



ALPHA 9C PREAMPLIFIER HANDBOOK

Front & Rear Panel Diagrams



SAFETY INSTRUCTIONS

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of:

- Read Instructions All the safety and operating instructions should be read before the appliance is operated.
- 2. Retain Instructions The safety and operating instructions should be retained for future reference.
- Heed Warnings All warnings on the appliance and in the operating instructions should be adhered to.
- Follow Instructions All operating and use instructions should be followed.
- Water and Moisture The appliance should not be used near water - for example near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool, etc.
- Carts and Stands The appliance should be used only with a cart or stand that is recommended by the manufacturer.
- 6A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
- Wall or Ceiling Mounting The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 8. Ventilation The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug or similar surface that may block the ventilation openings or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
- Heat The appliance should be situated away from heat sources such as radiators, heat registers, stoves or other appliances (including amplifiers) that produce heat.
- Power Sources The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
- 11. Grounding Precautions should be taken so that the grounding means of the appliance is not defeated.

- 12. Power-Cord Protection Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles and the point where they exit from the appliance.
- 13. Cleaning Unplug the unit from the mains supply before cleaning. The appliance should normally only require a wipe over with a clean, dry, lint-free cloth. If it is heavily soiled then a cloth slightly dampened with a water/washing up liquid solution may be used. Dry the unit afterwards with a dry cloth. We do not advise the use of furniture type cleaning sprays/polishes as this can cause white marks, which are very difficult to remove, if the unit is then wiped over with water.
- 14. Power Lines An outdoor antenna/ aerial should be located away from power lines.
- Non-use Periods The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- Object and Liquid Entry Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through any openings.
- Abnormal Smell If an abnormal smell or smoke is detected from the appliance, immediately turn the power off and unplug the unit from the wall outlet. Contact your dealer immediately.
- Damage Requiring Service The appliance should be serviced by qualified service personnel when:
- A. The power-supply cord or the plug has been damaged or:
- B. Objects have fallen, or liquid has spilled into the appliance or:
- C. The appliance has been exposed to rain or:
- D. The appliance does not appear to operate normally or exhibits a marked change in performance or:
- E. The appliance has been dropped or the enclosure damaged.
- Servicing The user should not attempt to service the appliance beyond that described in the operating instructions.
 All other servicing should be referred to qualified service personnel.

Introduction & Installation

INSTALLATION

- N.B. Circled numbers e.g. **2** refer to items on the front and rear panel diagrams.
- Check that your mains supply voltage agrees with the voltage setting indicated on the rear panel of the unit.
- If your mains supply voltage is different, consult your Arcam dealer.

MAINS SAFETY

- This product is normally supplied with a moulded mains plug already fitted to the lead. If for any reason the plug needs to be removed, it must be disposed of immediately and securely, as it is a potential shock hazard when inserted into a mains socket.
- Warning: This apparatus must be earthed.

NOTICE FOR U.K. OWNERS ONLY

- If the plug is removed then the remaining lead must be rewired as follows:
- The blue wire must be connected to the terminal which is coloured blue or marked with the letter N.
- The brown wire must be connected to the terminal which is coloured brown or marked with the letter L.
- The green and yellow wire must be connected to the terminal which is coloured green and yellow, or marked with the letter E or the safety earth symbol.
- When replacing the fuse in the supplied moulded mains plug, the integral fuse holder/cover must always be refitted. Use a 5 amp fuse.

SAFETY STANDARD

 This product has been designed to meet the IEC 65 international electrical safety standard.

MAINS SUPPLY CONNECTIONS

Insert the IEC line socket of the mains lead fully into the power inlet on the rear panel. Connect the other end to your mains supply.

CONNECTING YOUR SOURCE COMPONENTS

Using a suitable pair of interconnect cables, insert the red phono plugs into the sockets labelled 'R' and the other phono plugs into the sockets labelled 'L'.

All the line inputs (not PHONO) have the same sensitivity and may be used with equipment other than that labelled, if you need to do so.

