



ANTONY MICHAELSON SIGNATURE
REFERENCE COMPACT DISC PLAYER

by
MUSICAL FIDELITY



Instructions for use

Thank you for purchasing the Musical Fidelity AMSCD player.

The AMSCD is a CD player that is also useable as a top quality DAC for other digital sources. It features separately selectable SPDIF and optical inputs to allow other sources such as DAB radio, Minidisk, DAT etc. to take advantage of the top quality up-sampling digital to analogue conversion circuits within. This will free up analogue inputs on the following amplifier and obtain the absolute best in audio quality from the digital source.

The AMSCD consists of a top quality CD loading mechanism with unsurpassed playability and a top quality quad differential up-sampling 24 bit balanced digital-to-analogue converter. This moves the digital artefacts to well outside the audio band, allowing easy removal without detriment to the top end of the audio band. Our well tuned balanced filtering circuit gives immeasurably small jitter, noise and distortion artefacts allowing astounding imaging, detail and transparency, to deliver all music types exactly as the artist originally intended.

The AMSCD is designed to be partnered with present and future AMS or Primo series products. This combination yields one of the best high-fidelity systems available at any price.

Used properly and carefully, it should give many years of outstanding musical reproduction.

Dust regularly with a soft duster or soft brush, but be careful when using cleaning or polishing agents - they may harm the surface finish.

If there are any questions about the audio system, please consult the dealer who is there to help and advise.



CONTENTS

Section		Page
Safety Information	– Laser information and warnings – Mains plug (UK only) – modification warning	3 4
General advice	– Installation precautions	5
Disposal information	– EU disposal information	6
Installation	– Introduction – Cleaning – Installation – Power connections – Audio connections – Digital connections	7
Facilities and connections	– Illustrations - main unit front & rear panels	8
Remote control handset	– Operation and illustration	9
Operation	– Loading and playing compact disks – Play – Pause. – Stop – SPDIF input – Optical input – AES balanced input	10 11
Problems?	– Basic fault finding	12
Specifications		13
Manual history		14

CLASS 1 Laser Product

The AMSCD is a CD player which has been designed and manufactured according to FDA regulations "title 21, CFR, chapter 1, sub-chapter J, based on the Radiation Control for Health and Safety Act of 1968", and is classified as a Class 1 laser product. There is no hazardous radiation during normal use because invisible radiation emitted inside this product is completely confined within the protective housing. However you must observe the following important warnings:

CAUTION!

THIS CD PLAYER USES INVISIBLE LASER LIGHT. WHEN THE PLAYER OPERATES, LASER LIGHT IS RADIATED INTERNALLY. DO NOT REMOVE THE PROTECTIVE HOUSINGS.

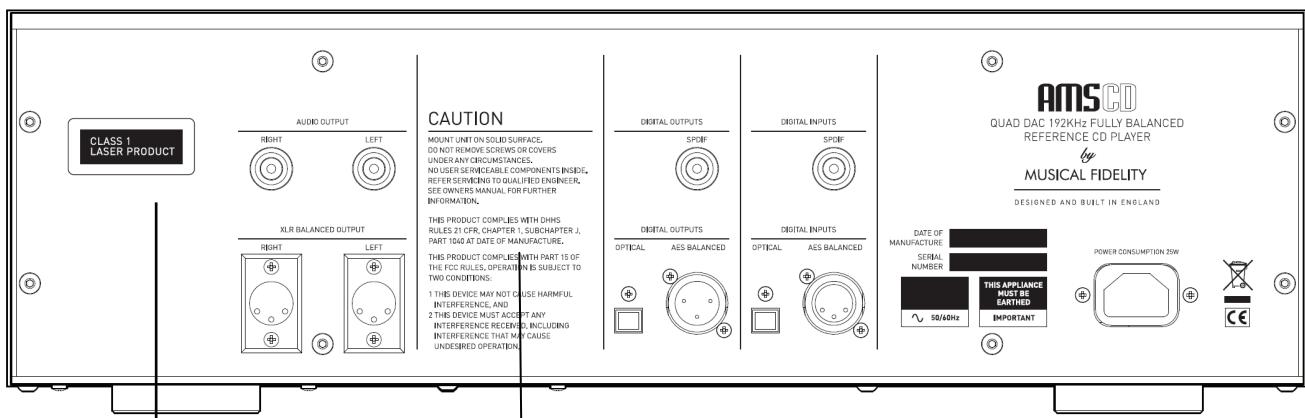
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE CAUSING EYE INJURY.

