ORDER NO. HAD8506124A4

Service Manual

Cassette Deck

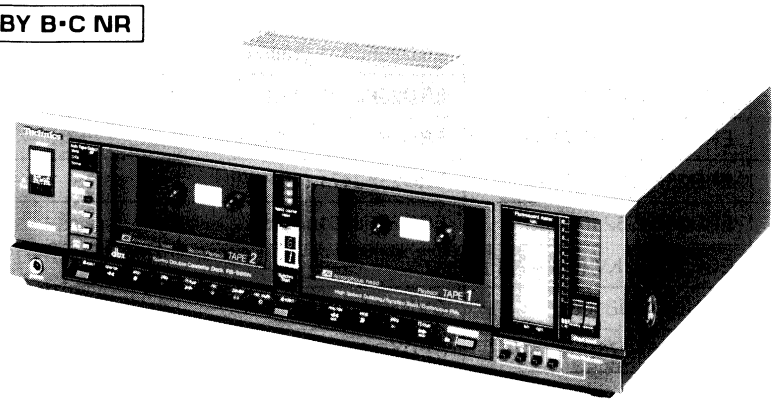
RS-B66W

dbx*/Dolby B-C NR,
6×-speed Tape-to-Tape Recording
Double Cassette Deck

** DOLBY B•C NR

Color

(K)...Black Type



Color	Area
(K)	[PA]....Far Fast PX.
(K)	[PE]....European Military.

RS-8R MECHANISM SERIES

- Please use this manual together with the service manual for model No. RS-B66W ([XA] mark areas) order No. HAD85022416C8.
- This Service Manual indicates the main differences between; original RS-B66W ([XA] mark areas) and RS-B66W ([PA][PE] mark areas).

SPECIFICATIONS

Deck system	Stereo cassette deck
Track system	4-track, 2-channel
Heads (TAPE 1) PLAY	AX head
(TAPE 2) REC/PLAY	AX head
Erasing	Double-gap ferrite head
Motors	
Capstan	1 motor
Reel drive	2 motor
Mechanism	2 motor
Recording system	AC bias
Bias frequency	300 kHz
Erasing system	AC bias
Tape speed	4.8 cm/sec.
Frequency response	
Metal	20 Hz–21,000 Hz
	30 Hz–20,000 Hz (DIN)
	30 Hz–19,000 Hz (±3 dB)
CrO_2	20 Hz–20,000 Hz
	30 Hz–19,000 Hz (DIN)
	30 Hz–18,000 Hz ±3 dB
Normal	20 Hz–19,000 Hz
	30 Hz–18,000 Hz (DIN)
	30 Hz–17,000 Hz ±3 dB
Dynamic Range (with dbx in)	110 dB (1 kHz)

S/N (Signal level = max. recording level, CrO_2 type tape)	
dbx in	92 dB (A weighted)
Dolby C NR in	75 dB (CCIR)
Dolby B NR in	67 dB (CCIR)
NR out	57 dB (A weighted)
Wow and flutter	0.06% (WRMS)
	±0.1% (DIN)
Max. Input level improvement (with dbx in)	10 dB
Fast Forward and Rewind Time	
Approx. 85 seconds with C-60 cassette tape	
Input sensitivity and impedance	
LINE	60 mV/47 kΩ
Output voltage and impedance	
LINE	400 mV/2.5 kΩ
HEADPHONES	80mV/8Ω
Power consumption	38 W
Power supply	AC 50 Hz/60 Hz
	110 V/127 V/220 V/240 V,
	preset power voltage 240 V for
	Europe, 127 V for other area
Dimensions (W×H×D)	430×110×325 mm
Weight	6.9 kg

Design and specifications are subject to change without notice.

*The term dbx is a registered trademark of dbx Inc.

**'Dolby' and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Technics

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

Panasonic Tokyo Office
Matsushita Electric Trading Co., Ltd.
1-2, 1-chome, Shibakoen, Minato-ku, Tokyo 105, Japan

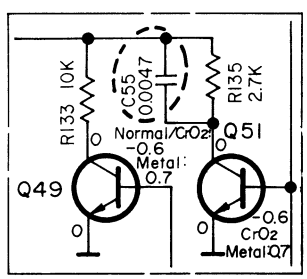
PARTS COMPARISON TABLE:

Please revise the original parts list in the Service Manual RS-B66W ([XA] mark areas) to conform to the changes shown herein.
If new part numbers are shown, be sure to use them when ordering parts.