- The use of high quality interconnect cables in your system is essential for good sound quality. Contact your dealer or Arcam for recommendations.
- If you are listening to an input and then switch to an unused (open circuit) input it may possible to still hear the original source but at a very low level. This is normal and is due to there being no equipment connected to that input.
- PROCESSOR/TAPE 2 OUT Connect this output to the input of your tape deck (usually labelled RECORD or IN) or to your A/V processor's Tape or Line inputs.
- PROCESSOR/TAPE 2 IN Connect this input to the output of your tape deck (usually labelled PLAY or OUT) or to your A/V processor's Tape or Line outputs.
- If you have only one tape deck connect it to the TAPE 1 sockets.
- TAPE 1 RECORD OUT Connect this output to the input of your tape deck (usually labelled RECORD or IN.
- TAPE 1 PLAY IN Connect this input to the output of your tape deck (usually labelled PLAY or OUT).
- TUNER Connect this input to the output of your radio tuner.
- A/V Connect this input to the output of an audio-visual product such as a VCR, Laserdisc or DVD player or Nicam tuner.
- CD Connect this input to the analogue outputs of your CD player or DAC (digital to analogue convertor).
- AUX Connect this input to the output of any unit with a line level output, eg. tape deck, tuner etc.
 - PHONO OPTION For use with a turntable.
 Please note: The phono inputs are on a separate plugin module which your Arcam dealer or distributor can supply and fit.

This module is compatible with most high output moving coil and moving magnet cartridges (MM) and low output moving coil cartridges (MC).

MM or MC is selected via an internal switch. Your cartridge type should be specified when the module is fitted.

- MM For connecting to a turntable fitted with a moving magnet (MM) or high output moving coil cartridge.
- MC For connecting to a turntable fitted with a low output moving coil (MC) cartridge.
- GROUND TERMINAL For connecting your turntable's earth lead (if fitted).

PREAMP OUT CONNECTIONS

- MAIN PREAMP OUTPUTS Connect one set of the PREAMP OUT sockets (left and right) to the input sockets of your power amplifier. The second set of sockets can be used to connect to a second power amplifier for biamping or to another power amplifier in a different room.
 - ZONE 1 PREAMP OUTPUTS ZONE 2 PREAMP OUTPUTS

The outputs available on these sockets are independently determined by the setting of the LISTEN (ZONE 1) and SEND (ZONE 2) selectors. They are fixed level unbalanced signals which can be used to connect to other integrated amplifiers in different rooms for simple multi room use. They are buffered and so are typically capable of driving up to 15 metres of high quality interconnect cable. The Zone outputs are not affected by the volume control or the remote control MUTE command (See also **(B)**, **(B)**, **(B)** & **(20)**.

OPERATION OF THE ALPHA 9C PREAMPLIFIER

NORMAL/ A/V READY SWITCH - (This switch is found on the rear panel.)

With the switch set to NORMAL the unit functions as a standard amplifier. For use with an A/V decoder with its own volume control, such as the Arcam Xeta 2, set the switch to 'A/V READY'. This bypasses the Alpha 9C's volume control when 'PROCESSOR/TAPE 2' input is selected, to provide a fixed gain stereo preamplifier. The volume control and MUTE **cannot** be operated by the remote control handset in this situation.

CAUTION: Do not set the switch to A/V READY if you have a cassette deck connected to the PROCESSOR/ TAPE 2 input.

This will bypass the volume control when you push the PROCESSOR/ TAPE 2 button in and send the signal straight to your power amplifiers. This could give an extremely high sound output sufficient to damage your loudspeakers.

- LISTEN/ZONE 1 SELECTOR Selects the input you wish to listen to. This signal also goes to the TAPE 2 output sockets for recording on to a cassette deck or for external processing and also to the ZONE 1 preamp out sockets. The selector can also be operated by remote control. (See Remote Control Functions).
- SEND TAPE 1/ZONE 2 SELECTOR Selects the input you wish to record onto TAPE 1. This operates independently of the LISTEN function. Additionally this switch can also be used as a simple 'second zone' selector, routing a chosen source signal, via the ZONE 2 preamp out sockets, to a second integrated amplifier operating in another room in the house.

Note: The ZONE 1 & ZONE 2 preamp outputs are **not** controlled by the volume control but they can be muted via the MUTE button on the remote handset or by use of the front panel ZONE 1 / ZONE 2 switches (3), (3).

- VOLUME Simultaneously adjusts the volume level of the main preamp outputs (6) and headphones.
- The VOLUME control is motorised and can be controlled remotely with the supplied remote control handset (see Remote Control Functions for more details).

