15

14
13
12

1

2   3   4   5   6   7

8   9   11   10

MISSION

REPEAT
RECALL
STORE

TRACK   INDEX   TIME   MINUTE   SECOND

21

22   23   24

PCM II REMOTE CONTROL

DISPLAY — 17

COMPACT
disc
DIGITAL AUDIO

1	2	3
4	5	6
7	8	9
0	STORE

20

TRACK

SEARCH

VOLUME — 16

INDEX   TIME

REPEAT   RECALL   A↔B   SCAN — 18

19

MISSION

K

Z   Y   J   X   W   V   U   H

TRACK   REPEAT

ERROR   RECALL —— G

INDEX   TIME   MINUTE   SECOND   DISC   STORE —— F

A   B   C   L   D   M   E   N   O   P   Q   R   S   T

Cyrus

PCM II

INSTRUCTION MANUAL

MANUEL DE L'UTILISATEUR

MANUALE D'ISTRUZIONE

ANSCHLUSS
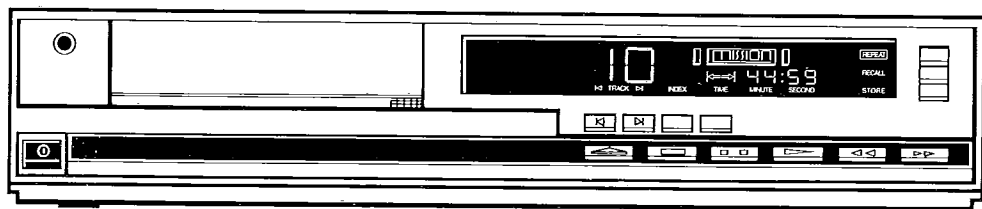
CYRUS PCM II

INSTALLATION

MAINS SUPPLY: The plate at the rear of the Cyrus PCM II shows the mains supply voltage for which the unit has been set. If your mains supply voltage is, for any reason, different to this, contact your dealer or the Mission Service Organisation to change the unit voltage setting. A detachable mains supply cord is supplied with the PCM II, this should be connected to the mains socket (24) on the rear of the unit.

FITTING A MAINS PLUG (UK ONLY): The wires in the mains supply cord are colour coded:

<div align="center">BLUE – Neutral   BROWN – Live</div>

The BROWN wire must be connected to the terminal which is marked with letter "L" or coloured RED.

The BLUE wire will then be connected to the terminal marked with letter "N" or coloured BLACK.

This apparatus must be protected by a 3 AMP fuse if a 13 AMP plug is used. If any other type of connection is used, then a 5 AMP fuse must be fitted either in the plug, the adaptor or at the distribution box. If in doubt, consult a qualified electrician.

PSX EXTERNAL DC POWER SUPPLY: The PCM II has the facility for upgrading its internal power supply by the addition of the optional Cyrus PSX Power Supply. The PSX unit should be connected to the 4-pin DIN socket (22) at the rear of the PCM II. If you have purchased the PSX unit, then refer to it's instruction manual for installation procedure.

WARNING: Before turning OFF the PCM II (with optional PSX Power Supply) turn the volume on the amplifier to MIN and select a different source. This will prevent any switch-off "thump" from damaging any other equipment. When the PCM/PSX combination is turned on this precaution is not necessary as the units automatically mute while powering up.

TRANSIT PROTECTION DEVICE: There are two RED fixing devices on the underside of the unit, which lock the transport mechanism for when the player is in transit. These are bayonet type fixings and should be removed by turning them anti-clockwise, before attempting to play any discs. Keep these devices safe with the packing and ensure that they are fitted to the unit and the original packing is used whenever the unit is transported.

POSITIONING THE PLAYER: The PCM II may be positioned as a free-standing unit or stacked with other components in an audio rack. If placed in a rack, it is best situated at the bottom of the stack. Never stand the player on top of a power amplifier which may generate heat. The PCM II must always sit horizontally on a flat firm surface. Allow a minimum of 3cm clearance above and behind the unit to ensure adequate air flow for cooling.

CONNECTING TO AMPLIFIER/RECEIVER: An RCA interconnect cable is provided with the PCM II. Connect one end of the cable (Left & Right Channels), to the output sockets of the PCM II (21) and the other end to the corresponding inputs of your amplifier or receiver.

