

# P R I M A R E

THE SOUND AND VISION OF SCANDINAVIA

## Design Brief – DD15 CD transport



DD15 is a CD transport, designed to partner any high performance digital to analog converter, and in particular the Primare I15 Prisma, SC15 Prisma models of integrated amplifiers and preamplifiers.

### Contents

- Design Philosophy
- Drive Technology
- System Building
- Specifications

### Design philosophy

All of Primare designs are a result of our Practical Design Approach, resulting in a focus on two fundamental design elements:

1. Thoroughly implemented power supply designs – so that all elements of any design to operate effortlessly at their fullest effectiveness. Every product and sub-circuit demands unique power supply solutions - a more conventional linear supply or advanced switch mode main supply may work best dependent upon the application, and carefully crafted individual discrete power supplies are strategically inserted into the circuit to deliver power exactly where and how much is needed.
2. Artfully crafted ultra-short signal paths - so that each individual component and sub circuit operates sympathetically to achieve a cohesive whole. Elegant and simple electrical designs are used in even the most complex product, utilizing ultra-short signal paths with all gain in one device whenever possible. Ultimately, this results in fewer, higher quality parts for a reduction in associated distortions and an increase in overall electrical efficiency.

To that end, basic technologies have been selected to realize those benefits:

- 2 and 4-layer double-sided circuit board construction allows for the most direct and efficient layout of circuit components not only for the shortest signal path, but also to more easily achieve a sympathetic layout of circuit and sub-circuit components for best performance.
- Surface mount components are used whenever possible as this allows for direct connection of the circuit device or component to the circuit board trace



with the solder being used solely to mechanically hold the part in place. The elimination of the small metal lead or wire at each connection point in a more conventional large scale circuit device or component cumulatively shortens the signal path. Additionally, conventional large scale components demand through hole or “eyelet” construction, limiting direct contact of the component’s lead to the circuit board trace and resulting in the solder providing electrical connection as well as mechanical connection for the device. Neither solder nor the metal used in the leads of most large scale devices provide the best signal transmission, therefore limiting potential performance of even the best designed circuits.

### **Drive Technology**

The Philips slot load disc drive chosen for use in DD15 was originally developed for the transportation industry, and as a result is extremely reliable and well isolated from external and internal vibrations, ensuring long life and low noise.

### **Power Supply Technology**

A customer linear power supply is combined with a switch mode standby supply (turned off when in playback mode to minimize noise) to deliver on demand the precise power needed.

### **System Building**

DD15 is designed to provide the lowest noise digital signal from compact discs so any high performance digital to analog converters, like those found in the Primare I15 Prisma and SC15 Prisma models of integrated amplifiers and preamplifiers.

### **DD15 Rear Panel**



## **DD15 CD Transport Specifications**

### Compact Disc Player

Mechanism: Philips CDM-M10

Digital outputs:

- 1x RCA
- 1x TOSLINK

### General



#### Control

- C25 system remote control
- RS232
- IR in/out
- Trigger in/out

#### Power consumption:

- Standby 0.5W
- Operation 10W

#### Dimensions: (wxdxh)

- 350 x 329 x 73 mm with buttons and connectors
- 430 x 329 x 73 mm without buttons and connectors

Weight: 6.5 kg

Color options: Black or Titanium

