# *User Instructions*
# *Cyrus dAD7*

Congratulations on the purchase of your *Cyrus DAD7* CD player. This piece of equipment is a precision manufactured state-of-the-art product, constructed to the highest standards and specifications. This manual contains installation and operating instructions to enable the user to connect up and operate the CD player correctly, thus ensuring the greatest satisfaction and long term use.

This instruction manual is divided into the following sections:

- **Cautions**
- **Installation**
- **Operation**
- **Remote Control**
- **Additional Information**
- **Trouble Shooting**
- **Specifications**
- **Guarantee**

To enable you to make full use of the comprehensive facilities of the *Cyrus DAD7* we would suggest that you read these sections which will explain the fundamental operations of the unit.

CAUTION

**POLARISED CONNECTOR (110/120V PRODUCTS ONLY)**

**CONNECTOR POLARISE (PRODUITS 110/120V SEULEMENT)**

To prevent electrical shock, match wide blade of plug to wide slot and fully insert

Attention: Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

ATTENTION

**(CDN) Canada**

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the Radio Interference Regulation of the Canadian Department of Communications

**(USA)**

This set complies with 21 CFR 1040.10 and with the FCC-Rules, Part 15.

Your *Cyrus DAD7* is factory set to operate from a fixed mains supply voltage, which is marked on a label at the rear of the unit. Before connecting, check that this voltage is the same as your mains supply, i.e.

| | |
|---|---|
| 230V Products | Voltage Range 220V-240V |
| 115V Products | Voltage Range 110V-120V |
| 100V Products | Voltage Range 100V |

## UNPACKING

Always follow the instruction handbook and retain it in a safe place for future reference. Before proceeding with installing the *Cyrus DAD7*, ensure that the following items are included in the accessory box:

- Instruction Manual
- Power Cable
- Remote Handset
- Disc Clamp
- Guarantee Card

After removing these items, please retain the packing for future use.

## LOCATION

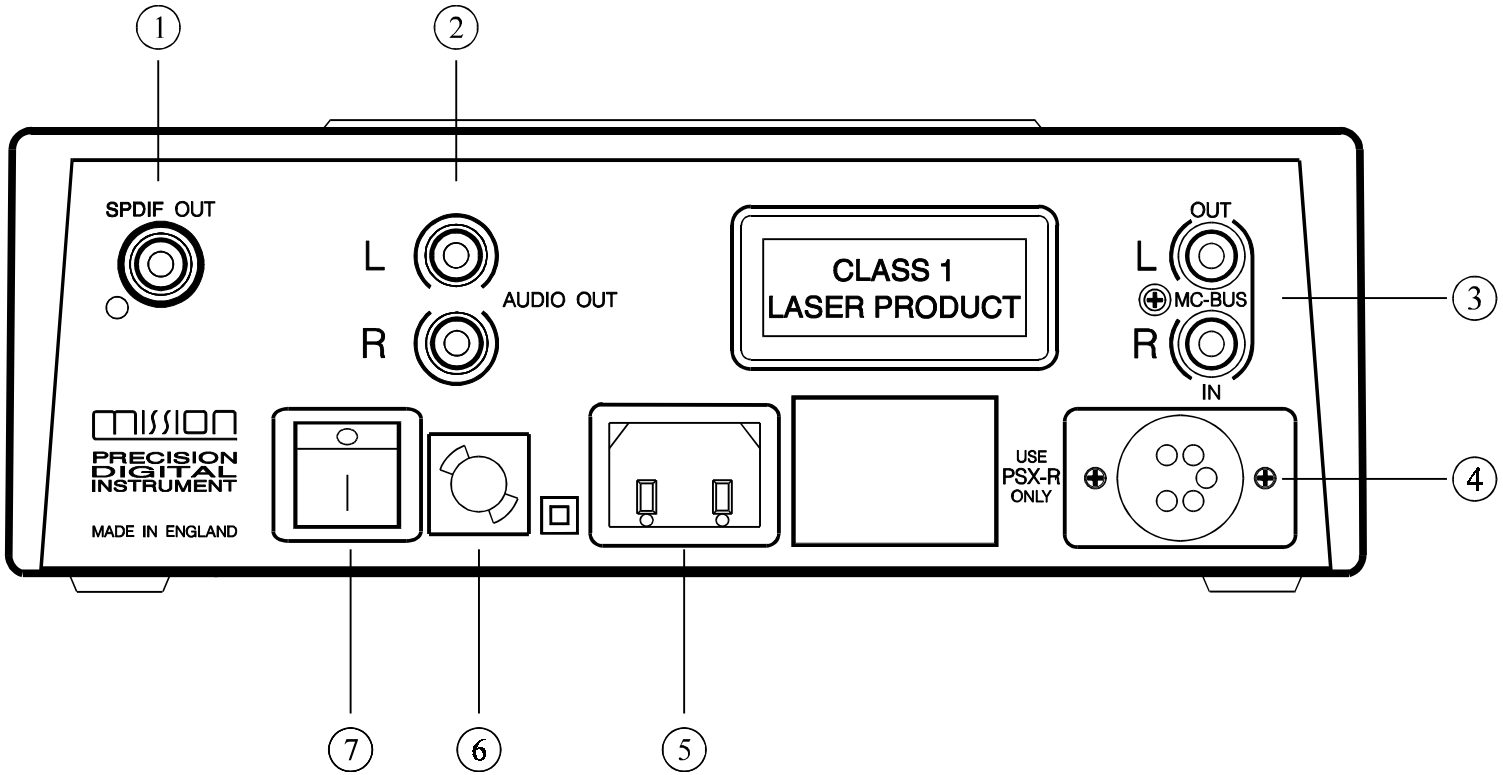
Install the *Cyrus DAD7* in a well ventilated location where it will not be exposed to high temperature or humidity. Avoid installing the *DAD7* in a location which is exposed to direct rays of sun, or near to hot appliances or radiators. Placing and using the *DAD7* for long periods on heat-generating sources will affect performance and may damage the cabinet. Installation in a damp or dusty environment may result in malfunction or accident.