Note: With the volume at minimum it may still be possible to hear music very faintly. This is normal.

PROCESSOR/TAPE 2 - This is a tape loop which allows you to monitor a recording made on a 3 head cassette deck. It can also be used to enable line inputs to be sent to an external surround decoder such as the Arcam Xeta 2 for processing, before being routed back to the amplifier.

For playback from a cassette deck or to reconnect the output from an A/V processor attached to TAPE 2 press the button in.

With the button out the 'loop' is taken out of circuit, so that the input signal chosen with the LISTEN selector is routed through the amplifier.

Note: PROCESSOR/TAPE 2 is not remote controllable.

- DIRECT When this button is pushed in it bypasses the bass, treble and balance controls. This affects all inputs and will generally give a small improvement in sound quality.
- BASS Rotate clockwise to boost the bass response and anti-clockwise to cut the bass response. For a flat response leave in the central 'click' position.
- TREBLE Rotate clockwise to boost the treble response and anti-clockwise to cut the treble response. For a flat response leave in the central 'click' position.
- The range of the tone controls has been deliberately limited to approximately +/- 6dB at the frequency extremes.
- BALANCE Rotate clockwise or anti-clockwise to move the position of the stereo image. This may be necessary if it is not possible to sit centrally between the speakers. In normal use leave in the central 'click' position.
- ZONE 1 Push the button in to activate the ZONE 1 preamp out sockets. With the button in the out position the ZONE 1 preamp out sockets are muted.
- ZONE 2 Push the button in to activate the ZONE 2 preamp out sockets. With the button in the out position the ZONE 2 preamp out sockets are muted.
- HEADPHONES SOCKET Accepts headphones rated between 8 ohms and 2k ohms fitted with a 6.3mm stereo jack plug. If your headphones are fitted with a different plug contact your dealer for a suitable adaptor.
- If you wish to listen on headphones only use the remote handset MUTE button to mute the main preamp out sockets.

NB:If you now wish to adjust the volume you need to do this manually as use of the volume buttons on the remote will un-mute the preamp outputs and allow signal to go to your power amps again. Alternatively you may be able to switch off the speakers connected to your power amplifier.

- The ZONE 1 and ZONE 2 outputs will remain live and can be switched off with use of the front panel ZONE buttons.
- The headphone socket is always switched on, irrespective of the positions of switches and or the remote control MUTE function.
- POWER Switches the unit on and off.
- POWER LED The LED above the POWER switch will initially glow amber. After a few seconds, it will glow green. When the LED glows amber, the preamp out sockets are disconnected. The power led will also glow amber if the unit has been muted by use of the remote.
- REMOTE RECEIVER The remote receiver is behind the badge in the top left hand corner of the unit. Ensure the remote receiver is not obscured or commands from the remote control handset will not be received.

TAPE RECORDING

- Both sets of tape sockets (TAPE 1 and TAPE 2) are identical in sensitivity and suitable for use with almost any type of recorder (cassette, hi-fi VCR, reel to reel, MD, etc.)
- RECORDING (TAPE 1)

Use the SEND selector ⁽¹⁾ to route the required signal to a cassette deck connected to the TAPE 1 RECORD OUT sockets ⁽³⁾.

Set your tape recorder into its recording mode and the selected input will be recorded.

Selecting the same input with the LISTEN selector will not affect the signal sent out to the recorder and will now enable you to listen to the signal being recorded.

If your tape recorder is a 3 head design, this will allow A-B monitoring of the actual recording while it is taking place. Switching the LISTEN switch between the original source and TAPE 1 during recording will then enable you to make a true 'before' and 'after' (A-B) comparison.

You may listen to another input whilst recording on TAPE 1 by use of the LISTEN selector.

RECORDING (TAPE 2)

Use the LISTEN selector ⁽¹⁾ to route the required signal to a cassette deck connected to the TAPE 2 RECORD OUT sockets ⁽³⁾.

Set your tape recorder into its recording mode and the selected input will be recorded.

To monitor the recording push the PROCESSOR/ TAPE 2 button in. If your tape recorder is a 3 head design, this will allow A-B monitoring of the actual recording while it is taking place.

You may record another input on to TAPE 1 whilst recording on TAPE 2 by use of the SEND selector.

