

Network audio system

WS-A70



Chromecast built-in



With the themes of wood and cloth, this second **NEW VINTAGE** high-resolution network audio system is a fusion of tradition and technology that further liberates audio.

The cabinet enclosure is created with “180° curve processing,” which is difficult to achieve in mass production. The paneling made with natural walnut is treated with an oil finish to bring out the texture of the wood itself, giving it a sense of luxury, and the design evokes an attention to detail based in craftsmanship. Moreover, the speaker grills employ natural materials and carefully-chosen textiles with expressive designs. This system brings together music and style to enhance your daily life.

The WS-A70 combines traditional technologies with high-quality audio design suitable for the high-resolution era. This next-generation audio system also offers new ways to interact with music in the Internet age.



Main functions

- Network audio system combines an amplifier and speakers
- Cabinet utilizes beautiful natural walnut paneling
- Replaceable speaker grills use textiles made by Nuno Corporation (sold separately)
- High-quality sound through the combination of coaxial two-way speakers and passive radiators
- Diverse input options include Wi-Fi/wired LAN, AirPlay, Bluetooth®, USB flash drives and external inputs
- Plays high-resolution audio sources up to 5.6MHz DSD and 192kHz/24-bit PCM

- High-quality audio streaming with “Chromecast built-in,” which functions with Wi-Fi
- Support for TuneIn, Spotify, Google Play Music, AWA and other music streaming services
- Play high-resolution audio sources stored on media servers including NAS and PCs, as well as smartphones, tablets and USB flash drives
- Easy operation using the TEAC HR AirCast network control app, which supports high-resolution audio sources

Brand	TEAC
Series	NEW VINTAGE
Model	WS-A70
Color	Walnut (WA)
Dimensions	590 × 221 × 186 mm / 2.3 kg
Package dimensions	740 × 365 × 380 mm / ?? kg

■ Product overview

The WS-A70 combines traditional technologies with high-quality audio design suitable for the high-resolution era. This next-generation audio system offers new ways to interact with music in the Internet age.

We sought to realize a simple but never boring design by shaping beautiful natural walnut paneling with difficult to achieve curves. The left and right speakers incorporate TEAC original coaxial two-way units and rear passive radiators that reproduce rich and natural low frequencies. As a result, in a compact size we have realized high audio quality equal to that of a serious stereo system.

The speaker grills use textiles made by Nuno Corporation, which is managed by famous Japanese textile designer Reiko Sudo. We want you to enjoy the fusion of tradition and technology that is the goal of the New Vintage series.

As to be expected in this age of network audio, these systems support a wide variety of digital sources. The extensive network streaming playback functions include the Spotify Internet streaming service for high-quality audio, Google Play Music, which supports cloud services, and TuneIn, which enables listening to Internet radio from around the world for free. Along with streaming, you can listen to wireless playback of music from smartphones and easily enjoy audio libraries of various formats, including audio files saved on music servers on the same network and USB flash drives. The playback of these audio sources can be easily controlled using the dedicated free TEAC HR AirCast app for iOS and Android devices. With it, you can work with your own libraries as you like, including track selection, volume adjustment and playlist creation. A multiroom function also allows you to control multiple WS-A70 systems simultaneously. You can share your libraries throughout your home, eliminating the need to prepare audio sources in each room.

• Curved cabinet with beautiful natural walnut material

Starting with a solid cabinet and core materials that thoroughly eliminate unwanted resonance and standing waves, we used natural walnut paneling with beautiful grain patterns, finishing it with natural oil and employing a challenging process to give it a curved shape. Our goal was to create a simple design that never loses interest.

Moreover, the replaceable speaker grill is attached without using catch pins, so the design of the WS-A70 can be enjoyed without any disruption to its beautiful finish even when the grill is removed.



- **Replaceable speaker grills that use textiles made by Nuno Corporation (sold separately)**

For the replaceable speaker grills, we have prepared options clad in textiles made by Nuno that fuse tradition and technology as is appropriate for this NEW VINTAGE line. Led by famous Japanese textile designer Reiko Sudo, Nuno Corporation creates textiles that infuse the beauty of traditional techniques even into modern expressions.

The plan is to increase the line up of speaker grills to adorn the WS-A70 with new designs added by Nuno to the collection every season.



About Nuno Corporation

Textile designer Reiko Sudo established this company in 1984 with the goal of combining traditional dyeing and weaving techniques with modern technologies to create textiles that are suited to the present age. Together with Nuno Works, the corporation is creating original textiles that combine new materials and techniques at dying and weaving sites but survive throughout Japan. Numerous works that they have created are in the permanent collections of major art museums in countries around the world, and many others decorate well-known commercial facilities and public spaces.