IF THIS PRODUCT DEVELOPS A FAULT, PLEASE CONTACT YOUR AUTHORISED MUSICAL FIDELITY SERVICE AGENT. DO NOT ATTEMPT TO SERVICE IT YOURSELF AND DO NOT CONTINUE TO USE THIS PRODUCT IN A FAULTY STATE.

INTERNAL LASER WARNING LABELS

**CAUTION!
CLASS 1
LASER
PRODUCT**

CAUTION	- INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
VORSICH!	- UNSICHTBARE LASERSTRÄHLUNG TRITT AUS, WENN DECKEL GEÖFFNET UND WENN SICHERHEITSVERRIEGELUNG ÖBERBRÖCT IST. NICHT DEM STRAHL AUSSETZEN!
WARNING	- OSYNLIG LASERSTRALNING NÄR DENNA DEL AR ÖPPNAD OCH SPÄRR ÄR URKOPPLAD. STRALEN AL FARLIG.
ADVARSEL	- USYNLIG LASERSTRAKING VED ABNING, NAR SIKKERHEDSAFBRYDERE UDE AF FUNCTION UNDGA

REAR PANEL

THIS PRODUCT COMPLIES WITH DHHS RULES 21 CFR, CHAPTER 1, SUBCHAPTER J, PART 1040 AT DATE OF MANUFACTURE.

THIS PRODUCT COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO TWO CONDITIONS:

- 1. THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND**
- 2. THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.**

IMPORTANT! (U.K. only)

This unit is supplied in the U.K. with mains lead fitted with a moulded 13 amp plug. If, for any reason, it is necessary to remove the plug, please remove the fuse holder and dispose of the plug safely, out of reach of children.

It must not be plugged into a mains outlet.

The wires in the mains lead supplied with this appliance are coloured in accordance with the following code:

Green and yellow	Earth
Blue.....	Neutral
Brown	Live

WARNING – This appliance MUST be earthed

As the colours of the wires of the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in the plug, proceed as follows:

- The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked with the letter E or coloured green or green-and-yellow, or by the earth symbol: 
- The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.
- The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
- If connecting to a BS1363 plug, a 13 amp fuse must be used.

WARNING:

ANY MODIFICATIONS TO THIS PRODUCT NOT EXPRESSLY APPROVED BY MUSICAL FIDELITY WHO IS THE PARTY RESPONSIBLE FOR STANDARDS COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THIS EQUIPMENT.



Installation, Precautions & User Information

This new AMSCD is designed and built to provide trouble-free performance, but as with all electronic devices it is necessary to observe a few precautions:

- Heed all warnings shown on the back of the product.
- Only connect the AMSCD to a mains outlet having the same voltage as marked at the back of the unit.
- Always ensure that when disconnecting and reconnecting your audio equipment the mains supply is switched off.
- Position the mains lead and signal interconnects where they are not likely to be walked on or trapped by items placed on them.
- Do not use near water, or place water-filled containers on the AMSCD, for example, a flower vase or potted plants. **If water does spill inside, immediately pull out the mains plug from the wall socket and inform your dealer, who should then check the unit before further use. Entry of liquid into the AMSCD is dangerous, and may cause electric shock or fire hazard.**
- Do not place the unit near direct heat sources such as radiators, direct sunlight or other equipment.
- Do not remove any covers or try to gain access to the inside. There are no internal adjustments or fuses you can replace yourself. Refer all service work to an authorised Musical Fidelity agent.
***Note: Unauthorised opening of the equipment will invalidate any warranty claim.**
- Dust regularly with a soft cloth or soft brush but be careful when using cleaning or polishing agents - they may harm the surface finish.

The electronics in modern hi-fi equipment is complex and may, therefore, be adversely affected or damaged by lightning. For protection of the audio system during electrical storms, remove the mains plugs.