 TAPE TO TAPE DUBBING: The Alpha 9C allows two way tape dubbing (copying) from TAPE 1 to TAPE 2 or vice versa.

For example, to copy from a recorder connected to the TAPE 2 sockets to a recorder connected to TAPE 1, first switch the SEND selector on the Alpha 9C to TAPE 2. This routes the TAPE 2 signal to TAPE 1's output. Then set the first tape recorder into its 'record' mode and the second to 'playback' mode to enable the transfer to take place. If you wish to monitor the transfer while it is taking place switch LISTEN to TAPE 1.

To record from TAPE 1 to TAPE 2 set LISTEN to TAPE 1. It does not matter what position the SEND selector is in. To monitor push the PROCESSOR/ TAPE 2 button in.

REMOTE CONTROL FUNCTIONS

- Your Alpha 9C preamplifier is supplied with the Arcam CR35 infra-red remote control handset, which has buttons to allow the simple operation of other products. It is supplied with 2 AA batteries - ensure these are inserted correctly.
- The remote handset enables you to operate the LISTEN/ ZONE 1 SELECTOR, VOLUME and MUTE functions on the Alpha 9C. It also allows you to control some basic functions of an Arcam or Philips based CD player (except the Alpha One CD player, which uses a different remote control language) and a remote controlled tuner (such as the Alpha 8 tuner).
- REMOTE MODE The Alpha 9C is factory-set to enable the Arcam CR35 or Arcam CR200 System Remote automatically to synchronise the operation of any Arcam CD player or transport, and remote control tuner with the LISTEN/ZONE 1 SELECTOR on the Alpha 9C, all at the touch of a single button.

For example, using the CR35 remote, press PLAY, and the CD player will start the disc and the LISTEN/ ZONE 1 switch of the Alpha 9C will select the CD input. If automatic operation is not required it can be disabled by your dealer by fitting an internal link. The LISTEN/ZONE 1 selector switch can still be operated by either remote control handset.

The MUTE button mutes the MAIN pre-amp outputs and the ZONE 1 & 2 preamp outputs. Both tape outputs and the headphone socket remain active. In MUTE mode the power LED will turn amber until mute is disabled by either pressing MUTE again or pressing the volume -/+ buttons on the handset.

Note: The 'STBY', 'DISP' and 'VCR' buttons on the CR35 have no effect on the Alpha 9C preamplifier. The 'DVD' button will select the 'AUX' input.

Guarantee Information

GUARANTEE FOR UK SALES

This equipment is guaranteed for two years from the date of purchase (parts and labour only), provided that it was originally purchased from an authorised 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 damage or loss occurring during transit to or from the person claiming under this guarantee.

This guarantee is applicable within the UK only. It is transferable to subsequent purchasers, but the liability of the manufacturer is limited to the cost of repair of the defective parts and under no circumstances extends to consequential loss or damage.

CLAIMS UNDER THIS GUARANTEE

This equipment should be packed in the original packing and returned to the dealer from whom it was purchased, or failing this, directly to Arcam. It should be sent carriage prepaid by a reputable carrier - NOT by post. No responsibility can be accepted for the unit whilst in transit to the factory, or an agent, and customers are therefore advised to insure the unit against loss or damage whilst in transit.

If the original packing is not available, replacement packing can be purchased from Arcam.

DO NOT CONSIGN THE EQUIPMENT TO ARCAM UNLESS YOU HAVE BEEN SPECIFICALLY REQUESTED TO DO SO BY THE CUSTOMER SUPPORT DEPARTMENT.

DO NOT UNDER ANY CIRCUMSTANCES ATTEMPT TO DISASSEMBLE THE EQUIPMENT BEFORE DESPATCH.

You can contact the manufacturer at the following address:

ARCAM Customer Support Department, Pembroke Avenue, Denny Industrial Centre, Waterbeach, Cambridge, CB5 9PB, England.

> Telephone: +44 (0)1223 203203 Fax: +44 (0)1223 863384 e-mail: custserv@arcam.co.uk

You should state clearly your name and address, the date and place of purchase together with a brief description of the fault.

In the event of equipment being returned which, after having been tested, is found to comply with the published specification, the manufacturer reserves the right to charge a reasonable fee for testing the equipment and for the return carriage.

