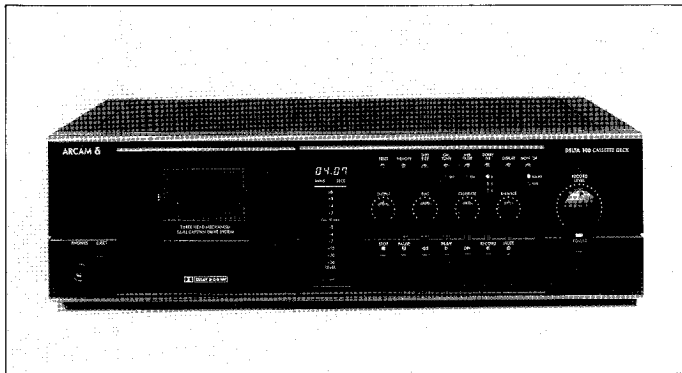
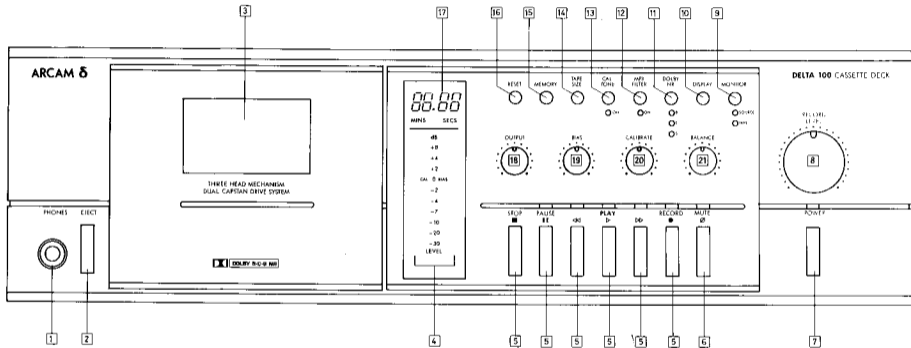


# ARCAM



## Delta 100 Cassette Deck Handbook



## INTRODUCTION

Thank you for buying the Arcam Delta 100 cassette deck. You have chosen not only one of the first cassette decks designed to use the single chip Dolby S Noise Reduction (NR) system, but a cassette deck that seriously rivals CD for sound quality. Arcam is currently the only British manufacturer with a cassette deck for the domestic market that is both designed and built in the UK.

The Delta 100 has been designed to complement not only the rest of the Delta range, but any good quality system requiring a first rate recording and replay capability. The inclusion of Dolby S type NR now gives you superb sound quality with pre-recorded Dolby S type NR tapes, or with tapes recorded yourself that have been encoded with Dolby S type NR. The Delta 100 is also fitted with Dolby B and C type NR, so ensuring complete compatibility with all your existing tapes. Dolby S type NR has also been designed so that tapes encoded with Dolby S type NR will play on decks fitted with Dolby B type NR. Any tape recorded at home on your Delta 100 can be played back on a personal stereo, portable deck, in the car, etc., and give excellent results.

Each Arcam Delta 100 cassette deck has been thoroughly checked and tested to ensure trouble free performance. Please read these instructions fully before operating your Delta 100 and retain them for future reference. This will ensure that you get the best results from your cassette deck. Remember that your dealer is there to help you! He has extensive knowledge of all Arcam products and considerable experience of their use in a variety of systems.

If, however, he is unable to answer your query, please do not hesitate to contact us directly at the factory.

## INSTALLING AND USING YOUR DELTA 100

### Mains supply

The Delta 100 may be supplied to work on any of the following voltages: 110V, 120V, 220V or 240V (100V units can be supplied to special order). Please check that your local mains supply voltage agrees with the voltage setting indicated on the back panel of the unit. If it does not, please contact your dealer or distributor for details of how to proceed further. A detachable mains lead is supplied with the Delta 100.

