

SONY

NW-A45/B

Walkman® with Hi-Res Audio



Enjoy superior sound quality, wrapped up in the colors of your world. High-

Resolution Audio lets you hear music as the artist intended, while Digital Noise Cancelling ensures that you only hear what you want. Go wireless with NFC™ and Bluetooth® streaming, and Ambient Sound Mode to keep you aware of your surroundings at all times.

Features

High Resolution Audio for uncompromised sound

Enjoy the subtlest nuances in higher-than-CD quality Hi-Res Audio. Passion for music unites every component from signal to speaker, so it feels like the artist is performing right in front of you.

S-Master HX™ delivers Hi-Res audio in maximum quality

Optimized for Hi-Res Audio, S-Master HX™ reduces distortion and noise, allowing you to enjoy all the subtleties in your music.

DSD playback

Experience the natural sound and intense detail of DSD audio formats. This is the preferred recording format of many top producers and engineers, and you can enjoy it using the NW-A40 Series' high-quality PCM conversion.

DSEE HX™ restores all your compressed music files

The Digital Sound Enhancement Engine HX (DSEE HX™) upscales compressed digital music files (MP3, ACC, ATRAC and WMA) and takes them closer to the quality of Hi-Res Audio. By restoring the high-range sound lost in compression, DSEE HX™ produces your digital music files in rich, natural sound.

New soldering maximizes clarity

The precision-engineered components of the NW-A40 Series include high-quality, lead-free solder on the circuit board. This improved solder is also used on the S-Master HX™ chip, resulting in a more efficient electronic connection. So every time you press play, you can enjoy purer audio playback with enhanced vocal clarity.

New circuit board for pure, solid bass

The NW-A40 Series' circuit board has been optimized to improve electricity flow. The layout from the battery to the audio block minimizes the power loop, making the power supply stable. The result is clearer sound and pure, solid bass that comes through in every track.

LDAC™: for the transmission of Hi-Res Audio content

Enjoy your music at greater than CD quality with LDAC™ wireless audio transmission. LDAC uses a conventional BLUETOOTH® connection², but transfers at a maximum data transfer rate up to 990kbps – approximately three times that of other audio profiles. The result is enhanced wireless listening that's much closer to the artist's intention.

Digital noise cancelling for fewer distractions

When used with compatible IER-NW500N headphones, the NW-A40 Series' digital noise cancelling reduces the ambient noise you would normally hear from your surroundings. Microphones built in to the headphones work with the digital noise cancelling engine to cut out unwanted sound.³

Ambient sound mode keeps you aware

Listening to music but still want to hear the outside world? When you're using the compatible IER-NW500N headphones, select Ambient sound mode and the NW-A40 Series will let in external sounds to keep you aware of your surroundings.³

Plays and decodes MQA music files

The NW-A40 Series is fully compatible with MQA files, so you can play even more lossless-quality music.

USB DAC function makes music played from your computer sound even better

Use your NW-A40 Series as a USB DAC (Digital-Analogue Converter) by pairing it with a PC, Mac computer, or smartphone. When connected and activated using the supplied USB cable, the NW-A40 Series replaces your computer's regular sound processing with its own, highly-tuned, hardware processing. Now, whether you're at your home or office, in a coffee shop or commuting, you can always enjoy premium sound quality.

Effortless control with the large touch screen

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With the large, full-color touch screen, you're in complete control. Change tracks, create playlists and more, just by tapping the handy on-screen buttons.

Listen for longer with up to 45 hours' battery life ¹

Perfect for commuting or when you want to enjoy your music all day, when fully charged you can enjoy up to 45 hours of music playback.¹

Expand your memory with the SD card slot

Want to store even more music on your Walkman®? Pop in an SD card (not supplied) for additional memory.

NFC™ One-touch for instant connectivity

Near Field Communication (NFC™) and Bluetooth® technology make connecting to your music fast and easy. ² Just touch your NFC™-enabled device to your NW-A40 Series for a quick, seamless connection, then start streaming.

Handy buttons for quick control

The play/pause, music-selection and volume buttons on the side panel are shaped and positioned for easy operation.

Specifications

Audio	
Audio Power Output	35mW+35mW (Maximum Power Output (JEITA 16Ω/mW))
Antenna System	Headphone cord antenna
Audio Format(s) Supported	MP3 (mp3.): 32 to 320kbps (Supports variable bit rate (VBR)) at 32, 44.1 and 48 kHz WMA: 32-192 kbps (Supports variable bit rate (VBR)) at 44.1 kHz FLAC: 16, 24 bit at 8 and 192 kHz WAV (.wav): 16, 24, 32bit(Float/Integer) at 8 and 192kHz AAC (.mp4, .m4a, .3gp): 6-320kbps at 8 and 48kHz HE-AAC (.mp4, .m4a, .3gp): 32-144kbps at 8 and 48kHz Apple Lossless (.mp4, .m4a): 16, 24bit at 8 and 192kHz AIFF (.aif, .aiff, .afc, .aifc): 16, 24, 32bit(Float/Integer) at 8 and 192kHz DSD (.dsf, .dff): 1bit at 2.8224, 5.6448, 11.2896 MHz *Audio that is converted to Linear PCM is output. APE (.ape): 8, 16, 24bit at 8 and 192kHz (Fast, Normal, High) MQA (.mqa.flac): Supported Sampling frequency may not correspond to all encoders. Copyright protected files cannot be played back. Non-standard bit rates or non-guaranteed bit rates are included depending on the Sampling frequency. Files that are 4 GB (APE is 2GB) or larger cannot be played back. This product recognizes audio sources exceeding CD quality (44.1 kHz/16 bit quantization) and DAT quality (48 kHz/16 bit quantization) as High-resolution Audio. The "HR" symbol is displayed for high-resolution audio sources.
Frequency Response	Headphone Out (Stereo mini-jack): 20 to 40,000 Hz(when playing data file, single signal measurement)
Tuner Frequency Range	87.5 to 108.0 MHz
Audio Features	
Play Mode	Shuffle Playback / Repeat Off / Repeat 1 Song / Repeat All Playback Range(All Range / Selected Range)

