

[Skip to content](#)

CompositorNodeDefocus(CompositorNode)

base classes — [bpy_struct](#), [Node](#), [NodeInternal](#), [CompositorNode](#)

class bpy.types.CompositorNodeDefocus(CompositorNode)

Apply depth of field in 2D, using a Z depth map or mask

angle

Bokeh shape rotation offset

TYPE:

float in [0, 1.5708], default 0.0

blur_max

Blur limit, maximum CoC radius

TYPE:

float in [0, 10000], default 0.0

bokeh

- `OCTAGON` Octagonal – 8 sides.
- `HEPTAGON` Heptagonal – 7 sides.
- `HEXAGON` Hexagonal – 6 sides.
- `PENTAGON` Pentagonal – 5 sides.
- `SQUARE` Square – 4 sides.
- `TRIANGLE` Triangular – 3 sides.
- `CIRCLE` Circular.

TYPE:

enum in ['OCTAGON', 'HEPTAGON', 'HEXAGON', 'PENTAGON', 'SQUARE', 'TRIANGLE', 'CIRCLE'], default 'CIRCLE'

f_stop

Amount of focal blur, 128 (infinity) is perfect focus, half the value doubles the blur radius

TYPE:

float in [0, 128], default 0.0

scene

Scene from which to select the active camera (render scene if undefined)

TYPE:

[Scene](#)

threshold

CoC radius threshold, prevents background bleed on in-focus midground, 0 is disabled

TYPE:

float in [0, 100], default 0.0

use_gamma_correction

Enable gamma correction before and after main process

TYPE:

boolean, default False

use_preview

Enable low quality mode, useful for preview

TYPE:

boolean, default False

use_zbuffer

Disable when using an image as input instead of actual z-buffer (auto enabled if node not image based, eg. time node)

TYPE:

boolean, default False

z_scale

Scale the Z input when not using a z-buffer, controls maximum blur designated by the color white or input value 1

TYPE:

float in [0, 1000], default 0.0

classmethod is_registered_node_type()

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod input_template(index)

Input socket template

PARAMETERS:

index (*int* in [0, *inf*]) – Index

RETURNS:

result

RETURN TYPE:

[NodeInternalSocketTemplate](#)

classmethod output_template(index)

Output socket template

PARAMETERS:

index (*int* in [0, *inf*]) – Index

RETURNS:

result

RETURN TYPE:

[NodeInternalSocketTemplate](#)

update()

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_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`
- `Node.type`
- `Node.location`
- `Node.location_absolute`
- `Node.width`
- `Node.height`
- `Node.dimensions`
- `Node.name`
- `Node.label`
- `Node.inputs`
- `Node.outputs`
- `Node.internal_links`
- `Node.parent`
- `Node.warning_propagation`
- `Node.use_custom_color`
- `Node.color`
- `Node.color_tag`
- `Node.select`
- `Node.show_options`
- `Node.show_preview`
- `Node.hide`
- `Node.mute`
- `Node.show_texture`
- `Node.bl_idname`
- `Node.bl_label`
- `Node.bl_description`
- `Node.bl_icon`
- `Node.bl_static_type`
- `Node.bl_width_default`
- `Node.bl_width_min`
- `Node.bl_width_max`
- `Node.bl_height_default`
- `Node.bl_height_min`
- `Node.bl_height_max`

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.keyframe_insert_path`
- `Node.update`
- `Node.insert_link`
- `Node.init`
- `Node.copy`
- `Node.free`
- `Node.draw_buttons`
- `Node.draw_buttons_ext`
- `Node.draw_label`
- `Node.debug_zone_body_lazy_function_graph`
- `Node.debug_zone_lazy_function_graph`
- `Node.poll`
- `Node.bl_rna_get_subclass`
- `Node.bl_rna_get_subclass_py`
- `NodeInternal.poll`

- `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`
- `Node.socket_value_update`
- `Node.is_registered_node_type`
- `Node.poll`
- `Node.poll_instance`
- `NodeInternal.poll_instance`
- `NodeInternal.update`
- `NodeInternal.draw_buttons`
- `NodeInternal.draw_buttons_ext`
- `NodeInternal.bl_rna_get_subclass`
- `NodeInternal.bl_rna_get_subclass_py`
- `CompositorNode.tag_need_exec`
- `CompositorNode.poll`
- `CompositorNode.update`
- `CompositorNode.bl_rna_get_subclass`
- `CompositorNode.bl_rna_get_subclass_py`