



UNIVERSAL PLAYBACK

With the proliferation of different optical disc formats, most people want just one player that will play them all. The M55 is capable of playing most all the popular entertainment oriented optical disc format, including the high resolution DVD-Audio and SACD music formats. MP3 and WMA compressed formats are also decoded, offering surprisingly good sound quality when recorded at higher available bit rates. Your existing CD collection is also in for a major sonic upgrade when played back through the advanced electronics of the M55.

DVD-Video can be watched in normal interlaced mode, or in progressive scan mode, providing your TV monitor supports this type of signal. If you have a high definition (HDTV) monitor equipped with HDMI inputs that support HDCP encryption, you can also take advantage of the Faroudja DCDi chip that will 'upconvert' standard DVD (480 lines) to the HD formats of 720p or 1080i. These upconverted formats are also available on the Analog Component Video output.

DVD-Audio and SACD decoding take place on board with comprehensive bass management available for decoded signals. DVD-Audio uses high resolution 24 bit PCM signals and MLP 'lossless' compression to advance audio performance to unprecedented levels. SACD (super audio compact disc) is a different approach to high definition audio using the DSD (direct stream digital) technique to obtain a very realistic sonic presentation. Both techniques have their adherents, but thankfully, with the M55, you don't have to take sides in the discussion about which format is better – you have both formats covered!

ADVANCED FEATURES

The M55 includes the High Definition Digital Interface (HDMI) with HDCP encryption, allowing high definition audio and video signals to be transferred between source components, processors, and TV Displays in a pure digital format. This eliminates the distortion producing conversions between digital and analog by keeping the signal in the digital domain. Before the advent of HDMI, it was mandated that high definition audio and video signals could only be transferred using an analog format.

Naturally, the M55 supports all the popular DVD-Video features, such as fast and slow scan, multi-language, multi-angle, A-B repeat, and last scene bookmarking. The ergonomically designed remote handset puts all these features right under your thumb for easy and convenient operation. Easy integration with advanced control systems, such as AMX and Crestron, is made possible using the rear panel IR input, 12V trigger input, and RS-232 port.

- Plays DVD-V, DVD-A, DVD+R, DVD-R, VCD, SVCD, SACD, CD, CD-R, CD-RW
- HDMI HD Output
- Faroudja DCDi circuit for 480i (DVD standard) video upconversion to 420p, 720p or 1080i
- Progressive scan with 3:2 pull down (film detection mode)
- Component, S-Video and Composite Video Output
- 10 bit 27MHz individual video DACs for Composite and S-Video
- 12 bit 148MHz individual video DACs for Component output
- Independent video DACs allow simultaneous feed to zone 2
- Coax and TosLink optical digital audio outputs
- Bass Management for DVD-A and SACD
- Separate 2 channel and 5.1 channel analog outputs
- Dolby Digital and DTS decoding
- HDCD, MP3, and WMA decoding
- 24 bit 192kHz DACs
- RS-232 port
- IR Input
- 12V Trigger Input
- Detachable AC cord
- DVD 55 Remote Control

LUXURIOUS DESIGN

The design brief reads: "The industrial design must create a physical presence that is powerful, dynamic, and solid, yet refined and elegant". We wanted a design that will still look fresh and new a decade from now, a design with classic proportions and understated details.

Intelligent use of aluminum extrusions, zinc castings, and heavy gauge steel results in a chassis that is as rugged as it is handsome. Innovative use of specialized coatings and plating results in a product that will retain its good looks for many, many years to come.

Since the high-density data recorded on DVD must be read with absolute accuracy, vibrations from outside or from internal sources, such as the power supply, will adversely affect sound and picture quality. A variety of special measures







have been incorporated in the NAD M55 to suppress these unwanted vibrations, from the carefully engineered heavy gauge steel chassis, to the vibration isolating silicon rubber foot design.

AUDIO PERFORMANCE

Separate signal paths for the DVD and SACD audio maintain the highest possible levels of DVD, CD and SACD sound quality. Digital audio outputs are available in both coaxial, and optical (TosLink) SPDIF formats, as well as digital format via the HDMI output. DVD-Audio uses the Dolby licensed MLP lossless compression to produce PCM formatted high resolution signals with 24 bits and up to 192kHz sample rates. MLP perfectly shrinks the very high data rates of DVD-Audio – up to 13.8 Mbps – to the DVD limit of 9.6 Mbps without losing any data. This compares with data rates of approximately 1.5 Mbps for CD, and as little as 0.03 Mbps for MP3 encoded audio.