Important safety notice
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

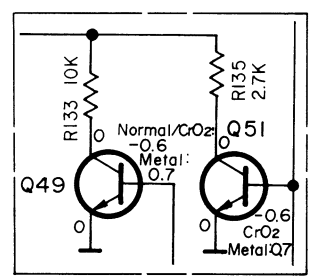
Ref. No.	Part Name & Description	Part Numbers		Remarks
		For [XA] mark areas.	**For [PA][PE] mark areas.**	
R55, 56	Resistors	ERD25FJ472 (4.7kΩ)	**ERD25FJ432 (4.3kΩ)**	
R248	Resistor	ERD25FJ221 (220Ω)	**ERD25FJ331 (330Ω)**	
R251	Resistor	ERD25FJ391 (390Ω)	**ERD25FJ331 (330Ω)**	
R306	Resistor	ERD25FJ100 (10Ω)	**ERD25FJ330 (33Ω)**	
R307	Resistor	ERD25FJ222 (2.2kΩ)	**ERD25FJ122 (1.2kΩ)**	
R308	Resistor	ERD25FJ222 (2.2kΩ)	**ERD25FJ471 (470Ω)**	
R309	Resistor	ERD25FJ562 (5.6kΩ)	**ERD25FJ561 (560Ω)**	
C55, 56	Capacitor	ECFDD472KV (0.0047μF)	——	Deleted
VR301	Variable Resistor	QVNB3A00B103	**QVNB3A00B332**	
RL1	Relay	SFDYG5A273P	**SFDYG5A237P**	
17	Fuse Holder	SJT347	**QTF1054**	⚠
A2	Instruction Book	SQF12313	**SQF12540**	

■ SCHEMATIC DIAGRAM

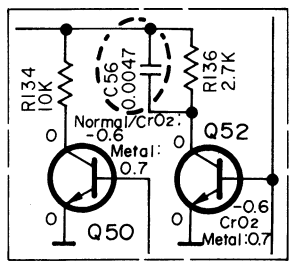


For [XA] mark areas.

(Deletion)

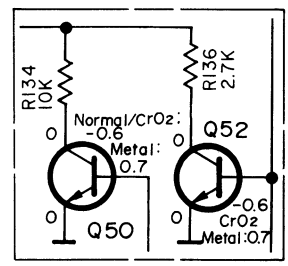


For [PA][PE] mark areas.



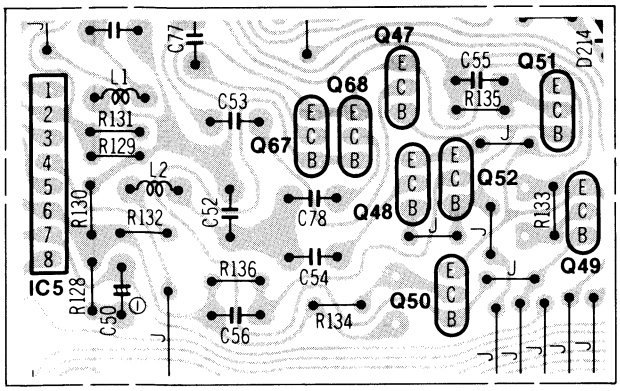
For [XA] mark areas.

(Deletion)



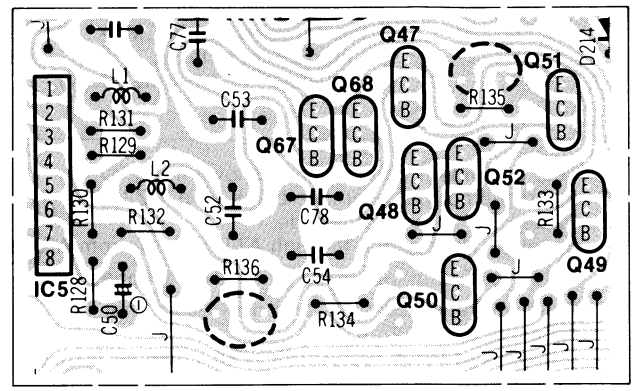
For [PA][PE] mark areas.

