates

Illuminates



This indicates that the tape monitor function of this unit is ON. To listen to sources other than a tape (TAPE 1),

be sure to turn off the indicator by pressing TAPE 1 MONITOR.





Turn TREBLE to adjust the highfrequency sound.

TREBLE

Ο

Use VOLUME to reduce the volume level, and connect the headphones.

If sound from speakers is not wanted, press SPEAKERS (A) and/or (B) to turn off the speaker select indicators.

Avoid listening for prolonged periods of time to prevent hearing damage.

9



To record from compact discs, etc.

It is possible to record from units which are connected to the rear "AUX", "CD", "TUNER" or "PHONO" terminals to cassette tape decks or DCC decks which are connected to the "TAPE 1" or "TAPE 2/DCC" terminals.



Before recording, prepare the tape deck or DCC for recording (recording level adjustment, etc.).

See the tape deck's or DCC's operating instructions for details.



Note:

If recording to both decks simultaneously, do not press TAPE 1 MONITOR. (If this button Is pressed, it will not be possible to record to the deck which is connected to the "TAPE 2/DCC" terminals.)

To check the sound recorded while recording is being made

If a cassette tape deck with 3 heads is connected to the "TAPE 1" terminals, it is possible to check the sound being recorded onto the tape.

Tape-to-tape recording

It is possible to record from tape deck 2 (the cassette tape deck or DCC deck which is connected to the "TAPE 2/DCC" terminals) to tape deck 1 (the cassette tape deck which is connected to the "TAPE 1" terminals).



Preparation

- Before recording, prepare the tape deck for recording (recording level adjustment, etc.).
- See the tape deck's operating instructions for details.
- Load tapes which have been advanced to the end of the leader tape into both decks.

Tape deck 1: For recording Tape deck 2: For playback.



For your reference

When recording from tape deck 1 to tape deck 2, press TAPE 1 MONITOR in step 1 above, and then start recording on tape 2 and begin playback on tape 1.

At this time, make sure that the input selector is set to a position other than "TAPE 2/DCC". (This is because monitoring of the unit connected to the "TAPE 2/DCC" terminals is not possible.)



Press TAPE 1 MONITOR (indicator will illuminate.) on this unit and set the monitor button on the tape deck to "TAPE".

Press TAPE 1 MONITOR once again to turn it off.

Technical specifications (DIN 45 500)

20 Hz – 20 kHz continuous power output both channels driven	
[SU-V500] (For United Kingdom, Europe, N.Z.)	Australia and 2 × 30 W (8 Ω)
40 Hz – 20 kHz continuous power output both channels driven	
[SU-V500] (For areas except United King	dom. Europe.
Australia and N.Z.)/[SU-V300] 1 kHz continuous power output	2×27 W (8 Ω)
both channels driven (THD: 1%)	
[SU-V500] (For United Kingdom, Europe, N.Z.)	Australia and 2×38 W (8 Ω)
···,	2×50 W (6 Ω)
[SU-V500] (For areas except United King	idom. Europe.
Australia and N.Z.)/[SU-V300]	2×33 W (8 Ω)
	2×40 W (4 Ω)
63 Hz-12.5 kHz continuous power output	
both channels driven (THD: 1%)	
[SU-V500] (For United Kingdom, Europe,	
N.Z.)	2×35 W (8 Ω)
[SU-V500] (For areas except United King	2×45 W (4 Ω)
Australia and N.Z.)/[SU-V300]	2×30 W (8 Ω)
	2×35 W (3 Ω)
Total harmonic distortion	
rated power at 20 Hz-20 kHz	0.1% (8Ω)
Intermodulation distortion (50 Hz: 7 kHz = 4:1,	SMPTE)
rated power	0.1% (8 Ω)
Residual hum and noise	1 mV
Damping factor	60 (8 Ω)
Headphones output level/impedance Load impedance	30 (4 Ω) 340 mV/47 Ω
A or B	4-16 Ω
A and B	8-16Ω
Input sensitivity/impedance	
PHONO MM TUNER, CD, AUX, TAPE 1, TAPE 2/DCC	2.5 mV/47 kΩ
Phono maximum input voltage (1 kHz, RMS)	150 mV/22 kΩ
	50 mV (1HF '66)
S/N (rated power, 4 Ω)	
PHONO MM	
[SU-V500] (For United Kingdom, Europe,	
N.Z.) 76 dB (77 dB, IHF '66)
[SU-V500] (For areas except United King	dom, Europe,
Australia and N.Z.)/[SU-V300] 76 dB (TUNER, CD, AUX, TAPE 1, TAPE 2/DCC	76 dB, IHF '66)
[SU-V500] (For United Kingdom, Europe,	Australia and
N.Z.) 90 dB (95 dB, IHF '66)
[SU-V500] (For areas except United King	dom. Eurone
	94 dB, IHF '66)
S/N at -26 dB power (4 Ω)	-,,
PHONO MM	67 dB
TUNER, CD, AUX, TAPE 1, TAPE 2/DCC	70 dB
S/N at 50 mW power (4 Ω)	
PHONO MM	63 dB
TUNER, CD, AUX, TAPE 1, TAPE 2/DCC	63 dB