Amplifier inputs that are suitable for this purpose are: CD, Aux.,Tape or Video Inputs. DO NOT plug into the phono input sockets of the amplifier, as this could cause damage to your amplifier circuitry.

DIGITAL OUTPUT: A single RCA output socket (23) is provided so that the PCM II may be connected to an external Digital Processor

Your PCM II is now ready for use. However, before attempting to operate it, it is recommended that the following passage be read carefully to familiarise yourself with all the functions and facilities designed into this unit, while avoiding unnecessary operating error.

FUNCTION KEYS: The function keys are visually separated into two groups. The first group consists of the keys which are used most frequently. These keys are ergonomically angled, and incorporate symbols indicating their functions. (1 to 7).

The second group of function keys (8 to 14), are used for the more elaborate operations of the unit, and they correspond to the legends immediately next to them on the Vacuum Fluorescent Display (VFD).

1.   POWER ON/OFF Switch: Switches the mains power on and off.

2.   OPEN/CLOSE Key: Opens and closes Disc loading tray.

3.   STOP/CLEAR Key: Stops player and clears memory. In programme "RECALL" mode deletes the Track/Index displayed at the time.

4.   PAUSE Key: Interrupts and mutes the program, while tracking the disc at the point of interruption. Pressing it again will resume play from this point. The Pause key can also be used when cueing.

5.   PLAY Key: Plays the disc, a selected track/index, or a programme. If pressed during play, will replay the track in progress.

6.   SEARCH(REVERSE) Key: Moves the laser head towards the beginning of the track/disc.

7.   SEARCH(FORWARD) Key: Moves the laser head towards the end of the track/disc.

8.   PREVIOUS Key: Selects the previous track/index, pressing the PLAY key within 6 seconds of the selection causes the laser head to jump to that track/index and begin playback.

9.   NEXT Key: Selects the next track/index, pressing the PLAY key within six seconds of the selection causes the laser to jump to that track/index and begin playback.

10. INDEX Key: Enables Index selection to commence using the NEXT/PREVIOUS Keys.

11. TIME TOGGLE Key: Selects timing status of the disc being played, toggling between Elapsed Time, Total Time, and Remaining Time.

12. STORE Key: Programmes a selected track or index into the memory.

13. RECALL Key: Recalls and displays tracks/indices programmed in the memory, one at a time, for review or correction.

14. REPEAT Key: Repeats the whole disc, or selected tracks if programmed.

15. HEADPHONE socket: Accepts a standard 1/4" headphone jack. The output level can be controlled from the remote control handset.

THE DISPLAY: The PCM II display has been designed to be highly interactive with the user and easy to understand, while displaying the maximum amount of information encoded onto the disc. The display is essentially divided into two sections. First, the Mission Logo tablet and legends annotating the function keys (A to J). Second, the digits and symbols indicating status and real time information off the disc.

Legends and symbols A to H are annotations referring to the function keys situated immediately next to them, while the Logo tablet (J) is the power on indication.

(K)	Track number digits.
(L)	Index number digits.
(M)	Elapsed time symbol.
(N)	Remaining time symbol.
(M,N)	Total disc/programme time.
(O,P)	Digits and legend indicating time (minutes).
(Q,R)	Digits and legend indicating time (seconds).
(S)	Indicates disc being loaded when flashing.
(S,U)	Indicates disc operating error.
(T)	When lit, indicates Inverted Phase mode of the audio signal. When flashing shows remote control handset active.
(U)	Operating error indicator.
(V,U)	Track/index selection error indicator.
(W)	Play mode symbol.
(X,Y)	Pause symbol.
(X,W)	Forward search symbol.
(Y,Z)	Reverse search symbol.

OPERATION

POWER ON/OFF: The player is switched on by pressing the POWER switch (1). Pressing it again will switch the unit off.

When the unit is first switched on:

   - If the Disc Tray is "IN": The unit will go into "Standby" mode and the legends/symbols A to J will light up.

   - If the Disc Tray is "OUT": The tray will close and if a disc is loaded, the disc information is read and displayed.

LOADING AND UNLOADING DISC: To load a disc press the OPEN/CLOSE Key (2) once and when the tray is fully out, take the disc out of its storage box and with your hand open, thumb and fingers extended, hold the disc and place it, label side up, onto the disc cradle. The disc may now be loaded by pressing the OPEN/CLOSE Key(2), the PLAY Key(5) or by gently pushing the tray inwards. As soon as the tray closes the machine will start to read the disc, and while doing so the DISC symbol (S) will flash.

