snips seeed studio
The IoT Hardware Enabler

Voice Interaction Development Kits

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Meet your new

Voice Interaction Development Kit

With this kit from Snips and Seeed empowers you will build your own personal, private by design voice assistant with natural language processing and automatic speech recognition powered by the Snips Voice Platform.

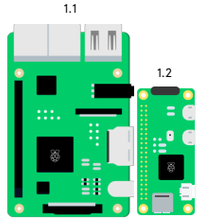
You'll learn how to assemble your sleek open-hardware pegboard with a Seeed ReSpeaker 2-Mics Pi HAT and a Raspberry Pi, and connect the hardware to the Snips voice assistant. The kit also includes two (2) Grove modules– the Temperature & Humidity Sensor and the Relay – which help you gather environmental data and control the kit's ON / OFF states via voice commands.

Assembly time

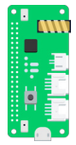
less than 10 minutes

This guide illustrates the basic steps to build your out-of-the-box kit. For more in-depth technical documentation, please visit **https://docs.snips.ai/the-maker-kit**.

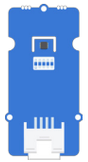
What's in the kit



1 Raspberry Pi3 B+ (1.1) or Raspberry Pi Zero W (1.2)

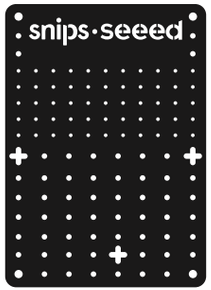


2 ReSpeaker 2-Mics Pi HAT



3 Grove – Temperature & Humidity Sensor (SHT31)

4 Grove Relay



11 Acrylic Mounting Board

5 Acrylic Table Stand

6 Screwdriver

7 MicroSD Card 16 GB

8 Speaker 6Ohm 2W

9 Power Adapter with Micro USB

10 x2 Grove Cables

12 Acrylic Protective Cover

13 Blue Rope

14 x4 M3, steel nuts

15 x3 6 mm, spacer

16 x4 6 mm, spacer

17 x5 12 mm,spacer

18 x3 25 mm, spacer

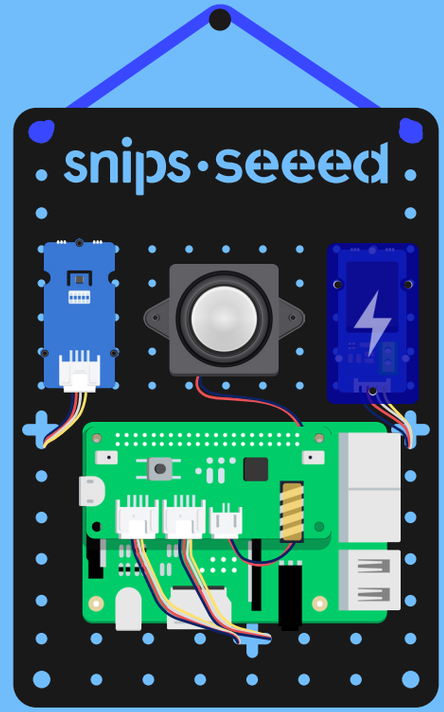
19 x22 5 mm, M2 phillips screw

20 x3 6 mm, spacer

21 x8 5 mm, M2.5 phillips screw

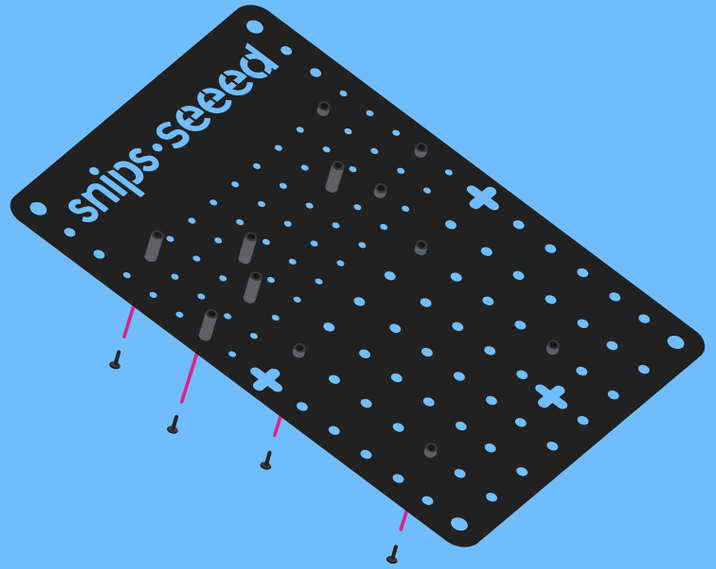
* If you purchased a Voice Interaction Satellite Kit, the only difference in assembly is the Raspberry Pi – the Base Kit's Raspberry Pi 3 B+ will be replaced by a Raspberry Pi Zero W.

How to build it



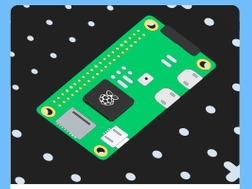
Step 1

Place all standoffs on the front of the mounting board and fix them with screws from behind.