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

GUARANTEE FOR SALES IN THE EUROPEAN ECONOMIC AREA (EEA)

This unit is covered by a European Economic Area warranty, provided to you under the terms of Article 85 of the Treaty of Rome 1957.

This entitles you to have the unit repaired free of charge, during the first two years after purchase, at any authorised Arcam distributor within the EEA, provided that it was purchased from an authorised ARCAM dealer or distributor within the EEA.

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 damage or loss occurring during transit to or from the person claiming under this guarantee.

Countries of the European Economic Area are: Austria, Belgium, Denmark, Eire, Finland, France, Greece, Germany, Great Britain, Holland, Iceland, Italy, Lichtenstein, Luxembourg, Norway, Portugal, Spain, Switzerland and Sweden. This includes the Canary Islands, the Channel Islands, the Isle of Man, Corsica and Sardinia.

This warranty remains in force for two years from the date of purchase as long as the unit remains in free circulation. Units exported from the EEA and subsequently re-imported are not subject to this warranty.

CLAIMS UNDER GUARANTEE

This equipment should be packed in the original packing and returned to the dealer from whom it was purchased, or failing this, directly to the Arcam distributor in the country of residence. It should be sent carriage prepaid by a reputable carrier - NOT by post. No responsibility can be accepted for the unit whilst in transit to the dealer or distributor and customers are therefore advised to insure the unit against loss or damage whilst in transit.

For further details contact Arcam at:

ARCAM Customer Service Department, Pembroke Avenue, Denny Industrial Centre, Waterbeach, Cambridge, CB5 9PB, England. Telephone: (01223) 203203 Fax:(01223) 863384 e-mail custserv@arcam.co.uk

GUARANTEE FOR SALES IN THE REST OF THE WORLD

This equipment is guaranteed in the country of purchase only, provided that it was purchased from an authorised ARCAM dealer or distributor.

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 damage or loss occurring during transit to or from the person claiming under this guarantee.

Full details of the guarantee can be obtained from the distributor in the country of purchase.

For your convenience a list of Arcam distributors is included on the rear of this leaflet. For any countries not listed please contact: Arcam Customer Services Department directly.

CLAIMS UNDER GUARANTEE

This equipment should be packed in the original packing and returned to the dealer from whom it was purchased, or failing this, directly to the Arcam distributor in the country of purchase. It should be sent carriage prepaid by a reputable carrier - NOT by post. No responsibility can be accepted for the unit whilst in transit to the dealer or distributor and customers are therefore advised to insure the unit against loss or damage whilst in transit.

PROBLEMS?

If your dealer is unable to answer any query regarding this or any other Arcam product please contact Arcam Customer Support on +44 (0)1223 203203 or write to us at the address on the back cover of this handbook and we will do our best to help you.

Technical Specifications	
INPUTS	
Line inputs:	Sensitivity 200mV
Noise (ref 800mV output)	-100dB typical ("DIRECT" IN)
	-98dB typical ("DIRECT" OUT)
Input impedance	25kΩ
Overload margin	>50dB
Frequency response	10Hz - 20kHz ± 0.5dB
Tone controls (typical range)	± 6dB at 50Hz and 10kHz
L/R Crosstalk	> -65dB at 1kHz
A/V loop input (A/V mode)	Sensitivity 940mV
Input impedance	30kΩ
Phono board (if fitted):	Sensitivity 3.0mV MM, 300uV MC
Noise (CCIR) ref 800mV output	-85dB MM, -75dB MC
Input impedance	47kΩ MM, 300Ω MC
OUTPUTS	
Main Outputs	
Nominal output level	800mV
Maximum output level	8V
Output impedance	10Ω
Torre & Torre entry her	
Tape & Zone outputs:	As an investigated (0.1D
Output level / gain Output impedance	As per input signal / 0dB
Headphones:	1.8 kΩ (Tape) 47Ω (Zones 1 & 2)
Maximum output level into 600Ω	8V
Output impedance	100Ω
Mains voltage	230V/115V ±12%
Power consumption(max)	20VA
Dimensions W/D/H mm.	430x310x110
	4.4kg
packed	6.0kg
Supplied accessories	Mains lead
	CR35 remote handset (inc. batteries)
E & O E.	

ARCAM

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