
USER MANUAL

Voice Assistant

FINISHED WORKING ON THIS
DOCUMENT ON THE 10/05/19.

Author

ALEX RANGLES
15302766

Supervisor

CATHAL GURRIN

TABLE OF CONTENTS

1

ABSTRACT

2

USING DEVICE

3

SEARCHING WIKIPEDIA

4

EMAIL

4

TRANSLATION LANGUAGE

5

SECURITY

5

PLAYING MUSIC

7

DEVICE CONNECTIVITY

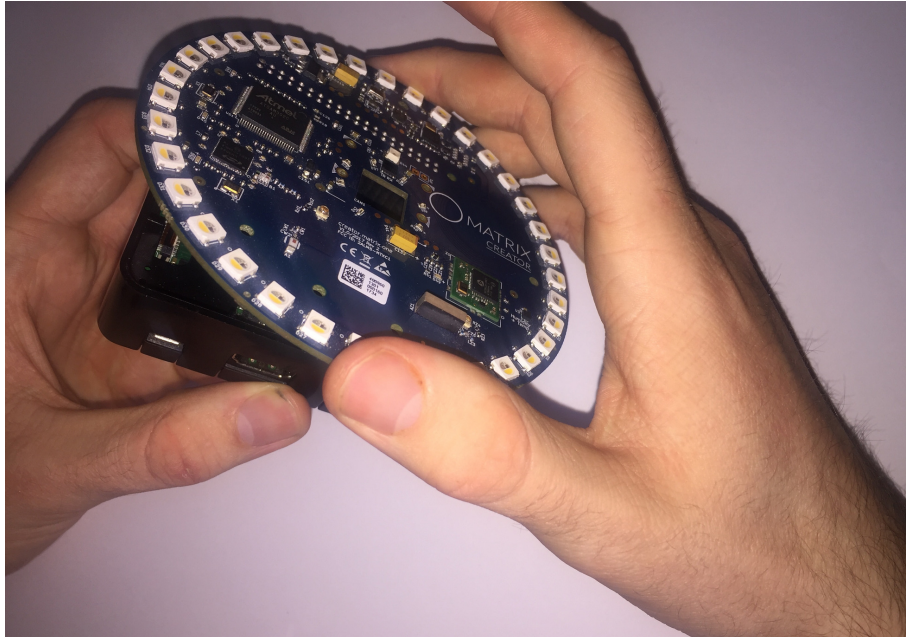
9

TROUBLESHOOTING

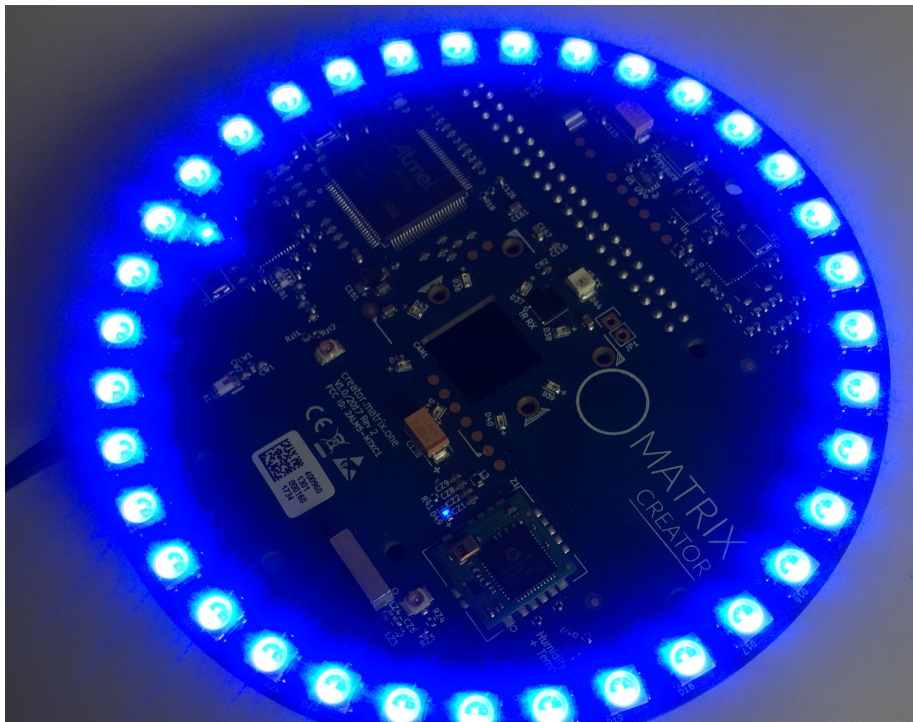
11

GLOSSARY OF TERMS

SETTING UP



• *Figure 1.1 Attaching matrix creator.*



• *Figure 1.2 Setup LED's.*

1. Attach the matrix creator to the Raspberry Pi as shown in figure 1.1.
2. Plug the device into a wall socket.
3. Turn the speaker on and connect it to the device with the USB port.
4. The device will connect to any non-password WIFI network automatically or you can connect it via an internet cable.
5. Wait until the blue LED's are shown as seen in figure 1.2.
6. The device is now ready for a request.