## RE-LOCATING

The *Cyrus DAD7* is supplied ready for use in your location. Care has been taken to ensure that the power supply requirements are correctly set. Consult your Cyrus distributor to arrange for conversion of your *DAD7* should you move to another area with a different mains voltage.

## PRECAUTIONS REGARDING INSTALLATION

It is important not to let any liquid or foreign object fall into this unit. When routing the power cord avoid running it over or near sharp objects.
Exercise particular care when the dust cover is open to avoid any contact with the sensitive optical components.
If the *Cyrus DAD7* is not to be used for a long period of time, unplug the unit from the mains power supply.
This unit contains no user serviceable parts, therefore **never** remove any panels from the unit or attempt to service the unit. In the unlikely event of failure, please refer to qualified service personnel.




1. Digital Output
2. Audio Outputs
3. MC-BUS System Connection
4. *PSX-R* Connection
5. Power Inlet
6. Mains Fuse
7. Power Switch

***Fig.1 DAD7 (rear view)***

## POSITIONING THE UNIT

The *Cyrus DAD7* may be positioned as a free standing unit or alongside a partnering *Cyrus Dacmaster* or *Cyrus PSX-R* where used. Never stand the unit on top of a power amplifier, which may generate heat. The *DAD7* must always sit horizontally on a flat firm surface. (A *Cyrus Isoplat* is ideal for this purpose).

Ensure that there is enough clearance above the *DAD7* to allow access to the dust cover when fully open.

## CONNECTING THE UNIT

### The Mains Supply

The moulded IEC connector of the mains lead supplied should be plugged in to the power inlet (5) on the rear of the unit. The mains fuse (6) is located on the rear panel next to the power switch. It must only be replaced with the following types :

| | |
|---|---|
| UK/Europe - 230V | T100mA/20mm |
| N.America - 115V | T200mA/20mm |
| Japan - 100V | T250mA/20mm |

In the U.K., the *Cyrus DAD7* comes with the mains plug fitted. In the unlikely event that the plug fuse should need replacing ensure that it is only replaced with a 3 Amp Fuse.

### MC-BUS System Connection

This is an optional connection which enhances and expands the functional capability of specific Cyrus products, including your *Cyrus DAD7*. Through the MC-BUS and certain ancillary equipment a highly functional integrated system with full remote control may be set up. This feature is usable if you also own a *Cyrus III amplifier*, *Cyrus pre-amplifier*, or the *Cyrus Systems Controller*.

