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GreasePencilLineartModifier(Modifier)

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

class bpy.types.GreasePencilLineartModifier(Modifier)

Generate Line Art strokes from selected source

chaining_image_threshold

Segments with an image distance smaller than this will be chained together

TYPE:

float in [0, 0.3], default 0.001

crease_threshold

Angles smaller than this will be treated as creases. Crease angle priority: object Line Art crease override > mesh auto smooth angle > Line Art default crease.

TYPE:

float in [0, 3.14159], default 2.44346

invert_source_vertex_group

Invert source vertex group values

TYPE:

boolean, default False

is_baked

This modifier has baked data

TYPE:

boolean, default False

level_end

Maximum number of occlusions for the generated strokes

TYPE:

int in [0, 128], default 0

level_start

Minimum number of occlusions for the generated strokes

TYPE:

int in [0, 128], default 0

light_contour_object

Use this light object to generate light contour

TYPE:

[Object](#)

opacity

The strength value for the generate strokes

TYPE:

float in [0, 1], default 1.0

overscan

A margin to prevent strokes from ending abruptly at the edge of the image

TYPE:

float in [0, 0.5], default 0.1

shadow_camera_far

Far clipping distance of shadow camera

TYPE:

float in [0, 10000], default 200.0

shadow_camera_near

Near clipping distance of shadow camera

TYPE:

float in [0, 10000], default 0.1

shadow_camera_size

Represents the “Orthographic Scale” of an orthographic camera. If the camera is positioned at the light’s location with this scale, it will represent the coverage of the shadow “camera”.

TYPE:

float in [0, 10000], default 200.0

shadow_region_filtering

Select feature lines that comes from lit or shaded regions. Will not affect cast shadow and light contour since they are at the border.

- `NONE` None – Not filtering any lines based on illumination region.
- `ILLUMINATED` Illuminated – Only selecting lines from illuminated regions.
- `SHADED` Shaded – Only selecting lines from shaded regions.
- `ILLUMINATED_ENCLOSED` Illuminated (Enclosed Shapes) – Selecting lines from lit regions, and make the combination of contour, light contour and shadow lines into enclosed shapes.

TYPE:

enum in ['NONE', 'ILLUMINATED', 'SHADED', 'ILLUMINATED_ENCLOSED'], default 'NONE'

silhouette_filtering

Select contour or silhouette

TYPE:

enum in ['NONE', 'GROUP', 'INDIVIDUAL'], default 'NONE'

smooth_tolerance

Strength of smoothing applied on jagged chains

TYPE:

float in [0, 30], default 0.0

source_camera

Use specified camera object for generating Line Art strokes

TYPE:

Object

source_collection

Generate strokes from the objects in this collection

TYPE:

Collection

source_object

Generate strokes from this object

TYPE:

Object

source_type

Line Art stroke source type

TYPE:

enum in ['COLLECTION', 'OBJECT', 'SCENE'], default 'COLLECTION'

source_vertex_group

Match the beginning of vertex group names from mesh objects, match all when left empty

TYPE:

string, default "", (never None)

split_angle

Angle in screen space below which a stroke is split in two

TYPE:

float in [0, 3.14159], default 0.0

stroke_depth_offset

Move strokes slightly towards the camera to avoid clipping while preserve depth for the viewport

TYPE:

float in [-0.1, inf], default 0.05

target_layer

Grease Pencil layer to which assign the generated strokes

TYPE:

string, default "", (never None)

target_material

Grease Pencil material assigned to the generated strokes

TYPE:

Material

thickness

The thickness for the generated strokes

TYPE:

int in [1, 200], default 25

use_back_face_culling

Remove all back faces to speed up calculation, this will create edges in different occlusion levels than when disabled

TYPE:

boolean, default False

use_cache

Use cached scene data from the first Line Art modifier in the stack. Certain settings will be unavailable.

