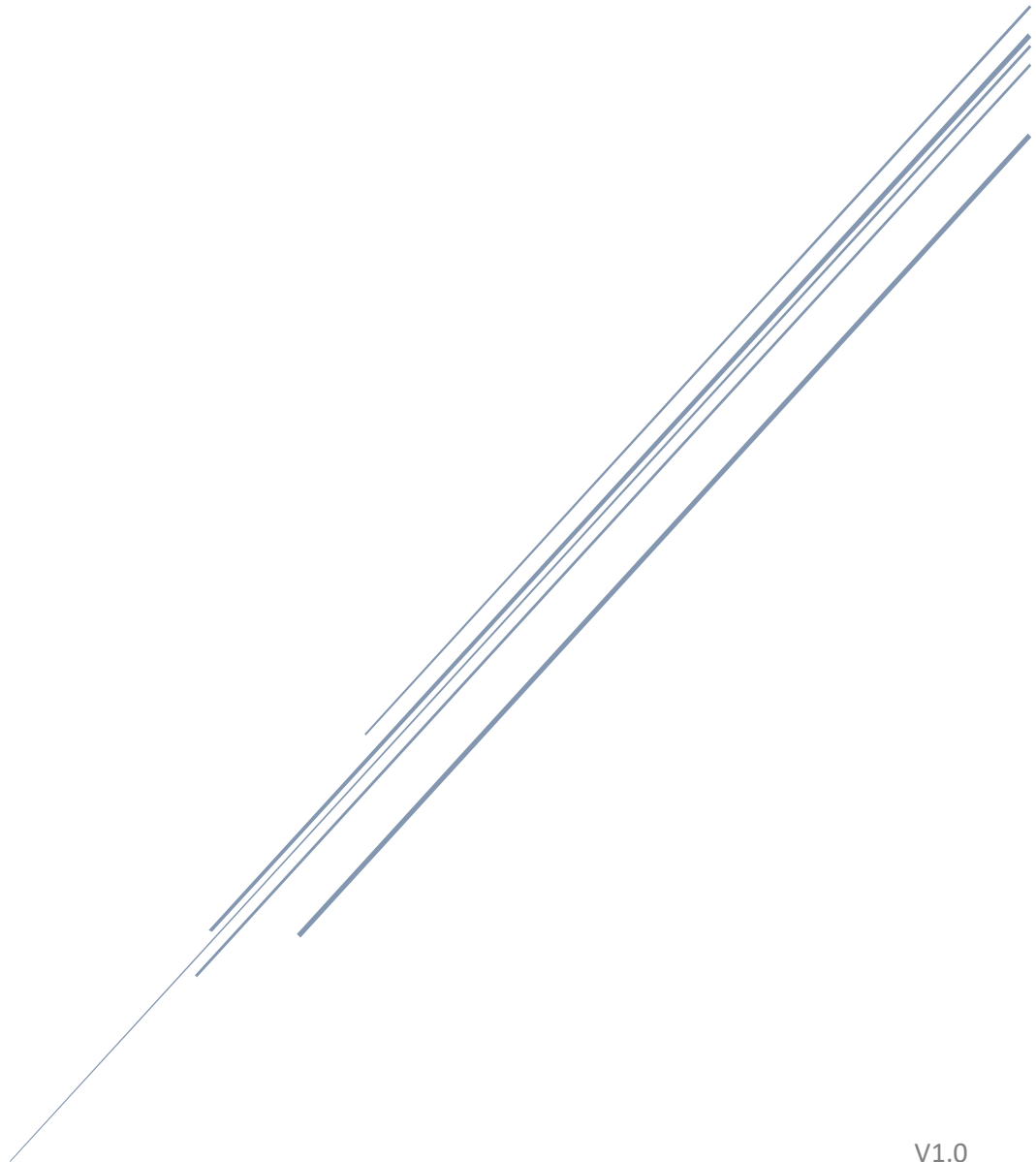


DENAFRIPS

AVATAR CD TRANSPORT

OWNER'S MANUAL



V1.0
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1. INSTALLATION & SAFETY INSTRUCTIONS

