TABLE OF CONTENTS

Specification ..................................................2 - 3
Measurement setup .......................................... 4
Safety ............................................................. 5
Connections & Controls ..................................... 6 - 7
Service hints .................................................. 8
Dismantling Hints ........................................... 9 - 11
Service Test Program ....................................... 12 - 16
Wiring Diagram of Set ...................................... 17 - 18
Block Diagram of Set ...................................... 19 - 21

Micro Mix Board
- Circuit Diagram ........................................ 22
- Component Layout ....................................... 22

Front Board
- Component Layout copierside view ................... 23 - 24
- Circuit Diagram AF-Part ................................. 25 - 26
- Component Layout componentside view .............. 27 - 28
- Circuit Diagram Control-Part ......................... 29 - 30

Recorder Board
- Adjustment Table ....................................... 31
- Component Layout ...................................... 32
- Circuit Diagram ......................................... 33 - 34

Power Board (all version except /22)
- Component Layout ....................................... 35 - 36
- Circuit Diagram ......................................... 37 - 38

Power Board (for /22 only)
- Component Layout ....................................... 39 - 40
- Circuit Diagram ......................................... 41 - 42

Tape Board
- Circuit Diagram ......................................... 43
- Component Layout ...................................... 43

ECO 4 Tuner
- Circuit Diagram ......................................... 44 - 46
- Component Layout ....................................... 47 - 48
- Adjustment Table ....................................... 49

Tuner 92
- Circuit Diagram ......................................... 50 - 52
- Component Layout ....................................... 53 - 54
- Adjustment Table ....................................... 55

CD
- Dismantling of CD Unit ................................ 56 - 59
- Block Diagram .......................................... 59 - 60
- Component Layout ....................................... 61 - 62
- Circuit Diagram ......................................... 63 - 65
- Faultfinding Tree ...................................... 66 - 67
- Abbreviations ........................................... 68
- Exploded View CD ....................................... 69 - 70

Exploded Views of Set ................................... 69 - 72
Partslist ....................................................... 73 ff

Annex
Service Manual Tape Transport RDN-11
Service Manual Record Player DL-40
SERVICE TEST PROGRAM

The service test program can be left:
- at each step: by switching power off (disconnect mains)
- from service main menu:
  by pressing the Standby button twice the set is switched
to normal working mode except: * in TUNER mode still the service preset
frequencies are available.
* in CD mode the error codes will be displayed.

2) Preset frequencies of table 1 can be used
   as in normal tuner mode.
   If fieldstrength is high enough "PROGRAM" flag will light.
Preset frequencies stored by the customer are still
stored in the EEPROM and can be recalled by a reset
of the µP (switching power off by disconnecting mains cord)
3) The CD PLAY Test is intended to be used for continuously playing a disc in order to detect permanent or not reproducible failures. The error code indicates where the failure can be found.

4) Use this mode only in case of a μP "hang up" to clear the EEPROM.
Attention: All preset frequencies stored by the customer will be cleared.
Dismantling hints CD Short Loader

Dismantling the tray

a) Press open/close button to open the tray. If the tray doesn't work, use a small screwdriver as shown in Fig. 1 point 1 to move the tray outside. After the first centimeter it is possible to pull the tray out by hand.

b) Release two snaps and remove tray.
Assembly of gear

a) Use a pin (e.g. a paperclip) to align the cam wheel (a) and the gear wheel (b) together. See Fig. 2.

b) Fix the wheels with the small plastic washers.
c) Mount idle wheel2 (c) and idle wheel1 (d) in any position. See Fig. 3.

d) Fix the idle wheel1 with the small plastic washer.
e) Mount the driving belt.

f) Mount the pinion guiding assy and the cover as shown in Fig. 4.
g) Turn the gear wheel (b) counter clockwise to endposition.

h) Mount the CD Mechanismn as shown in Fig. 5.
i) Mount the tray. (Align the tray to the chassis and push it inside)

**Check if tray mechanismn works correct!**

1) Turn the gear wheel (b) clockwise to its endposition. (Use a small screwdriver as shown in Fig. 1 point 1).

The tray has to move to inner position first and then the CD Mechanismn has to move to its upper position.

2) Turn the gear wheel (b) counter clockwise to its endposition.

The CD Mechanismn has to move to its lower position first and then the tray has to move to outside.