



Home Assistant Voice

Preview Edition

Quick Product Description

Description

Home Assistant Voice Preview Edition is the open source, privacy-focused voice assistant built to seamlessly connect with Home Assistant, and preview the future of voice today. Its advanced audio processor and dual microphones allow it to hear your commands and control devices. Tactile controls, the injection-molded case and LED ring lend to its premium feel, allowing it to blend into the home.

Short description

The Home Assistant Voice Preview Edition, is the first voice assistant built to seamlessly integrate with Home Assistant. This open source, privacy-focused device has advanced audio processing all contained in a premium design that blends into the home.

One liner

The open source, privacy-focused voice assistant, built to work with Home Assistant.

Key messages

Note: Voice Preview Edition requires Home Assistant to operate. Weaker Home Assistant hardware

can lead to slow speech processing. If you have lower-power Home Assistant hardware, you should offload speech processing to [Home Assistant Cloud](#).

- **Built for Home Assistant:** The first voice hardware designed by the team driving the development of Home Assistant, and built from the ground up to work with Home Assistant.
- **Preview the future of voice today:** Home Assistant is rapidly advancing their open source, privacy-focused voice assistant for the home. Preview Edition was built to help more people participate in development and allow anyone to preview the future of voice today.
- **The easiest way to start with Assist:** Just connect it to USB-C power (cable and power supply not included) and it will connect with Home Assistant via an intuitive installation wizard. No assembly required.
- **The private voice assistant:** Pairing Voice Preview Edition with powerful Home Assistant hardware can allow it to run fully locally, or offload its audio processing to the privacy-focused [Home Assistant Cloud](#). It also includes a hardware mute switch that physically cuts power to the microphones.
- **Language support:** Assist aims to support more languages than other voice assistants, but this is still a work in progress, and Home Assistant needs your help. Check the [supported languages](#) in the Home Assistant's Assist documentation.
- **Advanced Audio Processing:** Dual microphones and the XMOS audio processor cuts through noise to hear your voice clearly.
- **Visual and audio feedback:** The multicolored LED ring displays when it's listening, volume levels, and more. Get sensor readings, timers and other feedback via its speaker. Connect an external speaker for media playback via its 3.5mm headphone jack.
- **Physical controls:** The rotary dial lets you control volume and LED brightness, while the multifunction button can trigger Assist or be customized in Home Assistant.
- **Blends into the home:** Its small, unobtrusive design is injection-molded giving it a premium look, and its tactile controls give it a premium feel.
- **Expandable:** Built on ESPHome, sensors can be added via the included Grove port.
- **Fully open and community-driven:** Completely open software, firmware, and hardware lets you make it work the way you want. All backed by a dedicated community customizing and adding functionality.

Specifications

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
Power/data	USB-C, 5 V DC, 2 A
Radios	2.4 GHz Wi-Fi Bluetooth 5.0 Low Energy
Audio output	3.5 mm (1/8") stereo headphone jack Digital to analog converter (DAC): TI AIC3202 48 kHz sampling rate
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 Hardware mute switch Dedicated I2S lines for audio in and out
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
Software	ESPHome preloaded Fully open-source firmware for both the ESP32 and XMOS chip
Requirements	Home Assistant already configured on another device. For fully local speech processing, it is recommended to have a Home Assistant system based on an Intel N100 or higher. Weaker hardware will require a Home Assistant Cloud subscription for optimal speech processing performance.

Language support	Check Home Assistant Assist documentation for an up-to-date list .
Environmental conditions for operation	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
Dimensions & weight	84x84x21 mm, 96 g with box: 94x94x30 mm, 120g
Material	Enclosure: Injection-molded Polycarbonate plastic Colors: White and Semi-transparent