To unload the disc press the OPEN/CLOSE Key (2) and when disc tray is fully out remove the disc in the same manner as above and place it back in its storage box.

PLAYING THE COMPLETE DISC: If the disc is already in the machine, just press the PLAY Key (5). Otherwise, open the tray and place the desired disc onto the cradle and press PLAY Key (5).

If you would like the whole disc to be repeated, press the REPEAT Key (14), which will light up a box around the REPEAT legend (H) to indicate repeat activated mode. When repeat is active the programme will be repeated over and over, until the REPEAT Key is pressed again or the player is stopped by pressing the STOP Key (3) or the OPEN/CLOSE Key (2).

PLAYING A SPECIFIC TRACK: Select the track number by pressing the NEXT Key (9) or the PREVIOUS Key (8) to increment or decrement the displayed digits respectively, until the desired track number is displayed. Press the PLAY Key (5) to prompt playing the selected track.

PLAYING AN INDEX WITHIN A TRACK: Select the track number as above and press the INDEX Key (10). The INDEX legend (D) will start to flash showing that the NEXT (9) and PREVIOUS (8) Keys will now select index numbers. Use these keys to obtain the desired index number on the display and press the PLAY Key (5) to start playing the selected track/index.

NOTE: Any selected track/index number remains active for 6 seconds only. If the PLAY Key (5) is not pressed during this time or the selection process is not continued, then the displayed track/index number will be cleared from the display, selection mode de-activated, and the machine will reset to its previous status; That is, if playing it will continue to do so.

If a non-existent track number is selected and prompted to play, the "TRACK ERROR" (V,U) will light up and the disc will be played from the beginning.

If a non-existent index number is selected and prompted to play, the "TRACK ERROR" (V,U) will light up and the selected track number will be played.

PAUSE/INTERRUPT: Pressing the PAUSE Key (4), when playing a disc, will interrupt play and mute the audio output. The laser head will continue to track the disc at the precise point of interruption, until the PAUSE Key is pressed again at which time the programme will resume playing from the exact interruption point.

CUEING: To play the disc at a precise point of a track, press the PAUSE Key (4), select the desired track by using the NEXT (9) and PREVIOUS (8) keys, then press the PLAY Key (5). The player will go to the beginning of the selected track and wait for other commands. Use the SEARCH Keys (6 & 7) to arrive at the exact point in the track and press the PAUSE Key (4) when you are ready to start playing.

SCAN: You can use this facility to quickly review a disc by playing the first 10 seconds of each track. The control key for SCAN is provided on the remote control handset only.

ABSOLUTE INVERTED PHASE: To invert the phase on the PCM II press and hold the REPEAT key for three seconds. This enables recordings which are phase inverted to be restored on playback. The correct setting for this control should be determined by listening and will vary from disc to disc. The symbol (T) will light up to indicate that phase invertion has been selected. To reset the phase press and hold the REPEAT key for another three seconds.

PROGRAMMING THE PLAYER

The Cyrus PCM II may be programmed to play selected parts of a disc in any desired sequence. There are 20 memory locations available for programming, while each location may hold one track or one index number (1 to 99). To store an index number it is necessary to memorize the relevant track number also; Therefore, two memory locations per selection are used when indices are programmed.

For example, you may programme the unit with 20 track selections, or a maximum of 10 index selections, or a mix of 8 tracks and 6 indices.

PROGRAMMING: The player may be programmed when in STANDBY mode. That is, when the machine has been switched on, the unit has played a disc through and stopped, or when play has been terminated by pressing the STOP Key (3) or the OPEN/CLOSE Key (2).

When a programme has played to the end and the machine has stopped, then the existing programme may be modified by deleting or adding new tracks.

PROGRAMMING TRACKS/INDICES: Select the desired track/index number using the NEXT (9), PREVIOUS (8), and INDEX (10) Keys as appropriate. Then when the correct selection is displayed press the STORE Key (12). The STORE legend (F) will now go out momentarily to acknowledge the store command. To programme additional tracks, repeat as necessary.

