220i Integrated Amplifier 230D CD Player



The **MOON 230D** Disc Player is both an exceptional sounding and cost-effective source component. With features including a fully customized CD transport mechanism, a large easy-to-read display, highly advanced digital and analog circuitry, the **230D** creates music like no other player in its class.

Sophisticated



Incorporating technologies found in our highly acclaimed MOON CD players, the 230D Disc Player is a suitable companion source for the 220i Integrated Amplifier. Over thirty years of experience in the design and manufacturing of award winning high-performance components have paved the way for the MOON 230D, a component that will provide for many years of listening pleasure and hassle-free use.

Significant Design Features

- 8 stages of DC voltage regulation
- Internal upsampling with 24-bit/352.8kHz processing
- Proprietary M-ProDrive transport mechanism with in-house developed hardware & software
- All digital and analog audio circuitry mounted on a single circuit board, each with their own respective ground plane, to minimize signal path lengths and eliminate any potential for interference and signal degradation
- BurrBrown PCM1793 high-resolution 24-bit/192-kHz DAC and 8X oversampling digital filter
- Alpha Clocking System for exceptionally low intrinsic jitter levels
- Advanced analog signal path using a DC servo circuit and proprietary analog filter
- PCB w/ pure copper tracings & gold plating that yields low impedance characteristics
- Optimized selection of very high quality electronic components

The MOON 230D use a proprietary transport mechanism employing in-house developed hardware and software. This mechanism, which we named M-Pro-Drive, is comprised of following components: the disc drawer; the optical laser pickup; the dual-rail apparatus that holds this pickup, the motor which spins the disc; the disc positioning and clamping assembly, the frame which all these components are mounted onto, and finally, both the controller and servo software.

When we developed this mechanism, several key design considerations were implemented to enhance sonic performance: Improved stability of disc's rotational speed was achieved through the use of a very lightweight disc platform. Our disc clamping mechanism minimizes vibrations and uneven rotation. The optical pickup assembly is surrounded by small magnets and housed in an enclosure to



dramatically improve tracking. This enclosure is mounted on the aforementioned dual-rail apparatus which prevents any off-axis tilling when the lens moves. All of these features combine to ensure quieter disc rotation.

Some of the other advantages realized by this manufacturing process for the **M-ProDrive** include

- Reduced jitter
- Better handling of errors resulting from defective or dirty discs
- Improved mechanical reliability
- More accurate data retrieval
- A facility for firmware upgrades

Accurate data retrieval ensures more lifelike sonic reproduction



Simaudio Ltd. has been designing and manufacturing innovative, leading-edge audio and video products since 1980. MOON products have been globally recognized for their world-class performance, garnering numerous accolades for this outstanding achievement. Our products are engineered and built in Canada, utilizing advanced, efficient, "green" assembly techniques with strict quality control. Furthermore, our manufacturing processes are part of our philosophy, whereas the high quality and long-life of MOON products are the best way to preserve our environment, avoiding premature obsolesence. MOON products meet or exceed all international requirements for safety, performance and durability. At Simaudio, great music matters. However, great music for a lifetime matters most.

The MOON 220i Integrated Amplifier offers immense value, delivering unrivaled performance in a distinctive package. Designed with numerous convenient features such as a front-mounted mini-jack for personal media players, the 220i produces music like no other integrated amplifier in its class.

Musical.



Incorporating technologies found in our highly acclaimed MOON Amplifiers and Preamplifiers, the 2201 Integrated Amplifier is an excellent companion for the 230D Disc Player, providing for many years of listening pleasure and hassle-free use. Over thirty years of experience in the design and manufacturing of award winning high-performance components has cleared a path for the MOON 2201.