NUNO



- **Rotary aluminum control dial enables intuitive operation**

The interface adopted has a new feel that is suitable for new ways of experiencing music offered by network audio. The simple menu buttons and rotary control dial enable intuitive operation.



- **Various network sources supported.**

This system enables a vast range of musical experiences. In addition to the Spotify music streaming service known for its high audio quality and Google Music Play that supports cloud services, you can also use TuneIn, which allows you to enjoy over 120,000 Internet radio stations and 5.7 million podcast episodes from around the world, along with apps that support Chromecast. In particular, Spotify and Google Play Music, which provide different playlists for different situations, will keep playing curated tracks suitable for work, dining and other lifestyle scenes. Not only do these functions eliminate the need to select tracks, they are also excellent for playing background music at parties, for example, when used in combination with the multiroom function of the WS-A70. Moreover, in addition to music servers on the same network (NAS¹, computer² set up as a media server), you can also play music files saved on smartphones and tablets. Numerous playback possibilities are created not only by gapless playback and repeat playback but also by shuffle playback.



By registering for a paid Spotify Premium account monthly subscription for this music streaming service, you can choose from 40 million songs and listen to ones you like at high audio quality. In addition, you can also use Spotify for free with playlists they provide with different themes.



With the paid subscription streaming service, you can listen to songs you like from a selection of 3.5 million songs. You can also use this service for free to store your own music files in the cloud (a personal server on the Internet) for listening.



In addition to being able to listen to over 120,000 Internet radio stations and 5.7 million podcast episodes from around the world for free, paid plans allow you to listen to unlimited numbers of audiobooks and live broadcasts of professional sports from other countries, for example.

- 1 To enable a WS-A70 to access an NAS as a music server, the NAS must have its DLNA function set to on. For details, refer to the operation manual of the hard disk that supports NAS.
- 2 To enable a WS-A70 to access a computer as a media server, Twonky server software must be installed on the computer

- **Support for Bluetooth® and AirPlay**

With support for Bluetooth® and AirPlay, you can also enjoy using your favorite music playback apps with direct wireless transmission to the WS-A70.

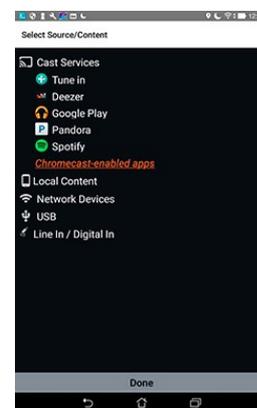


- **High-resolution audio playback from USB flash drives**

Using the USB port on the back of the system, you can play all kinds of music files, including high-resolution audio sources, stored on USB flash drives. This feature allows you to easily enjoy the music that you have without using a music server or Internet streaming service.

- **TEAC HR AirCast network control app supports high-resolution audio sources**

We have prepared a free dedicated app that allows you to control all the playback functions of the WS-A70 from iOS and Android devices. Along with streaming playback of audio files, including high-resolution sources, stored on the iOS or Android device, you can also use this to listen to various Internet services. These include Spotify, Google Play Music and other subscription music as TuneIn Internet radio, which you can enjoy for free. We have employed a straightforward layout that can be used intuitively.



streaming services, as well

- **Two-way coaxial speaker in the TEAC tradition**

We incorporated 2.5cm/13cm coaxial units that fully utilize TEAC two-way coaxial speaker technologies derived directly from our speakers, including the noted S-300, which has earned high praise as a compact bookshelf speaker for high-quality component systems, and the modern S-300HR. The coaxial arrangement of the central tweeter that reproduces high frequencies and the woofer that reproduces low frequencies ensures outstanding soundstage positioning without delays between high and low frequencies from every listening position. We have applied our expertise not only to the speaker units, but also to numerous details, including the structural design and volume calculations of the system cabinet that encloses them. We designed the WS-A70 speaker enclosure to be completely isolated from the amplifier, power supply, control circuit board and other components. This is exactly the same independent structure that is used in the speaker cabinets of ordinary component stereo systems.



Moreover, the placement of the passive radiators in the back of the system along the same axes as the speaker units enables the generation of rich natural low frequencies equivalent to speaker units with apertures that are a size larger.

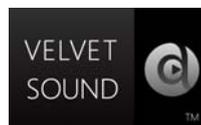
- **38W+38W maximum output with ICEpower Class-D power amplifier**

This system uses the same Class-D amplifier made by ICEpower A/S that we use in the TEAC NR-7CD flagship model. This amp is able to further enhance the outstanding soundstage positioning of the coaxial two-way speakers. Moreover, this amp generates almost no heat because its energy conversion rate is high, allowing it to operate efficiently inside the closed cabinet.