USING THE DEVICE

ACTIVATING A COMMAND

1. Ensure the device is correctly setup.
2. The hotword for the device is "Snow-boy".
3. The device has heard the hotword correctly if you hear a "Ding" sound.
4. After this, you can activate your chosen command.
5. If the device responds with "command not found" it's unable to understand you and should try again preferably at a closer position.

GENERAL COMMANDS

FINDING COMMANDS AVAILABLE

Say one of the following to find out which commands are available:

- *"Can you help me?"*
- *"Help me"*

If you wish to stop the device speaking, you can say the hotword.

TELLING THE TIME

This command will give you the current time. To activate this command say one of the following sentences:

- *"What time is it?"*
- *"Tell me the time"*
- *"Can you tell me the time?"*

GETTING THE NEWS

This command will give you the top ten news headlines for today. To activate this command say one of the following sentences:

- *"What is the news?"*
- *"What are the news headlines"*
- *"Is there any news?"*

To stop the news at anytime you can say the hotword.

GETTING THE WEATHER FORECAST

This command will allow you to get the weather forecast for today. To activate this command say one of the following:

- *"What is the weather forecast?"*
- *"What is the weather like for today?"*
- *"Can you tell me the weather?"*

GETTING SPORTS UPDATES

This command will allow you to get the sports headlines for today. To activate this command say one of the following sentences:

- *"What are the sports headlines?"*
- *"Do you have the sports updates?"*
- *"Are there sports updates?"*

SEARCHING FOR INFORMATION

SEARCHING WIKIPEDIA

This command will allow you to get brief summary about a topic. To activate this command say one of the following sentences:

- *"What is a [search term] ?"*
- *"What is the [search term] ?"*
- *"Who is [search term] ?"*

[search term] is the word you would like to find information on.

For example if you wanted to find information on the game of thrones, you would say the following sentence:

- *"What is the game of thrones?"*

For example if we wanted to find out who is George Bush, you would say the following sentence:

- *"Who is George Bush?"*

EMAIL

SENDING AN EMAIL

This command will allow you to send an email. To activate this command say one of the following sentences:

- *"Send an email to [name]"*
- *"Email [name]"*

[name] is the name of the email recipient. After this you will be asked for the subject and body content of the email you want to send.

READING EMAIL INBOX

This command will read the unread emails from your inbox. To activate this command say one of the following sentences:

- *"Read my email"*
- *"Read my email inbox"*

After this, your last unread email will be read out to you.

TRANSLATING LANGUAGE

TRANSLATING LANGUAGE

This command will allow you to translate a sentence into a different language. To activate it say the following sentence:

- *"Translate [sentence] to [language]"*

[sentence] is the sentence you want to translate.

[language] is the language you want to translate to.

For example if we wanted to translate the sentence *"how are you"* to Spanish, you would say the following:

- *"Translate how are you to Spanish"*

SECURITY

The device offers a security setting. If the security setting is on, the device hotword can only be activated by you.

TURNING SETTING ON

This command will turn the security settings off. To activate it, say one of the following sentences:

- *"Turn security on"*
- *"Change security to on"*
- *"Turn security settings on"*

TURN SECURITY OFF

This command will turn the security settings off. To activate it, say one of the following sentences:

- *"Turn security off"*
- *"Change security to off"*
- *"Turn security settings off"*

PLAYING MUSIC

The device offers a variety of options when you wish to play music. Each song you play will be saved by the device. This will allow you to create your own playlist over time. This is done automatically by the device each time you play a song.

PLAYING A SONG

This command will allow you to play a song of your choice. To activate this command say one of the following sentences:

- *"Play [song name]"*

[song name] is the name of the song you want to play.

PAUSING THE SONG

This command will pause the currently playing song. To activate this command say one of the following sentences:

- *"Pause the song"*
- *"Can you pause the song?"*
- *"Pause this song"*

After this the song will be paused.