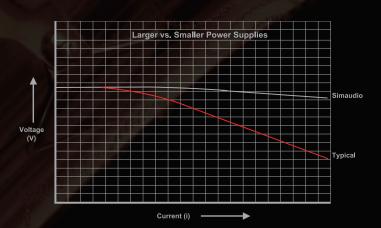
Significant Design Features

- An oversized power supply using a custom toroidal transformer design
- \blacktriangle Rated output of 40 watts/channel into 80 and 80 watts/channel into 40
- 6 line-level inputs including a front-mounted 1/8" mini-jack for personal media players
- Headphone output on 1/4" TRS jack located on the front panel
- Remote control operation
- Class A output to 5 watts for greater efficiency

- PCB w/ pure copper tracings & gold plating that yields low impedance characteristics
- Heat-sink free design incorporating an all-aluminum chassis for evenly distributed heat dissipation
- Rigid chassis construction to minimize the effects of external vibrations
- Optimized selection of very high quality electronic components
- Low operating temperature to ensure a longer than normal life expectancy

With a typical power supply, as the current draw increases the available voltage decreases. However, an **oversized power supply**, such as the one used in the **MOON 220i**, will minimize this inverse relationship, yielding a voltage level that barely decreases as the demand for current increases. This allows for significantly improved performance.

A greater power reserve results in a more effortless sonic character.

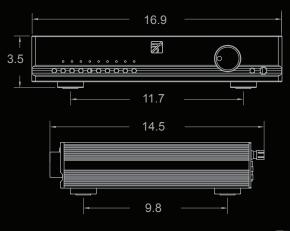




220i Specifications

Configuration	Single-ended / 2-channel
Class of Operation	A/AB
Single-ended Inputs (RCA)	5 pairs
Mini-jack Input	1 (1/8")
Input Sensitivity	370mV – 3.0V RMS
Input Impedance	11,000Ω
Preamplifier Output	1 pair
Output Power @ $8\Omega / @ 4\Omega$	40 watts/ch. / 80 watts/ch.
Output Impedance	0.04Ω
Damping Factor	> 200
Signal-to-noise Ratio	101dB @ full power
Maximum Output Voltage	20 Volts
Slew Rate	20V/µs
Maximum Current	14 amperes
Frequency Response	10Hz - 100kHz (+0/-3dB)
Crosstalk @ 1kHz	-78dB
Intermodulation Distortion (IMD)	< 0.07%
THD (20Hz - 20kHz @ 1 watt / @ 40 watts)	< 0.015% / < 0.03%
Remote Control	Full-Function (CRM-2)
Power Consumption @ idle	10 Watts
AC Power Requirements	120V / 60Hz or 240V / 50Hz
Shipping Weight	20 lbs / 8 Kgs
Dimensions (W x H x D, inches)	16.9 x 3.5 x 14.5

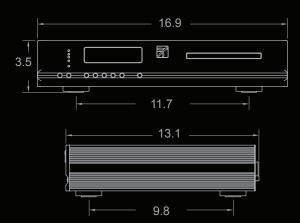
Specifications subject to change without notice



230D Specifications

Configuration	Single-ended / 2-channel
Transport Mechanism	Proprietary Design
Front Panel Controls	Stand by • Play • Pause • Stop
	Previous Track • Next Track • Open/Close
Front Panel Display	Track number • Time (track / disc)
Front Panel LED Mode Indicators	Program • Scan • Random • Repeat (disc and track)
Digital Filter / DAC	BurrBrown PCM1793
Frequency Response	2Hz - 72kHz +0/-3dB
THD @1kHz, 0dBFS (A-weighted)	< 0.004%
Intermodulation Distortion	< 0.007%
Dynamic Range	> 108dB
Signal-to-noise Ratio	> 108dB @ full output
Channel Separation	> 103dB
Intrinsic Jitter	< 325 picoseconds RMS
Single-Ended Analog Outputs	1 pair RCA
Max. Analog Output @ 0dBFS	2.0 Volts @ 100Ω
Digital Output	S/PDIF (RCA)
Digital Output Impedance	75Ω (0.5 Volts p-p)
Remote Control	Full-Function (CRM-2)
Power Consumption @ idle	15 Watts
AC Power Requirements	120V / 60Hz or 240V / 50Hz
Shipping Weight	14 lbs / 6.3 Kgs
Dimensions (W x H x D, inches)	16.9 x 3.5 x 13.1

Specifications subject to change without notice





Distributed by:

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