

Remarkable Sound from a Compact System

Building on the basic design of Denon's world-renowned D-M31 and D-M30, Denon engineers have continued to refine design details and parts through repeated tests in order to achieve an even higher level of sonic perfection. These engineers have also collaborated with European sound designers and technicians to develop a new speaker system that would faithfully deliver the improved sound quality from the D-M35, Denon's latest micro Hi-Fi system. The D-M35 not only plays CDs but a variety of other sources such as MP3 and WMA sound files and DAB as well, in the rich quality of sound that has made the Denon name so famous.



■ The D-M35 inherits Denon technology from high-end models to faithfully reproduce the original sound.

Capacitors developed for high-quality audio have been used in the circuitry of the power amp that determines sound quality and in the D/A converter section that converts the digital signal from the CD into an analog signal. In addition, the D-M35's high-class separate components feature Burr-Brown D/A converters from Texas Instruments Inc. that are well known for their superior sonic performance. The converters faithfully preserve both the powerful dynamism and the delicate nuances of sound as they convert the CD's digital signals into analog form for the speakers.

■ DAB Tuner

The RCD-M35DAB features a Digital Audio Broadcast (DAB) tuner as well as the conventional analog FM/AM tuner. DAB radio programs with the sonic quality of a CD, free of distortion, can be received through a small non-directional antenna. With the RCD-M35DAB, it is also possible to automatically scan and pre-set DAB stations. Up to 100 station pre-sets (60 digital and 40 analog) can be stored in memory. The display on the front panel contains two parts, enabling it to display the station name, program type, date, time and other information being broadcast from the DAB station. Of course, the station's frequency and audio format are also displayed.

■ MP3 and WMA playback

In addition to CD and radio sound sources, the D-M35DAB also plays MP3 and WMA files recorded on CD-R or CD-RW media. To play these discs, simply load it and push the Play button. You can also select a folder on the disc and just play the files in that folder. When a file is played, the artist name, track number, song title, album name and other information is displayed. Repeat or Random playback is also possible.

- S.D.B. (Super Dynamic Bass)
- Tone Controls (Bass, Treble)
- Source Direct Function
- 2 Sets of Analog Stereo Inputs and Analog Stereo Outputs
- MONO Output for Subwoofer
- Easy-to-Use Remote Control
- Headphone Jack
- A wealth of Playback Functions
- Optical Digital Output Jack for Direct Transmission of Digital Signals
- Auto Edit Function
- Radio TEXT with RDS function
- Everyday/Once/Sleep Timer

■ Hi-Fi Speaker system with the New European Tuning

The SC-M73 is a speaker system with high sound quality that has been newly tuned for the RCD-M35DAB. The bass driver has an inverted-profile double layer cone. This one-piece design does not use a centre-cap and therefore provides greater rigidity across the surface of the bass cone.

• Newly-developed drive unit

As shown in figure 1, the driver uses a dual-layer cone. Detailed "finite element analysis" was used to find the optimum thickness on each part of the subcone and the best connection point between main cone and voice coil. This design controls the break-up modes of the cone for a more stable sound. An aluminium ring is used inside the magnet system to reduce distortion due to inductance variations of the voice coil at large excursions. Figure 2 shows an analysis of the woofer diaphragm at 1.4 kHz. Piston motion is uniform over the entire diaphragm even at this frequency which is high for a woofer. In addition, the secondary cone has not been bonded to the edge of the driver in order to optimise control over vibration to the outer perimeter. This design thoroughly minimises influences on the secondary cone that actually emits the sound.

• Speaker cabinet

The speaker cabinet was constructed with MDF material. The acoustic design of the cabinet was optimised through laser scan measurements of vibration in the cabinet. The cabinet features a white wood grain finish that is often used in northern European furniture. Careful attention has been given to the rear of the speakers as well where rounded terminals are used.

• Network

An acoustic fourth order LKR filter has been used for the network to obtain optimum phase matching for the woofer and tweeter.



Figure 1 Newly-developed woofer unit

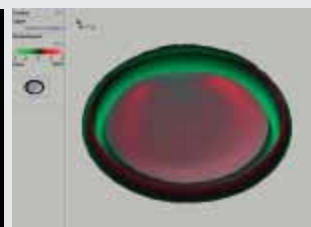


Figure 2 Woofer unit vibration

D-M35DAB

Cassette Deck (Optional)

DRR-M33



- Horizontal Loading Mechanism for Smooth, Stable Tape Travel
- Dolby B Noise Reduction System
- CD-SRS for One-Touch Recording from CD
- A Wealth of Editing and Playback Functions
- One-Touch Auto Reverse Operation
- Music Search
- Auto Tape Selector



Specifications

RCD-M35DAB	
Power output	22W+22W (6ohms, 1kHz, THD10%)
Input/Output	2 sets of analog inputs and outputs MONO output for subwoofer Headphone
Function	Tone control (Bass, Treble) SDB Source direct function Timer (once, every, sleep) CD playback repeat, random mode
Tuner	DAB BAND III 170MHz – 240MHz FM 87.50MHz – 108.00MHz AM 552kHz – 1611kHz Preset x 100 (DAB x60, FM/AM x40) RDS Radio text
General	
Power supply	AC230V, 50Hz
Power consumption	50 W
Dimensions	W210 x H95 x D328 mm
Weight	4.3kg

SC-M73	
Type	2way 2speakers
Drivers	130mm woofer 25mm soft dome tweeter
Frequency response	43Hz-40kHz
Max power	60W (IEC) 120W (PEAK)
Impedance	6 ohms
Dimensions	W156 x H213 x D249 mm
Weight	3.9kg/unit

DRR-M33	
Heads	
Record and Playback	Hard Permalloy Record / Playback Head x 1
Erase	Double Gap Ferrite Erase Head x 1
Power Source	230 V, 50 Hz, 9 W
Dimensions	W210 x H95 x D325 mm
Weight	3.1 kg



The speaker's design extends to the rear as well.

* Design and specifications are subject to change without notice.
* "WMA"(Windows Media Audio) is a new audio codec developed by Microsoft® in the United States of America.