If, after pressing the STORE key, no key is pressed for six seconds the display of the PCM II will change to show the total number of tracks stored and the total programme time. However, pressing either the NEXT or PREVIOUS key will return the display to the programme mode for another six seconds.

Press the PLAY Key (5) to start playing the stored programmes. These are played in the same order that they were stored.

REVIEWING PROGRAMME: To review the stored programme, press the RECALL Key (13). The RECALL legend (G) will start flashing to indicate recall mode, and the stored track/index numbers will be displayed one at a time, starting from your first selection. Programmes may be reviewed while playing the disc.

CORRECTING A PROGRAMME: To erase one or more selections from the memory, press the RECALL Key (13) and while reviewing the programme press the STOP/CLEAR Key (3) immediately after the undesired selection appears in the display. Correction CANNOT be made while reviewing the programme in PLAY mode, as activation of the STOP/CLEAR Key will erase and clear the entire memory, and restore the unit to STANDBY mode.

REPEAT PROGRAMME: When a programme is stored in the memory, pressing the REPEAT Key [14] will cause the programme to be repeated over and over until the machine is stopped or the REPEAT is de-activated by pressing the REPEAT Key [14] again.

CLEAR MEMORY: Pushing the STOP/CLEAR Key [3] or the OPEN/CLOSE Key [2] will clear any programme stored in the memory.

A/B PROGRAMMING: You may programme the PCM II to play a certain portion of the disc between any two points. Unlike normal programming whereby only complete tracks/indices are programmable, the A and B points can be anywhere on the recorded section of the disc.

To do "A to B" programming, simply cue the player to the precise point on the disc where you want the programme to start, and press the "A/B" Key on the Remote Control Handset; The letter "a" will appear in the index section of the display and will keep flashing. Now, Cue to the point where you want the programme to end, and press the "A/B" key again; the letter "b" will appear in the display next to the "a" indicating completion of programming. As soon as the PAUSE Key [4] is released the machine will start playing the disc from point "A".

NOTE: When you are in the "A to B" mode the player is put into a repeating loop, and most normal functions are disabled. You may, however, cue between "A" and "B" with the use of SEARCH Keys [6 & 7].

Pressing the "A to B" Key while the A to B loop is playing, will cause the unit to resume normal play from the point at which the key was pressed.

TIME INDICATION: Operating the TIME TOGGLE Key [11] steps through the different time indication facilities of the PCM II. In the normal mode, the time indicated is the elapsed time into the track. Pressing TIME TOGGLE Key once will display the remaining time of the disc or programme, Pressing it again will display the total time of the disc or programme.

NOTE: When indices are programmed, TIME indication is limited to the elapsed time only. The reason for this is that there is no time information relating to indices encoded onto the disc. Any attempt to operate the TIME TOGGLE facility will cause the ERROR and TIME symbols [M,N] to flash indicating an operating error.

REMOTE CONTROL FACILITY

The PCM II is equipped with Infra Red remote control. All the functions and control keys, except OPEN/CLOSE are duplicated on the Remote Control handset. In addition to these controls there are certain extra functions. These are:

16.   UP/DOWN Volume Control

17.   DISPLAY ON/OFF Key

18.   SCAN Key

19.   A to B Programming Key

20.   10-Digit Keypad for quick track selection

UP/DOWN VOLUME CONTROL: The remote volume control facility built into the PCM II is an exceptionally high quality electronic volume control. It allows you to control the output level of the unit from [+4dB] to [-59dB] in 1dB steps, by pressing the UP or DOWN keys

DISPLAY ON/OFF Key: This control allows you to switch the display on or off. This will not effect the normal controls of the unit, that is, you can continue to play discs and make selections etc.

SCAN Key: This facility puts the PCM II into track scanning mode. The unit will play the first 10 seconds of every track on the disc, starting from track number one.

A to B PROGRAMMING Key: This facility allows you to programme an arbitrary section of the disc, regardless of the individual track boundaries.

TEN-DIGIT KEYPAD: The 10-digit keypad provides quick track selection capability for programming or playback, without the need for stepping through track by track.

ADDITIONAL INFORMATION

DISC MAINTENANCE: Although the encoded tracks on the compact disc are covered by a protective layer, it is still advisable to treat and handle the disc carefully. So long as the disc is always picked up by its edges and placed back in its storage box immediately after use, cleaning will not be normally 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, and wipe the disc surface in straight lines from centre to the edge. DO NOT use detergents or abrasive cleaning agents on compact discs.