If after-sales service is required, to help the dealer identify the AMSCD please quote the serial number located on the rear panel of the unit.

**DISPOSAL**

The crossed out wheeled bin label that appears on the back panel of the product indicates that the product must not be disposed of as normal household waste. To prevent possible harm to the environment please separate the product from other waste to ensure that it can be recycled in an environmentally safe manner. Please contact local government office or retailer for available collection facilities.

**DISPOSITION**

La poubelle sur roulettes barrées X, qui apparaît en logo sur le panneau arrière du produit, indique que celui-ci ne doit pas être traité comme un déchet domestique commun. Afin de protéger l'environnement, ce produit électronique devra être géré séparément et donc recyclé selon les nouvelles normes Européennes Rohs concernant les déchets d'appareils électriques. Prière de contacter les services concernés gouvernementaux ou votre point de vente pour l'élimination et l'enlèvement de déchets électroniques équipés de composants électroniques.

**DISPOSAL**

La etiqueta cruzada hacia fuera del compartimiento que aparece en el panel trasero del producto indica que el producto no se debe reciclar como basura normal de la casa. Para prevenir daños posibles al ambiente, separe por favor el producto de otras basuras para asegurarse de que puede ser reciclada de una manera ambientalmente segura. Entre en contacto por favor a su oficina gubernamental local o a su minorista para las instalaciones disponibles de la colección.

**RIFIUTI**

L'etichetta del cassetto barrato riportato sul retro dell'apparecchio indica che il prodotto non deve essere smaltito tramite la procedura normale di smaltimento dei rifiuti domestici. Per evitare eventuali danni all'ambiente, separare questo prodotto da altri rifiuti domestici in modo che possa venire riciclato in base alle procedure di rispetto ambientale. Per maggiori dettagli sulle aree di raccolta disponibili, contattate l'ufficio governativo locale od il rivenditore del prodotto.

**FACHGERECHTE ENTSORGUNG:**

Das auf der Geräterückseite angebrachte Label deutet darauf hin, dass das Produkt nicht mit konventionellem Hauskehricht entsorgt werden darf. Um Schäden und Verschmutzungen an Umwelt und Mensch zu vermeiden, muss das Produkt fachgerecht entsorgt und von anderem Abfall getrennt werden. Wenden Sie sich bei Fragen hierzu an Ihren Fachhändler oder an eine öffentliche Informationsstelle.

**AFVAL**

Het label op de achterzijde van dit apparaat, een afvalbak op wielen met een kruis doorgehaald, geeft aan dat dit apparaat niet samen met gewoon huishoudafval mag worden weggegooid. Om mogelijke schade aan onze leefomgeving te voorkomen dient dit apparaat, gescheiden van gewoon huishoudelijk afval, te worden afgevoerd zodat het op een milieuvriendelijke manier kan worden gerecycled. Neem voor beschikbare inzamelplaatsen contact op met uw gemeentelijke reinigingsdienst of met uw elektronica leverancier.

**HÄVITTÄMINEN**

Yliuksattua jätteastiaa kuvava tarra tuotteen takalevyssä kertoo, että tuotetta ei saa käsitellä normaalina talousjätteenä. Ympäristön suojelemiseksi on tuote pidettävä erillään muista jätteestä ja se on kierrätettävä ekologisesti kestävällä tavalla. Ota yhteyttä laitteen myyjään tai Pirkanmaan Ympäristökeskukseen lähimmän kierrätyskeskuksen löytämiseksi.

**AFSKAFNING**

Logoet med en skraldespand med kryds over på bagsiden af apparatet indikerer at dette produkt ikke må kasseres som normal husholdningsaffald. For at forebygge mulig skade på miljøet, bedes De separere dette produkt fra andet affald, og sikre at det bliver genbrugt på en miljørigtig måde. Kontakt venligst de lokale myndigheder eller din forhandler for oplysning om nærmeste tilgængelige opsamlingssted for elektronikaffald.