Frequency response	
PHONO MM	RIAA standard curve ±1 dB
	(30 Hz – 15 kHz)
TUNER, CD, AUX, TAPE	1, TAPE 2/DCC
	3 Hz−80 kHz (+0, −3 dB)
_	+0 dB, -0.3 dB (20 Hz-20 kHz)
Tone controls	,
BASS	50 Hz, +10 to -10 dB
TREBLE	20 kHz, +10 to -10 dB
Output voltage	
TAPE 1, TAPE 2/DCC REC OUT 150 mV	
Channel balance (AUX 250 Hz-6.3 kHz) ±1 c	
Channel separation (AUX 1	kHz) 50 dB

GENERAL

Power consumption	[SU-V500] 130 W
	[SU-V300] 110 W
Power supply	• • •
For Europe	50 Hz/60 Hz AC, 230 V
For United Kingdom, Aus	tralia and N.Z.
	50 Hz/60 Hz AC, 230 V-240 V
For others 50 Hz/60 H	z AC, 110 V-127 V/220 V-240 V
Dimensions (W × H × D)	430 × 125 × 310 mm
Weight	
[SU-V500] (For United Ki	ngdom, Europe, Australia and
N.Z.)	6.0 kg
[SU-V500] (For areas exc	cept United Kingdom, Europe,
Australia and N.Z.)/[SU-V3	00] 5.4 kg
Notes:	
· · · · · ·	

- 1. Specifications are subject to change without notice. Weight and dimensions are approximate.
- 2. Total harmonic distortion is measured by the digital spectrum analyzer.
- For areas except Europe The specification values given have been measured while using a 240 V power supply.

For United Kingdom only

This apparatus was produced to BS 800.



 $^{\circ}$

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.

If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the directory of Authorized Service Centers (enclosed with this unit) to locate a convenient service center, or consult your Technics dealer for instructions.

Problem	Probable cause(s)	Suggested remedy
Problems noted at	all times	
No sound is heard when the power is switched ON.	The power cord plug is not completely inserted.	Confirm that the power cord plug is connected completely.
	Connections to the speakers, etc. are incomplete or incorrect.	Check to be sure that all connection wires are correctly connected.
	The input selector setting is incorrect.	Check to be sure that the selection of the desired sound source is made correctly.
	The speaker selector is set incorrectly.	Set it to the correct position.
	The tape monitor function is on. (TAPE 1 MONITOR indicator is illuminated)	 When listening to a source other than the tape deck (TAPE 1), press TAPE 1 MONITOR so that the indicator is switched off.
When listening to stereo sound, the sound lacks depth (i.e. thin bass, tinny sound).	One of the speakers is connected out of phase $[(+)\rightarrow(-), (-)\rightarrow(+)]$.	 Reconnect the speakers maintaining proper polarity [i.e., (+)→(+), (-)→(-)].
When listening to stereo sound, the left and right sounds are reversed.	The left and right speaker connections, source connections, or graphic equalizer connections are reversed.	Check all connections and correct them if necessary.
A low-pitched noise ("hum" or "buzz") is heard.	The power cord or a fluorescent light, etc., is near the connection wires.	 Try separating this unit as far as possible from the electric appliance.
Sound is not heard from one of the speakers.	The speaker wires are disconnected.	 Check and correct the connections of the speaker wires.
	The balance control is set too far to one side.	 Set so that sounds are heard at the center, between the speakers.
Sound stops during a performance, or no sound is heard when the power is switched ON.	The protection circuitry has functioned because the positive and negative speaker connection wires are "shorted", speakers with an impedance less than the indicated rated impedance of the amplifier are used.	 Switch OFF the power, and, after determining and correcting the cause, switch ON the power once again. Use the speakers of the proper impedance rating.

Matsushita Electric Industrial Co., Ltd.

Central P.O. Box 288, Osaka 530-91, Japan

Printed In Japan

Technics

How to use the remote control transmitter RAK-SU129WH



Before use

Battery installation

Insert the batteries included with this unit as shown below.



When you need to replace these batteries Use two UM-4 "AAA", IEC R03 (1.5 V) or equivalent batteries.

Method for use

Use the remote control within 60 degrees and within 7 meters (23 ft.) facing directly toward the amplifier's remote control signal sensor.



Note

Be sure the transmission window and the unit's sensor are free from dust. Excessive dust might affect performance.

