

# SONY

## TA-ZH1ES

### Signature Series Desktop Amplifier

Unleash the full potential of your headphones with the Signature Series headphone amplifier and experience the emotional impact of every song – just as the artist intended. Combining a premium hybrid DA amplifier, the very best digital and analog sound technologies and a chassis designed for perfect acoustics, it takes your headphones where they've never gone before. This one's for the serious listeners.



### Bullets

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- Hybrid high-output digital/analog amplifier for powerful, panoramic sound
- Built-in USB DAC supports a variety of audio formats up to DSD 22.4 MHz / PCM 32 bit 768 kHz
- Supports balanced (4.4mm, 3.5mm & XLR4) and unbalanced (6.3mm, 3.5mm) connections
- Rigid, durable ES frame and chassis for superior acoustic design and sound isolation
- New DSD re-mastering engine converts all PCM file formats to DSD (11.2MHz)
- Multiple inputs including analog in/out, optical-in, coax-in and USB-B
- Make compressed audio sound brilliant by restoring lost audio fidelity with DSEE HX™
- Two-position gain switch optimizes performance for a wide variety of headphones
- The perfect partner to the MDR-Z1R for impeccable sound

### Features

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#### Superior digital amplification

Our non-feedback S Master HX technology maintains the purity of dynamic, straight digital sound. Our new D.A Hybrid Amplifier Circuit takes this one step further, enhancing its precision and sound quality with an analog feed-forward amp. The analog amplifier corrects the errors caused by switching amplification.

#### Supports a variety of audio formats

Practically every Hi-Res file format has met its match with support up to DSD™ 22.4 MHz / PCM 32 bit 768 kHz. Whatever the acronym – from PCM to DSD and beyond – the Sony TA-ZH1ES is prepared to play it flawlessly.

#### A variety of balanced and unbalanced headphone connections

The amp utilizes a variety of headphone output connections, including both balanced (4.4mm, 3.5mm & XLR4) and unbalanced (6.3mm, 3.5mm).

#### Rigid and durable for superior acoustic design and sound isolation

The headphone amplifier's top panel is made from a combination of steel and aluminum. These materials each have their own resonance frequency, which when used in combination, suppress each other. The result is the effective elimination of unnecessary resonance.

It also features a rigid FBW chassis, which has been designed to isolate the circuit board from vibration. By minimizing vibration and preventing lateral movement, noise is reduced for a cleaner, purer sound. The newly added wall structure is made from a large aluminum block for high rigidity.

#### Convert any source to DSD™

Personalizing sound with the new DSD™ Remastering Engine. Offering double the conversion accuracy of previous models, the new DSD™ Remastering Engine let you convert all PCM music sources into DSD™ 11.2MHz. The technology utilizes FPGA (Field Programmable Gate Array) to convert any signal into the DSD™ sound format.

#### Well-connected

The amp features several terminals for multiple connectivity options with your current equipment, like analog input and output, plus digital inputs including optical in, coax in and USB-B — or simply room to expand.

#### Preserving the feeling

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Capturing every note and nuance with DSEE HX™. Take the concert feeling home and experience your music as the artist intended, in near High-Resolution Audio quality. Our new DSEE HX upscaling technology features four additional modes to the standard: female vocal, male vocal, percussions and strings, for optimal sound reproduction.

## Optimized performance for a wide variety of headphones

A two -position gain switch offers both high and low impedance headphones the higher or lower amount of power they need to deliver higher audio levels.

## The perfect partner to the MDR-Z1R for impeccable sound

The stationary headphone amplifier has been developed in partnership with headphone sound specialists to realize the potential of the MDR-Z1R headphones. Pair them up to discover an immersive listening experience that will take your breath away.

## Specifications

Headphone Amplifier		
	Output Power	Balanced : 1200mW + 1200mW (32Ω 1kHz 1%), Unbalanced : 300mW + 300mW (32Ω 1kHz 1%)
	Impedance	U.S.A. and Canada:12-600Ω, Other Countries:8-600Ω
	Playing Frequency Range	4Hz-200kHz
	Gain Switch	Yes (High/Low)
Input/Output	Headphone Jack	Balanced standard (4.4 mm in diameter), 3-pole mini (balanced connection, 3.5 mm in diameter) × 2, XLR4 (balanced 4-pin), Standard (6.3 mm in diameter), Stereo mini (3.5 mm in diameter)
	Other Input/Output	WALKMAN / Xperia Input, USB-B Input, COAXIAL Input, OPTICAL Input, LINE L/R Input, PRE OUT (Variable/Fixed)
	XLR4 Pin assignment	1:L+, 2:L-, 3:R+, 4:R-
Support format	Coaxial Input Jack	PCM up to 192 kHz/24 bit
	Optical Input Jack	PCM up to 96 kHz/24 bit
	Sampling Frequency / Bit Depth	DSD Native up to 22.4 MHz, DSD DoP up to 11.2 MHz, PCM up to 768 kHz/32 bit
	USB-B Port	DSD Native up to 22.4 MHz, DSD DoP up to 11.2 MHz, PCM up to 768 kHz/32 bit
	Walkman/Xperia Port	DSD Native up to 11.2 MHz, DSD DoP up to 5.6 MHz, PCM up to 384 kHz/32 bit
Audio Setting	8x over sampling	Yes
	D.C. Phase Linearizer	Yes
	DSD Remastering Engine	Yes (Convert to DSD 11.2MHz)
	DSEE HX	Yes (Upscale to PCM 384kHz/32bit)
	DSEE HX Mode	Standard / Female Vocal / Male Vocal / Percussion / Strings
	LR Balance Adjust	Yes
Other	AC Inlet	Yes
	Auto Standby	Yes (default:OFF)
	Dimmer	Yes (BRIGHT / DARK / DISPLAY OFF)
	Power	120V 50/60Hz
	Power Consumption	35W
	Power Consumption (OFF Mode)	0.3W
	Remote Commander	Yes
	Support Software for Music Playback	Hi-Res Audio Player / Media Go
Accessories		



Accessories	Supplied Accessories	Remote control AC power cord (mains lead) Digital cable for WALKMAN USB cable (USB-A/USB-B) R03 (size AAA) Batteries
Weights and Measurements		
Weights and Measurements	Dimensions (Approx.)	8.27 x 2.56 x 12.37 in (210 x 65 x 314 mm) including projecting parts and controls Carton Dimensions: 12.9 x 9.0 x 15.3 in (328 x 228 x 389mm) excluding outer carton (W x H x D)
	Weight (Approx.)	9.7 lb (4.4 kg) Gross Weight excluding outer carton: 14.8lbs (6.7 kg)

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