 青 HOLO AUDIO
= CYAN 2

→ POWER
→ USB
→ I2S
→ COAX
→ AES
→ OPT

→ 44.1K
→ 48K
→ 76.8K
→ 96K
→ 192K
→ 352.8K
→ 768K
→ 1.92M

→ 48K
→ 96K
→ 192K
→ 384K
→ 768K
→ 1536K

→ 64K
→ 128K
→ 256K
→ 512K
→ 1024K
→ 2048K

青 = CYAN 2

DIGITAL ANALOG
CONVERTER (DAC)
USER'S GUIDE



 HOLO AUDIO

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OVERVIEW

Cyan 2 “青2” , A new generation DAC of fully discrete resistor network (commonly known as R2R). Relative to its predecessor the Cyan “青” , the Cyan 2 “青2” has the following improvements:

FEATURE

- Equipped with R2R network and vector step resistor network at the same time. The R2R network is used for native digital-to-analog conversion of the PCM stream, and the vector step resistor network is used for native digital-to-analog conversion of the DSD stream.
- The new generation of de-glitch technology can provide full-amplitude de-glitch without increasing the noise floor and other adverse effects.
- Based on this new generation of technology, Cyan 2 “青2” Can provide >106db SINAD and >127db dynamic range.
- USB (Galvanically Isolated) supports sampling rates up to DSD1024 and PCM 1.536M.
- The USB interface uses proprietary firmware with ultra-low latency, a highly reliable data transmission, ideal USB eye pattern measurements that contributes to 2-4 times higher performance than official firmware.



SPECIFICATIONS

DIGITAL INPUT	
COAXIAL, OPTICAL, AES	PCM 44.1-192K (24bit) DSD 64X (DOP)
USB (Galvanically Isolated)	PCM 44.1K-1.536M (32bit) DSD 64-512X (DOP) DSD 64-1024X (Native)
I2S	PCM 44.1K-1.536M (32bit) DSD 64-1024X

ANALOG OUTPUT	
PCM 48K NOS	THD+N 0.0005% @1K (-106dB) DNR -127dB Output level 2.5Vrms (RCA), 5.0Vrms (XLR)
DSD 128X	THD+N 0.0002% @1K (-114dB) DNR -115dB Output level 1.25Vrms (RCA), 2.5Vrms (XLR)
Output Impedance	Single-ended RCA: 20Ω Balanced XLR: 40Ω

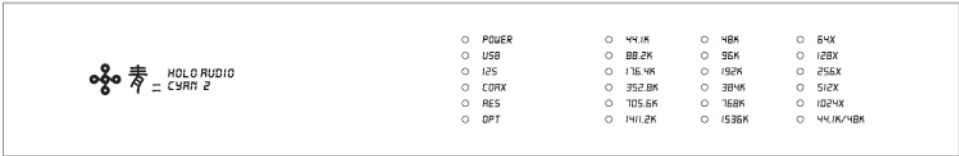
PHYSICAL CHARACTERISTICS	
Size (chassis)	300x200x48mm / 11.8" x7.9" 1.9" (W x L x H, Dimensions do not include protruding parts)
Weight	3.5Kg / 7.72lbs

POWER SPECIFICATIONS	
Power input (configurable, see the label on the bottom of unit for specified input)	220-230V 50/60Hz -Fuse Type: 2A SB 5x20mm 110-115V 50/60Hz -Fuse Type: 4A SB 5x20mm
Power Consumption	20W

ACCESSORIES	
Included Accessories	AC Power Cable (US only) x1 USB Cable x1



FRONT PANEL



The panel has 24 LED indicators: Power Supply, Input Signal Source, Sampling Rates of PCM and DSD.

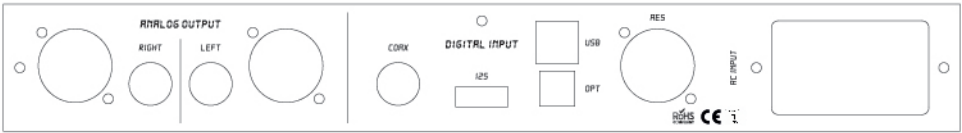
SOURCE (DIGITAL)

Cyan 2 “青2” has no buttons or remote control for input selection. When accessing a valid digital source Cyan 2 “青2” will automatically switch to this input source. This includes USB, I2S over HDMI interface*, COAX (RCA), AES, and optical fiber.

*I2S protocol is not the same as HDMI audio video interface, never plug this into an audio video HDMI source/product.



REAR PANEL



↑
ANALOG SIGNAL OUTPUT

↑
DIGITAL SIGNAL INPUT

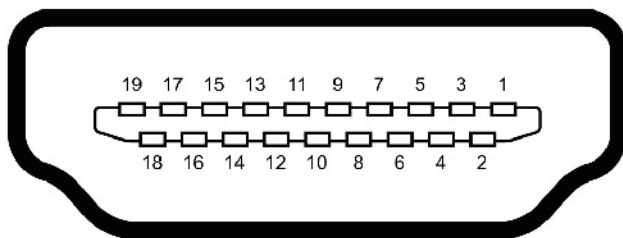
↑
RC POWER INPUT



I2S PORT

Using LVDS differential transmission method. The physical interface is consistent with HDMI, and HDMI cables can be used. Please note that the electrical signal it transmits is I2S, not the conventional HDMI audio and video signal. Never plug this in to any HDMI audio video product, this is I2S only.

The pin settings are Holo Audio specifications only.



Pin	PCM	DSD
1	12S_DATA-	DSD_DATA_L-
2	GND	GND
3	12S_DATA+	DSD_DATA_L+
4	12S_BCK+	DSD_BCK+
5	GND	GND
6	12S_BCK-	DSD_BCK-
7	12S_LRCK-	DSD_DATA_R-
8	GND	GND
9	12S_LRCK+	DSD_DATA_R+
10	12S_MCLK+	DSD_MCLK+
11	GND	GND
12	12S_MCLK-	DSD_MCLK-
13	NC	NC
14	NC	NC
15	NC	NC
16	NC	NC
17	GND	GND
18	NC	NC
19	GND	GND