### Connecting to an Amplifier

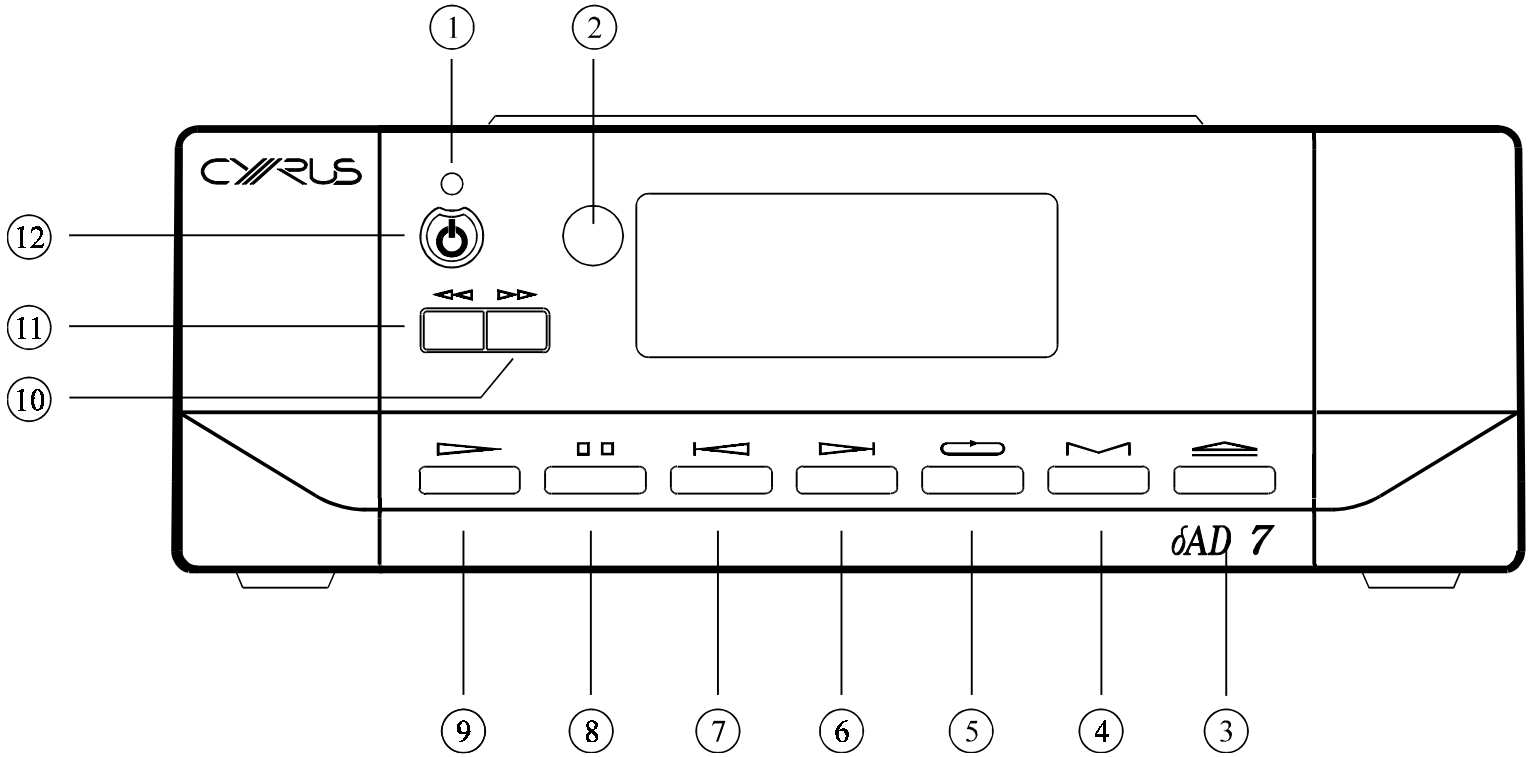
A pair of quality RCA interconnects are supplied with the *DAD7*. Connect one end of each lead to the audio output sockets of the *Cyrus DAD7* (2) and the other end to the corresponding input of the amplifier or receiver. Amplifier inputs that are suitable for this purpose are CD or AUX inputs. DO NOT connect the *DAD7* to the PHONO input sockets of the amplifier, as this could damage your amplifier/speakers.

