



MUSICAL FIDELITY



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A308 CR CD

# **SAFETY INFORMATION**

# **IMPORTANT!** (U.K. only)

This unit is supplied in the U.K. with a mains lead fitted with a moulded 13 amp plug. If, for any reason, you need to cut off 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 your 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.

# **SAFETY INFORMATION**

# CLASS 1 LASER PRODUCT

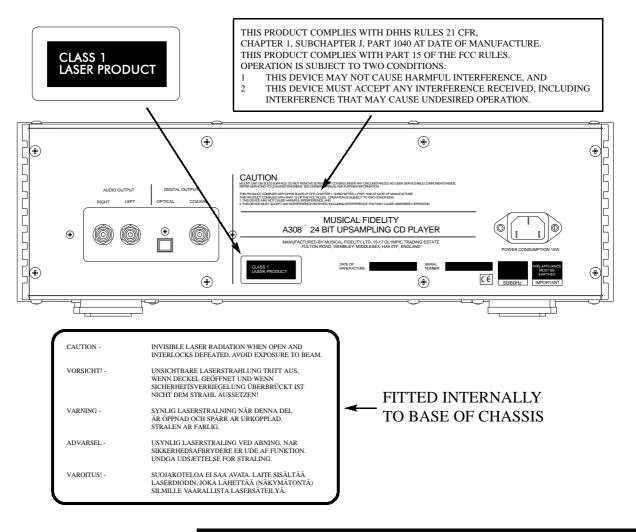
This CD player has been designed and manufactured according to FDA regulations "title 21, CFR, chapter 1, subchapter J, based on the Radiation Control for Health and Safety Act of 1968", and is classified as a Class 1 laser product. There is no hazardous radiation during normal use because invisible 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 AUTHO-RISED MUSICAL FIDELITY SERVICE AGENT. DO NOT ATTEMPT TO SERVICE IT YOURSELF AND DO NOT CONTINUE TO USE THIS PRODUCT IN A FAULTY STATE.

# WARNING AND INFORMATION LABELS:



# **USER INFORMATION**

# LASER INFORMATION:

Optical pick-up type:

Manufacturer:Sony CorporationBlock type :CDM14BL-5BD25Pick-up type :KSS213BA/F-NPWavelength :760-800nm

# RADIO - FREQUENCY INTERFERENCE (RFI)

This equipment uses and can radiate radio frequency energy, and if not installed and operated in accordance with the instructions, may cause interference to radio communications.

However, it is designed to radiate minimal levels of RFI, and accordingly been testing to North American standards (FCC regulations - limits for a class B digital device persuant to part 15 of the rules). These requirements are intended to provide reasonable protection against excessive interference in a residential installation.

Conversely, the product has also been checked to ensure that its own operation is not adversely affected by normal background levels of RFI received externally.

However, if interference is experienced, for instance to radio or TV broadcasts, the user is recommended to try one or more of the following measures:

- Identify the source of interference by turning off power to the CD player or other equipment individually, and checking whether the problem disappears.
- Re-orientate or relocate the receiving aerial.
- Move the CD player away from the receiver.
- Connect the CD player to a mains outlet on a different circuit from the receiver.
- Consult a dealer or experienced TV/radio technician for help.

If a problem persists, please contact Musical Fidelity's service department.

# **GENERAL ADVICE**

### **INSTALLATION PRECAUTIONS and USER INFORMATION**

Your new A308 <sup>CR</sup>CD 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 A308 <sup>CR</sup> CD 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 CD player, for example, flower vases 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 CD player 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 user adjustments. Refer all service work to an authorised Musical Fidelity agent. **NOTE: Unauthorised opening of the equipment will invalidate any warranty claims.** 

There are fuses inside the  $A308 \ ^{CR}$  CD. In the unlikely event that one blows, refer the unit to your audio dealer. Do NOT try to replace the fuse yourself as this will invalidate the warranty.

Dust regularly with a soft duster 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 your audio system during electrical storms, remove the mains plugs and disconnect any aerial lead.

The remote control enables most functions of the CD player to be operated from a convenient distance. Several of the features described in this manual are only available via the remote handset. Equivalent button inscriptions on the remote control have the same functions as the player's front panel buttons. As the remote control system uses an invisible infra-red light beam, the transmitter must be pointed directly towards the receiver window on the player and visual contact must exist between them. If the range of the remote control greatly decreases, replace the batteries with new ones. Do not mix old and new batteries.