- **AK4490 D/A converters that are highly evaluated for audio quality**

The VERITA AK4490 D/A converters, which are made by Asahi Kasei Microdevices, used in these systems support audio sources of high resolutions up to 5.6MHz DSD and 192kHz/24-bit PCM. These converters can process the great amounts of data in high-resolution audio sources with room to spare, and reproduce smooth analog waveforms that are close to the original sounds.



- **Optical digital and RCA inputs**

This system supports both digital (rectangular optical connector) and analog (RCA) input from other devices. For example, you could connect a record player (that has built-in phono EQ) or a portable audio player to the analog input connectors and a CD player or TV audio output to the digital input connector.

- **Bass EQ (Flat/Enhanced) to adjust low-frequency volume**

Along with the combination of coaxial two-way speakers and passive radiators, this system has a Bass EQ circuit for the production of pleasant natural sound even during low-volume playback. This can be turned on

and off as you like.

- **Organic EL display with dimmer**

The built-in organic EL display has excellent legibility. Along with the high contrast of the organic EL, the use of a large font makes the display easy for everyone to read. The brightness can be set to one of four levels to suit the atmosphere of your room. (The brightness of the ring around the control dial is also linked to this setting.)

- **Sleep timer (15, 30, 45, 60, 90 or 120 minutes)**

The sleep timer, which can be set up to 120 minutes, allows you to drift to sleep while listening to your favorite music. This can be set using the system's controller.

- **Automatic power saving function**

The automatic power saving function will put the unit into standby if no operation occurs and sound input stops for a long time (20 minutes). The automatic power saving function can be enabled or disabled as necessary. Moreover, according to the system connections, one of two modes can be chosen to wake the unit from standby automatically.

PS1: The unit will turn on when playback starts from a smartphone or tablet or audio is input through the Digital In or Line In connectors.

PS2: The unit will turn on automatically only when playback starts from a smartphone or tablet. This mode reduces standby power consumption more than PS1 mode.

- **List of features**

- Network audio system combines an amplifier and speakers
- Curved cabinet with paneling made of beautiful natural walnut material with an oil finish
- Replaceable speaker grills use textiles made by Nuno Corporation (sold separately)
- TEAC HR AirCast network control app supports high-resolution and is available free
- Playback of audio sources with high resolutions up to 5.6MHz DSD and 192kHz/24-bit PCM possible
- Wi-Fi and wired LAN supported
- Built-in Bluetooth® receiver for direct reception from smartphones and tablets
- AirPlay supported
- Spotify, Google Play Music and other subscription audio streaming services supported¹
- TuneIn Internet radio reception
- Chromecast-compatible apps supported
- Multiroom support and display names of WS-A70 units on a network can be customized
- Streaming playback of audio stored on music servers, including NAS and PC servers
- Wireless playback of music files stored on smartphones and tablets
- High-resolution audio source playback from USB flash drives
- Gapless, shuffle and repeat (one song/all songs) playback options
- Playlist creation and playback
- Amplifier and speaker enclosure sections completely independent inside the cabinet
- TEAC original coaxial two-way speakers
- Passive radiators in the back of the system reproduce rich and natural low frequencies
- Class-D power amplifier made by ICEpower has an established reputation
- AK4490 D/A converter made by Asahi Kasei Microdevices
- Optical digital and analog line inputs
- Bass EQ (Flat/Enhanced) adjusts volume of low frequencies

- Sleep timer (15, 30, 45, 60, 90 or 120 minutes)
- Organic EL display with dimmer
- Rotary aluminum control dial enables intuitive operation
- Automatic power saving function (can be enabled/disabled)
- Mode for waking up from standby can be selected
- Fanless design maintains quiet environment
- Product compliant with RoHS

¹ Each streaming service requires separate account registration.

² Use of the WS-A70 requires a smartphone or tablet with the TEAC HR AirCast (iOS or Android) app installed, and a wireless LAN (Wi-Fi) connected to the Internet.

■ Specifications

Network section

Internet	100BASE-T
Wireless LAN specifications	IEEE 802.11 a/b/g/n/ac
Frequency bands	2.4GHz, 5GHz
Security	WEP 64/128-bit, WPA, WPA-PSK, WPA2, WPA2-PSK, IEEE802.11i

Bluetooth® section

Bluetooth version	4.1
OutputClass	Class 2
Supported profiles	A2DP, AVRCP
Codecs	AAC, SBC

USB section

Compatible USB devices	USB mass storage device class
Interface	USB 2.0 (High speed)
File systems	FAT, FAT32, NTFS
USB output voltage	DC 5V
USB power supply current	500mA maximum

Music playback formats and protocols*

DSD

Extensions	.dsf, .dff
Sampling frequencies	2.8, 5.6 MHz

WAV

Extension	.wav
Sampling frequencies	8, 11.025, 16, 22.05, 32, 44.1, 48, 88.2, 96, 176.4, 192 kHz
Bit depths	8, 16, 24

WAV files include uncompressed PCM digital audio.

