

How to use the hot button

General

The hot button has 3 different types of button press

- Short button press – will play the next song in the current folder
- Long button press – will play the song stored in folder no.99 (Default happy birthday)
- Double click – change the current folder (Folder 1 → 10 → 1)

While the power is connected, the button will store the last song you played for each folder. Upon return to this folder, the next song will be played. At the end of the song list the playback will resume at song no. 1. When the power is lost all songs will be played starting from no. 1.

When cycling through the folders, the button will respond with a short green flash. Only when flipping back from folder 10 to folder 1 the button will flash red.

How it works

The hot button includes an Attiny85 µController and a Module called DFPlayer. The DFPlayer module is a special chip than can play MP3 or Wave Files from an SD Card and also includes an amplifier to power the speaker. To make everything a little bit fancier, RGB light effects were included to amplify the disco feeling.

The DFPlayer module is controlled through the Attiny, which also monitors the button and controls the NeoPixel LED animations. The interface between the Attiny and the DFPlayer is a regular UART interface at 9600 Baud. All the Attiny must do is to tell the DFPlayer which song number from which folder it should play. A busy line indicates the Attiny when the playback of the selected song is finished.

What you get

The hot button with preloaded songs:

1. Folder – Everything is awesome from the Lego movie in 17 different languages.
2. Folder – Well known tunes from television shows.
3. Folder – Christmas songs.

Folder 4-10 containing no songs yet. Only a file that gives you the current folders number.

99. Folder – The happy birthday tune.

How to modify

The hot button supports 10 different folders where for each folder a maximum of 255 songs can be stored. The folder number 99 is an expectation. This folder can contain only a single file which will be played on a long button press.

You can store new songs onto the SD card in MP3 or Wave format. To remove the SD card, unscrew the housing. Carefully lift the top part of the housing (short wires inside). Lift up the DFPlayer module and give the SD card a gently push. This will eject the SD card from the DFPlayer.

Songs names must start with a unique number from 001 until 255 for each folder. After this you can write the song name, but don't use special characters.

