

# CD Stereo Radio Recorder

Service  
Service  
**Service**



**AZ1140**  
**AZ1141**  
**AZ1142**  
**AZ1143**  
**AZ1145**  
all versions

# Service Manual



## TABLE OF CONTENTS

	chapter		chapter
Handling chip components and safety .....	1 - 1	MAIN BOARD	
Technical Specification & Service Tools.....	2 - 1	circuit diagram .....	10 - 1
Service Measurement .....	2 - 2	layout diagram .....	10 - 2
Connections & Controls .....	3 - 1	RECORDER & BEAT CUT BOARD	
Instructions for use .....	3 - 2 to 3 - 6	circuit diagram .....	11 - 1
Disassembly Diagram .....	4 - 1	layout diagram .....	11 - 2
CD Service Test Program.....	4 - 2 to 4 - 3	CD MODULE	
Block Diagram .....	5 - 1	circuit diagram .....	12 - 2
Wiring Diagram .....	6 - 1	layout diagram .....	12 - 1
CONTROL BOARD		EXPLODED VIEWS DIAGRAM	
circuit diagram .....	7 - 1, 7 - 3	cabinet .....	13 - 1
layout diagram.....	7 - 2	tape deck .....	13 - 2
SWITCH & VOLUME BOARD		Mechanical partslist .....	13 - 2
layout diagram .....	8 - 1	Electrical partslist .....	14 - 1 to 14 - 4
TUNER BOARD			
circuit diagram .....	9 - 1		
layout diagram .....	9 - 2		

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

© Copyright 1995 Philips Consumer Electronics B.V. Eindhoven, The Netherlands  
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise without the prior permission of Philips.

**CLASS 1  
LASER PRODUCT**



**PHILIPS**

## TECHNICAL SPECIFICATIONS

### GENERAL

Mains voltage	-/00 : 230 V
	-/01/11/16 : 120/230 V
	-/05/10 : 240 V
	-/17 : 120 V
Mains frequency	-/00/05/10 : 50 Hz
	-/01/11/16 : 50 / 60 Hz
	-/17 : 60 Hz
Battery	mains : 9 V (R14 x 6)
	Remote : 3V (R03 x 2)
Power consumption	normal : 10 W
	standby : 2 W
Dimension (W x H x D)	: 290 x 152 x 253 mm
Weight	: 2.6 Kg

### AMPLIFIER

Output power	mains : 2 x 1.6 W
	battery : 2 x 2 W
Speaker impedance	: 2 x 4 ohm
Frequency response	: 100 Hz - 8 kHz ( $\pm 3$ dB)

### TUNER - FM SECTION

Tuning range	: 87.5 - 108 MHz
IF frequency	: 10.7 MHz $\pm$ 0.2 MHz
Sensitivity	: 16 dBf at 26dB S/N
Selectivity	: 55 dB at $\pm$ 300kHz
IF rejection	: 85 dB
Image rejection	: 40 dB

### TUNER - AM SECTION

Tuning range	MW : 531 - 1602 kHz
	-/17 : 520 - 1730 kHz
	LW : 153 - 279 kHz
IF frequency	: 450 kHz $\pm$ 1 kHz
Sensitivity	MW : 64 dBu at 26dB S/N
	LW : 70 dBu at 26dB S/N
Selectivity	MW : 22dB
	LW : 29 dB
IF rejection ratio	MW : 70 dB
	LW : 70 dB
Image rejection ratio	MW : 32 dB
	LW : 35 dB

### AUDIO CASSETTE RECORDER

Tape speed accuracy	: $\pm$ 3%
Wow & flutter	: < 0.35 % JIS WTD
Fast wind/rewind C60	: < 120 sec.
Frequency response	P/B : 125 – 6.3 kHz
S/N ratio	: 45 dB

### COMPACT DISC

Frequency response	: 100 Hz - 10 kHz
S/N ratio	: > 50 dB
Channel difference	1 kHz : < 3 dB
Channel crosstalk	1 kHz : > 26 dB
Laser wavelength	: 780 $\pm$ 20nm
Laser light power	: < 0.3 mW

## SERVICE TOOLS

Audio signal disc SBC 429.....	4822 397 30184
Playability test disc SBC 444.....	4822 397 30245
Test disc 5 (disc without errors ) +	
Test disc 5A (disc with dropout errors, black spots and fingerprints)	
SBC 426/426A.....	4822 397 30096
Burn in test disc (65 min. 1kHz signal at -30 dB level without "pause").....	4822 397 30155
Universal test cassette Fe SBC 420 .....	4822 397 30071

**ELECTRICAL PARTSLIST - CD99 DA11****- RESISTORS -**

4888	482205120008	Jumper
4889	482205120008	Jumper

**- COILS & FILTERS -**

1810	482224273557	Filter CST8,46MTW-TF01
5803	482215711231	Coil LAN02TB1R0J

**- DIODES -**

6877	482213011564	Diode UDZ3.9B
------	--------------	---------------

**- IC & TRANSISTORS -**

7800	482220917324	IC SAA7325H
7802	532220911517	IC PC74HCU04T
7803	532213060123	Trans BC807-40
7804	532220982941	IC LM358D
7807	532213042755	Trans BC847C
7808	482220932852	IC TDA7073A/N2
7809	482220932852	IC TDA7073A/N2
7810	482220933165	IC TDA1308T/N1
7875	482213060511	Trans BC847B

