

SONY

SA-Z1

Signature Series Speakers

Enjoy astonishingly faithful sound reproduction that's definitively clear and expressive. The Sony SA-Z1 speaker delivers the subtle nuances of every track with an incredibly rich near-field listening experience. Engineered in an effort to achieve ultimate sonic resolution and raw, live expression, the SA-Z1 creates a uniquely exquisite audio experience for music lovers.



Bullets

- Designed for near field listening
- Tsuzumi layout delivers a wide acoustic sound field
- Newly-developed I-Array tweeter design for expansive sound field
- Newly-developed woofer Unit
- Newly-developed tweeter Unit
- High Power Field Programmable Gate Array (FPGA)
- Time Alignment by FPGA and Multi-Amp
- Coaxial layout
- Accurate impulse reproduction
- Acoustic suspension enclosure

Features

Designed for near field listening

The SA-Z1 delivers an immaculate near field listening experience. These speakers were designed to deliver an unrivaled sound when the listener is positioned 3 feet or less away from the speaker.

Tsuzumi layout

A pair of woofers are set back-to-back in order to cancel out the vibration of the woofers and eliminate distortion while delivering a clear sound image with superb resolution.

I-Array tweeter design

Three tweeters combine to work as if they are one. The main tweeter can reproduce rich, high frequency playback, while the two smaller tweeters have wide directivity and can reproduce frequencies up to 100kHz.

Newly developed woofer unit

This new woofer developed with a high rigidity zinc die cast basket and magnetic circuit has properly set venting holes that ensure free air flow. This helps in delivering a distortion free listening experience.

Newly developed tweeter unit

The newly-developed Balanced Dome tweeter has a balanced dome structure to suppress split vibrations that disturb high frequency sound reproduction. This provides a tweeter that has both high internal loss and high velocity making it possible to deliver natural sound with the capability of reproducing frequencies up to 100kHz.

High power Field Programmable Gate Array (FPGA)

A high-power FPGA was used by Sony engineers to create an original hardware processor capable of recreating the advanced signal processing necessary to reduce errors and deliver clear sound quality from the SA-Z1 speakers.

Time alignment by FPGA and multi-amp

The FPGA and Multi-Amp system enables the SA-Z1 speakers to perfectly control time alignment of the sound wave coming from all driver units of the speaker. In traditional speakers, sound from the tweeter will arrive at your ears faster than the woofer because the tweeter is closer to your ear than the woofer. The FPGA and Multi-Amp system work together to delay the signal coming from the tweeter so that sound waves from the woofer and the tweeter arrive at your ears in unison with one another.

Coaxial layout

The coaxial layout of the SA-Z1 speakers delivers the ability to blend sound from the tweeters and the woofer in one sound from a short distance.

SONY

Accurate impulse reproduction

Impulse is the most important signal for speakers to be able to reproduce. The SA-Z1 is able to deliver accurate impulse reproduction with the implementation of the coaxial driver layout and time alignment control by FPGA.

Acoustic Suspension Enclosure

The SA-Z1's Acoustic Suspension Enclosure is able to suppress bass distortion to deliver distortion free low frequency sound.

Frame Beam Wall (FBW) Chassis

A disadvantage to traditionally-powered speakers is that the electronic circuits vibrate as a result of the speaker producing sound, which has a negative effect on the overall sound quality of the speaker. The SA-Z1 positions the electric circuits in an external frame beam wall chassis. This eliminates the possibility of the electric circuits vibrating to cause a loss in sound quality.

Bridge Connection

The Bridge Connection links the speaker enclosure and the FBW chassis together utilizing an extended arm shaped bridge. This design decouples the electric circuits from the vibration of the drivers.

Aluminum enclosure

The aluminum enclosure of the SA-Z1 constructed with 6 thick aluminum plates utilizes traditional Japanese construction methods to provide an enclosure that eliminates any distortion or noise by removing the possibility of vibrations within the enclosure.

Heat sink

The Heat Sink of the SA-Z1 has a chimney shape which helps avoid resonance. This design also helps to keep the upward current of hot air generated by the speaker flowing freely contributing to a high level of heat dissipation.

D.A. Hybrid Amplifier Circuit

The D.A. Hybrid Amplifier Circuit makes it possible for the speaker to reproduce the original sound and signal with absolute precision.

L/R speaker synchronization

The high-speed differential signal transmitting cable supports the synchronization of each speaker by sharing a common clock. This ensures that the time alignment between the left and right speakers is almost perfectly accurate.

Acoustic adjustment switch

Featuring settings for different sound adjustments, which allow the user to customize the sound for how they would like to listen.

Wide array of connection options

The SA-Z1 features a wide array of on board connection options for a myriad of different devices. Users are able to connect via USB-B, Walkman, optical, stereo mini, balanced XLR, and unbalanced analog inputs.

Specifications

Amplifier		
Audio Setting	8x over sampling	Yes
	DSEE HX	Yes (Upscale to PCM 384kHz/32bit)
Other	AC Inlet	Yes
	Auto Standby	Yes (default:OFF)
	Dimmer	Yes (BRIGHT/DARK/DISPLAY OFF)
	Power	120V 50/60Hz
	Power Consumption	SpeakerA:60W, SpeakerB:50W
	Power Consumption (OFF Mode)	SpeakerA:0.5W or less, SpeakerB:0.5W or less
	Remote Commander	Yes (RMT-AS504U)
	Support Software for Music Playback	Hi-Res Audio Player / Music Center for PC

Support format	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
Amplifier/Receiver		
Audio Features	Frequency Characteristics	10Hz-100kHz (-3dB)
	Number of amp. channels	SpeakerA:4, SpeakerB:4
	Signal-to-Noise Ratio (A Network) (When all of EQ/Surround off)	100dB
	Total Harmonic Distortion	0.03% (1kHz, 10W)
Front Speaker		
General Features	Assist Tweeter	14mm (9/16in) soft dome type
	Enclosure Material	Aluminum
	Enclosure Type	Acoustic suspension
	Finish Type	Blasting + Anodized
	Speaker System	2-way, 5 speaker system
	Speaker Type	Active
Accessories		
Accessories	Supplied Accessories	Remote control AC power cord (mains lead) Digital Sync Cable Digital cable for WALKMAN USB cable (USB-C/USB-B) R03(size AAA) Batteries
Weights and Measurements		
Weights and Measurements	Dimensions (Approx.)	SpeakerA: 7 7/8in x 8 1/4in x 12 7/8in (199mm x 207mm x 326mm) , SpeakerB:7 7/8in x 8 1/8in x 12 7/8in (199mm x 205mm x 326mm), including projecting parts and controls Package: 24 3/4in x 22 7/8in x 15 3/8in (626 x 578 x 388 mm)
	Weight (Approx.)	SpeakerA:23lb 2 2/5oz (10.5kg) SpeakerB:23lb 2 2/5oz (10.5kg)