RESUME PLAYING THE SONG

This command will allow you to continue playing the song you have paused. To activate this command say one of the following sentences:

- *"Play the song"*
- *"Play the current song"*
- *"Play the song where I left off"*

This will resume playing the song where you previously paused.

STOP PLAYING THE SONG

This command will completely stop playing the song meaning you will be unable to resume the song. To activate this command say one of the following sentences:

- *"Stop playing the song"*
- *"Stop the song"*
- *"Can you stop the song?"*

After this command has been activated you will be unable to resume the song in the previous place you left off after this command.

SHUFFLING MY PLAYLIST

This will choose a random song from your previous search history and start playing it. If you want to stop playing the song, follow the steps previously described in the "Stop playing the song" section. To activate this command say one of the following sentences:

- *"Shuffle my playlist"*
- *"Shuffle playlist"*
- *"Can you shuffle my playlist?"*

DEVICE CONNECTIVITY

The device offers Infrared connectivity which is used in remote controls such as those for a television. It also offers Zigbee connectivity which is used in Zigbee enabled smart devices such as smart home plugs or lights.

USING ZIGBEE SMART DEVICE

PAIRING A DEVICE

To pair a new Zigbee device say one of the following sentences:

- *"Pair a device"*
- *"Pair a smart home device"*
- *"Pair this device"*

Once the device has started pairing it will inform you that you have 60 seconds to reset your Zigbee enabled device. Instructions on how to reset your device should be found in the user manual for the device.

If pair has been successful, the device will say "Pairing successful". If the device is unable to pair your device try one of the troubleshooting steps and repeat the above steps.

TURNING ON A DEVICE

To turn on the previously paired device, say one of the following sentences:

- *"Turn on [device]"*
- *"Can you turn on the [device]?"*

[device] is the name of the device you have registered.

TURNING OFF A DEVICE

To turn off the previously paired device, say one of the following sentences:

- *"Turn off [device]"*
- *"Can you turn off the [device]?"*

[device] is the name of the device you have registered.

USING INFRARED REMOTE CONTROL

RECORDING REMOTE CONTROL COMMAND

To record a remote control command, say one of the following:

- *"Record button press"*
- *"Record remote control"*
- *"Record remote"*

After this, the system will prompt you for a command name which describes the remote control action such as "volume up" or "volume down". Following this the system will prompt you to press the button on the remote control. If the command was registered successfully the system will say "Command registered successfully". If it was unable to record the command, please try again at a closer proximity or check the batteries in the remote control.

Ensure you use a command name which you will easily remember.

USING THE REMOTE CONTROL COMMAND

After successfully recording a command, you can activate by saying one of the following sentences:

- *"Change [command name]"*
- *"Turn off [command name]"*
- *"Turn on [command name]"*

[command name] is the name of the command you have previously registered.

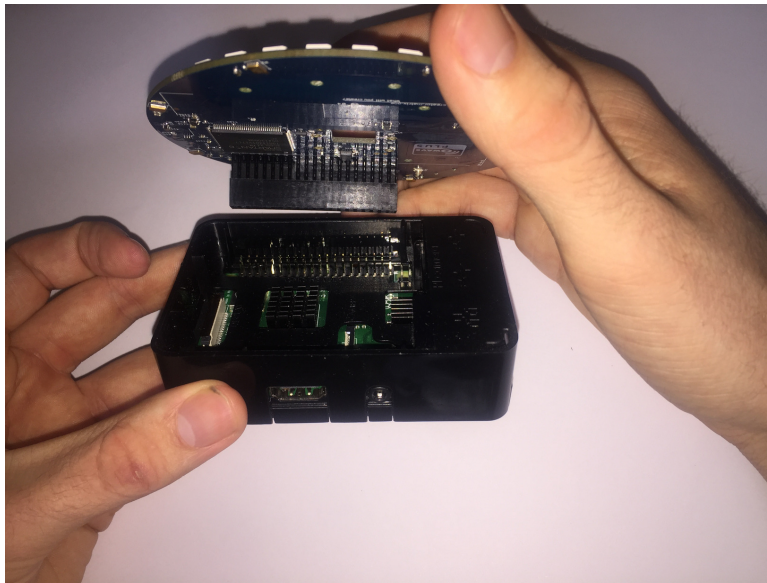
TROUBLESHOOTING

If you notice any unusual activity with your device, try one of the following to assist you resolving this problem.