TYPE:

boolean, default False

use_clip_plane_boundaries

Allow lines generated by the near/far clipping plane to be shown

TYPE:

boolean, default True

use_contour

Generate strokes from contours lines

TYPE:

boolean, default False

use_crease

Generate strokes from creased edges

TYPE:

boolean, default False

use_crease_on_sharp

Allow crease to show on sharp edges

TYPE:

boolean, default True

use_crease_on_smooth

Allow crease edges to show inside smooth surfaces

TYPE:

boolean, default False

use_custom_camera

Use custom camera instead of the active camera

TYPE:

boolean, default False

use_detail_preserve

Keep the zig-zag “noise” in initial chaining

TYPE:

boolean, default False

use_edge_mark

Generate strokes from Freestyle marked edges

TYPE:

boolean, default False

use_edge_overlap

Allow edges in the same location (i.e. from edge split) to show properly. May run slower.

TYPE:

boolean, default False

use_face_mark

Filter feature lines using Freestyle face marks

TYPE:

boolean, default False

use_face_mark_boundaries

Filter feature lines based on face mark boundaries

TYPE:

boolean, default False

use_face_mark_invert

Invert face mark filtering

TYPE:

boolean, default False

use_face_mark_keep_contour

Preserve contour lines while filtering

TYPE:

boolean, default True

use_fuzzy_all

Treat all lines as the same line type so they can be chained together

TYPE:

boolean, default False

use_fuzzy_intersections

Treat intersection and contour lines as if they were the same type so they can be chained together

TYPE:

boolean, default False

use_geometry_space_chain

Use geometry distance for chaining instead of image space

TYPE:

boolean, default False

use_image_boundary_trimming

Trim all edges right at the boundary of image (including overscan region)

TYPE:

boolean, default False

use_intersection

Generate strokes from intersections

TYPE:

boolean, default False

use_intersection_mask

Mask bits to match from Collection Line Art settings

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TYPE:

boolean array of 8 items, default (False, False, False, False, False, False, False, False)

use_intersection_match

Require matching all intersection masks instead of just one

TYPE:

boolean, default False

use_invert_collection

Select everything except lines from specified collection

TYPE:

boolean, default False

use_invert_silhouette

Select anti-silhouette lines

TYPE:

boolean, default False

use_light_contour

Generate light/shadow separation lines from a reference light object

TYPE:

boolean, default False

use_loose

Generate strokes from loose edges

TYPE:

boolean, default False

use_loose_as_contour

Loose edges will have contour type

TYPE:

boolean, default False

use_loose_edge_chain

Allow loose edges to be chained together

TYPE:

boolean, default False

use_material

Generate strokes from borders between materials

TYPE:

boolean, default False

use_material_mask

Use material masks to filter out occluded strokes

TYPE:

boolean, default False

use_material_mask_bits

Mask bits to match from Material Line Art settings

TYPE:

boolean array of 8 items, default (False, False, False, False, False, False, False, False)

use_material_mask_match

Require matching all material masks instead of just one

TYPE:

boolean, default False

use_multiple_levels

Generate strokes from a range of occlusion levels

TYPE:

boolean, default False

use_object_instances

Allow particle objects and face/vertex instances to show in Line Art

TYPE:

boolean, default True

use_offset_towards_custom_camera

Offset strokes towards selected camera instead of the active camera

TYPE:

boolean, default False

use_output_vertex_group_match_by_name

Match output vertex group based on name

TYPE:

boolean, default True

use_overlap_edge_type_support

Allow an edge to have multiple overlapping types. This will create a separate stroke for each overlapping type.

TYPE:

boolean, default False

use_shadow

Project contour lines using a light source object

TYPE:

boolean, default False

vertex_group

Vertex group name for selected strokes

TYPE:

string, default “”, (never None)

classmethod bl_ma_get_subclass(id, default=None)

PARAMETERS:

id (*str*) – The RNA type identifier.

RETURNS:

— RNA type class or None

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`
- `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`