If after-sales service is required, to help your dealer identify the A308 <sup>CR</sup> CD player please quote the serial number located on the rear panel of the unit.

Issue 4: March 2003

# **GENERAL ADVICE / INSTALLATION**

#### **INTRODUCTION**

Congratulations on the purchase of your new A308 <sup>CR</sup> CD upsampling 24 BIT CD player.

The A308 uses the latest technology for the reproduction of your CD collection.

The digital data stream is first up-sampled at 96kHz, which moves noise, jitter and distortion artefacts well above the audio band. It is then passed through a new, low noise, low distortion 24-bit digital-to-analog convertor operating at 96kHz, which allows simpler filtering of the analog output. This in turn gives an improved audio response without the need for sharp filters that degrade sound quality. The result is a CD player which gives a smoother response than previously possible with none of the "hardness" of other players.

This model fully complements our A308 range of products, which enable its full potential to be realised.

#### <u>NOTES ON USING COMPACT DISCS</u>

Always hold discs by the edges and make sure they remain clean. Do not touch the surface, or stick paper or adhesive tape to either side of the disc. Keep discs away from direct sunlight and heat sources, such as radiators. Do not leave CDs in a car parked in direct sunlight, as the temperature inside the car can become extremely high. Clean discs with a cloth before playing them. Do not use solvents to clean your compact discs, such as benzene, thinners, commercially available cleaners or antistatic spray intended for analog records. After playing, always return the disc to its case for storage.

#### <u>CLEANING</u>

Before cleaning the CD player, always turn off power at the mains switch and remove the mains plug from the wall outlet. Clean the housing and the remote control unit using a moist cloth. We do not advise the use of solvents, white spirits or thinners, as they could damage the surface finish of the unit.

#### **INSTALLATION**

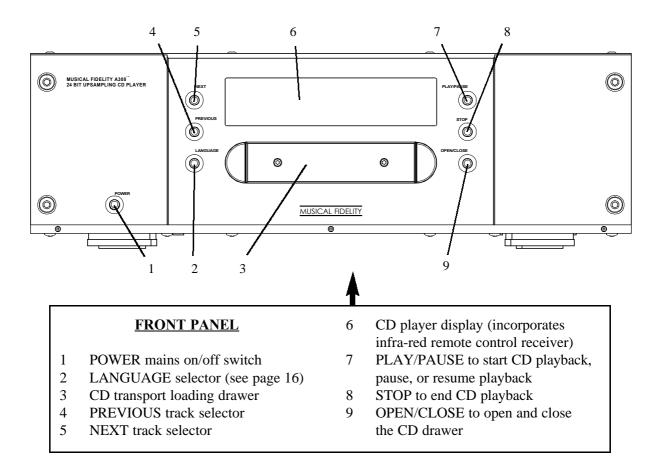
Position the CD player on a stable, horizontal surface where there is no risk of it being knocked, or subjected to vibration such as from loudspeakers.

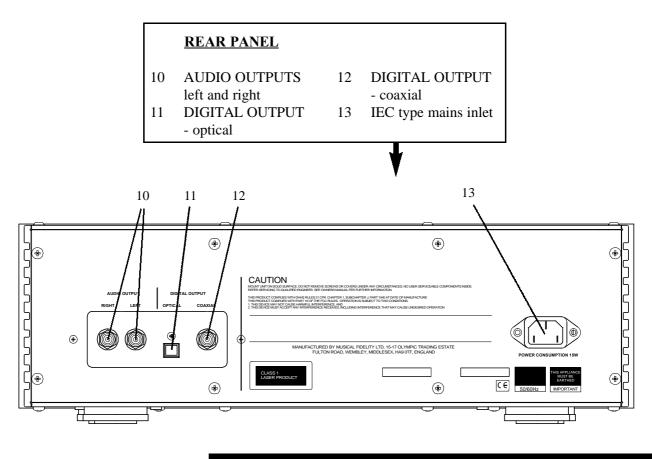
Protect your CD player from humidity - if the unit is moved from a cold place to a warm room, moisture can form on the pickup lens inside the player, preventing the laser beam from reading the disc. If this happens, remove the CD, close the disc drawer, and leave the unit switched on for an hour or so to allow sufficient time for the moisture to evaporate.

#### **AUDIO CONNECTION**

The CD player should be connected to an amplifier input by audio cables with RCA/phono type plugs. These link the left and right AUDIO OUTPUT sockets on the rear panel of the CD player to the CD or auxilliary input sockets on the amplifier. Do not use any sockets on the amplifier intended for "vinyl" phono cartridge input, as the sensitive circuit will overload, producing a severely distorted sound. Alternatively, you can use the DIGITAL OUTPUTS (coaxial or optical) for connection to an external digital-to-analog converter or digital amplifier.