The operation may not be correct if direct sunlight or another strong light source strikes the receiving sensor of this unit. If there is a problem, place the unit away from the light source.

When operating a Technics audio equipment with a remote control sensor, face this remote control toward the remote control sensor of the unit to be operated.

Remote control operation

This remote control transmitter can be used to operate other units manufactured by Technics in addition to this amplifier, including CD players (or CD changers), cassette decks, DCC decks, or tuners.

- For detailed information concerning operation steps, etc., please refer to the appropriate page for each unit and the respective operating instructions.
- Make sure that the power of each unit is set to the "ON" position before beginning the operations.

To operate the amplifier

NOTE:

Face this remote control transmitter toward the main unit to operate the main unit or other units which are connected to the main unit by means of a remote control cable. To operate any other unit with a remote control sensor, face this remote control transmitter toward that unit.

	To turn the unit ON/OFF	POWER
AUDIO OFF AUDIO OFF TAPE 1 TAPE 2 CD TUINER DCC AUX PHONO DCC AUX PHONO DCC AUX PHONO TUNER 1 2 3 TUBEC 1 3 4 TUBEC 1 4 5 8 9 0 1 4 7 1 7 1 8 9 1 7 1 8 9 1 7 1 7 1 8 9 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7	To change the input source	TAPE 1 TAPE 2 CD TUNER DCC AUX PHONO DCC AUX PHONO The input source on the amplifier will change each time a but- ton is pressed. Furthermore, if either TAPE 2 or DCC is pressed, only the "TAPE 2/DCC" input indicator will illuminate in both cases. Only for SU-V500 The tape monitoring function of the amplifier will switch on when TAPE 1 is pressed. The monitoring function will then be automatically canceled when a button other than TAPE 1 is pressed.
	To adjust the volume level	
	if your unit is equipped wi (see below)	th the New Technics Remote Control System
	To turn the system OFF	

New Technics Remote Control System Compatibility Table (as of April, 1994)		
Amplifier	SU-V500, SU-A700MK2, SU-A800MK2, SU-A900MK2	
CD player (or CD changer)	SL-PG360A, SL-PG460A, SL-PG560A, SL-PD667, SL-PD867, SL-PD1000	
Cassette deck	RS-BX501, RS-BX601, RS-BX701, RS-BX646, RS-BX747, RS-TR373, RS-TR474, RS-TR575	
Digital compact cassette deck (DCC)	RS-DC8	
Tuner	ST-GT350, ST-GT550, ST-GT650	



To operate a digital compact cassette deck (DCC)

The explanation below is an example of operation in the case where a DCC been connected to the "TAPE 2/DCC" terminals on the rear of this amplifier.
Note: The Technics RS-DC10 can not be operated by this remote control.

To switch the remote control transmitter to DCC operation mode	The input source for the amplifier will switch to the DCC deck which is connected to the "TAPE 2/DCC" terminals, and operation of the buttons listed below will be possible. If a DCC deck which is equipped with the New Technics Remote Control System is connected The power supply of the DCC deck can be turned on by press- ing this button for approximately 2 seconds.
To start play	Ò
To select by track number	This is only effective for commercially-available DCC tapes and for other DCC tapes for recording purposes which have had track numbers recorded. $\begin{array}{c} 1 & 2 & 3 \\ \hline & 0 & 1 \\ \hline & 0 & 5 & 6 \\ \hline & 0 & 0 \\ \hline & 0 & 6 \\ \hline & 0 & 0 \\ \hline & 0$
To change the tape side	
To fast-forward or rewind the tape	(Backward) (Forward)
To skip a track	(Backward) (Forward)
To stop play temporarily	Press or resume play.
To stop play	Ċ
	control transmitter to DCC operation mode To start play To select by track number To change the tape side To fast-forward or rewind the tape To skip a track To stop play temporarily

To operate a tuner



Battely notes

- Do not mix old and new batteries, or batteries of different types (carbon and alkaline, etc.).
- Always remove old, weak or worn-out batteries promptly and dispose of them properly.
- The average battery life is about one year.
- Although the battery life varies depending on how often the device is used, you should generally replace the batteries about once a year.
- The batteries should be replaced if commands from the remote control transmitter do not operate the unit even when the transmitter is held close to the front panel.
- Never subject batteries to excessive heat or flame; do not attempt to disassemble them; and be sure they are not short-circuited.

- If you will not use the remote control for a long period of time, remove the batteries and store them in a cool, dark place.
- If a battery leaks, remove all batteries and dispose of them properly. Thoroughly clean the battery compartment before inserting new batteries.

If the leaking electrolyte comes into contact with skin or clothes, flush with water immediately.

- Keep batteries out of reach of children.
- Do not use rechargeable (nickel-cadmium) type batteries.
- Do not attempt to recharge alkaline or carbon batteries.
- · Do not dispose of used batteries in household rubbish.