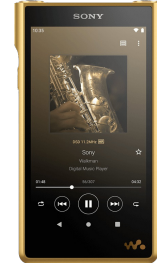




## NWWM1ZM2

### Signature Series Premium Digital Music Player

Settle for nothing less than immersive excellence with the newest addition to Sony's Signature Series. The WM1ZM2 sets a new benchmark in pure sound quality and listening sophistication. Crafted with fine materials and meticulous attention to detail, and offering the ease of downloading and streaming music, this is audio at its most indulgent.



### Bullets

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- Signature Series Superior Sound and High-Resolution Audio
- Gold plated oxygen free copper delivers a purer sound
- Faithful sound reproduction using S-Master™ HX digital amp technology
- 256GB capacity and SD card slot<sup>3</sup>
- Upscale compressed digital files with DSEE Ultimate<sup>1</sup>
- Hi-Res Audio Wireless with LDAC technology<sup>7</sup>
- KIMBER KABLE® achieve powerful and smooth sound quality.
- Crystal oscillators ensure precision clock stability
- Large 5.0" display for beautiful visuals and better usability
- Wi-Fi enabled for streaming and downloading

### Features

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#### Purer materials for a purer sound

Despite oxygen-free copper (OFC) being notoriously difficult machine process, the WM1ZM2 features a gold-plated OFC chassis-just like its predecessor. This time though, OFC purity has been upgraded to 99.99%, offering even greater benefits in terms of audio quality and high rigidity. Bass notes are clear and powerful, the atmosphere is more expansive, and mid to high range sounds linger beautifully.

#### Faithful sound reproduction

S-Master™ HX digital amp technology, independently developed for Walkman®, is compatible with Native DSD format, and supports balanced and high power output. It reduces distortion and noise across a wide range of frequencies, for rich and full-bodied sound, further enhanced by new high quality lead-free solder.

#### An even stronger power supply

Taking inspiration from the DMP-Z1, our flagship digital music player, the WM1ZM2 features an even stronger power supply than its predecessor, both in the analog block and digital block.

#### Large solid high polymer capacitor



Adapted as battery assist for the amplifier block, the newly developed large solid high polymer capacitor offers large capacitance and low resistance. Able to instantaneously supply large amounts of power, it can accurately output signals by preventing sudden falls in voltage. This contributes to clear, powerful and accurate bass sound, as well as clear vocals.

### **FT CAP3 (High polymer capacitor)**

Custom-made for Sony and tuned by Sony engineers, FT CAP3 is adopted for all bypass capacitors in the audio block power supply. Drawing on know-how cultivated in high-end home audio development, it has helped to improve sound expression and create a smoother sound, with a wider sound space, more transparency, and tighter bass.

### **OFC Milled block**

An OFC milled block covers the digital block, helping both to strengthen digital ground and improve noise shielding from digital block elements such as the application processor and memory devices. The result is a clearer sound that appears to rise up from silence.

### **High polymer capacitors**

The high polymer capacitors are used to strengthen the power supply of the amp block for unbalanced output, enhancing low-range reproduction performance for a more expansive listening experience.

### **Film capacitors**

High quality film capacitors deliver voltage with a linear response across frequencies, resulting in reduced distortion and noise.

### **Winding inductors**

Replacing the conventional laminated capacitor, winding inductors in the digital block power supply contribute to a pure sound.

### **KIMBER KABLE®**

The wiring material from the amp base to the balanced headphone jack has been upgraded to thick KIMBER KABLE®, just like on the flagship DMP-Z1 music player. This helps to shut out external noise, transmit high quality audio signals, and achieve powerful and smooth sound quality.

### **Crystal oscillators**

Two compact low-phase-noise crystal oscillators ensure precision clock stability at sampling rate multiples of 44.1kHz and 48kHz. The crystal electrode piece is formed with gold vapor deposition for enhanced electric characteristics and improved instrumental separation. This helps remove a veil and reduce noise to realize clear, open sound reproduction.

### **Fine sound register**

The surface mounted Fine Sound Register ensures even, effective distribution of power to the circuit components, for consistent sound quality.

### **Newly developed reflow solder containing gold**



This is the first time Sony has used reflow solder containing gold, and it features extensively across the circuit board surface – so the overall effect is significant, including improved sound localization and a wider sound space.

### **High quality solder containing gold**

The exceptional conductivity of gold ensures absolute minimum signal loss. For clearer sound and vocals, a premium, audio-grade lead-free solder with a small amount of gold connects the circuit of the WM1ZM2 to the battery.

### **Low dielectric circuit board**

The printed circuit board uses low dielectric material to realize accurate signal transmission, while the via holes are filled with copper to further reduce impedance. The result is a wide sound space with clear, bright sound.

### **Optimized circuit board layout**

By dividing the audio block and the power/digital block, the circuit board layout has been optimized to ensure sound quality is unaffected by digital interference.

