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View3DOverlay(bpy_struct)

base class — [bpy_struct](#)

class bpy.types.View3DOverlay(bpy_struct)

Settings for display of overlays in the 3D viewport

bone_wire_alpha

Maximum opacity of bones in wireframe display mode

TYPE:

float in [0, inf], default 1.0

display_handle

Limit the display of curve handles in edit mode

TYPE:

enum in ['NONE', 'SELECTED', 'ALL'], default 'SELECTED'

fade_inactive_alpha

Strength of the fade effect

TYPE:

float in [0, 1], default 0.4

gpencil_fade_layer

Fade layer opacity for Grease Pencil layers except the active one

TYPE:

float in [0, 1], default 0.5

gpencil_fade_objects

Fade factor

TYPE:

float in [0, 1], default 0.5

gpencil_grid_color

Canvas grid color

TYPE:

[mathutils.Color](#) of 3 items in [0, 1], default (0.5, 0.5, 0.5)

gpencil_grid_offset

Canvas grid offset

TYPE:

float array of 2 items in [-inf, inf], default (0.0, 0.0)

gpencil_grid_opacity

Canvas grid opacity

TYPE:

float in [0.1, 1], default 0.9

gpencil_grid_scale

Canvas grid scale

TYPE:

`mathutils.Vector` of 2 items in [0, inf], default (1.0, 1.0)

gpencil_grid_subdivisions

Canvas grid subdivisions

TYPE:

int in [1, 100], default 4

gpencil_vertex_paint_opacity

Vertex Paint mix factor

TYPE:

float in [0, 1], default 1.0

grid_lines

Number of grid lines to display in perspective view

TYPE:

int in [0, 1024], default 16

grid_scale

Multiplier for the distance between 3D View grid lines

TYPE:

float in [0, inf], default 1.0

grid_scale_unit

Grid cell size scaled by scene unit system settings

TYPE:

float in [-inf, inf], default 0.0, (readonly)

grid_subdivisions

Number of subdivisions between grid lines

TYPE:

int in [1, 1024], default 10

normals_constant_screen_size

Screen size for normals in the 3D view

TYPE:

float in [0, 100000], default 7.0

normals_length

Display size for normals in the 3D view

TYPE:

float in [1e-05, 100000], default 0.1

retopology_offset

Offset used to draw edit mesh in front of other geometry

TYPE:

float in [0, inf], default 0.2

sculpt_curves_cage_opacity

Opacity of the cage overlay in curves sculpt mode

TYPE:

float in [0, 1], default 0.0

sculpt_mode_face_sets_opacity**TYPE:**

float in [0, 1], default 1.0

sculpt_mode_mask_opacity**TYPE:**

float in [0, 1], default 0.75

show_annotation

Show annotations for this view

TYPE:

boolean, default True

show_axis_x

Show the X axis line

TYPE:

boolean, default True

show_axis_y

Show the Y axis line

TYPE:

boolean, default True

show_axis_z

Show the Z axis line

TYPE:

boolean, default False

show_bones

Display bones (disable to show motion paths only)

TYPE:

boolean, default True

show_camera_guides

Show camera composition guides

TYPE:

boolean, default True

show_camera_passepartout

Show camera passepartout

TYPE:

boolean, default True

show_cursor

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Display 3D Cursor Overlay

TYPE:

boolean, default True

show_curve_normals

Display 3D curve normals in editmode

TYPE:

boolean, default False

show_edge_bevel_weight

Display weights created for the Bevel modifier

TYPE:

boolean, default True

show_edge_crease

Display creases created for Subdivision Surface modifier

TYPE:

boolean, default True

show_edge_seams

Display UV unwrapping seams

TYPE:

boolean, default True

show_edge_sharp

Display sharp edges, used with the Edge Split modifier

TYPE:

boolean, default True

show_extra_edge_angle

Display selected edge angle, using global values when set in the transform panel

TYPE:

boolean, default False

show_extra_edge_length

Display selected edge lengths, using global values when set in the transform panel

TYPE:

boolean, default False

show_extra_face_angle

Display the angles in the selected edges, using global values when set in the transform panel

TYPE:

boolean, default False

show_extra_face_area

Display the area of selected faces, using global values when set in the transform panel

