Basic Setup

Hardware basics:

1. Connect the ReSpeaker 6-microphone array to the ReSpeaker HAT via the ribbon cable as above.	2. Attach the HAT and the array to the Pi via the 40-pin header on your raspberry Pi.

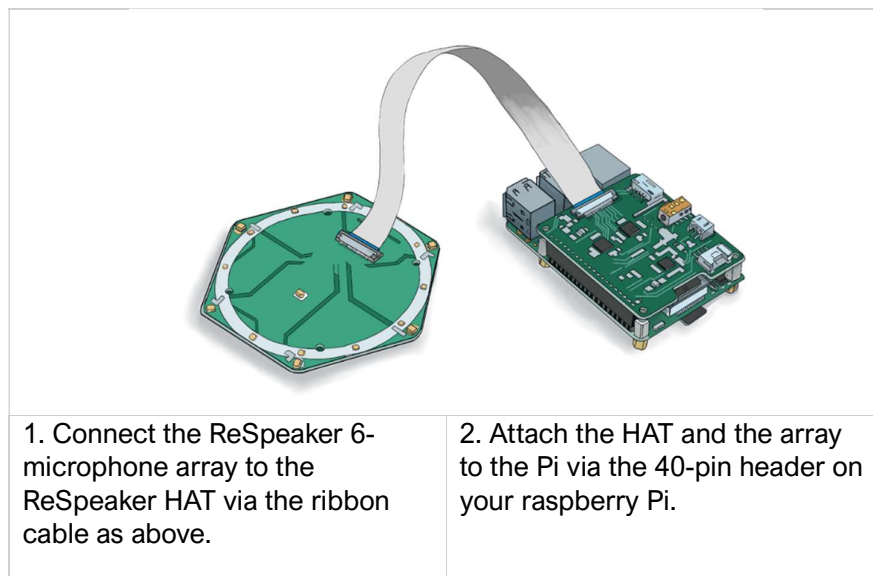**Setting up the operating system:**

There are two options for setting up the operating system. 1) you can download our prebuilt OS [here] on to a micro-SD card or 2) follow instructions to set it up yourself [here].

3. You'll need Wi-Fi or a network connection to get everything set up. If you're looking to autonomise your device by connecting it to mobile networks, you can set that up now:	
	For networked recorders…. a. Pay for a network subscription and activate your SIM card. SIM card activation usually involves making a phone call from your phone with the SIM inserted but can vary network-to-network. Make sure you can connect to the internet via the SIM on your phone first. b. Put the SIM in the USB dongle. c. Plug the USB dongle into the Raspberry Pi
	For offline recorders… You'll want to use WiFi or ethernet to get the Raspberry Pi

Once you've got a functional Operating system on a micro-SD:

4. Insert the micro-SD to the Raspberry PI	5. Plug the Raspberry Pi into a screen and power on. Check that startup works as expected	6. Power down**. Unplug the screen (and keyboard and mouse if using) and you're good to go!!

> **TIP**: Be careful not to suddenly unplug the raspberry Pi at any point. It'll mess with the system. Instead, if you want to turn off the Pi:
>
> - Press the button in the center of the array and wait for it to power down.
> - Type "sudo halt" into the command line.
> - Switch off the power source (wall plug or solar charge controller).

If you want to power MAARU autonomously... check the autonomous powering document.

If you don't want to power MAARU autonomously... you should plug your pre-charged battery into a solar charge controller. Or if you are chosing to use a power bank with inbuilt charge moderation, you can plug right into the Pi