# **FACILITIES AND CONNECTIONS**



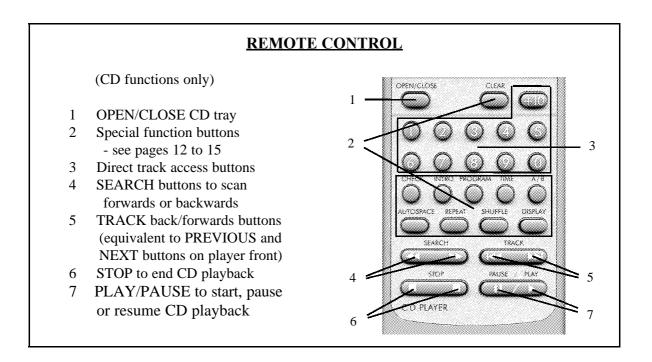


# **REMOTE CONTROL**

Remote control buttons shown below enable CD player functions to be operated from a convenient distance. Remaining buttons on this universal handset are for use with other Musical Fidelity products, and have no effect on the A308 <sup>CR</sup> CD player.

Equivalent buttons on the remote handset have the same functions as those on the front panel of the unit, but the SEARCH function is 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.



# **BASIC OPERATION**

### LOADING AND PLAYING COMPACT DISCS

If mains power to the A308 <sup>CR</sup> CD player is switched on with a disc already loaded, it will automatically search for the disc and begin playing from the first track.

However, if no disc is loaded, after approximately 3 or 4 seconds the unit will display the following:



To play a disc, press the **OPEN/CLOSE** button to open the transport drawer. When the drawer is fully extended, insert the required disc with the label facing upwards and then press either the **OPEN/CLOSE** or **PLAY/PAUSE** button to close the transport drawer again.

If **OPEN/CLOSE** is pressed, the disc drawer closes and the CD player scans the contents of the disc. After a short delay, the display window then shows for approximately 4 seconds the total number of tracks available on the CD, and total playing time, for example:



Display time  $\mathbf{0}$  on the left then replaces the temporary track and time information, indicating that a disc is loaded but not yet playing.

The "calendar" grid pattern at the righthand end of the display also confirms tracks available for playing up to the first 20, but remains displayed. In the above example there are 4 tracks on the disc.

### DISC PLAY

If **PLAY/PAUSE** is pressed, the CD player will go into play mode, an arrow confirming playback will appear on the left, and the current track and index point will be displayed similar to the following example:



Again, the calendar grid shows playback progress of the first 20 tracks only.

When all tracks on the CD have been played, playback stops and the display reverts to:



### <u>PAUSE</u>

Pressing the **PLAY/PAUSE** button whilst a disc is playing pauses playback of the disc. A pause symbol (**II**) appears in the display window next to the play arrow. The disc will continue spinning but the track does not advance and the A308 <sup>CR</sup> CD's output is muted. Pressing **PLAY/PAUSE** again resumes

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

### INDEX POINTS

Some CDs contain index points within a track to separate a musical piece into different movements. If used, these index point numbers (one or two digits, up to 99) will appear in the display under the INDEX graphic. Otherwise, index number 1 will be displayed.

# **BASIC OPERATION**

### <u>STOP</u>

Playback can be stopped at any time by pressing the **STOP** button once.

### TRACK SELECTION

To change track, the track skip buttons **NEXT** and **PREVIOUS** can be pressed to jump forwards or backwards one track in either direction. Note that a single press of the **PREVIOUS** button restarts playback at the beginning of the current track. A double-press is needed to jump back to the previous track. Corresponding **TRACK** buttons on the remote control are also marked |<< and >>|. If either button is held down, the A308 <sup>CR</sup> CD will quickly step through the available tracks in the required direction.

### TRACK SELECTION (Remote control)

A specific track can be selected directly by pressing the required track number button on the remote control. The chosen track then plays immediately.

To play a track number with two digits, press the 10+ button on the remote control followed by the first digit, then the second digit. For example, to obtain track 27, press 10+, then 2, then 7.

### <u>SEARCH</u>

The SEARCH buttons can be used to fastforward or fast-rewind during playback in a similar way to a video or tape cassette player. This permits location of particular passages at high speed with the audio playback of the CD still active.