The cores of this lead are colour coded in accordance with the following code:

Green & yellow	Earth
Blue	Neutral
Brown	Live

**Note:** Export units for certain markets have moulded mains plugs fitted as standard. If the colour-coded mains lead does not correspond with the coloured markings identifying the terminals in your mains plug, please proceed as follows:

The wire which is colour-coded green and yellow must be connected to the terminal in the plug which is coloured green, or marked with the safety earth symbol or the letter 'E'. The wire which is colour-coded blue must be connected to the terminal coloured black or marked 'N'. The wire which is colour-coded brown must be connected to the terminal coloured red or marked 'L'.

## FUSES

If the mains plug is fused, fit a 3 amp fuse. The AC supply inlet to the Delta 100 uses a standard IEC chassis mounting plug. The IEC line socket on your mains lead, and the IEC plug on the Delta 100 are a tight fit. Before using the unit, please ensure that the mains lead is pushed firmly home. Under no circumstances should the cover be removed unless the mains supply has been disconnected at the wall socket.

**Notice:** 1. Please retain the carton and all packaging so that it may be repacked correctly if it ever becomes necessary to ship the unit or return it for service.

2. If servicing is required, the equipment should be properly packed and returned to the dealer from whom it was purchased. It is essential to include a covering letter giving your name and address, and a brief but thorough explanation of the fault.

## CONNECTIONS

Both audio inputs and outputs are via RCA phono connectors. The phono sockets for left and right channels are marked accordingly. Your interconnect cables should be marked left and right or colour coded, usually red for right channel and black for left. Before connecting your Delta 100, please ensure that all components are switched off.

the right hand meter the 10kHz tone. For a flat frequency response these levels must be equal. Because it is impractical to read levels of -20dB accurately on the normal meter scales, a precise 20dB of gain is applied to the meter circuits in the calibration mode. In addition an offset is applied to the meter circuit in this mode so that the level change represented by each meter segment around the 0dB mark is reduced to approximately 0.5dB. Using the BIAS and CALIBRATE controls it is then easy to match the replay levels of the two tones to within 0.25dB. This will ensure an overall record/replay response flat to well within +/- 1dB over the range 40Hz to 15kHz for any tape close to the IEC standard.

#### CHECK LIST

If you have any difficulty operating your cassette deck, check the following before suspecting a fault:

##### IF THE TAPE DOES NOT RUN:

Check the cassette compartment is closed correctly.  
Check the tape is not too tightly wound.

##### IF THE TAPE STOPS BEFORE REACHING THE END DURING REWIND AND / OR FAST FORWARD:

Check the MEMORY function is switched off.  
Check the tape is not too tightly wound.

##### NO OUTPUT DURING RECORDING OR PLAYBACK:

Check CAL TONE is switched off.  
Check MONITOR is set to the correct position.  
Check the record level or output level is set correctly.  
Check all connections have been made correctly.

##### DULL HIGH FREQUENCIES - UNNATURAL SOUND:

Check the heads and transport mechanism for deposits of oxide or dust. Clean if necessary.  
Wrong bias setting for tape in use. Use the calibration procedure to correct this.  
Demagnetize the deck if it has been in use for approx. 50 hours or more since the last demagnetization.  
Check the correct Dolby NR system has been selected.

#### UNEVEN SOUND - DROP OUTS - EXCESSIVE WOW AND FLUTTER:

Check the heads and transport mechanism for deposits of oxide or tape binder. Clean if necessary with isopropyl alcohol.  
Check the quality of the tape. Avoid using very old or poor quality tapes.