### Upgrading with a *Cyrus PSX-R* Intelligent Power Supply (Optional)

When upgrading with a *PSX-R* Intelligent power supply, only one connection is necessary to the *DAD7*. The Cannon connector fitted to the umbilical cable on the *PSX-R* must be securely connected to the socket marked *PSX-R* (4) on the rear of the *DAD7*. When correctly fitted, the connector will latch into place in the socket. Note that when a *PSX-R* is in use, both the *PSX-R* power supply **and** the *DAD7* will require connection to the mains supply.

### Connecting to an External D/A Converter (Optional)

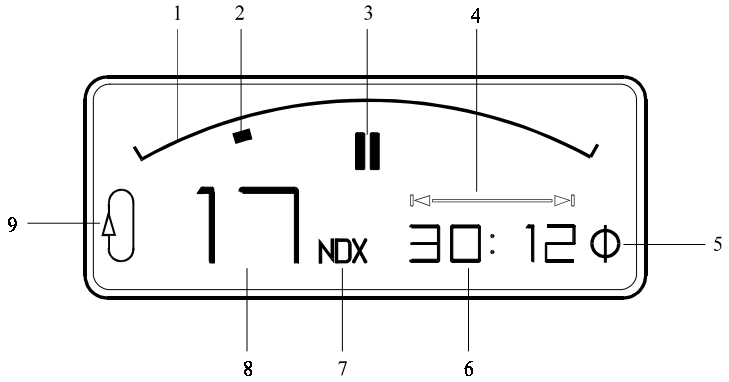
The *DAD7* also supplies a digital output signal which can drive an external D/A converter if desired, such as the *Cyrus Dacmaster*. Using a single RCA interconnect designed for digital signals, connect from the socket marked SPDIF OUT (1) to an input of the D/A converter (the CD input is recommended for best performance when using the *Cyrus Dacmaster*). Ensure that you use a cable specifically designed for use with digital data, rather than an audio phono cable. Use of the wrong type of cable may cause a mismatch between components and degrade sound quality. Referring now to the D/A converter handbook, connect the D/A converter audio outputs to a suitable input of the amplifier.




1. Standby Light
2. Remote Eye
3. Stop/Open
4. Memory
5. Repeat
6. Next Track
7. Previous Track
8. Pause
9. Play
10. Search Forward
11. Search Reverse
12. Standby

***Fig.2 DAD7 (front view)***

**Front Panel Display**




**1. Disc Indicator**.....

Flashing slowly indicates that the lid is open. Flashing rapidly indicates that the *DAD7* is reading the Table of Contents from a disc.

**2. Progress Indicator**

Indicates time into the track .....

Indicates time into the disc program .....

**3. Pause Indicator** .....

This symbol indicates that pause is set.

**4. Time Display Mode Indicator** .....

The time display below this symbol indicates the total length of the music program.

**5. Phase**.....

This symbol lights to show phase inversion.

**6. Index / Time Display**.....

(Mins : Secs)

**7. Index Indicator**.....

The time display now shows index number.

**8. Track Display (Two Digit)** .....

Track number and error display.

**9. Repeat Indicator**.....

This symbol indicates that repeat is set.

## POWER CONTROL

The mains power switch (7) is located on the rear panel of the player (refer to figure 1, rear panel drawing on page 4).

This switch should be left on for normal operation, except when left unattended for a long period. In this case the mains power should be switched off or the product disconnected from the AC supply.

For the following section, refer to the front panel view on page 7.

When the *Cyrus DAD7* is in regular use and power is permanently applied, the STANDBY key (12) can be used to switch the unit on and off. The standby light (1) will show red when the player is in standby and green when operating.

## LOADING A DISC

First, press the STOP/OPEN key (3) which will raise the dust cover for a few seconds to allow access for lifting. Place a thumb under the front edge of the cover and lift gently until fully open. The cover will latch open.

Remove the disc clamp from the turntable, load a disc with the label side upward and replace the clamp carefully over the center of the disc.

Place a finger on the top edge of the cover and pull gently to release the catch. The cover will now close on its own accord with a damped action. Do not force the cover to close as this may damage the internal mechanism.

When the cover is fully closed the disc will spin for a few seconds, then stop.

**Note**:
To prevent any damage to the player or your discs, ensure that the disc clamp is **always** in place before closing the dust cover.

## PLAYING A DISC

To play a disc, press the PLAY key (9) on the front panel. Playback of a disc will always commence from track 1 unless otherwise selected.