**ΔΙΑΔΙΚΑΣΙΑ ΑΠΟΡΡΙΨΗΣ**

ΤΟ ΣΗΜΑ ΜΕ ΤΟΝ ΔΙΑΓΕΓΡΑΜΜΕΝΟ ΤΡΟΧΗΛΑΤΟ ΚΑΔΟ ΑΠΟΡΡΙΜΑΤΩΝ ΣΤΗΝ ΠΙΣΩ ΟΨΗ ΤΟΥ ΜΗΧΑΝΗΜΑΤΟΣ ΔΗΛΩΝΕΙ ΟΤΙ ΤΟ ΠΡΟΙΟΝ ΑΥΤΟ ΔΕΝ ΠΡΕΠΕΙ ΝΑ ΔΙΑΧΕΙΡΙΣΘΕΙ ΣΑΝ ΣΥΝΗΘΙΣΜΕΝΟ ΟΙΚΙΑΚΟ ΑΠΟΒΛΗΤΟ. ΠΡΟΣ ΑΠΟΦΥΓΗ ΕΝΔΕΧΟΜΕΝΗΣ ΕΠΙΒΑΡΥΝΣΗΣ ΤΟΥ ΠΕΡΙΒΑΛΛΟΝΤΟΣ, ΞΕΧΩΡΙΣΤΕ ΤΟ ΠΡΟΙΟΝ ΑΠΟ ΤΑ ΆΛΛΑ ΑΠΟΡΡΙΜΑΤΑ ΩΣΤΕ ΝΑ ΕΞΑΣΦΑΛΙΣΘΕΙ Η ΑΝΑΚΥΚΛΩΣΗ ΤΟΥ ΜΕ ΤΟΝ ΠΡΕΠΟΝΤΑ ΤΡΟΠΟ. ΠΑΡΑΚΑΛΟΥΜΕ ΝΑ ΕΠΙΚΟΙΝΩΝΗΣΕΤΕ ΜΕ ΤΗΝ ΤΟΠΙΚΗ ΥΠΗΡΕΣΙΑ ΑΝΑΚΥΚΛΩΣΗΣ Η ΜΕ ΤΟ ΚΑΤΑΣΤΗΜΑ ΑΓΟΡΑΣ ΓΙΑ ΠΕΡΙΣΣΟΤΕΡΕΣ ΛΕΠΤΟΜΕΡΕΙΕΣ.



Introduction

Congratulations on the purchase of the new AMSCD player. This unit will give top quality performance when used as:

- A top quality CD player delivering the best performance possible from CD
- A top quality DAC (digital to analogue converter) for other sources with digital outputs such as DAB radio, minidisk, DAT, TV, etc. delivering the best audio performance using these sources

Cleaning

Before cleaning the unit, switch off power at the mains switch and remove the mains plug from the wall socket. Clean the cabinet and remote control unit using a moist cloth. Using solvents, white spirit or thinners is not advised, as they could damage the surface finish.

Installation

Position the AMSCD on a stable, horizontal surface where there is no risk of it being knocked, or subjected to vibration such as from loudspeakers.

Important note:

The AMSCD must be protected from humidity – if the unit is moved from a cold place to a warm room, leave the unit for an hour or so to allow sufficient time for the moisture to evaporate.

Power Connections

The AMSCD is supplied with a standard IEC mains cable which plugs into the IEC socket at the back of the unit

Audio Connections

XLR audio outputs: Use good quality XLR balanced audio cables (fully connected signals and ground), for optimum signal transfer. This gives the best performance from the CD player when used in conjunction with an amplifier with fully balanced input such as the Musical Fidelity AMS35i Integrated or Primo Preamplifier.

RCA audio outputs: Use good quality RCA phono audio cables (fully connected signal and ground), for optimum signal transfer.

