

Arcam T51 AM/FM tuner
Tuner AM/FM T51 Arcam
Arcam AM/FM-Tuner T51

English

Français

Deutsch



ARCAM

Safety guidelines

Safety instructions

This product is designed and manufactured to meet strict quality and safety standards. However, you should be aware of the following installation and operation precautions:

1. Take heed of warnings and instructions

You should read all the safety and operating instructions before operating this appliance. Retain this handbook for future reference and adhere to all warnings in the handbook or on the appliance.

2. Water and moisture

The presence of electricity near water can be dangerous. Do not use the appliance near water – for example next to a bathtub, washbowl, kitchen sink, in a wet basement or near a swimming pool, etc.

3. Object or liquid entry

Take care that objects do not fall and liquids are not spilled into the enclosure through any openings. Liquid filled objects such as vases should not be placed on the equipment.

4. Ventilation

Do not place the equipment on a bed, sofa, rug or similar soft surface, or in an enclosed bookcase or cabinet, since ventilation may be impeded. We recommend a minimum distance of 50mm (2 inches) around the sides and top of the appliance to provide adequate ventilation.

5. Heat

Locate the appliance away from naked flames or heat producing equipment such as radiators, stoves or other appliances (including other amplifiers) that produce heat.

6. Climate

The appliance has been designed for use in moderate climates.

7. Racks and stands

Only use a rack or stand that is recommended for use with audio equipment. If the equipment is on a portable rack it should be moved with great care, to avoid overturning the combination.

8. Cleaning

Unplug the unit from the mains supply before cleaning.

The case should normally only require a wipe with a soft, damp, lint-free cloth. Do not use paint thinners or other chemical solvents for cleaning.

We do not advise the use of furniture cleaning sprays or polishes as they can cause indelible white marks if the unit is subsequently wiped with a damp cloth.

9. Power sources

Only connect the appliance to a power supply of the type described in the operating instructions or as marked on the appliance.

10. 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, and the point where they exit from the appliance.

11. Grounding

Ensure that the grounding means of the appliance is not defeated.

12. Power lines

Locate any outdoor antenna/aerial away from power lines.

13. Non-use periods

If the unit has a standby function, a small amount of current will continue to flow into the equipment in this mode. Unplug the power cord of the appliance from the outlet if left unused for a long period of time.

14. Abnormal smell

If an abnormal smell or smoke is detected from the appliance, turn the power off immediately and unplug the unit from the wall outlet. Contact your dealer immediately.

15. Servicing

You should not attempt to service the appliance beyond that described in this handbook. All other servicing should be referred to qualified service personnel.

16. 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.

Safety compliance

This product has been designed to meet the IEC 60065 international electrical safety standard.

Using this handbook

This handbook has been designed to give you all the information you need to install, connect, set up and use the Arcam T51 tuner. The CR-389 remote control handset supplied with this equipment is also described.

Safety

Safety guidelines are set out on the inside front cover of this handbook.

Many of these items are common sense precautions, but for your own safety, and to ensure that you do not damage the unit, we strongly recommend that you read them.

Radio interference

The T51 tuner is an audio device containing microprocessors and other digital electronics. It has been designed to very high standards of electromagnetic compatibility.

EC countries

This product has been designed to comply with directive 89/336/EEC.

USA

This product complies with FCC requirements. If the equipment causes interference to radio/television reception, which can be determined by switching the equipment off and on, the following measures should be taken: Re-orientate the receiving antenna or route the antenna cable of the receiver as far as possible from this appliance and its cabling. Relocate the receiver with respect to this appliance. Connect the receiver and this appliance to different mains power outlets. If the problem persists contact your Arcam dealer or Arcam Customer Support on +44 (0)1223 203203.