Whilst playing, pressing the PLAY key will re-play the current track. Refer to the front panel display on page 8 for full details of the display information available during disc play.

## PAUSE

When the PAUSE key (8) is operated, the player will continue to track the disc, holding at the precise point of interruption. The PAUSE symbol will then show on the display. A second press of the key will resume playing the disc.

The PAUSE key can also be used to cue a track by pressing the PAUSE key first and using the NEXT (6) and PREVIOUS (7) keys to select the track to cue. The player will now hold at the beginning of this track. To begin playing this track, press the PAUSE key.

## FAST SEARCH

The FAST FORWARD (10) and FAST REWIND (11) keys can be used to quickly locate a specific point within a track.

The elapsed time of the current track is always shown on the display during fast search to enable easy location of a specific track time.

The Fast Search keys will also search through next or previous tracks if held down long enough.

## REPEAT

The REPEAT key (5) can be used for replay of the entire disc or programmed tracks.

When REPEAT is selected, its symbol will show on the display. Repeat can be cleared by pressing the key a second time.

If a program selection has been stored, the REPEAT key will allow continuous play of this program sequence.

## STOP / OPEN

The STOP / OPEN key (3) has several uses. When a disc is playing, use of this key will stop the disc immediately.

Continued depression of the key when the disc has stopped spinning will raise the dust cover for a few seconds to give access for lifting.

If the disc is already stationary, a touch of the STOP / OPEN key will raise the dust cover immediately. Opening the cover will also clear the program memory.

## PROGRAM MEMORY STORAGE

The memory function is used for storage of a program track selection sequence. To store a program sequence, first load a disc. Select the desired track number by using the NEXT key ⑥ or PREVIOUS key ⑦, then press the MEMORY key ④. The display will confirm memory storage.

As each selection is stored, the display will switch to show the letter 'P', followed by the position of the track in the memory (for example P:07 indicates that this track is in position seven). Repeat this for up to 20 tracks as required.

**Note:**

1. The program memory is cleared when the dust cover is opened.
2. Memory full indication will show on the display when the program stored exceeds a 20 track sequence or a stored program time of 100 minutes or more.

## PROGRAM MEMORY REVIEW

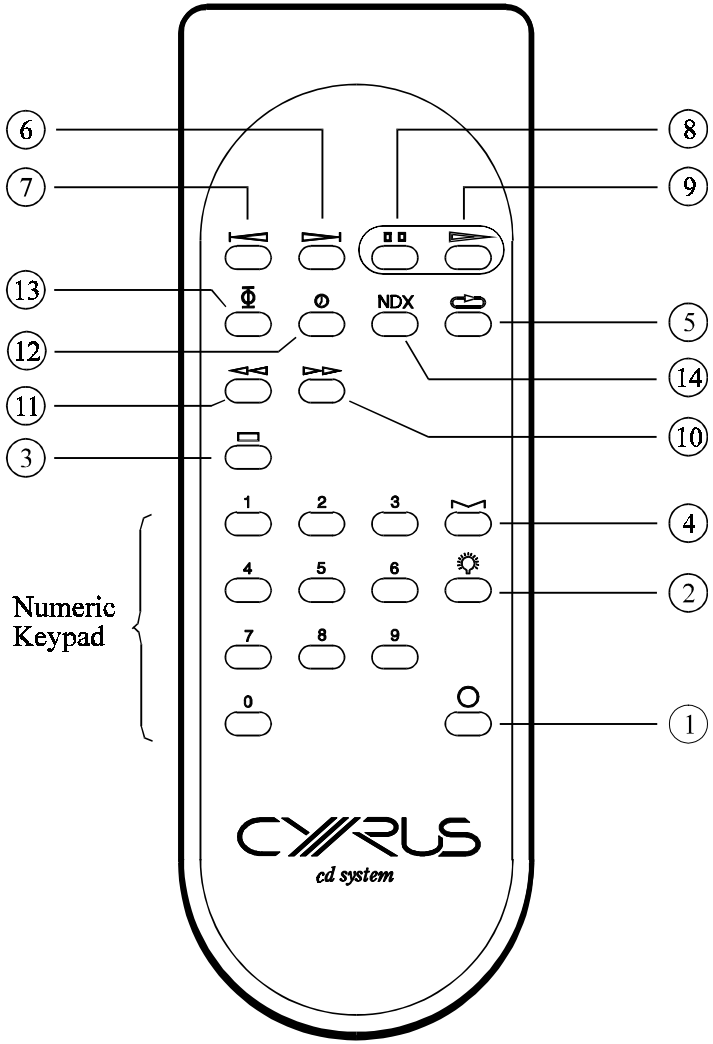
After storing a selection of tracks it is also possible to check the contents of the memory with a long press of the MEMORY key ④. The program display will now show each memory position in turn and the track display will show the corresponding track numbers.