Pressing the forward-search button (>>) fast winds forwards whilst the search backwards button (<<) fast winds backwards. As the unit searches through a track, the track time remaining display (far right digits) will be seen to advance rapidly in the required direction. For both directions the unit will return to normal playback when the button is released.

### DISPLAYING PLAYBACK TIME

There are three playback time display modes accessed progressively by pushing the **TIME** button on the remote control. The default mode (e.g. after switch on) shown below indicates the elapsed time for the currently playing track.

(2 minutes 34 seconds in this example):



Pushing the **TIME** button once changes the display to show the remaining time for the current track (4 mins 29 secs in this example):



Pushing the **TIME** button again changes the display to show the remaining time for the whole disc (33 mins 54 secs) below:



(Note: Track and Index displays are not shown in this mode).

¥

A third press of the **TIME** button will now **→** bring the display back to the original (elapsed track time) mode.

#### **REPEAT PLAYBACK**

The **REPEAT** button on the remote control allows the repeated playback of either one track or all tracks on the disc. By pressing the **REPEAT** button once, you can repeat the entire disc (or the programmed selections - see page 12) over and over again. Large letters **REPEAT** briefly replace track, index and time information followed by a smaller, permanent REPEAT legend underneath.

If the **REPEAT** button is pressed a second time, only the current track is repeated. Large letters **REPEAT 1** briefly replace track, index and time information followed by a REPEAT 1 legend underneath.

Pressing **REPEAT** a third time cancels repeat mode. Graphics **REPEAT OFF** then briefly replace track, index and time information before reverting to a normal disc play display.

#### A-B REPEAT PLAYBACK

"A-B repeat" provides the option of playing just a certain section of the disc over and over again.

Find the beginning of the required section either by listening, or using the display time as a guide. When the desired starting point is reached, press button **A/B** on the remote control. The display will show REPEAT and the flashing letter A. When the disc has reached the end of the required section, press the **A-B** button again. Letters A-B will now be illuminated in the display, and the unit continuously plays the selected part of the disc. To cancel A-B repeat mode, press **REPEAT** on the remote control. Graphics REPEAT OFF then briefly replace track, index and time information in the display.

### SHUFFLE PLAYBACK

The SHUFFLE feature allows tracks on the discs to be played in random sequence rather than the normal consecutive order. Tracks are also played in a different order each time the disc is restarted, or another disc loaded.

This function is obtained by pressing **SHUFFLE** on the remote control with the unit either stopped or playing.

If playing, the word SHUFFLE in large letters briefly replaces track, index and time display information, before a permanent red indication provides a reminder that the function has been activated.

From stop mode, pressing **PLAY/PAUSE** also begins shuffle play.

If the A308 <sup>CR</sup> CD is already playing, play will continue until either the current track has finished, or either the track >>| button on the remote control or **NEXT** on the unit is pressed. Shuffle play is then further confirmed by the track number display digits briefly changing into segments revolving in a box formation.

If the **SHUFFLE** button is now pressed for a second time, the word CONTINUE briefly replaces track, index and time display information. The unit then resumes normal play function, except that it now only plays previously unplayed tracks of the current disc, unless others are then manually selected. Shuffle play is cancelled by pressing the **STOP** button.

# **SPECIAL FEATURES**

### **INTRODUCTION SEARCH**

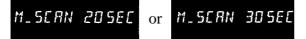
The introduction-search function allows play back of just the start of each track on the disc, for instance to locate a preferred track by ear.

Press **INTRO** on the remote control, and the display will briefly show:



The first ten seconds (approximately) of each title on the CD are then played (or the first 10 seconds of any programmed titles, see below). The playback arrow in the display window flashes to indicate that this mode is activated.

Track playing time can be changed to approximately 20 or 30 seconds at any time during introduction mode. Press **INTRO** twice or three times in quick succession instead of once, and the revised time will be indicated on the display as:



Press **STOP** to cancel introduction mode.

Note: Intro scan time will be memorised as long as the unit is powered on, even when another disc is loaded.

### PROGRAMMED PLAY/R.M.S.

The built-in program memory (Random Music Selection function) allows you to store up to 24 tracks and then play them back in the stored order. Each track is stored as a 'STEP' in the program. It is possible to store a track more than once in the same program if required. Example:- You wish to listen to tracks 14, 7, 9, 9 and 12 in that order on a disc. With the disc loaded and the player stopped, first press **PROGRAM** on the remote control. The word **PROGRAM**  briefly replaces track, index and time information, before a permanent red display provides a reminder that the function has been activated.