FLAC

Extension	.flac
Sampling frequencies	8, 11.025, 16, 22.05, 32, 44.1, 48, 88.2, 96, 176.4, 192 kHz
Bit depths	8, 16, 24

ALAC (Apple Lossless)

Extensions	.alac, .m4a, .mp4
Sampling frequencies	8, 11.025, 12, 16, 22.05, 24, 32, 44.1, 48, 88.2, 96, 176.4, 192 kHz
Bit depths	16, 24

AAC

Extensions	.aac, .m4a, .mp4, .3gp, .3g2
Standards	MPEG-2/MPEG-4 Audio
Sampling frequencies	8, 11.025, 12, 16, 22.05, 24, 32, 44.1, 48, 88.2, 96 kHz
Bit rates	8–320 kbps and VBR

MP3

Extension	.mp3
Standards	MPEG-1/MPEG-2 Audio Layer-3
Sampling frequencies	8, 11.025, 12, 16, 22.05, 24, 32, 44.1, 48 kHz
Bit rates	8–320 kbps and VBR

OGG Vorbis

Extension	.ogg
Standards	MPEG-1/MPEG-2 Audio Layer-3
Sampling frequencies	8, 11.025, 16, 22.05, 32, 44.1, 48, 88.2, 96, 176.4, 192 kHz
Bit rate	48–500 kbps and VBR

This unit cannot play incompatible files.

* These are formats that can be played back via a network or from USB flash drives. However, some formats and sampling frequencies might not be playable if the server does not support them.

Amplifier section

Maximum output 38W+38W (6Ω, THD 10%, JEITA)
Rated output 31W+31W (6Ω, THD 1%, JEITA)

Speaker section

Format Passive radiator
Front Two-way coaxial × 2
 Low-frequency 13cm paper cone
 High-frequency 2.5cm titanium dome
Rear 13cm passive radiator × 2
Playback frequency range 55 Hz – 45 kHz

Audio inputs

Optical digital
 Connector type OPTICAL (rectangular) × 1
 Supported format IEC-60958-3 (S/PDIF)
 Sampling frequencies 44.1, 48, 88.2, 96, 176.4 and 192 kHz
 Supported bit depths 16, 24

Analog line inputs

 Connector type RCA pin × 1 pair
 Maximum input level: 2.0 Vrms
 Input impedance 20 kΩ

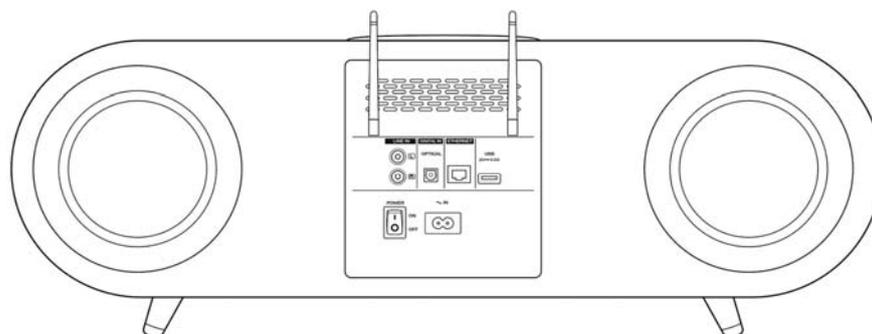
General

Power AC 100V, 50/60Hz
Power consumption 35 W
Maximum external dimensions (W×H×D) 590 × 221 × 235 mm (including protrusions)
Weight 10.0 kg

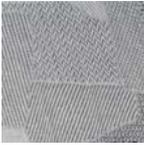
Included items

Power cord × 1
Wireless LAN antennas × 2
Quick Start Guide (network connection)
Owner's Manual (with warranty)

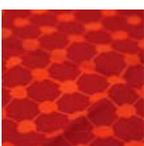
■ Rear panel



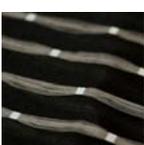
■Optional Nuno grilles

1	Colorfield Painting
	
Cotton 100%	

2	Fuhyogun (Pack Ice)
	
Silk 84% Rayon 16%	

3	Seed Beads
	
Wool 100%	

4	Kibiso Nagi
	
Silk 100%	

5	Ryusui
	
Silk 83% Washi 17%	