|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| title | artist | composer | copyright | genre | source | file/audio format | number of channels | sample rate | bit per  second | duration |
| Siesta | Jahzza | Jahzza | Kazoomzoom | Pop, Indie-Rock | Free Music Archive | Mp3 | 2 | 44100Hz | 192000 | 00:47:52 |
| Space Love Attack | UltraCat | UltraCat | Cheshire Records | Electronic, House | Free Music Archive | Mp3 | 2 | 44100Hz | 306949 | 00:14:47 |
| Brooklyn | The Inventors | The Inventors | Attribution-Noncommercial-Share Alike 3.0 United States License. | Indie-Rock | Free Music Archive | Mp3 | 2 | 44100Hz | 263308 | 00:47:36 |

One advantage of a time-frequency analysis over a waveform based analysis is that it captures audio signals by time and by frequency compared to waveforms which depicts amplitude over time. A spectrogram is a form of time-frequency analysis and from it we can see that in the UltraCat track that there tends to be more use of the lower frequency as the colour is stronger on the bottom of the y-axis all along the x-axis. The waveform doesn’t show the frequency but it is clear to see that between the two the same kinds of patterns are apparent.