Press the numeric button of the track number corresponding to the first track you wish to store (14 in our example is +10, then 4). That track number will now appear in the display under TRACK, number 1 (being the first entry) will appear under STEP, and track playing time appears under MIN SEC. Alternatively, the track number can be selected by using the track skip buttons ( |<< or >>| ).

The calendar grid to the right of the display also confirms this track selection.

Next the second track to be programmed can be selected (7 in our example) either by entering the required number with the numeric buttons or again by using the track skip buttons. As the second track number is selected the step number will be seen to change to a 2 indicating the program step being filled.

If you want to save a track twice in succession (for example 9 followed by 9), then simply press button 9 twice.

Repeat the above procedure by pressing remaining track numbers required (9, 9 again and 12 in our example). Note that as tracks are added, the total playing time indicated increases by a corresponding amount *plus one second per track*. This is to allow access time for the CD mechanism during the program play sequence.

If entry of more than 24 tracks is attempted accidently, the memory will not accept the extra ones. The following is then briefly displayed:



# **SPECIAL FEATURES**

If at any time you make a mistake or wish to delete a track from the list, press the **CLEAR** button to erase the last step. Repeated pressing of **CLEAR** will then erase each step in reverse order.

If you wish to check the selection before playing back your program, the **CHECK** button can be pressed to step through each track in turn. At the end of the check sequence, the display briefly shows:



To play the programmed tracks press **PLAY/PAUSE** (or **INTRO** if required, see page 12).

When all programmed tracks have been played, the CD player stops. The same track selection can then be played again by pressing the **PLAY/PAUSE** button.

To cancel this mode, press **PROGRAM**. The word CONTINUE then briefly replaces track, index and time display.

Note: The entire program contents will be cleared if you open the disc compartment to load another disc, but this does not cancel program mode itself.

#### AUTOSPACE

The A308 <sup>CR</sup> CD's AUTOSPACE function can be used to insert 4-second silent spaces in between each track as it is played back. This can be useful when making cassette recordings of CDs. Some cassette recorders feature a track skip or search function which uses the silent gap between tracks to locate each one individually. However, some CDs do not have long enough gaps between tracks for this function to operate properly. AUTOSPACE can solve this problem.

Pressing the **AUTOSPACE** button once activates the function. The legend AUTO SPACE will appear in the display. In this mode, once the A308 <sup>CR</sup> CD has reached the end of a track the AUTO SPACE graphic will begin to flash and the elapsed time part of the display will change to count down from four seconds to zero before play of the next track begins. When zero is reached the AUTO SPACE legend stops flashing and play continues at the start of the next track.

Press **AUTOSPACE** again to cancel this mode.

### <u>DISPLAY</u>

The A308 <sup>CR</sup> CD's display can be switched off with the **DISPLAY** button on the remote control <u>when a disc is playing</u>. However, if the button is pressed without a CD being loaded, or with a disc stopped, track, index and time displays are briefly replaced by the word DISPLAY OFF to confirm this mode has been engaged, *but the display remains lit until play is selected*. Pushing the button a second time briefly shows DISPLAY ON to confirm that the function has been cancelled.

When in display-off mode, pressing any button will cause the display to return briefly to confirm the new status before again switching off.

# **SPECIAL FEATURES - TEXT**

### CD TEXT DISCS

A small number of CDs released for sale more recently have additional text information contained in the recorded digital data.

The A308 <sup>CR</sup> CD can individually display either the disc title, artist's name or track title with appropriate control commands.

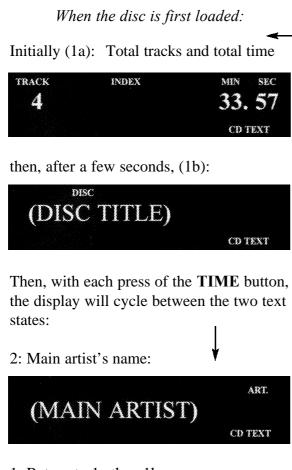
Only CDs which are identified as having

this text feature, either on the disc's label or the library case, will have text function on the A308 <sup>CR</sup> CD.



When a text disc is first loaded, a red CD TEXT legend appears in the display window.