Information on radio transmissions

The **British Broadcasting Corporation** publishes a booklet entitled 'Radio Transmitting Stations' which contains details of all BBC transmitters in the UK together with other useful hints and tips. This booklet can be obtained on request by sending a large stamped addressed envelope to:

Engineers Dept.
BBC Radio
201 Wood Lane
LONDON
W12 7TS

Telephone: 08700 100 123

Internet: http://www.bbc.co.uk/enginfo/fm_recep

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The **UK Radio Authority** publishes 'The Radio Authority Pocket Book' which contains details of all independent radio stations. This booklet can be obtained on request by sending a large stamped addressed envelope to:

Holbrook House
14 Great Queen Street
Holborn
LONDON
WC2B 5DG

Telephone: 0207 430 2724

Fax: 0207 405 7062

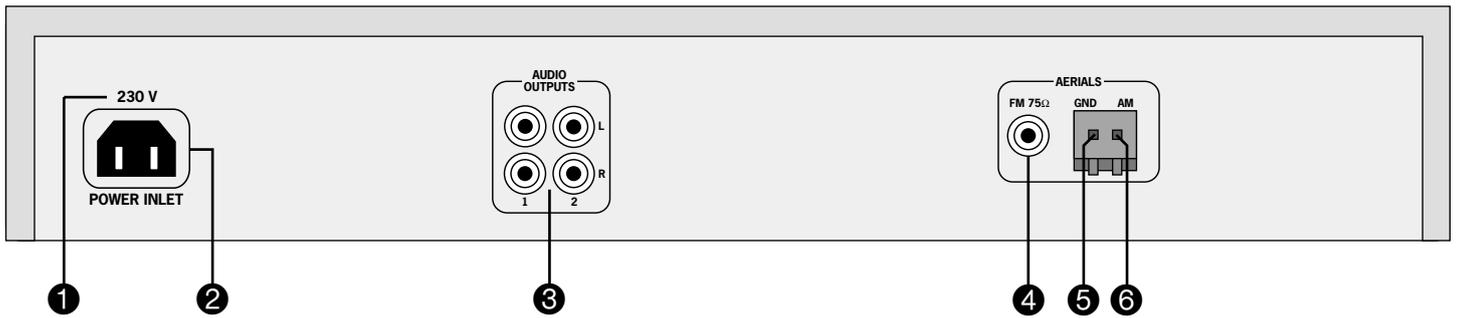
E-mail: info@radioauthority.org.uk

Internet: <http://www.radioauthority.org.uk>

A free booklet (number 004-000-00345-4) is available from the **U.S. Government** called 'How to Identify and Resolve Radio-TV Interference Problems' by writing to:

The U.S. Government Printing Office
Washington, D.C. 20402
United States of America.

Installation



T51 rear panel

- ❶ Voltage indicator
- ❷ Socket for IEC power inlet line
- ❸ Audio output phono sockets, two pairs
- ❹ FM coaxial plug
- ❺ Ground socket (for AM loop aerial)
- ❻ AM socket (for AM loop aerial)

Positioning the unit

Always place the tuner on a level, firm surface.

Setting up the aerials

FM aerial

An FM aerial is required to receive VHF radio signals. An external FM ribbon aerial is supplied as an accessory.

For optimal FM radio reception a roof or loft mounted aerial is advised. For your own safety it is recommended that a roof top aerial is fitted by an experienced contractor. Your Arcam dealer should be able to put you in contact with an aerial installer. A contractor will be able to tune your aerial to the nearest FM transmitter. In an apartment building an aerial system may already be installed. If this is the case you should have sockets in your home marked FM or VHF (do not use those marked TV).

The 'T' shaped wire aerial (dipole design) supplied should give reasonably good reception. Mount this aerial as high up as possible on a wall with the elements positioned horizontally. Try each usable wall of the room to see which gives best reception. Use tacks or adhesive tape to secure the aerial in a T shape. The tacks should not come into contact with the internal wire of the aerial.

Whether you decide to get an aerial professionally installed or opt to use the supplied aerial it should be connected to the FM Antenna input ❹ on the rear of the unit.

AM aerial

An AM aerial is required to receive AM/Medium Wave radio signals.

An external AM loop aerial is supplied as an accessory. This should be attached to the AM Antenna inputs with one end connected to AM ❺ and the other to Ground ❻. It does not matter which way round this aerial is fitted. Rotate the aerial to discover which position gives the best reception.

In areas of weak reception or when the receiver is used inside a steel framed building (such as an apartment building) you can use a wire between 3 and 5 metres long to strengthen reception. Mount this high up outside the building, if possible, and connect one end of this wire to the AM antenna input ❺ as well as the loop aerial supplied. **DO NOT DISCONNECT THE LOOP AERIAL.**

Connecting to other equipment

Interconnect cables

Interconnecting cables are not supplied with this tuner. We recommend high quality cables as inferior quality cables will degrade the sound quality of your system. Please contact your Arcam dealer for details of suitable cables.