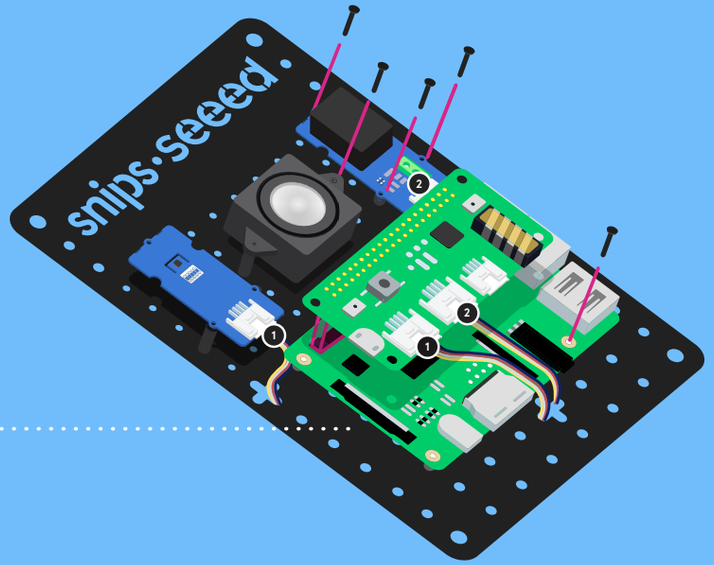


Step 2

Place all hardware components on the standoffs and screw in place.

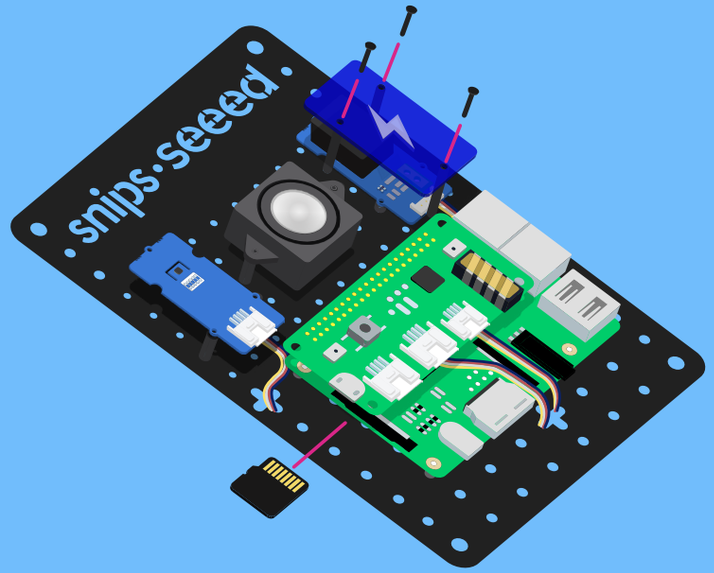


For the Satellite Kit,
make sure to fix a Raspberry Pi Zero W to the mounting board instead of Raspberry Pi 3 B+



Step 3

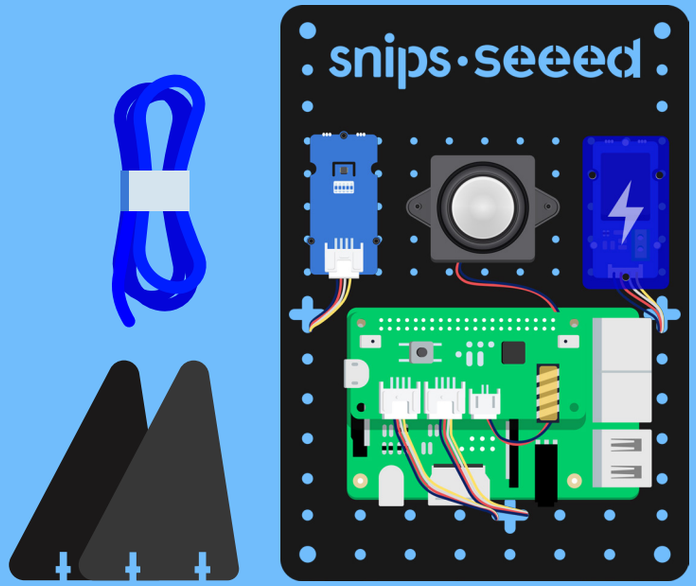
Mount the blue acrylic cover on top of the Grove Relay module and secure with 3 screws. Insert SD card into Raspberry Pi.



NOTE: take care to monitor the Grove Relay when the kit is powered on, since the working voltage will be high.

Step 4

The kit can be placed in two ways. You can either keep your kit on a horizontal surface as a stand using the two included table stands, or you can hang your kit on the wall using the included blue rope.



Congratulations, you've just assembled your

Voice Interaction Development Kit

Now you're ready to connect your kit to the Snips Voice Platform.

1. Power the kit with the default power adapter included, or use a 5.0V-3.0A DC adapter with a Micro USB connector.

2. Install the Snips assistant on the Raspberry Pi. To save you setup time, the MicroSD card included in your kit has been flashed with the full functional system image, which means the Snips assistant is ready for your trigger words (in English). We suggest you review the step-by-step installation guide by visiting https://docs.snips.ai/getting-started/quick-start-raspberry-pi to learn the sam tool in command line.

3.Trigger the assistant by first saying "Hey Snips", followed by these commands:

Command	Action
What's the temperature?	Responds with the current temperature
What's the humidity?	Responds with the current humidity
Turn the relay on.	The relay closes and the red LED turns on
Turn the relay off.	The relay opens and the red LED turns off

What's Next?

You've just set up your very own private-by-design smart speaker! Now that you've experienced what's possible with the Voice Interaction Kit, we'd love to see what you do with it. Get up and running with more tools to help build your own smart speaker projects:

https://docs.snips.ai/the-maker-kit

Don't forget to share your creations with the maker community at

#MakeWithSnips