Text is shown on the front display as follows:

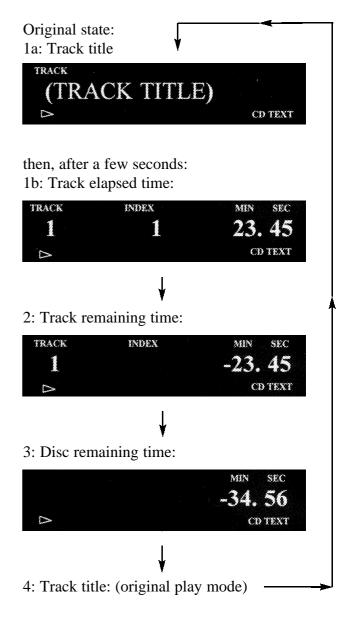


1: Return to 1a then 1b,

If a title or name has more than twelve characters, the first 12 only will be diplayed after the title or name has finished scrolling.

### With disc playing:

Each press of the **TIME** button, the display will cycle between four states:



#### **SPECIAL FEATURES - Other Languages**

#### **Other Languages:**

A limited number of CD text discs also have an "other-language" option.

In this case, after loading the disc, the display shows the current or default language after MULTI has appeared underneath the TEXT legend.

If the player cannot read one of the languages identified in the disc's digital data, the display will show "(OTHER LANG)" after loading the text CD.

To change language with a suitable text disc, before playing the text CD:

Press the **LANGUAGE** button on the front panel. The current operating language will then appear in the display.

Press **NEXT** or **PREVIOUS** on the front panel, or |<< or >>| on the remote control to find the required language.

Press the LANGUAGE button again to store the setting.

#### Notes:

\* If a non-text disc is loaded, pressing the LANGUAGE button has no effect.

\* If a text disc which does not have other languages available *is loaded but not playing*, when the **LANGUAGE** button is pressed "CAN'T SELECT" is displayed

\* If the LANGUAGE button is pressed while playing a multi-language text disc, the current language is displayed momentarily.

# **PROBLEMS** ?

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 when <b>POWER</b> button is pressed	Power plug is not inserted fully into rear socket	Plug in securely.
No playback when disc is loaded, "NO DISC" displayed	Disc is loaded with label side down	Re-load with label side up.
No audio output, or too low level output	Connection to rest of stereo system is incorrect	Check connections.
Sound is severely distorted, and volume control needs to be turned down very low.	CD player audio lead is connected to phono input sockets of the amplifier	Re-connect lead to auxilliary sockets or other "line level" amplifier input.
Mistracking (sound jumping)	Player receiving vibration or shock	Change position of player away from loudspeakers.
	Disc is dirty	Clean disc surface.
Hum	Audio connector plug not fully pushed in	Insert plug securely.
Interference noise heard from radio tuner	Player too near tuner	Keep a reasonable distance between player and tuner, or switch off player power.
Remote control does not work	Player's <b>POWER</b> switch set to off	Set switch to on.
	One or more batteries inserted the wrong way round	Insert batteries correctly.
	Batteries are flat	Change batteries - do not mix old and new ones.
	Remote control is not pointed directly towards the front panel of the player	Ensure there is no obstruc- tion between the remote control and player front.
Remote control range has greatly reduced	Batteries are running out	Change batteries - do not mix old and new ones.

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 A308 <sup>CR</sup> CD yourself, as this will invalidate the guarantee. If none of the above actions effect a cure, please contact your dealer or Musical Fidelity service agent.

**SPECIFICATIONS**:

# A308 CR CD

# Upsampling 24 Bit Compact Disc Player

DAC architecture	24 bit Delta-Sigma (Bitstream) Dual differential 8x oversampling
Disc mechanism	Sony
Upsampling	96kHz
Frequency response	10Hz to 20kHz +0 / -0.2dB
Signal / noise ratio	> 115dB "A" weighted
Total harmonic distortion	< 0.003% 10Hz to 20kHz
Total correlated jitter	< 150 pS
Channel separation	> 100dB 20Hz to 20kHz
Linearity	< 0.2dB down to -100dB
Audio output at digital 0dB level	2.14VRMS at 1kHz nominal
Analog output	1 pair RCA connectors
Analog output impedance	50 Ohms
Digital outputs	1 optical (Toslink), 1 S/PDIF (RCA connector)
Power requirements	100 / 115 / 230V AC 50 / 60Hz (factory preset) 15 Watts
Dimensions (approximate)	440mm, 17.3 inches wide 143mm, 5.6 inches high including feet 375mm, 14.8 inches deep including terminals
Weight	17.5kg, 38.7lbs unit only, un-boxed 20.5kg, 45.3lbs in shipping carton
Standard accessories	Remote control handset (universal type), 2 batteries (type SUM-4, AAA, LR03) IEC mains lead

# CE

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