Connecting your tuner to your amplifier

Audio outputs ❸

Two pairs of identical outputs are provided.

Connect one set to your amplifier's tuner input or any other line-level input using suitable high quality interconnect cables. Ensure that the left and right audio outputs from the tuner are connected to the same left and right inputs on your amplifier.

The second set of audio outputs can be used to connect to a second amplifier set up for 'multi room' use, or routed to a tape recorder for 'off air' recording.

Connecting to a power supply

Wrong plug?

Check that the plug supplied with the unit fits your supply and that your mains supply voltage agrees with the voltage setting (115V or 230V) indicated on the rear panel of the unit ❶.

If your mains supply voltage or mains plug is different, consult your Arcam dealer or Arcam Customer Support on +44 (0)1223 203203.

Mains lead

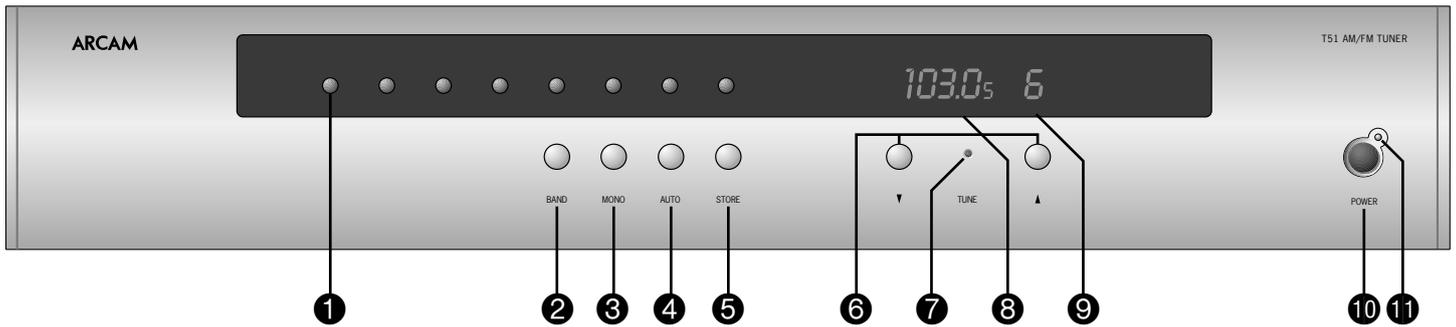
The appliance is normally supplied with a moulded mains plug already fitted to the lead. If for any reason the plug needs to be removed, it must be disposed of immediately and securely, as it is a potential shock hazard when inserted into the mains socket. Should you require a new mains lead, contact your Arcam dealer.

Plugging in

Push the plug (IEC line socket) of the power cable supplied with the unit into the **POWER INLET** socket ❷ in the back of the unit. Make sure it is pushed in firmly.

Put the plug on the other end of the cable into your power supply socket and switch the socket on.

Using your tuner



Front panel controls

Preset memory buttons ❶

You can store up to a total of 24 radio stations as presets. There are two storage 'levels':

FM 'level' where **16** stations can be stored.

AM 'level' where **8** stations can be stored.

The 8 stations can be either AM, LW or a combination of the two. Your first and ninth FM stations are stored using button **1-9**; your second and tenth FM stations are stored using button **2-10** and so on.

BAND ❷

Selects FM, AM or LW frequency band. The appropriate letters appear on the display.

MONO ❸

Selects mono or stereo output. Stereo is only available on FM radio stations.

The word 'MONO' or 'STEREO' lights on the display.

If a weak station is received in stereo the background hiss can be reduced (and in most cases eliminated) by selecting 'MONO'.

AUTO ❹

When pressed, the word 'AUTO' illuminates in the display. When either of the tune buttons **❻** are pressed, the tuner stops automatically at a station with any suitably strong signal.

To continue searching, press either of the tune buttons again.

STORE ❺

The **STORE** button allows you to assign radio stations to preset numbers (1-16 for FM and 1-8 for AM). See the instruction 'To store a radio station in memory'.