Digital Connections

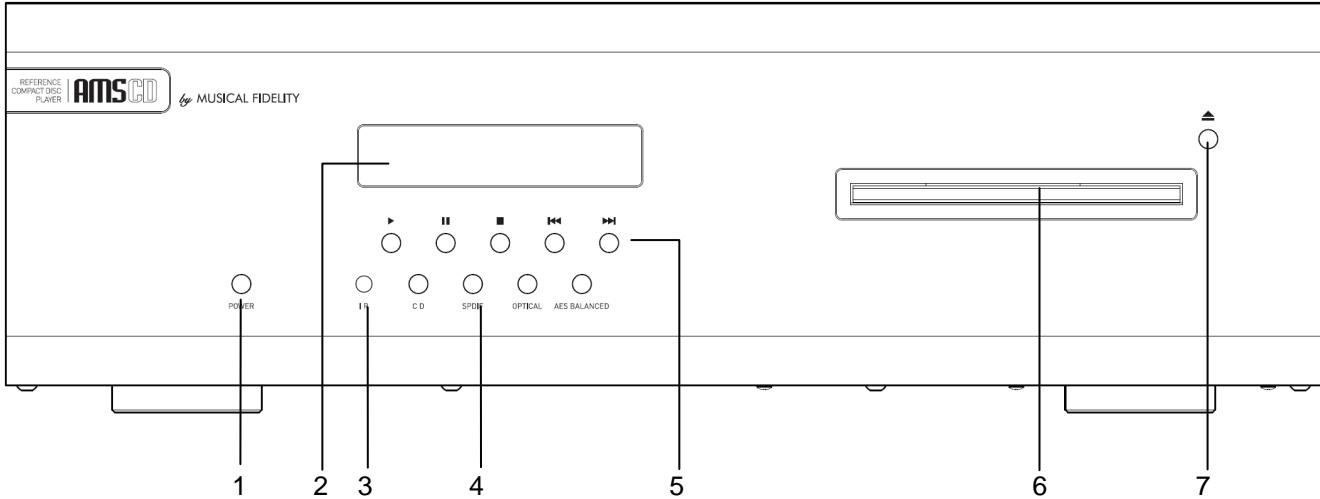
RCA digital (SP/DIF) input: Connect RCA digital sources to RCA digital inputs. Use good quality fully connected (signal and ground) coaxial digital cables for optimum RCA digital signal transfer.

Optical (TOSLINK) input: Connect optical digital source to optical input. Use good quality “Toslink” cables, for optimum signal transfer.

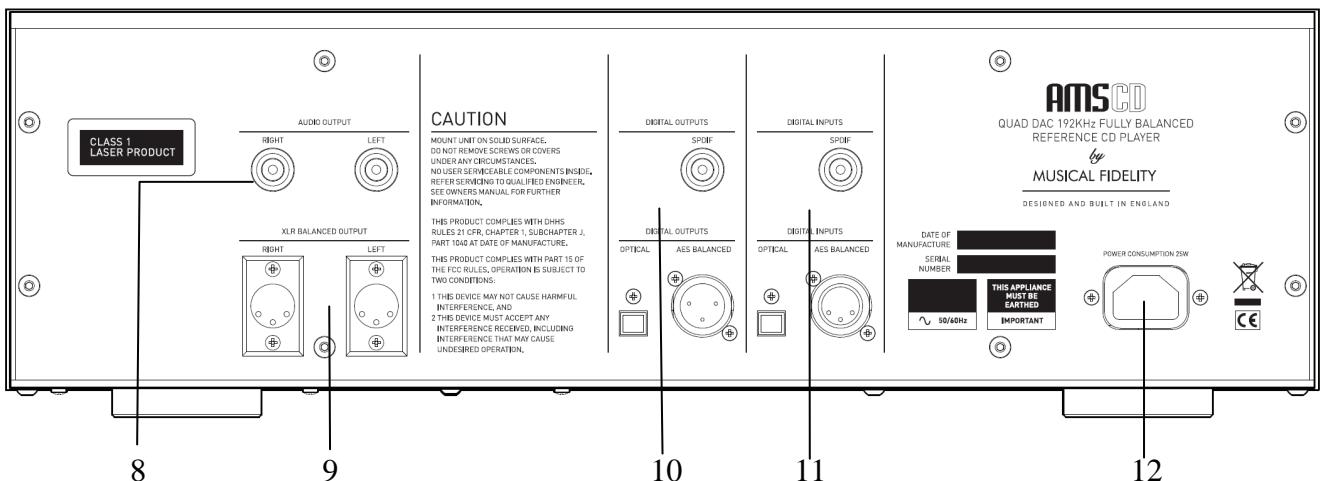
XLR digital inputs: Use good quality XLR balanced AES digital cables (fully connected signals and ground), for optimum signal transfer. This gives the option to take advantage of the AMSCD's advanced DAC circuits when used in conjunction with a source with fully balanced digital output.

