

# CD 6

## Compact Disc Player/DAC

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The compact disc is a format now more than 30 years old, with a catalog of hundreds of thousands of titles; simultaneously, digital downloading and computer music storage is skyrocketing in popularity. Combining a super high-resolution compact disc player and digital-to-analog converter in one compact chassis, the CD6 is a perfect fit for modern music playback. The CD6 is positioned to optimize most any digital format with spectacular results.

The CD6 offers disc playback via the Philips Pro2 transport (still considered the industry standard), plus four digital inputs (asynchronous USB, coaxial RCA and two toslink). All inputs handle 24 bit / 192k resolution. Benefitting from what Audio Research has learned in the development of the REF DAC and CD9, the CD6 utilizes quad 24-bit DACs running in mono mode, with dual master oscillators for highest performance; one for 44.1/88.2/176.4 sample rates, the other for 48/96/192kHz sample rates. Sample rate conversion is selectable for all inputs, allowing playback in native resolution or via upsampling, including compact disc and USB. Additionally, there is a selectable digital filter offering fast or slow rolloff. In addition to the digital inputs, the back panel includes two digital outputs (AES/EBU and BNC), and single-ended RCA and balanced XLR outputs.

Sonically, the CD6 is a stunner, uncovering new musical detail in every corner of your recordings and providing startling dynamics, both micro and macro. The top end is extended, airy and pure, while bass definition and impact are precise and powerful. The recording venues are lifelike, broad and expansive or close-up and intimate, depending on what was captured by the engineer. Like great analog, listening to music through the CD6 draws you into the performance, not just the notes, with resolution and transparency that are in service of the music. Experience your music in High Definition®.



## Specifications

**Frequency Response:** +0-3dB, 3Hz to 96kHz at rated output.  
0.15dB 20Hz to 20kHz. (Balanced, 200k ohms load)@ 192kHz sample rate.

**Distortion:** THD+N Less than .004% at 2V RMS BAL output.

**Signal-Noise-Ratio:** 110dB

**Dynamic Range (AES17):** 111dB

**IMD (SMPTE):** .003%

**RMS Noise level:** -95dBV (20-20kHz)

**Gain:** 16.5dB Balanced, 8.3dB SE.

**Input Impedance:** Digital: 75 ohms RCA, OPT 660nm TOSLink fiber  
44.1 to 96kHz.

**Output Impedance:** 500 ohms Balanced, 250 ohms SE Main (2),  
20K ohms minimum load and 2000pF maximum capacitance.

**Output Polarity:** Non-inverting.

**Max. Output:** At 0.0dB input, 5V RMS into 200K ohm balanced  
load.

**Digital Sample Rates:** 24 bits @ 44.1kHz to 192kHz, SPDIF and USB  
2.0 HS.

**Upsampling:** Select upsampling or Native mode; CD, RCA, TOS  
upsample to 176.4 or 192kHz. USB upsamples to 88.2 or 96kHz.

**Master Oscillator:** 22.579mHz  $\pm$ 20Hz for 44.1, 88.2 & 176.4kHz.  
24.576mHz  $\pm$ 20Hz for 48, 96 & 192kHz.

**Intrinsic Jitter:** <10ps

**Outputs Digital:** XLR Balanced AES/EBU 110-ohms 4V P-P, BNC  
coax SPDIF 75-ohms 0.7V P-P.

**Channel Separation:** 103dB @ 1kHz.

**Push buttons:** Power, Previous, Stop, Pause, Play, Next, Input.

**Signal Format (disc):** Sample freq. 44.1kHz, Quantization bit;  
16bit linear/channel, Channel bit rate; 4.3218Mb/sec, Channel  
modulation code; EFM (8-14 modulation), Error Correction; CIRC.

**Drive Mechanism (Top Load):** Wow & Flutter; Unmeasurable  
(Quartz stability); Discs; Accepts 5" (12cm) and 3" (8cm) sizes.

**Optical pickup:** Type; 3-beam LDGU (Laser Diode & Grating  
Unit), with holographic diffraction light pen, Laser; GaAlAs  
semiconductor, 780nm, 0.5mW max. output, Servo; Digitally-  
controlled low inertia linear positioning actuator.

**Jitter reduction:** High-stability crystal-controlled re-clocking for  
all outputs.

**Power Requirements:** 105-125VAC 60Hz (210-250VAC 50/60Hz)  
120 watts maximum. Sleep mode 1 watts maximum.

**Fuses:** 2A fuse slo-blo (120V) / T1A (220-240V); AGC 1/4A fuse  
(120V) / T125mA fuse (220-240V)

**Dimensions:** Width 19" (48 cm)  
Height 5.25" (13.4 cm) (standard rack panel)  
Depth 12.25" (31 cm)  
Handles extend 1.50" (3.8 cm) forward of the front panel.

**Weight:** 25.9 lbs. (11.8 kg) Net; 34 lbs. (15.5 kg) Shipping.