## PROGRAM EDITING

To clear a track from the stored program sequence, select the desired track and press the STOP / CLEAR key ③.

## PHASE PROGRAMMING

A special feature of the *Cyrus DAD7* is the ability to store absolute phase setting within a program sequence. This enables each track of a CD to be played with the preferred phase setting recalled from program memory. To store a program with phase information, first select a track, then change absolute phase to the required sense using the remote handset phase key (see page 14, Phase Control). Now press the MEMORY key ④ to store both the track and phase information.




1. Standby
2. Display
3. Stop
4. Store
5. Repeat
6. Next Track
7. Previous Track
8. Pause
9. Play
10. Fast Forward
11. Fast Rewind
12. Time Display
13. Phase
14. Index Select

## REMOTE OPERATION

Whilst the front panel control keys of the *DAD7* give adequate control over the player functions, using the remote control handset will provide access to a number of additional features of the *DAD7*.

### Power

Your *Cyrus DAD7* can be switched to and from Standby using the STANDBY key ① on the handset.

### Function Controls

All front panel controls of the *DAD7* are duplicated on the remote control handset. These control functions have been fully covered in the operation section.

### Direct Access Numeric Keypad

A NUMERIC KEYPAD for instant track selection is available on the handset. Pressing any key will immediately prompt the *DAD7* to play the chosen track. For a disc which has more than 10 tracks, the *DAD7* will briefly wait for entry of a second digit when appropriate. Note that when a program memory is stored, the keypad will only enable access to tracks included in the program memory.

### Programming from the Handset

To store a program from the handset, follow the sequence described on page 11 for storage from the front panel. To select tracks for programming, use only the NEXT and PREVIOUS keys as the NUMERIC KEYPAD is reserved for fast access direct play only.

### Display Control

The DISPLAY key ② on the handset can be used to switch the display of the *DAD7* off should this be preferred. Pressing this key again restores the display to its normal mode. Switching the display off stops the digital traffic related to display update function and reduces the load on the power supply. This can improve the overall quality of the sound without adversely affecting the normal functions of your *DAD7*.

## Phase Control

The absolute phase of the audio signal can be switched by use of the remote control PHASE key (13). The correct setting for absolute phase is best determined audibly from the listening position as factors relating to both the audio system and the recording process can influence this. The phase symbol will show on the display when absolute phase is inverted. For details of phase programming, please refer to the Programming section on page 11. Note that absolute phase correction will not be applied to the SPDIF digital output when an external D/A converter is used. Phase correction must then be selected at the D/A converter.

## Time Display Selection

The TIME key (12) enables selection of four different time and progress display modes. Mode 1 will always be set when a disc is loaded. These scroll in sequence as follows:

Mode 1 *Index* display with NDX indicator showing. The time display will read the current index number.

Mode 2 *Elapsed time* display with arrow pointing left. The time display will read the time elapsed from the beginning of the current track.

Mode 3 *Remaining time* display with arrow pointing right. The time display will read the time remaining to the end of the disc or program if stored.

Mode 4 *Total time* display with double arrow. The time display will read the total time for all tracks on the disc. Note that for this mode the track display will also show the total number of tracks on the disc, or program if stored.

Note In Modes 1 and 2 the progress pointer will show the proportion of time elapsed through the current track. In Modes 3 and 4 the progress pointer will indicate the proportion of time elapsed through the whole disc or program if stored.

## Index Selection

The remote handset will also allow selection of a particular index point within a track provided that the disc in use has been recorded with indices. First, select the required track using the NEXT and PREVIOUS keys. Now use the NDX key (14) to step up to the correct index number. Note that track sub-division into indices is mostly found on classical recordings.

## CYRUS REMOTE COMMANDER

The *Cyrus Remote Commander* which is available as an optional extra, is a unified handset designed to complement the full range of Cyrus electronics. The distinctive *Cyrus Commander* replaces individual product handsets where supplied, with a view to providing additional functionality and enhanced ergonomics.