RCA digital (SP/DIF) output: Connect RCA digital receiver to RCA digital outputs. Use good quality fully connected (signal and ground) coaxial digital cables for optimum RCA digital signal transfer.

Optical (TOSLINK) output: Connect optical digital receiver to optical output. Use good quality “Toslink” cables, for optimum signal transfer. **XLR digital outputs:** Use good quality XLR balanced AES digital cables (fully connected signals and ground), for optimum signal transfer. This output allows future upgrades to be realised, when used in conjunction with a DAC with fully balanced digital input.



- 1 ON/OFF Button**
- 2 DISPLAY**
- 3 IR RECEIVER lens**
- 4 CD, SPDIF, OPTICAL, AES BALANCED SOURCE selector buttons**
- 5 PLAY/PAUSE, STOP, <<, >> buttons**
- 6 CD TRAY**
- 7 STOP/EJECT button**



- 8 RCA OUTPUTS** right and left
- 9 BALANCED XLR OUTPUTS** right and left
- 10 OPTICAL, SPDIF (RCA) & AES (XLR)** digital outputs
- 11 OPTICAL, SPDIF (RCA) & AES (XLR)** digital inputs
- 12 IEC MAINS INPUT**

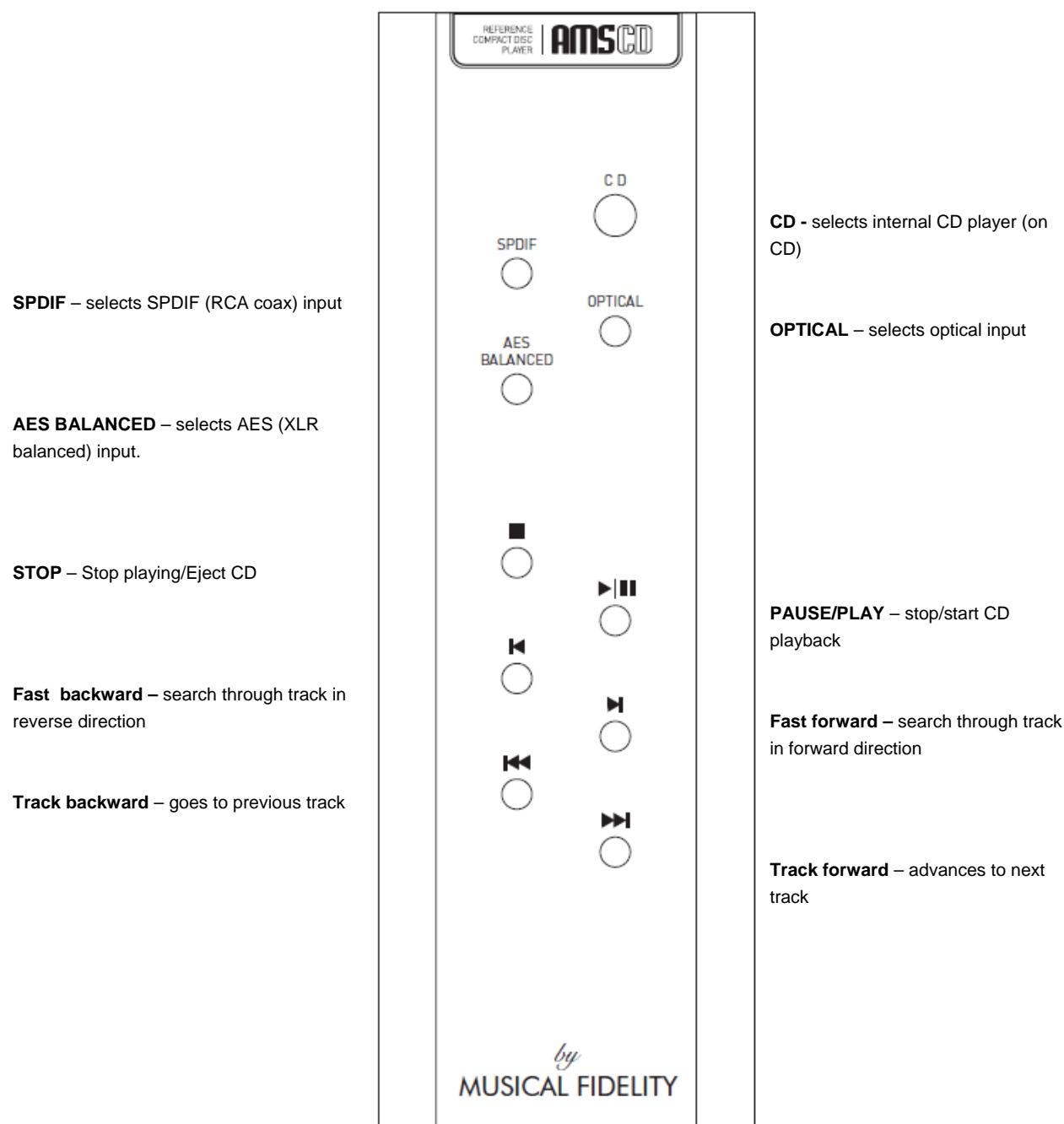
The universal remote control shown below enables functions from this and related units to be operated from a convenient distance.