PLAYER MAINTENANCE: The moving parts of the PCM II are self-lubricating and must not be oiled or greased. The cabinet may be cleaned, when necessary, using a chamois leather, slightly moistened with water. DO NOT use cleaning agents containing alcohol, spirit, ammonia or abrasives. The disc cradle should be always kept clean and free of dust.

FAULTS AND THEIR LIKELY CAUSE

Although your Cyrus PCM II has been manufactured to the highest standards, it is possible that a fault could appear or that for some reason the player may fail to perform to your complete satisfaction.

The cause for a malfunction, will certainly not always be found in the player itself.   Certain apparent faults could arise from operating errors, while others may be due to faulty compact discs.

To save your time and unnecessary aggravation, it will be worthwhile to refer to the following paragraphs in case of difficulty.   Although some of the causes listed may seem to be very trivial, our experience shows that in a large number of cases simple problems are the cause.

If, by using the following guidelines, you are unable to solve the problem, stop any further investigation, disconnect the unit from the mains supply and contact your dealer for advice.

UNDER NO CIRCUMSTANCE should you remove the cover of the unit, as in addition to shock hazard, you will invalidate all rights under warranty.

FAULT	PROBABLE CAUSE
PRESSING THE POWER ON/OFF SWITCH DOES NOT LIGHT UP DISPLAY	The POWER Key[1] was not pressed in far enough.
	The mains plug is not properly plugged into the supply socket; or it is loose at the mains socket at the rear of the unit.
	The supply at the mains plug has been interrupted; plug in a side lamp to check availability of supply at the plug point.
PRESSING THE OPEN/CLOSE KEY DOES NOT OPEN THE DISC TRAY	The player is not switched on.
	The microprocessor has not received the command correctly. Check if pressing the STOP/CLEAR Key[3] and then pressing the OPEN/CLOSE Key[2] will cure the problem.
	The microprocessor is hung up. Switch the power off and on, then try again.

PRESSING THE OPEN/CLOSE KEY OR PLAY WILL NOT CLOSE THE DISC TRAY

The mains supply has been interrupted.

The microprocessor has not received the command correctly. Check if pressing the STOP/CLEAR Key(3) and then the OPEN/CLOSE Key(2) will cure the problem.

The microprocessor is hung up. Switch the power off and on, then try again.

A foreign object is blocking the free movement of the drawer, or the disc is not placed on the cradle correctly.

AFTER THE DISC IS LOADED THE DISC INFORMATION IS NOT DISPLAYED.

The disc is loaded label side DOWN, or there is no disc in the drawer.

The disc is dirty or badly scratched. Check if cleaning the disc or using another clean disc will rectify the fault.

The disc is defective. Check if a known good disc will clear the fault.

There is an unwanted object in the cradle, for example a piece of paper or a remnant of packaging.

The TRANSIT PROTECTION DEVICES have not been removed.

SKIPPING TRACKS, OR SOUND IS DISTORTED

The disc is dirty or badly scratched. Check if a good disc rectifies the problem.

There is a foreign object in the disc tray.

The player is connected to the Phono input of the amplifier/receiver. It should be connected to the CD, VIDEO or AUX input.

The transit protection devices have not been removed.

The interconnect RCA plugs are not fully homed at the player or the amplifier/receiver end.

THE DISC IS PLAYING (TIME DIGITS INCREMENT REGULARLY), BUT THERE IS NO SOUND

The connection between player and amplifier/receiver has been interrupted.

The amplifier/receiver is not switched on, or the volume control is set to minimum.

The selector switch on the amplifier/receiver is set to another source.

The amplifier/receiver input to which the player is connected is defective. Check by changing the inputs over with a working input.

The amplifier/receiver or the speakers are not working. Check operation by switching to another source, e.g. Tuner or Tape.

SOUND COMES OUT OF ONE CHANNEL ONLY

One channel of the amplifier/receiver or the loudspeakers is defective. Check with another sound source.

One channel of the interconnect /RCA plug assembly is faulty. Change the connection over (Left/Right) at the player output sockets and check if the fault transfers to the other channel.

The interconnect RCA plugs are not fully homed at the player or the amplifier/receiver end.

Try a known interconnect cable between the player and the amplifier/receiver.