Tune down/up ❻

Press to tune up or down through the chosen frequency band. When pressed and held, the tuner scrolls continuously, when touched and released, the tuner scrolls in fixed amounts.

TUNE indicator ❼

This glows green when you are correctly tuned to a signal on any band. When the tuner is not tuned to a signal of sufficient strength, the indicator is off.

Frequency display ❸

Indicates the frequency of the selected station in MHz (FM) or kHz (AM).

Preset indicator ❹

Indicates the number of the preset currently selected.

POWER ❿

Switches the unit on and off.

Power indicator ⓫

This glows green to show that the unit is switched on.

To store a radio station in memory

Select the waveband (FM, AM or LW) using **BAND** and tune into the radio station you wish to store.

Press the **STORE** button.

You will see a small figure '1' in the display at **❹**.

Within five seconds, press the memory button (numbers 1 to 8) you wish to store the station under.

The station is stored when a number appears in the right hand end of the display at **❹**.

To store stations 9-16 in FM, proceed as above but press the **STORE** button twice.

You will see a small figure '2' in the display at **❹**.

This will access the presets **9-16**.

To select a stored radio station

Select the waveband (FM, AM or LW) using **BAND** and tune.

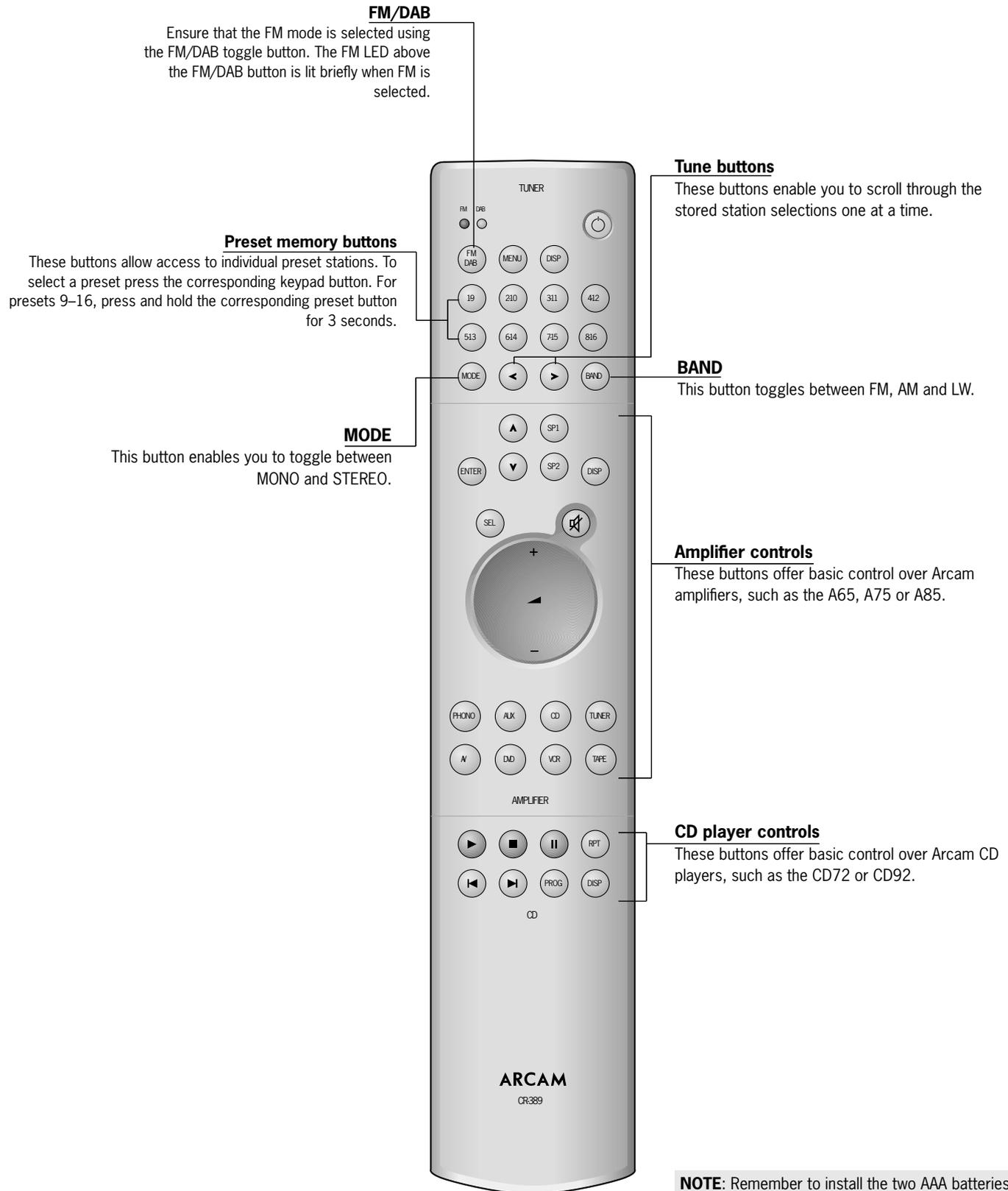
To select stations stored on presets 1 to 8, press the memory button number which stores the station you wish to select, for less than one second only.