TYPE:

boolean, default False

show_extra_indices

Display the index numbers of selected vertices, edges, and faces

TYPE:

boolean, default False

show_extras

Object details, including empty wire, cameras and other visual guides

TYPE:

boolean, default True

show_face_center

Display face center when face selection is enabled in solid shading modes

TYPE:

boolean, default False

show_face_normals

Display face normals as lines

TYPE:

boolean, default False

show_face_orientation

Show the Face Orientation Overlay

TYPE:

boolean, default False

show_faces

Display a face selection overlay

TYPE:

boolean, default True

show_fade_inactive

Fade inactive geometry using the viewport background color

TYPE:

boolean, default False

show_floor

Show the ground plane grid

TYPE:

boolean, default True

show_freestyle_edge_marks

Display Freestyle edge marks, used with the Freestyle renderer

TYPE:

boolean, default True

show_freestyle_face_marks

Display Freestyle face marks, used with the Freestyle renderer

TYPE:

boolean, default True

show_light_colors

Show light colors

TYPE:

boolean, default False

show_look_dev

Show HDRI preview spheres

TYPE:

boolean, default False

show_motion_paths

Show the Motion Paths Overlay

TYPE:

boolean, default True

show_object_origins

Show object center dots

TYPE:

boolean, default True

show_object_origins_all

Show the object origin center dot for all (selected and unselected) objects

TYPE:

boolean, default False

show_onion_skins

Show the Onion Skinning Overlay

TYPE:

boolean, default False

show_ortho_grid

Show grid in orthographic side view

TYPE:

boolean, default True

show_outline_selected

Show an outline highlight around selected objects

TYPE:

boolean, default True

show_overlays

Display overlays like gizmos and outlines

TYPE:

boolean, default True

show_paint_wire

Use wireframe display in painting modes

TYPE:

boolean, default False

show_relationship_lines

Show dashed lines indicating parent or constraint relationships

TYPE:

boolean, default True

show_retopology

Hide the solid mesh and offset the overlay towards the view. Selection is occluded by inactive geometry, unless X-Ray is enabled

TYPE:

boolean, default False

show_sculpt_curves_cage

Show original curves that are currently being edited

TYPE:

boolean, default False

show_sculpt_face_sets

TYPE:

boolean, default True

show_sculpt_mask

TYPE:

boolean, default True

show_split_normals

Display vertex-per-face normals as lines

TYPE:

boolean, default False

show_stats

Display scene statistics overlay text

TYPE:

boolean, default False

show_statvis

Display statistical information about the mesh

TYPE:

boolean, default False

show_text

Display overlay text

TYPE:

boolean, default True

show_vertex_normals

Display vertex normals as lines

TYPE:

boolean, default False

show_viewer_attribute

Show attribute overlay for active viewer node

TYPE:

boolean, default True

show_viewer_text

Show attribute values as text in viewport

TYPE:

boolean, default False

show_weight

Display weights in editmode

TYPE:

boolean, default False

show_wireframes

Show face edges wires

TYPE:

boolean, default False

show_wpaint_contours

Show contour lines formed by points with the same interpolated weight

TYPE:

boolean, default False

show_xray_bone

Show the bone selection overlay

TYPE:

boolean, default False

texture_paint_mode_opacity

Opacity of the texture paint mode stencil mask overlay

TYPE:

float in [0, 1], default 1.0

use_debug_freeze_view_culling

Freeze view culling bounds

TYPE:

boolean, default False

use_gpencil_canvas_xray

Show Canvas grid in front

TYPE:

boolean, default False

use_gpencil_edit_lines

Show Edit Lines when editing strokes

TYPE:

boolean, default True

use_gpencil_fade_gp_objects

Fade Grease Pencil Objects, except the active one

TYPE:

boolean, default False

use_gpencil_fade_layers

Toggle fading of Grease Pencil layers except the active one

TYPE:

boolean, default False

use_gpencil_fade_objects

Fade all viewport objects with a full color layer to improve visibility

TYPE:

boolean, default False

use_gpencil_grid

Display a grid over Grease Pencil paper

TYPE:

boolean, default False

use_gpencil_multiedit_line_only

Show Edit Lines only in multiframe

TYPE:

boolean, default False

use_gpencil_onion_skin

Show ghosts of the keyframes before and after the current frame

TYPE:

boolean, default False

use_gpencil_show_directions

Show stroke drawing direction with a bigger green dot (start) and smaller red dot (end) points

TYPE:

boolean, default False

use_gpencil_show_material_name

Show material name assigned to each stroke

TYPE:

boolean, default False

use_normals_constant_screen_size

Keep size of normals constant in relation to 3D view

TYPE:

boolean, default True

boolean, default False

vertex_opacity

Opacity for edit vertices

TYPE:

float in [0, 1], default 1.0

vertex_paint_mode_opacity

Opacity of the texture paint mode stencil mask overlay

TYPE:

float in [0, 1], default 1.0

viewer_attribute_opacity

Opacity of the attribute that is currently visualized

TYPE:

float in [0, 1], default 1.0

weight_paint_mode_opacity

Opacity of the weight paint mode overlay

TYPE:

float in [0, 1], default 1.0

wireframe_opacity

Opacity of the displayed edges (1.0 for opaque)

TYPE:

float in [0, 1], default 1.0

wireframe_threshold

Adjust the angle threshold for displaying edges (1.0 for all)

TYPE:

float in [0, 1], default 1.0

xray_alpha_bone

Opacity to use for bone selection

TYPE:

float in [0, 1], default 0.5

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`

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`

References

- `SpaceView3D.overlay`