

## 34.4. `winsound` — Sound-playing interface for Windows

The `winsound` module provides access to the basic sound-playing machinery provided by Windows platforms. It includes functions and several constants.

`winsound.Beep(frequency, duration)`

Beep the PC's speaker. The *frequency* parameter specifies frequency, in hertz, of the sound, and must be in the range 37 through 32,767. The *duration* parameter specifies the number of milliseconds the sound should last. If the system is not able to beep the speaker, `RuntimeError` is raised.

`winsound.PlaySound(sound, flags)`

Call the underlying `PlaySound()` function from the Platform API. The *sound* parameter may be a filename, a system sound alias, audio data as a `bytes-like object`, or `None`. Its interpretation depends on the value of *flags*, which can be a bitwise ORed combination of the constants described below. If the *sound* parameter is `None`, any currently playing waveform sound is stopped. If the system indicates an error, `RuntimeError` is raised.

`winsound.MessageBeep(type=MB_OK)`

Call the underlying `MessageBeep()` function from the Platform API. This plays a sound as specified in the registry. The *type* argument specifies which sound to play; possible values are `-1`, `MB_ICONASTERISK`, `MB_ICONEXCLAMATION`, `MB_ICONHAND`, `MB_ICONQUESTION`, and `MB_OK`, all described below. The value `-1` produces a “simple beep”; this is the final fallback if a sound cannot be played otherwise. If the system indicates an error, `RuntimeError` is raised.

`winsound.SND_FILENAME`

The *sound* parameter is the name of a WAV file. Do not use with `SND_ALIAS`.

`winsound.SND_ALIAS`

The *sound* parameter is a sound association name from the registry. If the registry contains no such name, play the system default sound unless `SND_NODEFAULT` is also specified. If no default sound is registered, raise `RuntimeError`. Do not use with `SND_FILENAME`.

All Win32 systems support at least the following; most systems support many more:

<code>PlaySound()</code> <i>name</i>	Corresponding Control Panel Sound name

<code>PlaySound()</code> <i>name</i>	Corresponding Control Panel Sound name
'SystemAsterisk'	Asterisk
'SystemExclamation'	Exclamation
'SystemExit'	Exit Windows
'SystemHand'	Critical Stop
'SystemQuestion'	Question

For example:

```
import winsound
# Play Windows exit sound.
winsound.PlaySound("SystemExit", winsound.SND_ALIAS)

# Probably play Windows default sound, if any is registered (because
# "*" probably isn't the registered name of any sound).
winsound.PlaySound("*", winsound.SND_ALIAS)
```

#### `winsound.SND_LOOP`

Play the sound repeatedly. The `SND_ASYNC` flag must also be used to avoid blocking. Cannot be used with `SND_MEMORY`.

#### `winsound.SND_MEMORY`

The *sound* parameter to `PlaySound()` is a memory image of a WAV file, as a bytes-like object.

**Note:** This module does not support playing from a memory image asynchronously, so a combination of this flag and `SND_ASYNC` will raise `RuntimeError`.

#### `winsound.SND_PURGE`

Stop playing all instances of the specified sound.

**Note:** This flag is not supported on modern Windows platforms.

#### `winsound.SND_ASYNC`

Return immediately, allowing sounds to play asynchronously.

#### `winsound.SND_NODEFAULT`

If the specified sound cannot be found, do not play the system default sound.

#### `winsound.SND_NOSTOP`

Do not interrupt sounds currently playing.

`winsound.SND_NOWAIT`

Return immediately if the sound driver is busy.

**Note:** This flag is not supported on modern Windows platforms.

`winsound.MB_ICONASTERISK`

Play the SystemDefault sound.

`winsound.MB_ICONEXCLAMATION`

Play the SystemExclamation sound.

`winsound.MB_ICONHAND`

Play the SystemHand sound.

`winsound.MB_ICONQUESTION`

Play the SystemQuestion sound.

`winsound.MB_OK`

Play the SystemDefault sound.