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Sound Modes	6Band equalizer (Off / Rock / Pop / Jazz / Classic / EDM / R&B HIPHOP / Relax / Custom 1 / Custom 2) DSEE HX (On / Off) DC Phase Linearizer VPT(Off / Studio / Club / Concert Hall / Matrix) Dynamic Normalizer(On / Off) ClearAudi+(On / Off) Clear Phase(On / Off)
Bluetooth	
Bluetooth® Technology	Version 4.2
Frequency Range	Frequency band: 2.4 GHz band (2.4000 GHz - 2.4835 GHz)
Modulation Method	FHSS
Profile	
A2DP	Yes
AVRCP	Yes
Convenience Features	
Multiple Language Display	German / English / Spanish / French / Italian / Polish / Portuguese / Russian / Turkish / Japanese / Korean / Simplified Chinese / Traditional Chinese
Display	
Display Technology	TFT color display with white LED-backlight, Capacitive touch screen
Screen Size	3.1 inch (7.8 cm) WVGA (800 x 480 Pixels)
FM Radio Feature	
Antenna	Headphone cord antenna
Hardware	
Interface	Hi-Speed USB (USB 2.0 compliant) Stereo mini-jack WM-PORT (multiple connecting terminal):22 pins
Memory	
External Memory	microSD microSDHC microSDXC
Memory Size	16GB
User Memory Capacity (Approx.)	Approx. 12.26 GB = 13,164,150,784 (byte) *Available capacity may vary. A portion of the memory is used for data management functions.
Operating Conditions	
Operating Temperature	41 °F to 95 °F (5 °C to 35 °C)
NFC	
Type	Active type (for reader and writer)
Power	
Battery Charging (Approx)	USB-based charging: 4 Hours

Battery Life (Approx)	<p>MP3 @128 kbps = 45 Hrs.(Ambient Sound Mode OFF) , 30 Hrs. (Ambient Sound Mode ON), 37 Hrs. (Noise Cancel ON), 45 Hrs.(Noise Cancel OFF)</p> <p>AAC @256kbps = 39 Hrs.(Ambient Sound Mode OFF) , 27 Hrs. (Ambient Sound Mode ON), 33 Hrs. (Noise Cancel ON), 39 Hrs.(Noise Cancel OFF)</p> <p>FLAC @96 kHz/24 bit = 39 Hrs.(Ambient Sound Mode OFF) , 27 Hrs. (Ambient Sound Mode ON), 32 Hrs. (Noise Cancel ON), 39 Hrs.(Noise Cancel OFF)</p> <p>FLAC @192 kHz/24 bit = 30 Hrs.(Ambient Sound Mode OFF) , 23 Hrs. (Ambient Sound Mode ON), 27 Hrs. (Noise Cancel ON), 30 Hrs.(Noise Cancel OFF)</p> <p>DSD @ 2.8224MHz/1 bit = 25 Hrs.(Ambient Sound Mode OFF) , 20 Hrs. (Ambient Sound Mode ON), 22 Hrs. (Noise Cancel ON), 25 Hrs.(Noise Cancel OFF)</p> <p>Radio: = 32Hrs. (Noise Cancel OFF), 27 Hrs. (Noise Cancel ON)</p> <p>Direct REC: 8 hours (MP3 (128kbps))</p> <p>Bluetooth: = 20 Hrs. (SBC, Connection), 13 Hrs. (LDAC, Auto)</p> <p>*The values shown in this topic are the approximate battery life when content is played continuously at the default settings. Even if the player is turned off for an extended period, a small amount of battery power is still consumed.Battery life may vary depending on volume setting, conditions of use and ambient temperature.The battery is consumed considerably when the screen is on.The battery life may become about 70% shorter when some of the sound quality settings are active. A Bluetooth connection will shorten the battery life by up to 45% depending on the following conditions.Format of the content. Settings of the connected device.</p>
Power Type	Built-in Rechargeable lithium-ion Battery USB power (from a computer via a USB connector of the player)
System Requirements	
Operating System	Sony original OS
Weights and Measurements	
Dimensions (Approx.)	2.16 x 3.84 x 0.43 inches (54.8 x 97.3 x 10.7 mm) w/h/d, projecting parts not included 2.21 x 3.84 x 0.43 inches (55.9 x 97.5 x 10.9 mm)
Weight (Approx.)	3.5 oz (98 g)
Accessories	
Supplied Accessories	Walkman (1) USB cable (1) Startup Guide Instruction Manual

1. Battery life when playing MP3 128 kbps files is approx 45 hours, or approx 39 hours when playing FLAC 96kHz 24bit files. Actual performance varies based on settings, environmental conditions, and usage. Battery capacity decreases over time and use.

2. Interoperability and compatibility among Bluetooth® devices vary.

3. Digital noise cancelling and ambient sound mode functions can only be activated when the NW-A40 is used with the IER-NW500N headphones

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