Dolby Digital and Dolby ProLogic decoding is also included, as is support for MP3 and Windows Media Audio.

The NAD M55 uses professional grade 24-bit, 192-kHz audio D/A converters. These premium devices are well protected from noise caused by even minute fluctuations in current

from the power supply. The level of quantization noise within the frequency range is uniform for all frequencies and very well suppressed. This D/A converter ensures that all the sound you hear is as clear and noise-free as possible. High speed FET output devices keep all the detail present in high resolution SACD and DVD-Audio formats, perfectly intact.

Digital Bass Management is available for all surround sound formats. This prevents bass frequencies from overloading and distorting your speakers by 'redirecting' them to your subwoofer which is specially designed to handle the lowest octaves. When playing DVD-Video, DVD-Audio or Super Audio CD sources, it is possible to preset speaker configurations. The crossover point is selectable with 12 dB high and 24 dB low pass filter slopes.

VIDEO PERFORMANCE

The M55 features a Dual Discrete Video Circuit (D.D.V.C.) for the highest possible picture quality via the Component Video output. An extremely high-speed video D/A converter is a very critical component in generating a superior quality video playback from DVD. The NAD M55, therefore, uses the highest quality 10-bit, 27MHz individual video DACs for Composite and S-Video and 12-bit, 148MHz individual video DACs for Component output. Independent video DACs allow simultaneous feed to zone 2. These ensure highly accurate playback of delicate, low-level video signals. This produces a vivid picture that is faithful in every detail. Over sampling of 4x is achieved for Progressive and 8x for interlaced video signals, allowing more detailed D/A conversion. Higher quality picture reproduction is also possible thanks to a filter with flexible 'shutout characteristics' that is used for the analog filter in the latter stage. Furthermore, the NAD M55 uses two separate video D/A converters to process Progressive and Interlaced signals. This eliminates mutual interference between the Progressive and Interlaced signals and allows both an Standard Definition and a High Definition picture to be output simultaneously - a great feature for sending video to a second viewing zone (available on the M15 Preamp Processor).

Progressive Scan features the DCDi processor by Faroudja. Progressive Scan technology represents a vast improvement over the interlaced scanning method used in normal TV broadcasts and other conven-tional applications, as it can process around twice as much video data to produce a sharper, noise-free picture with finer details. Video images are faithfully displayed with optimum naturalness and beauty.

A wealth of picture quality adjustment functions, including Contrast, Brightness, Hue, Sharpness, Black Level and Gamma, can all be adjusted using the intuitive On Screen Display.





Specifications

Audio

Frequency Response CD Audio 4Hz to 20kHz Frequency Response SACD Audio 10Hz to 41kHz Frequency Response DVD (96kHz) 4Hz to 44kHz 2V rms Output Level Signal/noise ratio, A-weighted -115dB 0.0045% THD (at 0dB, 1kHz) Wow and Flutter Quartz Accuracy Channel separation CD 90dB Dynamic range 99dB Number of discs

DVD Video

Signal to Noise 70dB (Interlace), 72dB
Signal System (Progressive Scan)
PAL/NTSC

Output

 $\begin{array}{lll} \mbox{Digital Coaxial - PCM, DTS, MPEG, AC3} \\ \mbox{Digital Optical - PCM, DTS, MPEG, AC3} & 0.5 \ \mbox{p-p} \ 75\Omega, RCA \times 1 \\ \mbox{Composite Video} & 3V \ \mbox{p-p} \ 75\Omega \\ \mbox{S-Video} & 1v \ \mbox{p-p} \ 75\Omega \ \ 1 \times RCA \\ \mbox{Component Video} & 9/C \ \mbox{4 pin} \ \mbox{x} \ \ 1 \\ \mbox{RCA} \ \mbox{x} \ \ 3 \ \mbox{Y/Cb/Cr} \end{array}$

HDMI YES

Remote Control NAD DVD-6

Physical Specifications

Dimensions (W x H x D) 17 1/8 x 3 7/8 x 11 4/5" (436 x 100 x 300mm)

Net Weight 18.7 lbs (8.5kg)

Shipping Weight 30.0 lbs (13.6kg)