#### TECHNICAL SPECIFICATION

Number of motors	3
Number of heads	3
Tape speed	4.76 cm/second
Wow and flutter	0.04% wrms, +/- 0.07% w peak
Fast forward/rewind time	approx. 90 secs. (C60)
Frequency response, 70 µsec	20Hz-20kHz +/- 3 dB
Distortion at 400 Hz	<1% ref. Dolby level (200 nWb/m)
Signal to noise ratios, 70 µsec	66 dB, NR off
(CCIR weighted, ref. 3% distortion)	88 dB, Dolby S NR on
Crosstalk	>40 dB at 1 kHz
Alignment oscillator	300 Hz + 10 kHz, at -20 dB ref. Dolby level
Line input	100 mV (at 0 dB)
Input impedance	10 k Ohm
Line output	1 V (at 0 dB)
Output impedance	150 Ohm
Bias oscillator frequency	105 kHz
Power consumption	20 VA
Power supply	240/220/120/110 VAC 100V to special order
Dimensions (overall)	430 W x 124 H x 340 D mm.
Weight	8 kg inc. packing
Guarantee (UK sales only)	2 years

### **GUARANTEE FOR OVERSEAS SALES**

Equipment purchased outside the UK is generally guaranteed by the distributor for that country only. For further details, please contact your distributor.

### **GUARANTEE FOR UK SALES**

This equipment has been fully tested, and a full record of these tests was made before despatch from the factory. Both the workmanship and the performance of this equipment are (except as set out below) guaranteed against defects for a period of two years from the date of purchase, provided that it was originally purchased from an authorised UK dealer under a consumer sale agreement. (The words "consumer sale" shall be construed in accordance with Section 15 of the Supply of Goods [Implied Terms] Act 1973).

The manufacturer can accept no responsibility for defects arising from accident, misuse, abuse, wear and tear, neglect or through unauthorised adjustment and/or repair. Neither can they accept responsibility for loss or damage occurring during transit to or from the person claiming under this guarantee. Please note that heads, capstans, pinch rollers and mechanical parts subject to wear and tear are not covered by the guarantee.

This guarantee covers both parts and labour, and is transferable to subsequent purchasers, but the liability of the manufacturer is limited to the cost of repair or replacement (at the discretion of the manufacturer) of the defective parts. Under no circumstances does this extend to consequential loss or damage.

### **CLAIMS UNDER THIS GUARANTEE**

This equipment should be packed in its original packaging, and returned to the dealer from whom it was purchased. If this is not possible, please contact the factory. If the original packaging is not available, replacement cartons and packing may be purchased from the manufacturer. If this unit needs to be returned to the factory, please send it via a reputable carrier. This equipment should NOT be sent by post.

**DO NOT CONSIGN THIS EQUIPMENT TO ARCAM UNLESS YOU HAVE BEEN SPECIFICALLY REQUESTED TO DO SO. DO NOT UNDER ANY CIRCUMSTANCES ATTEMPT TO DISASSEMBLE THIS EQUIPMENT BEFORE DESPATCHING IT.**

If you have any difficulty complying with these requirements, please contact the manufacturer at the following address:

**ARCAM,**  
Pembroke Avenue,  
Denny Industrial Centre,  
Waterbeach,  
Cambridge, CB5 9PB  
England.  
Telephone : 0223 440964  
Fax : 0223 863384

You should always state clearly your name and address, and a brief but thorough description of the fault.

If, in the event of the equipment being returned, the unit is put on test and found to comply with the published specification, the manufacturer reserves the right to charge a reasonable fee for testing and returning the unit.

### **ENQUIRIES**

Arcam will be happy to answer any queries you may have regarding the use of this, or any other Arcam item. Please send your enquiry to the above address, enclosing a stamped addressed envelope. Please state (if applicable) the serial number of your unit, the dealer from whom it was purchased, and the date of purchase.

**THIS GUARANTEE IN NO WAY VARIES OR REMOVES A PURCHASER'S STATUTORY RIGHTS.**

The Dolby Noise Reduction System is manufactured under licence from Dolby Laboratories Licensing Corporation. "Dolby" and the double D symbol are trademarks of Dolby Laboratories Licensing Corporation.