■ PRINTED CIRCUIT BOARD

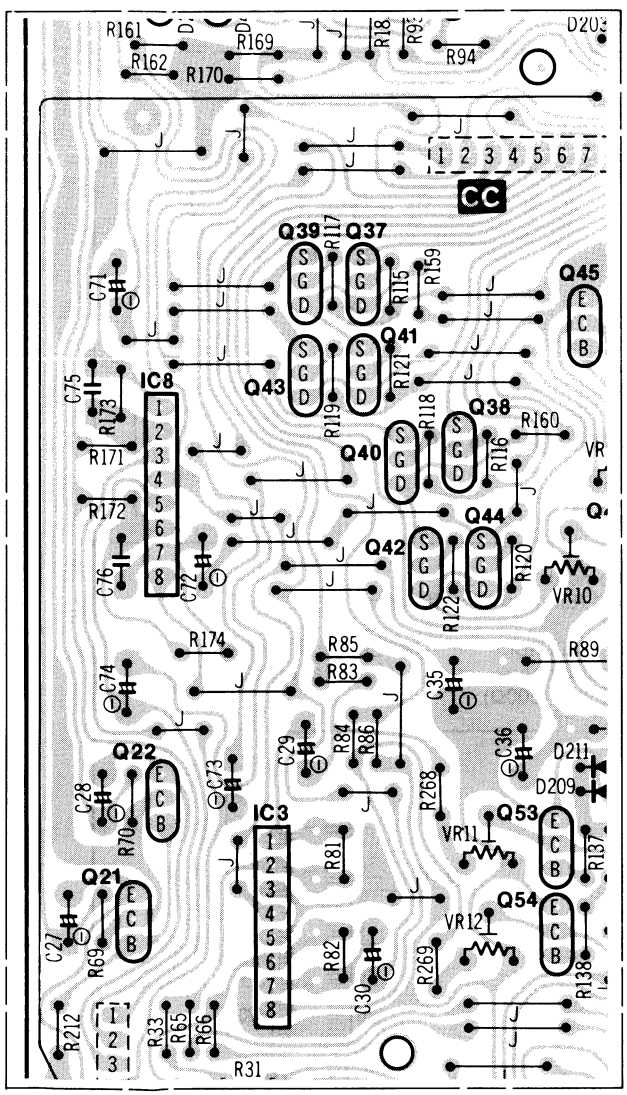


For [XA] mark areas.

(Deletion)

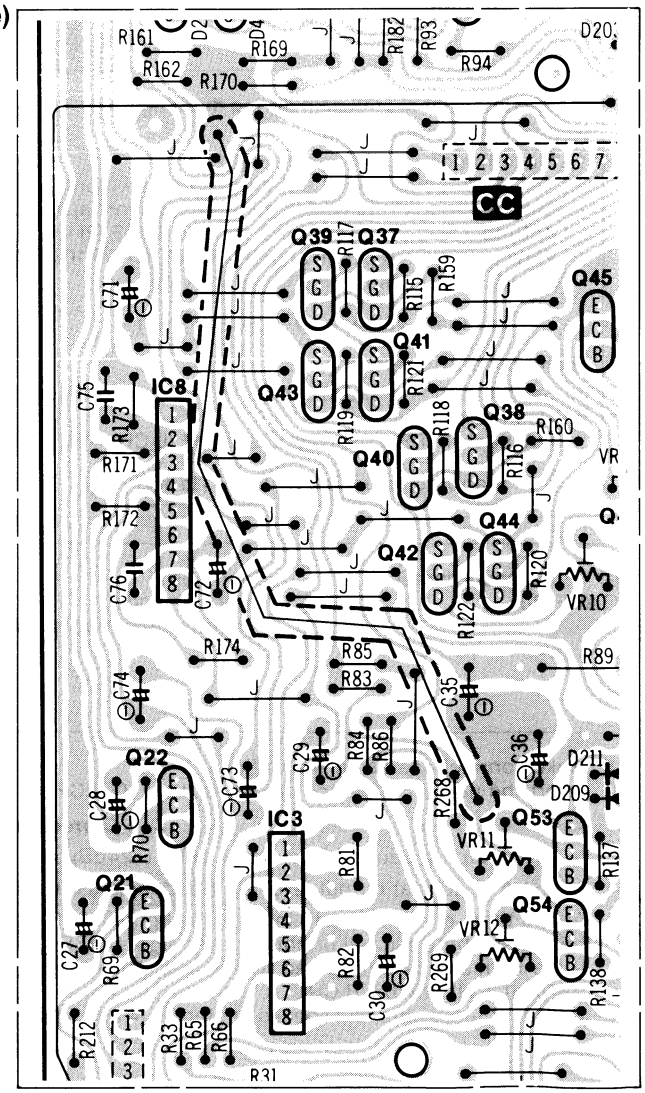


For [PA][PE] mark areas.



For [XA] mark areas.

(Difference)



For [PA][PE] mark areas.