## *DAD7* MAINTENANCE

There are no user serviceable parts in the *Cyrus DAD7*, so there is no reason to remove any of the panels. The cabinet may be cleaned using a chamois leather, slightly moistened with water. DO NOT use cleaning agents containing alcohol, spirits, ammonia or abrasives. The disc tray should not be cleaned.

## DISC MAINTENANCE

Although the encoded tracks on the compact disc are covered by a protective layer, it is advisable to treat and handle the disc carefully. The disc should always be picked up by its edges and replaced in its storage box after use, cleaning will not normally be necessary. However, should finger prints, dust or dirt appear on the disc surface, it can be wiped clean with a soft, lint-free cloth. Breathe on the disc first if necessary, then wipe the disc surface in straight lines from the center of the disc.

DO NOT use cleaning agents containing alcohol, spirits, ammonia or abrasives on compact discs.

## THE MISSION/CYRUS GROUP MANUFACTURE

- Loudspeakers
- Loudspeaker Stands
- Loudspeaker Cables
- Compact Disc Players
- D to A Converters
- Amplifiers
- Tuners
- Regulated Audio Power Supplies
- Isoplat (Vibration Isolation Platform)

## KNOW YOUR *DAD7*

### The Progress Indicator

The progress indicator of the *Cyrus DAD7* provides a useful graphic alternative to the conventional elapsed time display. Two modes of operation are available, depending on which time display is selected:

i). When the time display is set to show index or elapsed time the pointer will indicate progress through the track now playing.

ii). When the time display is set to show remaining time or disc total time the pointer will indicate progress through the entire disc or program (if stored).

A comprehensive display of status information is therefore possible at all times.

### Power Supplies

For peak sonic performance, the *Cyrus DAD7* is equipped with over 12 separately regulated power supplies, ensuring maximum isolation between digital disc reading circuitry and the sensitive analogue D/A conversion stages.

When upgraded with the *Cyrus PSX-R* intelligent power supply, the sensitive analogue sections of the circuit are fed directly from this highly stabilised and regulated external power source, while the internal power supply is applied more generously to the other part of the *DAD7*. This results in a much improved sonic performance of the system.When connected to the *DAD7*, the *PSX-R* automatically adjusts its output to suit this application. In this case *PSX-R*'s standby status is also controlled by the *DAD7*.

### Digital Filter and DAC Strategy

An 8-times oversampling 20-bit digital filter gives the *DAD7* the ability to push the sampling frequency and its side bands well away from the audio band, while achieving linear phase response to within 1/2 of a degree at 20KHz. Two separate 18-bit resolution Digital to Analogue converters with very high speed Op-Amps are then used to convert the digital data stream to analogue signal. This is then followed by a high performance post-filter circuit and a low noise output buffer to drive the signal to the output sockets.

## The Disc Reading Mechanism

The disc reading mechanism selected by Mission for the *Cyrus DAD7* is a new design featuring a monolithic glass optical assembly and a high torque motor housed in a rigid chassis for stable disc support and long term durability. This implementation also eliminates the need for complex circuit adjustment found in most other players, ensuring peak tracking performance at all times.

## The Disc Loading Mechanism

This is an injection-moulded, mineral-loaded polymer, designed to provide a highly stable and inert platform for the disc pick-up mechanism, as well as housing the decoding circuitry. It has been one of the design objectives to keep the signal paths to the absolute minimum and this has been substantially achieved with this complex moulding.

The CD mechanism is suspended in a critically damped environment provided by tight-tolerance self-aligning de-coupling supports. The result is a superbly well isolated pick-up system offering minimal signal path for the highly sensitive low-level raw data extracted from the CD.

## Cable Directionality

It is a proven fact that most electrical cables exhibit directional properties when used for audio application. This is a complex phenomenon which is to do partly with the way in which the cable is extruded in the manufacturing process. Curiously enough, the audible effects can also be quite significant in the digital cable links carrying a digital audio signal.

It is recommended that you experiment with the audio cable supplied to determine the preferred direction by auditioning. In case you use an external D to A converter, the same experiment will pay premiums. When the cable is correctly installed, you will be able to hear much improved focus and timing.

## TROUBLE SHOOTING GUIDE

If you suspect that your *Cyrus DAD7* is not operating to specification, please read through this section before returning the *DAD7* to your local dealer.

