

# JOY-IT



## Talking-Pi

Installing the Sound-Modules

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## 1. Introduction

Dear customer,

thank you for choosing our Talking-Pi product.

If you have decided to integrate the Talking-Pi content into an already installed Raspbian system, you may experience problems with sound output and speech input.

In this guide, we will show you how to configure your system and how to make the necessary settings. If, however, problems should occur while working with your Talking-Pi, please feel free to contact us.

Current instructions, projects and a community forum can also be found here:

[Talking-Pi Website](#)

## 2. Installing the necessary drivers

If you have transferred the system of the Google AIY project to your already installed Raspbian system, you will find that both the audio output and the voice input are not yet working.

To install the necessary drivers, simply open a new terminal window and enter the following commands.

Please note that an active internet connection is required.

```
git clone https://github.com/google/aiyprojects-raspbian.git AIY-projects-  
python  
cd AIY-projects-python  
scripts/install-deps.sh  
sudo scripts/install-services.sh  
sudo scripts/configure-driver.sh  
sudo reboot
```

After the restart is complete, enter the following commands:

```
cd AIY-projects-python  
sudo scripts/install-alsa-config.sh
```

Before restarting your system, you need to modify the **check\_audio.py**-File and execute it:

```
sudo nano checkpoints/check_audio.py
```

Append the following line to the start of the file, right before the import of the **aiy.audio** is done:

```
sys.path.append(os.path.realpath(os.path.join(__file__, '..', '..')) + '/src/')
```

The beginning of the file should look like the following:

```
import fileinput
import os
import re
import sys
import tempfile
import textwrap
import traceback
sys.path.append(os.path.realpath(os.path.join(__file__, '..', '..')) + '/src/')
import aiy.audio # noqa
from aiy_drivers._hat import get_aiy_device_name
```

Save the file with the combination **CTRL+O** and close the file with the combination **CTRL+X**.

Now execute the file:

```
sudo python3 checkpoints/check_audio.py
```

Warning! Currently there is a misconfiguration within the source-files provided by google.

Even when the execution of the file is showing an error, the execution is still successfull.

You can skip the error by pressing **Enter**.

### 3. Testing the modules

You can now test whether both the microphone and speaker are functioning.

Simply record a voice recording with the following command:

```
arecord sound.wav
```

The recording can be completed with the **CTRL+C** key combination and then played back with the following command:

```
aplay sound.wav
```

You should now be able to listen to your previously recorded voice file.

## 4. Support

We also support you after your purchase.

If there are any questions left, or if you encounter any problems, please feel free to contact us by mail, phone or by our ticket-supportsystem on our website.

E-Mail: [service@joy-it.net](mailto:service@joy-it.net)  
Ticket-System: <http://support.joy-it.net>  
Phone: +49 (0)2845 98469 – 66 (11- 18 Uhr)

Please visit our website for more informations:

[www.joy-it.net](http://www.joy-it.net)