DEVICE NOT RECORDING YOU

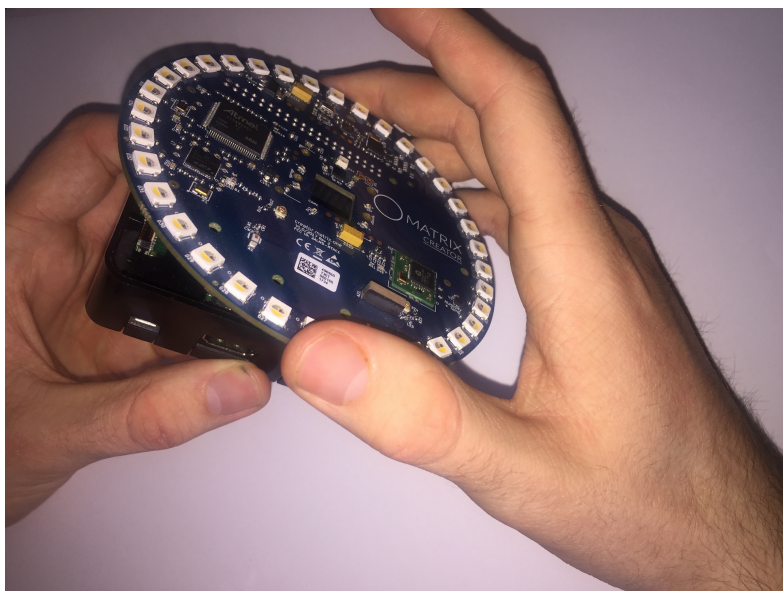
If the device is no longer responding to you, firstly try restarting the device. If that fails to resolve the issue, it could be a connect issue, follow the instructions below on how to resolve this.

Remove the matrix creator from the Raspberry Pi as shown in figure 2.1.



- *Figure 2.1 Removing matrix creator*

Place the matrix creator back onto the Raspberry Pi as shown in figure 2.2.

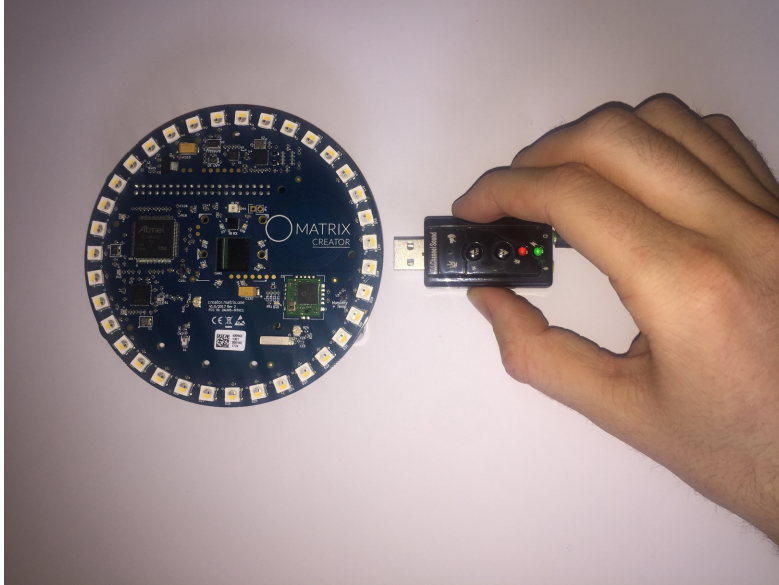


- *Figure 2.2 Putting on matrix creator.*

DEVICE NOT PLAYING SOUND

If you notice the device is not playing any audio, this could be a problem with the speaker. The instructions below should help you resolve this.

Disconnect the speaker from the device as shown in figure 2.3.



• *Figure 2.3 Removing speaker connection.*

Press the power off button on the speaker and reconnect it to the device as shown in figure 2.4.



• *Figure 2.4 Powering on speaker.*

GLOSSARY OF TERMS

HOTWORD

It is also referred to as a wakeword. Hotword listens for specific key words chosen to activate the device. The hotword for this device is "Snow-boy".

MATRIX CREATOR

The matrix creator is the circular device on top of your Raspberry Pi. It is removable from the device for transportation. This is the part of the device that includes the microphones.

RASPBERRY PI

This is the small computer attached to the matrix creator. It is within the black box of the device.

INFRARED

This is a wireless communication that allows you to control a device with a remote control. The most common example would be a television remote control.

ZIGBEE

This is a wireless communication that allows you to control Zigbee enabled smart devices.