

[Skip to content](#)

# Sound(ID)

base classes — [bpy\\_struct](#), [ID](#)

## class bpy.types.Sound(ID)

Sound data-block referencing an external or packed sound file

### channels

Definition of audio channels

- `INVALID` Invalid – Invalid.
- `MONO` Mono – Mono.
- `STEREO` Stereo – Stereo.
- `STEREO_LFE` Stereo LFE – Stereo FX.
- `CHANNELS_4` 4 Channels – 4 Channels.
- `CHANNELS_5` 5 Channels – 5 Channels.
- `SURROUND_51` 5.1 Surround – 5.1 Surround.
- `SURROUND_61` 6.1 Surround – 6.1 Surround.
- `SURROUND_71` 7.1 Surround – 7.1 Surround.

#### TYPE:

enum in ['INVALID', 'MONO', 'STEREO', 'STEREO\_LFE', 'CHANNELS\_4', 'CHANNELS\_5', 'SURROUND\_51', 'SURROUND\_61', 'SURROUND\_71'], default 'INVALID', (readonly)

### filepath

Sound sample file used by this Sound data-block

#### TYPE:

string, default "", (never None)

### packed\_file

#### TYPE:

[PackedFile](#), (readonly)

### samplerate

Sample rate of the audio in Hz

#### TYPE:

int in [-inf, inf], default 0, (readonly)

### use\_memory\_cache

The sound file is decoded and loaded into RAM

#### TYPE:

boolean, default False

### use\_mono

If the file contains multiple audio channels they are rendered to a single one

#### TYPE:

boolean, default False

### factory

The `aud.Factory` object of the sound.

(readonly)

### pack()

Pack the sound into the current blend file

### unpack(\*, method='USE\_LOCAL')

Unpack the sound to the samples filename

#### PARAMETERS:

**method** (enum in [Unpack Method Items](#), (optional)) – method, How to unpack

### classmethod bl\_rna\_get\_subclass(id, default=None)

#### PARAMETERS:

**id** (*str*) – The RNA type identifier.

#### RETURNS:

The RNA type or default when not found.

#### RETURN TYPE:

`bpy.types.Struct` subclass

### classmethod bl\_rna\_get\_subclass\_py(id, default=None)

#### PARAMETERS:

**id** (*str*) – The RNA type identifier.

#### RETURNS:

The class or default when not found.

#### RETURN TYPE:

type

## Inherited Properties

- `bpy_struct.id_data`
- `ID.name`
- `ID.name_full`
- `ID.id_type`
- `ID.session_uid`
- `ID.is_evaluated`
- `ID.original`
- `ID.users`
- `ID.use_fake_user`
- `ID.use_extra_user`
- `ID.is_embedded_data`
- `ID.is_missing`
- `ID.is_runtime_data`
- `ID.is_editable`
- `ID.tag`
- `ID.is_library_indirect`
- `ID.library`
- `ID.library_weak_reference`
- `ID.asset_data`
- `ID.override_library`
- `ID.preview`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_create`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `ID.rename`
- `ID.evaluated_get`
- `ID.copy`
- `ID.reset_weak`

- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `ID.asset_mark`
- `ID.asset_clear`
- `ID.asset_generate_preview`
- `ID.override_create`
- `ID.override_hierarchy_create`
- `ID.user_clear`
- `ID.user_remap`
- `ID.make_local`
- `ID.user_of_id`
- `ID.animation_data_create`
- `ID.animation_data_clear`
- `ID.update_tag`
- `ID.preview_ensure`
- `ID.bl_rna_get_subclass`
- `ID.bl_rna_get_subclass_py`

## References

- `BlendData.sounds`
- `BlendDataSounds.load`
- `BlendDataSounds.remove`
- `SoundStrip.sound`
- `Speaker.sound`