### **DSD remastering engine**

Pulse Code Modulation (PCM) audio is resampled into an 11.2MHz Direct Stream Digital (DSD) ultra-high-frequency 1-bit audio stream.<sup>1</sup> The single-bit stream delivered to the DAC has a character far closer to that of analogue, giving you even more ways to enjoy your music.

### **DSEE Ultimate**

Using Edge-AI (Artificial Intelligence), DSEE Ultimate™ (Digital Sound Enhancement Engine) upscales compressed digital music files in real time. And the evolving algorithm now delivers even greater benefits for CD-quality (16 bit 44.1/48kHz) lossless codec audio. Restoring acoustic subtleties and dynamic range, it provides a richer, more complete listening experience.

### **Vinyl Processor**

Give the warmth and character of vinyl back to your digital tracks. Enjoy subtle tone reproduction of the low-frequency resonance, tone-arm resistance and surface noise to deliver an authentic listening experience.

### **DC Phase Linearizer**

Our DC Phase Linearizer works to effectively replicate a wide variety of sonic signatures. It applies digital-signal processing to match the phase characteristics of various types of analog amplifier to deliver a purer, more analog-like sound. Choose from six phase character settings

### **Balanced connection**

The Walkman® features a balanced single plug, designed for the Ø4.4mm balanced connection cable. This separates left and right sound signals, while minimizing signal transmission loss and resulting sound deterioration.

### **Every note as the artist intended.**

Take your digital music collection to another level with High-Resolution Audio. By capturing and



reproducing digital audio at a higher rate than CD (24-bit/96kHz and beyond), High-Resolution Audio allows you to get closer to the original studio recording.

### **11.2 MHz DSD Native/PCM 384kHz<sup>1</sup>**

Supreme quality with 11.2 MHz DSD native using balanced headphones and PCM 384kHz/32-bit support.<sup>1</sup>

### **Hi-Res Audio Wireless**

Enjoy High-Resolution Audio quality without wires thanks to LDAC, our premium wireless codec. With 3x the bitrate of standard BLUETOOTH<sup>®</sup> technology, you can enjoy a superior listening experience for all your music.<sup>7</sup>

### **MQA<sup>™</sup>**

The Walkman includes MQA technology, which enables you to play back MQA audio files.

### **Familiar features**

Key design elements include the twin headphone jacks on the top and intuitive side key, both inherited from its predecessor.

### **Distinctive rear section**

The OFC frame with machine carved aluminum rear contributes to the high-quality sound and creates a premium feel. In addition, the distinctive rear section – thicker and more pronounced than its predecessor – reflects the larger, superior quality audio parts that are housed within.

### **Echoes of analog**

Every element of the WM1ZM2 is dedicated to the pure joy of music listening, right down to the volume UI, which recalls classic analog design.

### **Wi-Fi lets you stream and download even more music**

Supported by Android<sup>™</sup> and compatible with Wi-Fi, the WM1ZM2 gives you even more freedom to enjoy music, listen to your favorite streaming and music apps on your Walkman or connect to a PC to download tracks and playlists from your music collection.

### **Large 5.0" display**

Smooth and responsive, the large 5.0" touchscreen display has been enlarged from its predecessor's 4.0" display and upgraded to HD.

### **Walkman<sup>®</sup> Home Screen**

With the Walkman<sup>®</sup> Home Screen you can customize the home display to suit your needs.

### **USB Type-C<sup>®</sup> port**

A USB Type-C port, compatible with USB 3.2 Gen1 offers fast music file transfer and easy connectivity with a range of devices.<sup>2</sup>

### **Expandable Storage**



With 256GB integrated memory and an SD card slot, the WM1ZM2 lets you take even the biggest music collections on the go.<sup>3</sup>

## Discover the Signature Series

Settle for nothing less than immersive excellence with the full range of Signature Series products. Designed for the ultimate sound quality, the transcend audio convention to elevate every note.

## So immersive. So real.

Immerse yourself in sound all around you. As real as if you are there at a live concert or with the artist recording in a studio. With 360 Reality Audio, music has never been so immersive and so real. The WM1ZM2 lets you enjoy 360 Reality Audio.<sup>4 5</sup>

## Sustainability in mind

Our products are not only designed to be stylish but also with the environment in mind. No plastic is used in the packaging material for the WM1ZM2<sup>6</sup>, reflecting Sony's commitment to reducing the environmental impact of our products and practices.