To select stations 9 to 16 in FM, proceed as above, but press the memory button number which stores the station you wish to select, and hold for one second.

NOTE: The preset memory will be retained while the tuner is connected to the mains. If the mains supply is disconnected, the memory will be retained for approximately one week.

Using the remote control

CR-389 Remote Control



NOTE: Remember to install the two AAA batteries supplied before trying to use your remote control.

Do not place anything in front of the display area on the tuner (where the IR receiver is located), or the remote control may not work.

Technical specifications

T51 Tuner

FM Section

Tuning range	87.5 to 108.0MHz
Tuning system	Phase-locked-loop
Frequency steps	50kHz
Presets	16
Sensitivity (IHF) for 50dB S/N ratio	typically 8 μ V
Alternate channel selectivity	better than 60dB
AM suppression ratio	better than 50dB
Capture ratio	typically 1.0dB
On-tune indicator	Lights at tuned frequency \pm 50kHz
Frequency response	20Hz–15kHz \pm 1dB
Ultimate S/N ratio (CCIR) Mono	better than –76dB
Stereo	better than –71dB
Total harmonic distortion Mono	(96MHz reference, 22.5kHz deviation at 1kHz) better than 0.1%
Stereo	better than 0.25%
Channel separation (1kHz)	better than 38dB
Pilot tone suppression	better than 30dB
Output level	700mV at 75kHz deviation

AM Section

Tuning range	522 to 1611 kHz (AM MW) 146 to 290 kHz (AM LW)
Tuning system	Phase-locked-loop
Frequency steps	9kHz (AM MW) in Europe 10 kHz (AM MW) in USA & Canada 1 kHz (AM LW)
Presets	8
Usable sensitivity	typically 25 μ V
IF rejection	20dB
S/N ratio (30% mod., 50mV I/P)	50dB
Total harmonic distortion (30% mod., 50mV I/P)	0.5%
Output level	750mV at 70% modulation

General

Output impedance	100 Ω
Minimum recommended load	5k Ω
Power consumption	10VA
Size W x D x H	430 x 290 x 85mm
Weight net	4.6kg
Weight packed	7.1kg
Supplied accessories	FM dipole aerial AM loop aerial coaxial plug adaptor mains lead CR-389 remote control handset and batteries
E&OE	

Continual improvement policy

Arcam has a policy of continual improvement for its products. This means that designs and specifications are subject to change without notice.

NOTE: All specification values are typical unless otherwise stated.

Guarantee

Worldwide Guarantee

This entitles you to have the unit repaired free of charge, during the first two years after purchase, at any authorised Arcam distributor provided that it was originally purchased from an authorised Arcam dealer or distributor. The manufacturer can take 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 the guarantee.

The warranty covers:

Parts and labour costs for two years from the purchase date. After two years you must pay for both parts and labour costs. The warranty does not cover transportation costs at any time.

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 Support Department,
Pembroke Avenue, Waterbeach, CAMBRIDGE
CB5 9PB, England.

Telephone: +44 (0)1223 203203

Fax: +44 (0)1223 863384

Email: support@arcam.co.uk

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 above address and we will do our best to help you.

On-line registration

You can register your Arcam product on line at:

www.arcam.co.uk/reg