Equivalent buttons on the remote control have the same functions as those on the front panel of the unit. Other functions are only available by remote control.

As the handset uses an invisible infra-red light beam, the front edge must be pointed directly towards the receiver window at the front of the player, without visual obstruction between them.

If the range of the remote control greatly decreases, replace the battery with a new one, VARTA Lithium Li-Mn button type CR2450.

Please dispose of used batteries in accordance to local regulations.



LOADING AND PLAYING COMPACT DISCS

To use the CD, press the CD button on the front panel. Alternatively, use the CD button on the remote control.



To load a disc, press OPEN/CLOSE button to gain access to the tray. Display will show "OPEN"



When the tray is fully extended, gently place the disc, with the label facing upwards, centrally into the indentation and press the OPEN/CLOSE or PLAY button so the displays show "CLOSE".



The unit will scan the contents of the disc. After a short delay, the display windows then show the total number of tracks available on the CD, and total playing time. In the following example there are 7 tracks, lasting a total of 41 minutes 56 seconds



DISC PLAY

If **PLAY/PAUSE** is pressed, the unit will begin playing from track 1, confirmed by the word **PLAY** appearing on the left of the display, with **1** in the centre and elapsed time on the right.



When all tracks on the CD have been played, the display shows **STOP** and total number of tracks on the disc.

PAUSE

Pressing the **PLAY/PAUSE** button when disc is playing will hold up playback. **PAUSE** appears in the display windows instead of **PLAY**. The disc will continue spinning, but the track does not advance and the CD's output is muted.



Pressing **PLAY/PAUSE** again resumes playback from the same place.

Note that if the disc is already playing, pressing the **PLAY** button reverts to the beginning of the current track.

STOP

Playback can be stopped at any time by pressing the **STOP** button once. On the remote control, press either end of the button, not the middle part. If mains power to the unit is switched on with a disc already loaded, it will automatically search for the disc.

SPDIF input

To use the SPDIF input, press the SPDIF button on the front panel. Alternatively, use the SPDIF button on the remote control. The display will flash “not locked” in absence of digital input signal. If a signal is present, the display will show a steady “locked” message.

**OPTICAL input**

To use the OPTICAL input, press the OPTICAL button on the front panel. Alternatively, use the OPTICAL button on the remote control. The display will flash “not locked” in absence of digital input signal. If a signal is present, the display will show a steady “locked” message.

**AES BALANCED input**

To use the AES BALANCED input, press the AES BALANCED button on the front panel. Alternatively, use the AES BALANCED button on the remote control. The display will flash “not locked” in absence of digital input signal. If a signal is present, the display will show a steady “locked” message.



