

2025.2.5

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## Home Assistant Voice Preview edition

# Bring choice TO VOICE

The best way to get  
started with voice



## Our vision

Let's make open, local, and private voice

# assistants a reality



January 2023

## Year of the voice

Home Assistant declares 2023 the year of the voice; the community and Nabu Casa focus on rapid development. Assist is added to Home Assistant.

April 2023

## Home Assistant Cloud gets voice

Home Assistant Cloud adds speech-to-text and text-to-speech capabilities, enabling low-powered hardware to run Assist. More languages and features are added.

December 2024

## Voice Preview Edition launches

Dedicated high-quality hardware allows you to experience and develop this community-driven and private voice assistant.



Future

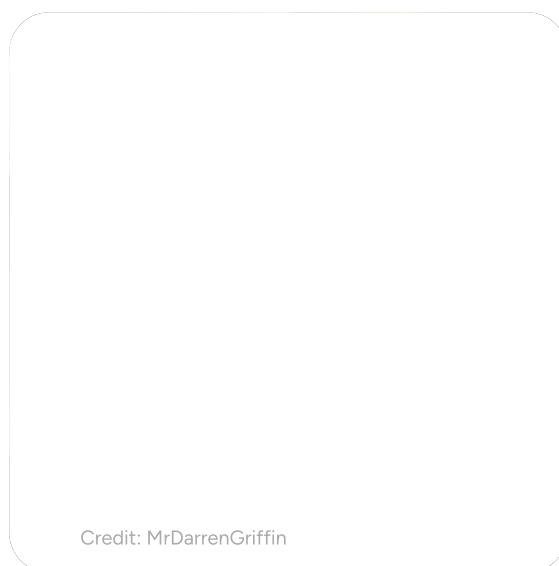
## Fully-local voice for everyone

We will match and then surpass other voice assistants. Supporting languages that big tech ignores - while being private, open, and fully customizable. Running inexpensively on local hardware.

# IN SHORT

**Advanced audio  
processing**

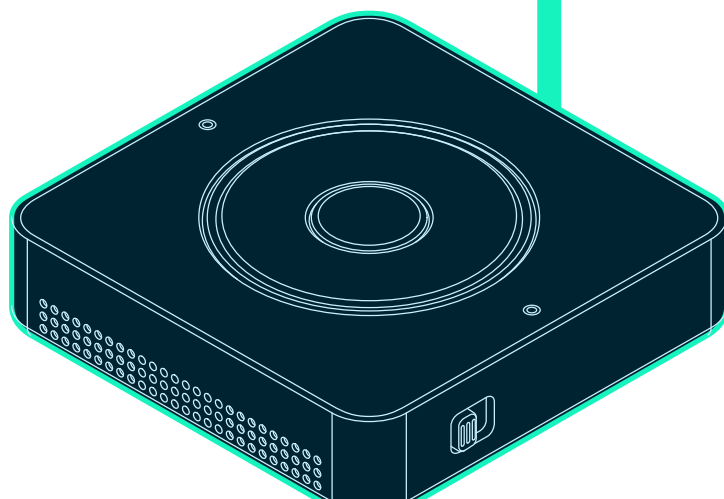
**Built for Home  
Assistant**



**Run local or in the  
cloud**

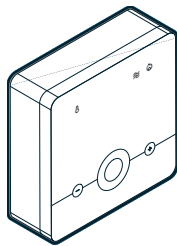
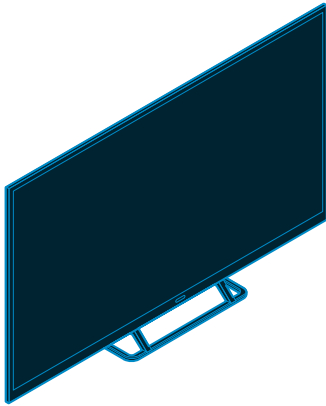
# BUILT FOR HOME ASSISTANT

Easy Setup - one USB-C cable and  
setup wizard, no assembly required.



What's the temperature?

It's 24 degrees.



CLICK TO ROTATE



## Injection-moulded case

A small, unobtrusive design that blends into the home

# BRINGING CHOICE TO VOICE

If you have powerful hardware, run voice fully locally, or offload speech processing to our privacy-first cloud for speedy performance.

