

## Streaming using BUTT

When we stream audio, we convert the studio audio and send it along to our streaming service provider where it is then broadcast out to our audience.

There are a number of options to consider when we stream.

- Streaming format (MP3/ACC/OPUS/OGG)
- Streaming bit rate (48k/128k/192k)

The lower the bit data rate, the lower the quality of audio received. Different codec's convert the audio to a digital standard, and some are better than others. MP3 is the standard but not great at a low bit rate. ACC+ is much better at lower bit rates. Some codec's such as OPUS and OGG are great at converting audio to digital but there are very few online audio players that will convert the audio.

In the following examples, we shall assume that our stream will be at the standard of MP3 stereo at 128k.

### BUTT – Broadcast Using This Tool

BUTT (broadcast using this tool) is an easy to use, multi OS streaming tool. Free to download and use, it was developed by Daniel Nothen.

It supports SHOUTcast and Icecast and runs on Linux, Mac OS X and Windows.

The main purpose of butt is to stream live audio data from your computers Mic or Line input to a Shoutcast or Icecast server. Recording is also possible.

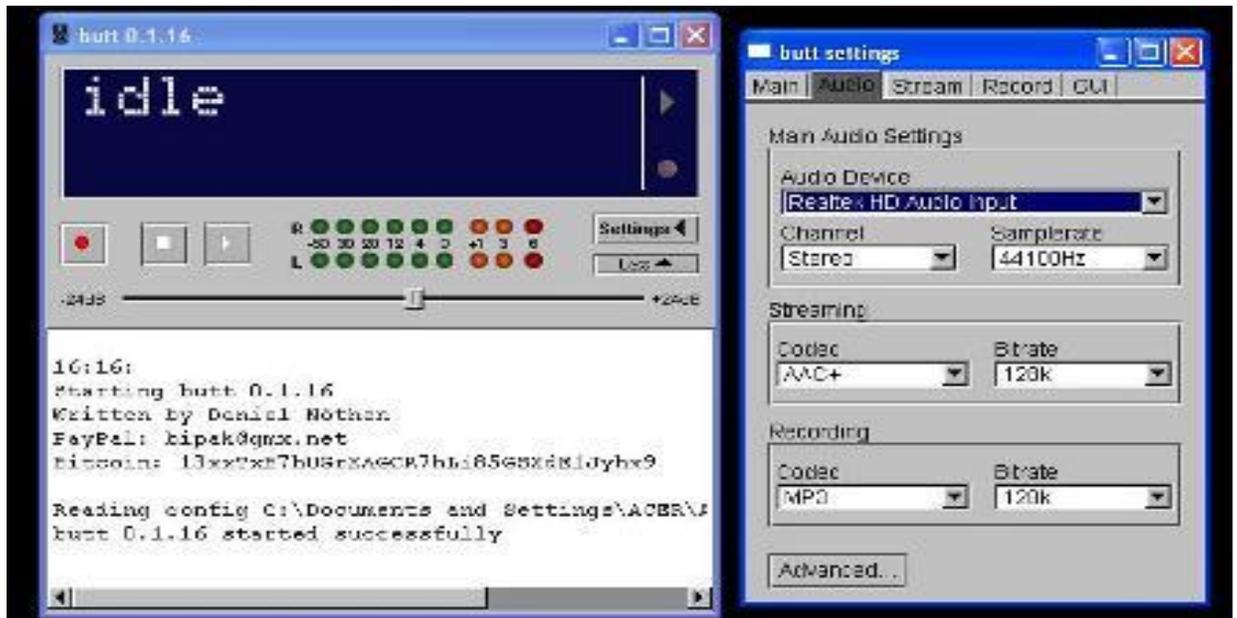
It is NOT intended to be a server by itself (like Shoutcast) or automatically stream a set of audio files, but used as a tool to stream to an Icecast or Shoutcast server.

1. Download BUTT via Daniel's site: <https://danielnoethen.de/> You will be redirected to Sourceforge.
2. Run install and open BUTT



3. Click on Settings and enter server name/stream info – ip address, port, password (click ADD to start a new stream)

- Click on Audio settings and configure device and streaming codec preferences.



- You should now be able to click the start button and connect to your streaming server



- You can adjust the audio input as required.

BUTT is very simple tool just stream audio and could be used for remotes to feed quality audio, but beware that as with all streams there will be a delay and unlike voIP SKYPE, this is only one way audio so cannot be used for sports commentaries.