■ MEASUREMENT AND ADJUSTMENT METHODES

Ⓖ Overall gain (TAPE [2])

Condition:
- Record/playback mode
- Normal tape mode
- Input level controls...MAX
- Standard input level; LINE IN ...−24±4dB (63mV)

Equipment:
- EVM (Electronic Voltmeter)
- ATT
- Resistor (600Ω)
- Test tape (reference blank tape) ...QZZCRA for Normal
- AF oscillator
- Oscilloscope
- **Test tape ...QZZCFM (315Hz, 0dB)** — **Addition**

1. Test equipment connection is shown in fig. 17.
2. Insert the normal reference blank tape (QZZCRA).
3. Place UNIT into record mode.
4. Supply a 1kHz signal through ATT (−24dB) from AF oscillator, to LINE IN. — **Correction**
5. Adjust ATT until monitor level at **Headphones output** becomes **0.525V**. — **Correction**
6. Playback recorded tape, and make sure that the output level at LINE OUT becomes 0.4V±22mV.
7. If measured value is not 0.4V±22mV, adjust it by using VR9 (L-CH) or VR10 (R-CH).
8. Repeat from step (2).

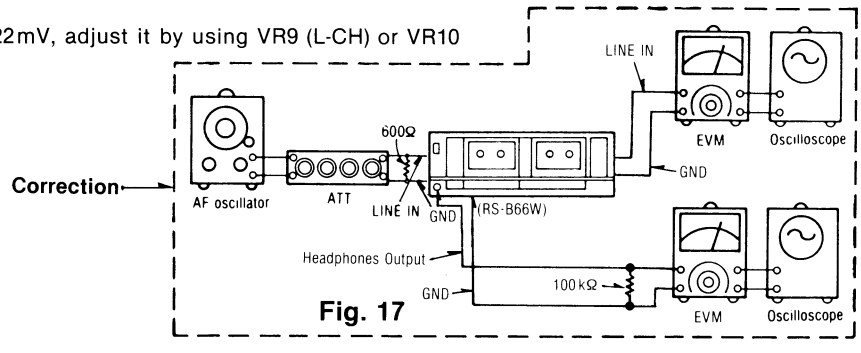


Fig. 17

Addition

• Adjustment of overall gain during dubbing

Normal speed adjustment

1. Make the connection as in Fig. 17-1.
2. Set the dubbing speed switch to ×1 mode (normal speed).
3. Set the standard playback gain adjustment tape QZZCFM (315Hz, 0dB) to TAPE [1], and normal tape to TAPE [2] when dubbing.
4. Playback TAPE [2], then adjust VR9 (L-CH) {VR10 (R-CH)} so that the output level is within the standard value.

Standard value: 0.4V±0.5dB (11mV)

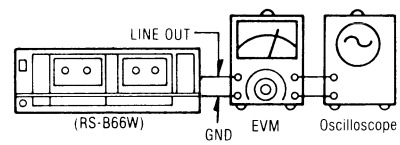


Fig. 17-1

High speed Adjustment

5. Set the dubbing speed switch to ×6 mode (6 times higher speed).
6. Operate the step 3.
7. Playback TAPE [2], then adjust VR11 (L-CH) {VR12 (R-CH)} so that the output level is within the standard value.

Standard value: 0.4V±0.5dB (11mV)

Ⓗ Fluorescent meter (TAPE [2])

Condition:
- Record mode
- Input level controls...MAX

Equipment:
- EVM (Electronic Voltmeter)
- ATT
- AF oscillator
- Oscilloscope
- Resistor (600Ω)
- Test tape (reference blank tape)...QZZCRA

1. Make connections as shown in fig. 17.
2. Insert the normal reference blank test tape (QZZCRA).
3. In the recording pause mode, apply 1kHz (−24dB) to LINE IN. — **Correction** **Correction**
4. Adjust ATT so that output level at **Headphones output** is **0.525V**.
5. At this time, check that 0dB indicator is lighted halfway (intermediate brightness between full brightness and light-out: See fig. 18).
6. If the indicator is not lighted halfway as described in step 4, adjust VR701 (L-CH), VR702 (R-CH).
7. Repeat adjustments and checks at steps 3, 4 and 5 two or three times.

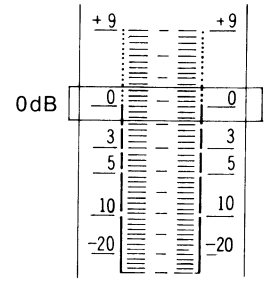


Fig. 18

PAPE
Printed in Japan
850600830 Ⓗ M.S/A.H