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

- Unpack the CDT carefully.
- Position the CDT on a stable, horizontal surface, i.e. sturdy rack.
- The CDT supports voltage 100-250VAC worldwide voltage. Please connect the AC power cord with earth(ground) pin unless it is absolutely required to reduce hum from the ground loops of the connected devices.
- Always ensure that when disconnecting and reconnecting your audio equipment the mains supply is turned off.
- Position the power cord and signal interconnects where they are not likely cause trip and fall hazard.
- Do not use the CDT near water, or place water-filled containers on the CDT. Entry of liquid into the CDT is hazardous and may cause electric shock and/or fire hazard.
- Do not place the unit under direct sunlight or heat source.
- Do not remove any covers or try to gain access to the inside. There are no user adjustments or fuses to change without qualification.
- Clean regularly with a damp soft cloth. Do not use any cleaning agents as it might damage the surface finishing.
- 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, disconnect the mains plugs.
- AVATAR CDT supports Redbook CD only.

2. INTRODUCTION

Thank you for purchasing the DENAFRIPS AVATAR CDT.

The AVATAR CDT leveraged our knowledge and technologies in the Digital Domain, we integrated the famous Philips CDM4/19 laser assembly in the AVATAR along with a dozen of Ultra Low Noise, Precision Linear Power Regulars along with dual oversized O-Core Transformers, delivers clean power to the digital circuitry effortlessly.

The digital data retrieved by the CDM4/19 is FIFO buffered and reclocked via the Precision Crystal Oscillator. This process eliminates the jitter to negligible level, ensuring the digital output signal are free from the harmful jitter noise.



3. OPERATING INSTRUCTION

3.1 Quick Start Guide

Package Contents

- AVATAR CDT
- Disc Clamp
- Remote Control – *CR2032 battery is required*

Disc Loading

To open the AVATAR top loading door, slide the lid towards the rear of the unit fully. The CDM4 assembly shall be visible, and the Disc Clamp shall be accessible.

Lift the Disc Clamp gently by holding the centre part of the Disc Clamp. Place a disc to the centre of the disc holder. Place the Disc Clamp in the centre of the disc and disc holder.

The Disc Clamp is magnetic, once it is in position with the centre of the CDM4 spinner, you should feel the grip. Please note that the Disc Clamp must be in the correct position for the CDT to be operational.

Slide the top loading lid towards the front of the unit fully. The micro limit switch must be triggered for the CDT to be operational.

Change Disc

It is recommended to stop playing the current disc before changing the disc. This allow the CDM4 mechanism motor to stop spinning gradually. Press Stop button on the front panel to stop playing the current disc.

Slide the top loading lid towards the rear of the unit fully. Retrieve the Disc Clamp and Disc gently. Follow the same steps stated in Disc Loading above.

3.2 Front Panel



Figure 1. Front Panel

(1) Standby Button

Press the button once to switch on the CDT, vice versa, press once to put the CDT into standby mode. The Standby LED shall be on when the CDT is in Standby Mode. The LED shall be off when the CDT is in Operating Mode.

(2) OLED Display

The OLED displays the disc information.

(3) Control Button (From left to right)

- a. PREV/NEXT
Press the buttons select the previous/next track
- b. PLAY
Press the button to start playing the tracks
- c. PAUSE
Press the button to pause the playback
- d. STOP
Press the button to stop the playback

3.3 Rear Panel



Figure 2. Rear Panel

Description:

(1) AC Power Supply

CAUTION! AVATAR supports worldwide AC mains, range from 100-250VAC. The Please use a good quality power cord with earth/ground pin connected

(2) Digital Signal Output #1 (Async)

There are two groups of Digital Output. Digital Output #1 uses the internal Crystal Oscillator Clocks. Select the dip switch to *Async* and connect any of the digital output interface of this group to an external DAC. All output are active simultaneously.

(3) Digital Signal Output #2 (Sync)

Digital Output #2 uses the external Master Clock input (45.1584MHz). Select the dip switch to *Sync* and connect any of the digital output interface of this group to an external DAC.