## Specification

Size & Weight	
DIMENSIONS (W X H X D)	Approx. 3.17inches x 5.62inches x 0.83inches, Approx. 80.5mm x 142.5mm x 21.0mm
WEIGHT	Approx. 17.29 Oz, Approx. 490 g
Wi-Fi	
FREQUENCY BAND	2.4 / 5 GHz
Power	
BATTERY LIFE - CONTINUOUS PLAYBACK MUSIC(W.MUSIC APP)	MP3 (128kbps) / Stereo mini-jack: Approx. 40 hrs, MP3 (128kbps) / Balanced standard-jack: Approx. 40 hrs, FLAC (96kHz / 24bit) / Stereo mini-jack: Approx. 40 hrs, FLAC (96kHz / 24bit) / Balanced standard-jack: Approx. 40 hrs, FLAC (192kHz / 24bit) / Stereo mini-jack: Approx. 35 hrs, FLAC (192kHz / 24bit) / Balanced standard-jack: Approx. 35 hrs, DSD (2.8224MHz / 1bit) / Stereo mini-jack: Approx. 25 hrs, DSD (2.8224MHz / 1bit) / Balanced standard-jack: Approx. 15 hrs, DSD (5.6448MHz / 1bit) / Stereo mini-jack: Approx. 18 hrs, DSD (5.6448MHz / 1bit) / Balanced standard-jack: Approx. 13 hrs
BATTERY LIFE - CONTINUOUS PLAYBACK MUSIC(OTHER MUSIC APP)	FLAC (96kHz / 24bit) / LDAC Connection Preferred (Auto): Approx. 18 hrs
CHARGING TIME (FULL CHARGE)	Approx. 4.5 hrs



BUILT-IN BATTERY	Built-in Rechargeable lithium-ion Battery
CHARGING AND POWER SUPPLY	USB power (from a computer via a USB)
<b>Storage Media</b>	
MEMORY SIZE	256GB *Actual available memory 215GB
<b>Playback &amp; display</b>	
MUSIC SEARCHING METHODS	All Songs,Artist,Release Year,Playlists,Album,Genre,Composer,Hi-Res,Recent Transfers,Folder,Cue sheet
MUSIC PLAY MODE	Shuffle Playback,Repeat Off,Repeat 1 Song,Repeat All,All Range,Selected Range
DRAG AND DROP	Yes
DISPLAY RESOLUTION	12.7 cm (5.0-inch) ,HD (1280 x 720 Pixels)
DISPLAY TYPE	TFT colour display with white LED-backlight
SOUND EFFECTS	Direct Source (Direct) ,10 Band equalizer,DSEE Ultimate,DC Phase Linearizer,Dynamic Normalizer,Vinyl Processor
AUDIO PLAYBACK	MP3: 32 - 320kbps (supports VBR) / 32, 44.1, 48kHz, WMA: 32 - 192kbps (supports VBR) / 44.1kHz, FLAC: 16, 24bit / 8-384kHz, WAV: 16, 24, 32bit (Float / Integer) / 8-384kHz, AAC: 16-320kbps / 8-48kHz, HE-AAC: 32-144kbps / 8-48kHz, Apple Lossless: 16, 24bit / 8-384kHz, AIFF: 16, 24, 32bit / 8-384kHz, DSD: 1bit / 2.8MHz, 11.2MHz, APE: 8, 16, 24bit / 8-192kHz (Fast, Normal, High), MQA: Supported
<b>Headphone Out (Stereo mini-jack)</b>	
FREQUENCY	20-40,000 Hz
MAXIMUM POWER OUTPUT (JEITA 16Ω/MW)	60mW+60mW (High Gain)
<b>Headphone Out (Balanced standard-jack)</b>	
FREQUENCY	20-40,000 Hz
MAXIMUM POWER OUTPUT (JEITA 16Ω/MW)	250mW+250mW (High Gain)
<b>Software</b>	
OPERATING SYSTEM	Android 11
<b>Connectivity</b>	



TERMINALS	Headphone: Stereo mini jack, Balanced standard jack, External memory: Micro SD Micro SDHC Micro SDXC
WIRELESS CAPABILITIES	Communication system: Bluetooth Specification Version 5.0, NFC: No, Supported Bluetooth profiles: Yes, Supported Codecs (Transmission): Yes, Supported Codecs (Reception): No
<b>Accessibility</b>	
TALKBACK	Yes
<b>What's In The Box</b>	
What's In The Box	USB Type-C® Cable (USB-A - USB-C) Operating Instructions Reference Guide Headphone jack cap (Stereo Mini) Headphone jack cap (Balanced Standard) Leather case

1. Native DSD playback is only achievable with a balanced connection. For unbalanced connections DSD playback will be PCM.
2. Not compatible with Walkman cable.
3. A portion of the memory is used for data management functions. Actual available memory is approx. 215GB.
4. Video content with 360 Reality Audio is not supported on the NW-WM1ZM2.
5. Sony | Headphones Connect App is needed. Requires subscription to a music streaming service – subscription fees apply. Personalization function is available only for selected headphones. Some services may not be available in certain countries/regions.
6. Coating and adhesive materials excluded. This varies by region.
7. Connected Bluetooth device must support LDAC format. Interoperability and compatibility among Bluetooth® devices vary.

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