Basic problem-solving with a CD player is similar to troubleshooting other electrical or electronic equipment. Always check the most obvious possible causes first, such as the following examples:

Problem	Probable Cause	Remedy
No power / display	Power plug is not inserted into socket correctly	Plug in securely into unit's IEC socket.
No playback when disc is loaded, "NO DISC" displayed	Disc is loaded with label side down Incorrect disc type Dirty disc Moisture/humidity or cold affecting laser lens	Re-load with label side up Please load a standard audio CD Clean disk and try again Leave unit on for an hour to allow moisture to evaporate.
No audio output, or too low level output	Incorrect or missing connections	Check connections are secure.
Hum	Audio connector plug not fully pushed in Cable Fault Unsuitable Cable (e.g. cable grounds not connected)	Insert plug securely Check cable is connected at both ends. N.B. some esoteric cables have internal wiring intentionally disconnected/modified. For best results on all inputs analogue AND digital, please use good quality screened coax; signal and screen directly connected both ends.
Miss-tracking (sound jumping)	Player is receiving vibration or shock Disc is dirty Moisture/humidity or cold affecting laser lens.	Move player away from loudspeakers etc. Clean disc surface Leave unit on for an hour to allow moisture to evaporate.
Remote control does not work	Power supply switch is set to off	Set switch to on
	Battery(ies) fitted the wrong way round	Insert batteries correctly
	Batteries are flat	Change batteries for a new set
	Control is not pointed directly towards the front panel of the player	Ensure there is no obstruction between the remote control and player front
Remote control range has reduced	Batteries are running out	Change batteries – for a new set



This product contains a PHILIPS CD mechanism, which complies with the PHILIPS/SONY red book CDDA standard. It is guaranteed to play all disks with the "compact disc digital audio" badge (see left) without any problems.

Please note that due to "piracy" concerns, some record companies/pressing plants are creating disks that do not adhere to this standard. Such disks may –or- may not play in some –or- all CD player products of any manufacturer. We advise caution in using these disks, as the information contained therein has been deliberately manipulated and can cause audio degradation and/or playability problems.

We also advise caution with using cheap and/or computer CD-R/RW disks for audio. To ensure optimum reliability and performance we recommend all home-generated CDs intended for playback on this unit are recorded as CDDA AUDIO CDs (i.e. not MP3, WAV, etc.) on good quality **AUDIO** grade CD-Rs.

Remember - the most vulnerable part of a CD playing system is the disc itself. The most likely cause of a disc not playing is that the disc itself is faulty, scratched or simply dirty. Never open the case of the unit yourself, as this will invalidate the guarantee. If none of the above actions affect a cure, please contact your dealer or Musical Fidelity service agent.

Output

Output impedance	50 ohms balanced or single ended
Output, digital 0dB level	XLR output - 4.4V r.m.s. balanced nominal RCA output - 2.2V r.m.s. single ended nominal

DAC

DAC circuit	Quad DAC 192 kHz fully balanced over-sampling
Total correlated jitter	<15 picoseconds peak to peak
Linearity	<0.1dB down to -96dB
Frequency response	10Hz to 20 kHz -0.2dB max.
Channel separation	>105dB 20 Hz to 20 kHz
Signal-to-noise ratio	>117dB "A"- wtd.
Total harmonic distortion	<0.003% 10Hz to 20 kHz

Connections

Line level outputs	1 pair line level RCA connectors, left and right outputs 1 pair line level XLR connectors, left and right outputs
Digital outputs	1 RCA coaxial connector SPDIF 1 TOSLINK optical connector 1 XLR AES output connector
Digital inputs	1 RCA coaxial connector SPDIF 1 TOSLINK optical connector 1 XLR AES input connector

Power requirement

Mains voltages	115/230VAC 50/60Hz (factory pre-set) 100VAC 50/60Hz (alternative)
Consumption	25 Watts maximum

Weight

Unit only, unboxed	11.2 kg (24½ lbs)
In shipping carton	15.5 kg (34 lbs)

Dimensions

Wide	440 mm (17⅓")
High, including feet	125 mm (5")
Deep (front to back) including terminals	385 mm (15⅛")

Standard accessories

IEC type mains lead (10-Amp type)
AMSCD remote control
VARTA Lithium Li-Mn button type CR2450

Musical Fidelity reserves the right to make improvements which may result in specification or feature changes without notice.





MANUAL HISTORY

RELEASE	DATE	CHANGES
Issue 1	24 th July 2009	1 st issue
Issue 2	23 rd October 2009	Button label, range, DAC specs