(4) Function Selector

- Async – Toggle the SW1 to *down* position to use the internal clock
- Sync – Toggle the SW1 to *up* position to set the CDT to use the external clock
- Filters - Toggle the SW2 to *up* position for Slow filter, *down* position for Sharp filter.
- Sampling Rate – There are 4 sampling rates to choose from. Both SW3/4 at *down* position output native Redbook CD sampling rate at 44.1kHz. SW3(*down*)/SW4(*up*) for 88.2kHz, SW3(*up*)/SW4(*down*) for 176.4kHz, SW3(*up*)/SW4(*up*) for 352.8kHz,

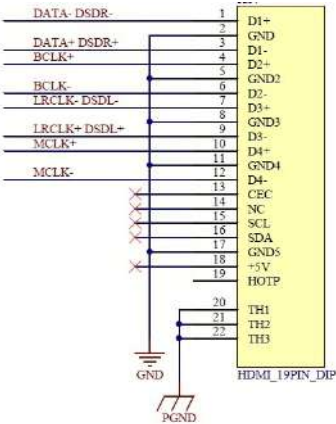
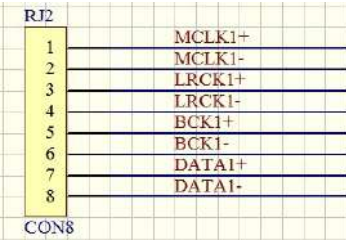
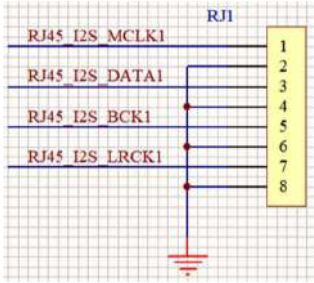
I2S-A/D HDMI (LVDS)	I2S-B (LVDS)	I2S-C/E RJ45 (LVCMOS)
		

Table 1. I2S Pinout

CLOCK SYNC

The AVATAR supports the following clock frequencies input 45.1584MHz or 22.5774Mhz

Use Case Examples:



Table 3. Use case examples of AVATAR CLOCK IN

3.4 Remote Control



- Power → Turn on/standby the CDT
- Vol +- → No function
- Analog Source → No function
- Digital Source → No function
- Open → No function
- Time → No function
- Track 0-9 → Select Track 0-9
- Play → Begin CD playback
- Pause → Pause CD playback
- Stop → Stop CD playback
- Next/Prev → Select Next/Prev track
- Rew/Fwd → Fast Forward/Backward
- Repeat → Repeat Mode
- Random → Random track playback
- Program → No function
- Scan → No function

4. SPECIFICATIONS

Description	Parameters
CD Transport	Proprietary FPGA DSP Processing Architecture
	FIFO Buffer and Reclock with Internal Crystal / External Clock
	FEMTO CLOCK
	Optical Isolated All Digital Input Interfaces
	External Master Clock Input Supported
	Upsampling Frequency 44.1, 88.2, 176.4, 352.8 KHz
Digital Output PCM	16bits / 44.1, 88.2, 176.4, 352.8KHz
External Clock Input	Master Clock (22.5792Mhz / 45.1584Mhz) via 75ohms BNC
Digital Output	Coax SPDIF via RCA
	TOSLink
	AES/EBU
	I ² S HDMI LVDS Standard
	I ² S RJ45 LVDS Standard
	I ² S RJ45 LVCMOS Standard
AC Power Requirement	110-240VAC, 50/60Hz
Power Consumption	≤20W
Dimension	436W x 368D x 93H mm (Feet +18mm)
Weight	12 Kg
Colour	Silver / Black
Warranty	12 Months

5. WARRANTY

DENAFRIPS AVATAR purchased from the Authorized Distributor comes with 12 months of warranty from the date of purchase / delivery (whichever later).

Defective Within	Warranty Policy
First 30 Days	DENAFRIPS to bear both way shipping fee.
Within 1st Year	Customer to bear one-way shipping fee. DENAFRIPS shall cover the return shipping fee.
Out of Warranty	Customer to bear both way shipping cost. DENAFRIPS to provide repair / maintenance services at cost.