### Indication 'EO' on the display (Error; Operating)

A function has been selected which is not available.

### Indication 'EP' on the display (Error; Programming)

An incorrect key sequence has been used during programming.

### Repeated Indication 'Ed' on the display when a disc is loaded (Error; Disc)

- Check that the disc is loaded label side upward.
- The disc may be dirty or badly scratched. Try loading another disc. If the disc is dirty or greasy, refer to the Disc Maintenance section on page 15 for details of disc cleaning.

### Disc spinning with no sound

- Pause may have been set. Check for the pause symbol on the display. Press the pause key again on the front panel or handset to cancel pause.
- If used with a *Dacmaster*, check if the phase light is on when playing music, indicating signal lock. If the light is on then the *DAD7* is functioning correctly and the problem is elsewhere in the system. If the light is off, then check that the correct input is selected on the *Dacmaster* and that the connections between the two units are correctly and securely made.
- If used with another D/A converter, check the connection from the 'SPDIF' socket of the *DAD7* to the D/A converter. Check also that power is applied to the D/A converter and amplifier and that the input selection and volume control of these units is correctly set.

### No display

- The display may have been switched off at the handset. Press the display key again to restore the display and backlight.

**Skipping tracks or distorted sound.**

- Ensure that the disc clamp is properly seated on the disc surface.
- The disc may be dirty or badly scratched. Try playing another disc. If the disc is dirty or greasy, refer to the Disc Maintenance section on page 15 for details of disc cleaning.
- Remove the disc and check the surface of the turntable for dust or dirt which may prevent the disc from seating properly. The turntable should be cleaned with a soft camera lens brush.

**No Remote Operation**

- The handset batteries may need to be replaced, in which case proceed as follows:
- Remove the battery compartment cover located underneath the unit. Remove the batteries and replace with new ones carefully noting the orientation marked in the bottom of the battery case.
- The batteries in the unit should only be replaced with new batteries type AAA (I.E.C.L R03).

## POWER SUPPLY

### Voltage

See the plate attached to the rear of the unit.

### Power Consumption

Playing ..... 16W
Standby ..... 12W
Safety Requirement ..... IEC 65

## ELECTRICAL PERFORMANCE

Output level ..... 2V rms (+0.2/-0.0 dB)

Output Impedance ..... 50Ω

Frequency Response ..... 20-20,000Hz,

ChannelSeparation ..... >100dB @ 1KHz
80dB @ 20KHz

SNR (using silent track) ..... 102dB (106dBA)

THD @ -10dB ..... 0.0066%

'D' range ..... 95dBA

## ENCLOSURE

Dimensions (WxHxD)

Dust Cover Closed ..... 215 x 78 x 360mm
Dust Cover Open ..... 215 x 230 x 360mm

Weight ..... 4.5Kg

Material ..... Magnesium alloy and Aluminium

The Company reserves the right to change this specification without prior notice.

Part No. HA7F1431 File 7FEN5328.WIM

This guarantee only becomes effective if the guarantee card enclosed is completed by the Dealer and the purchaser and returned to MISSION or Distributor within 8 days of purchase.

This guarantee excludes:

i) All damage caused through accident, misuse, wear and tear, neglect or through incorrect installation, adjustment or repair by unauthorised personnel.

ii) Liability for damage or loss occurring in transit to or from the purchaser.

Claims under this guarantee must, whenever possible, be made through the Dealer from whom the equipment was purchased or if that is not convenient, through another authorised MISSION/CYRUS dealer.

MISSION shall not be liable for any consequential damage, loss or injury whatsoever, arising from or in conjunction with this equipment.

The cost of carriage (to or from the Dealer) shall be borne by the purchaser.

This guarantee is personal to the original Purchaser and is not transferable.

If equipment is found on examination to comply with the published specification, MISSION reserves the right to make a charge for examination and for return carriage.

No Dealer or Distributor has any authority to vary the terms of this guarantee.

Any unauthorised servicing will result in loss of guarantee.

We strongly recommend that you retain the sales receipt for your *CYRUS* equipment in case of any warranty claim.

The above conditions do not affect your statutory rights as a consumer.

| Disc Name | Tracks with Phase Inversion |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

| Disc Name | Tracks with Phase Inversion |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

| Disc Name | Tracks with Phase Inversion |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

| Disc Name | Tracks with Phase Inversion |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |