

[Documentation](#)

search

Search

- [rocket launch](#)

[Get started](#)

- [Installation](#)
add
- [Fundamentals](#)
add
- [First steps](#)
add
- [code](#)

[Develop](#)

- [Concepts](#)
add
- [API reference](#)
remove
 - PAGE ELEMENTS

 - [Write and magic](#)
add
 - [Text elements](#)
add
 - [Data elements](#)
add
 - [Chart elements](#)
add
 - [Input widgets](#)
add
 - [Media elements](#)
remove
 - [st.audio](#)
 - [st.image](#)
 - [st.logo](#)
 - [st.video](#)
 - [Layouts and containers](#)
add
 - [Chat elements](#)
add
 - [Status elements](#)
add
 - [Third-party components](#)*open in new*
 - APPLICATION LOGIC

 - [Navigation and pages](#)
add
 - [Execution flow](#)
add
 - [Caching and state](#)

add

- [Connections and secrets](#)

add

- [Custom components](#)

add

- [Utilities](#)

add

- [Configuration](#)

add

- TOOLS
-

- [App testing](#)

add

- [Command line](#)

add

- [Tutorials](#)

add

- [Quick reference](#)

add

- [web_asset](#)

[Deploy](#)

- [Concepts](#)

add

- [Streamlit Community Cloud](#)

add

- [Snowflake](#)

- [Other platforms](#)

add

- [school](#)

[Knowledge base](#)

- [FAQ](#)

- [Installing dependencies](#)

- [Deployment issues](#)

- [Home/](#)

- [Develop/](#)

- [API reference/](#)

- [Media elements/](#)

- [st.audio](#)

st.audio



Streamlit Version

Display an audio player.

Function signature[\[source\]](#)

```
st.audio(data, format="audio/wav", start_time=0, *, sample_rate=None, end_time=None, loop=False,
         autoplay=False)
```

Parameters

```
st.audio(data, format="audio/wav", start_time=0, *, sample_rate=None, end_time=None, loop=False,
         autoplay=False)
```

The audio to play. This can be one of the following:

- A URL (string) for a hosted audio file.
 - A path to a local audio file. The path can be a `str` or `Path` object. Paths can be absolute or relative to the working directory (where you execute `streamlit run`).
 - Raw audio data. Raw data formats must include all necessary file headers to match the file format specified via `format`.
- data (str, Path, bytes, BytesIO, numpy.ndarray, or file)

If data is a NumPy array, it must either be a 1D array of the waveform or a 2D array of shape (C, S) where C is the number of channels and S is the number of samples. See the default channel order at [http://msdn.microsoft.com/en-us/library/windows/hardware/dn653308\(v=vs.85\).aspx](http://msdn.microsoft.com/en-us/library/windows/hardware/dn653308(v=vs.85).aspx)

format (str) The MIME type for the audio file. This defaults to "audio/wav". For more information, see <https://tools.ietf.org/html/rfc4281>.

The time from which the element should start playing. This can be one of the following:

- None (default): The element plays from the beginning.
 - An int or float specifying the time in seconds. float values are rounded down to whole seconds.
 - A string specifying the time in a format supported by [Pandas' Timedelta constructor](#), e.g. "2 minute", "20s", or "1m14s".
 - A timedelta object from [Python's built-in datetime library](#), e.g. `timedelta(seconds=70)`.
- start_time (int, float, timedelta, str, or None)

sample_rate (int or None) The sample rate of the audio data in samples per second. This is only required if data is a NumPy array.

The time at which the element should stop playing. This can be one of the following:

- None (default): The element plays through to the end.
 - An int or float specifying the time in seconds. float values are rounded down to whole seconds.
 - A string specifying the time in a format supported by [Pandas' Timedelta constructor](#), e.g. "2 minute", "20s", or "1m14s".
 - A timedelta object from [Python's built-in datetime library](#), e.g. `timedelta(seconds=70)`.
- end_time (int, float, timedelta, str, or None)

loop (bool) Whether the audio should loop playback.

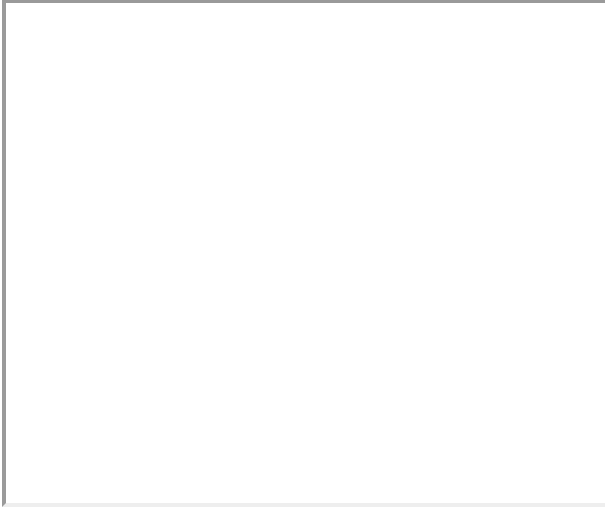
autoplay (bool) Whether the audio file should start playing automatically. This is `False` by default. Browsers will not autoplay audio files if the user has not interacted with the page by clicking somewhere.

Examples

To display an audio player for a local file, specify the file's string path and format.

```
import streamlit as st

st.audio("cat-purr.mp3", format="audio/mpeg", loop=True)
```



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You can also pass bytes or numpy.ndarray objects to st.audio.

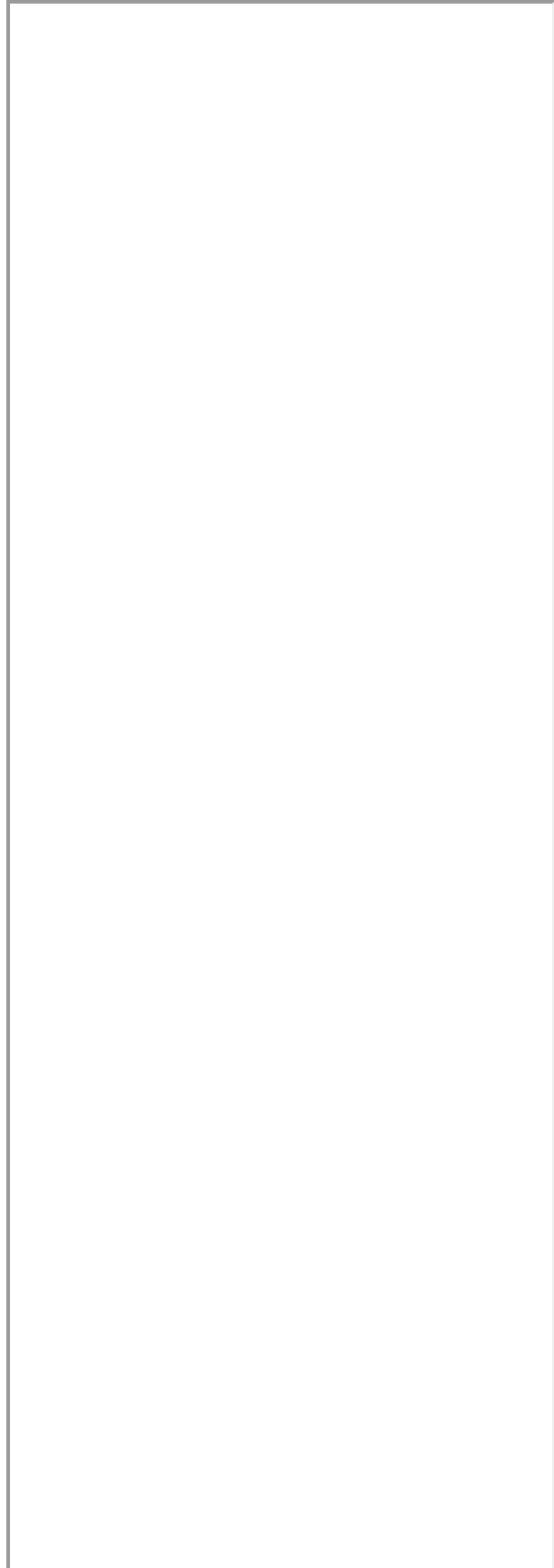
```
import streamlit as st
import numpy as np

audio_file = open("myaudio.ogg", "rb")
audio_bytes = audio_file.read()

st.audio(audio_bytes, format="audio/ogg")

sample_rate = 44100 # 44100 samples per second
seconds = 2 # Note duration of 2 seconds
frequency_la = 440 # Our played note will be 440 Hz
# Generate array with seconds*sample_rate steps, ranging between 0 and seconds
t = np.linspace(0, seconds, seconds * sample_rate, False)
# Generate a 440 Hz sine wave
note_la = np.sin(frequency_la * t * 2 * np.pi)

st.audio(note_la, sample_rate=sample_rate)
```



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← [Previous: Media elements](#) [Next: st.image](#) →
forum

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