**Local**

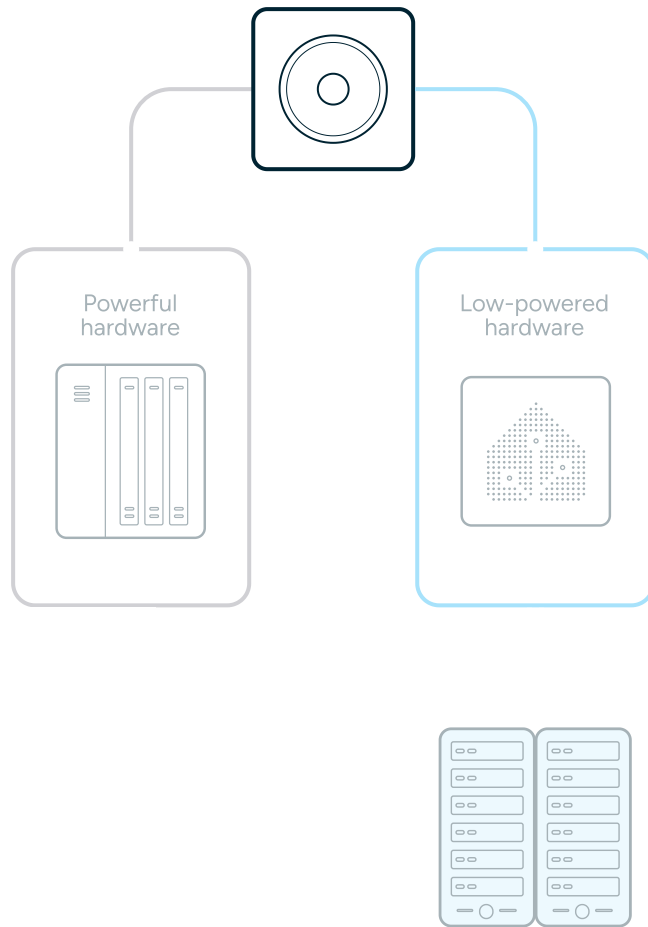
Your voice never leaves your home

**Cloud**

Your voice is processed on a private

Your voice never leaves your home  
and the processing is pretty accurate,  
but is hardware-intensive.

Your voice is processed on a private  
cloud, allowing Assist to run fast and  
very accurately on low-powered  
hardware.



## Breaking language barriers

Assist aims to support more languages than other voice assistants, but this is still a work in progress, and we need your help.

**Check supported languages here**

English



Local

Home Assistant Cloud

Fully supported

Fully supported

HELP IMPROVE LANGUAGE SUPPORT

# Start experimenting with AI

Connect your Voice Preview Edition to popular AI providers, or local LLMs, to control your home with natural language.

Google



ANTHROPIC





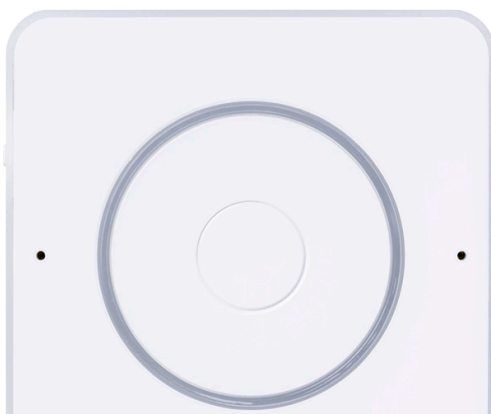
# FULLY OPEN SOURCE AND COMMUNITY-DRIVEN

Fully open software, firmware, and hardware allows you to make it work best for your needs. It includes a Grove port for connecting sensors and a 3.5mm headphone jack for connecting external speakers. With a dedicated community customizing and adding functionality.

Be part of building Assist and preview the future of voice control in the home.

[EXPLORE RESOURCES](#)[JOIN OUR COMMUNITY](#)

## SPECS





# Dimensions and weight

Device	With box
84x84x21 mm	94x94x30 mm
96 g	120 g

# Material

Enclosure	Colors
Injection-molded Polycarbonate plastic	White and semi-transparent

# Outside

Physical controls
Multipurpose button
Rotary dial for volume and other input
Mute switch that physically cuts power to the microphone
Microphone & speaker
Internal speaker
Internal dual-mic array
3.5mm audio output
Expandability

Grove port to connect sensors or other accessories

Easy to open - no clips, only screws to access internals

Exposed pads on PCB for modding

## Inside

### SoC ---

ESP32-S3 SoC with 16 MB of FLASH storage

8 MB octal PSRAM

### Audio Processing ---

XMOS XU316

Featuring:

Echo cancellation

Stationary noise removal

Auto gain control

Dedicated I2S lines for audio in and out

### Power / data ---

USB-C, 5 V DC, 2 A

### Radios ---

2.4 GHz Wi-Fi

Bluetooth 5.0

### Audio output ---

3.5 mm ( $\frac{1}{8}$ " ) stereo headphone jack

Digital to analog converter (DAC):

TI AIC3204

48 kHz sampling rate

### Software ---

ESPHome preloaded

Fully [open-source](#) firmware for both the ESP32 and XMOS chip

#### Environmental conditions for operation

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Indoor use only

0 °C to 30 °C | 32 °F to 86 °F

Humidity: non-condensing

Keep in dry, not excessively dusty environment as this can cause damage to the unit

# GOT SOME QUESTIONS?

Why is this called the Preview Edition?

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Can I run this voice assistant fully locally?

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Do I need Home Assistant Cloud?

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How does Home Assistant Cloud maintain my privacy with voice?

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Why is my language listed as “not supported” locally?

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Why is my language listed as “not supported” by Home Assistant Cloud?

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What can I do to get my language supported locally, or to improve support?

Support.

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Can I use a different speech-to-text model than OpenAI's Whisper?

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Which wake words can I select?

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Why did you pick these default wake words and not something like "computer" or "okay assist"?

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Can this replace my Google Mini, Apple HomePod, Amazon Echo, or other Big Tech devices?

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Can I play music on this device?

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Can I use AI models or LLMs as my voice assistant?

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Does the device come with a USB-C charger and cable?

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Which devices can I control, and what can I say to Voice Preview Edition?

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# Home Assistant

Home Assistant is a project from the [Open Home Foundation](#), sponsored by [Nabu Casa](#).

**JOIN US AND CONTRIBUTE!**

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[Developers Portal](#) 

[Design Portal](#) 

[Data Science Portal](#) 

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## SYSTEM STATUS

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## COMPANION APPS

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Originally based on the [Oscailte theme](#)