**- MISCELLANEOUS -**

1800	482226510925	Connector 15P
1823	482226511207	Connector 6P
1824	482226511207	Connector 6P
8000	482232012178	Flexible Foil 15P

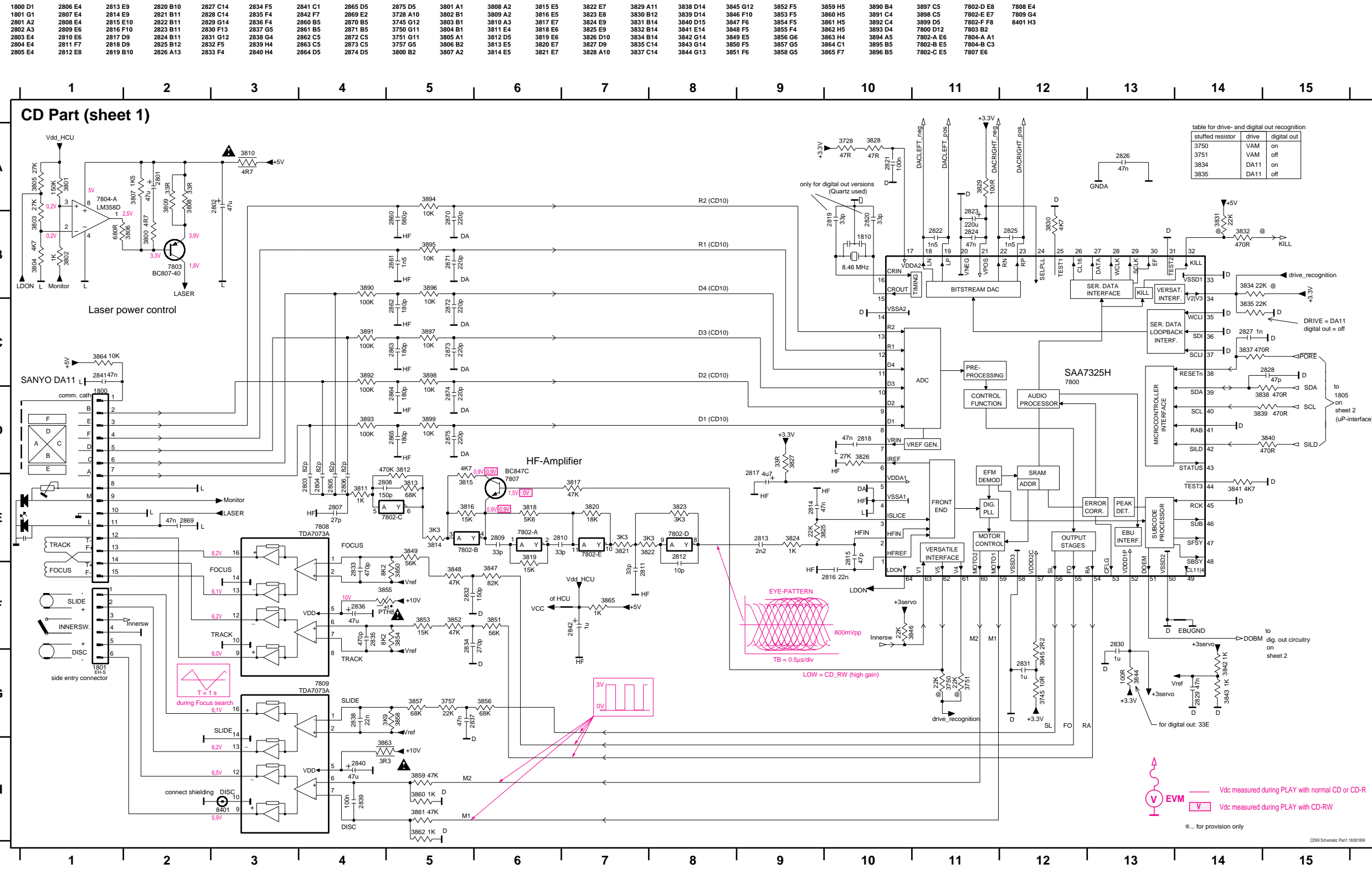
**Note :** Only these parts mentioned in the list are  
normal service parts.

CD99 DA11 - CIRCUIT DIAGRAM

12-2

12-2

12-2



SCREW LIST

- 1. C2 x 10
- 2. C2 x 12
- 3. C2.5 x 9.5
- 4. C3 x 7.5
- 5. C3 x 8
- 6. C3 x 9
- 7. C3 x 10
- 8. C3 x 12
- 9. C3 x 34
- 10. C P/W 2.5 x 16
- 11. C P/W 3 x 10
- 12. C P/W 3 x 14

