

[Skip to content](#)

WaveModifier(Modifier)

base classes — [bpy_struct](#), [Modifier](#)

class bpy.types.WaveModifier(Modifier)

Wave effect modifier

damping_time

Number of frames in which the wave damps out after it dies

TYPE:

float in [-1.04857e+06, 1.04857e+06], default 10.0

falloff_radius

Distance after which it fades out

TYPE:

float in [0, inf], default 0.0

height

Height of the wave

TYPE:

float in [-inf, inf], default 0.5

invert_vertex_group

Invert vertex group influence

TYPE:

boolean, default False

lifetime

Lifetime of the wave in frames, zero means infinite

TYPE:

float in [-1.04857e+06, 1.04857e+06], default 0.0

narrowness

Distance between the top and the base of a wave, the higher the value, the more narrow the wave

TYPE:

float in [0, inf], default 1.5

speed

Speed of the wave, towards the starting point when negative

TYPE:

float in [-inf, inf], default 0.25

start_position_object

Object which defines the wave center

TYPE:

[Object](#)

start_position_x

X coordinate of the start position

TYPE:

float in [-inf, inf], default 0.0

start_position_y

Y coordinate of the start position

TYPE:

float in [-inf, inf], default 0.0

texture

TYPE:

Texture

texture_coords

- LOCAL Local – Use the local coordinate system for the texture coordinates.
- GLOBAL Global – Use the global coordinate system for the texture coordinates.
- OBJECT Object – Use the linked object's local coordinate system for the texture coordinates.
- UV UV – Use UV coordinates for the texture coordinates.

TYPE:

enum in ['LOCAL', 'GLOBAL', 'OBJECT', 'UV'], default 'LOCAL'

texture_coords_bone

Bone to set the texture coordinates

TYPE:

string, default "", (never None)

texture_coords_object

Object to set the texture coordinates

TYPE:

Object

time_offset

Either the starting frame (for positive speed) or ending frame (for negative speed)

TYPE:

float in [-1.04857e+06, 1.04857e+06], default 0.0

use_cyclic

Cyclic wave effect

TYPE:

boolean, default True

use_normal

Displace along normals

TYPE:

boolean, default False

use_normal_x

Enable displacement along the X normal

TYPE:

TYPE:

boolean, default True

use_normal_y

Enable displacement along the Y normal

TYPE:

boolean, default True

use_normal_z

Enable displacement along the Z normal

TYPE:

boolean, default True

use_x

X axis motion

TYPE:

boolean, default True

use_y

Y axis motion

TYPE:

boolean, default True

uv_layer

UV map name

TYPE:

string, default "", (never None)

vertex_group

Vertex group name for modulating the wave

TYPE:

string, default "", (never None)

width

Distance between the waves

TYPE:

float in [0, inf], default 1.5

classmethod bl_ma_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_ma_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`
- `Modifier.name`
- `Modifier.type`
- `Modifier.show_viewport`
- `Modifier.show_render`
- `Modifier.show_in_editmode`
- `Modifier.show_on_cage`
- `Modifier.show_expanded`
- `Modifier.is_active`
- `Modifier.use_pin_to_last`
- `Modifier.is_override_data`
- `Modifier.use_apply_on_spline`
- `Modifier.execution_time`
- `Modifier.persistent_uid`

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_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`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `Modifier.bl_rna_get_subclass`
- `Modifier.bl_rna_get_subclass_py`