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# ShapeKeyCurvePoint(bpy\_struct)

base class — `bpy_struct`

**class** `bpy.types.ShapeKeyCurvePoint(bpy_struct)`

Point in a shape key for curves

**co**

**TYPE:**

`mathutils.Vector` of 3 items in  $[-\text{inf}, \text{inf}]$ , default (0.0, 0.0, 0.0)

**radius**

Radius for beveling

**TYPE:**

float in  $[0, \text{inf}]$ , default 0.0

**tilt**

Tilt in 3D View

**TYPE:**

float in  $[-376.991, 376.991]$ , default 0.0

**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`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`

- `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.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
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# SunLight(Light)

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

**class** bpy.types.SunLight(Light)

Constant direction parallel ray Light

## angle

Angular diameter of the Sun as seen from the Earth

### TYPE:

float in [0, 3.14159], default 0.00918043

## energy

Sunlight strength in watts per meter squared (W/m²)

### TYPE:

float in [-inf, inf], default 10.0

## shadow\_buffer\_clip\_start

Shadow map clip start, below which objects will not generate shadows

### TYPE:

float in [1e-06, inf], default 0.05

## shadow\_cascade\_count

Number of texture used by the cascaded shadow map

### TYPE:

int in [1, 4], default 4

## shadow\_cascade\_exponent

Higher value increase resolution towards the viewpoint

### TYPE:

float in [0, 1], default 0.8

## shadow\_cascade\_fade

How smooth is the transition between each cascade

### TYPE:

float in [0, 1], default 0.1

## shadow\_cascade\_max\_distance

End distance of the cascaded shadow map (only in perspective view)

### TYPE:

float in [0, inf], default 200.0

## shadow\_filter\_radius

Blur shadow aliasing using Percentage Closer Filtering

### TYPE:

float in [0, inf], default 1.0

## shadow\_jitter\_overblur

Apply shadow tracing to each jittered sample to reduce under-sampling artifacts

**TYPE:**

float in [0, 100], default 10.0

**shadow\_maximum\_resolution**

Minimum size of a shadow map pixel. Higher values use less memory at the cost of shadow quality.

**TYPE:**

float in [0, inf], default 0.001

**shadow\_soft\_size**

Light size for ray shadow sampling (Raytraced shadows)

**TYPE:**

float in [0, inf], default 0.0

**use\_shadow\_jitter**

Enable jittered soft shadows to increase shadow precision (disabled in viewport unless enabled in the render settings). Has a high performance impact.

**TYPE:**

boolean, default False

**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`
- `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.library_weak_reference`
- `ID.asset_data`
- `ID.override_library`
- `ID.preview`
- `Light.type`
- `Light.color`
- `Light.specular_factor`
- `Light.diffuse_factor`
- `Light.transmission_factor`
- `Light.volume_factor`

- `ID.is_embedded_data`
- `ID.is_missing`
- `ID.is_runtime_data`
- `ID.is_editable`
- `ID.tag`
- `ID.is_library_indirect`
- `ID.library`
- `Light.use_custom_distance`
- `Light.cutoff_distance`
- `Light.use_shadow`
- `Light.node_tree`
- `Light.use_nodes`
- `Light.animation_data`
- `Light.cycles`

## 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`
- `ID.rename`
- `ID.evaluated_get`
- `ID.copy`
- `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`
- `Light.bl_rna_get_subclass`
- `Light.bl_rna_get_subclass_py`



# SurfaceCurve(Curve)

base classes — `bpy_struct`, `ID`, `Curve`

**class** `bpy.types.SurfaceCurve(Curve)`

Curve data-block used for storing surfaces

**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`
- `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`
- `Curve.shape_keys`
- `Curve.bevel_profile`
- `Curve.bevel_resolution`
- `Curve.offset`
- `Curve.extrude`
- `Curve.bevel_depth`
- `Curve.resolution_u`
- `Curve.resolution_v`
- `Curve.render_resolution_u`
- `Curve.render_resolution_v`
- `Curve.eval_time`
- `Curve.bevel_object`
- `Curve.taper_object`
- `Curve.dimensions`
- `Curve.fill_mode`
- `Curve.twist_mode`
- `Curve.taper_radius_mode`
- `Curve.bevel_factor_mapping_start`
- `Curve.bevel_factor_mapping_end`
- `Curve.twist_smooth`
- `Curve.use_fill_caps`
- `Curve.use_map_taper`
- `Curve.use_auto_texspace`

- `Curve.splines`
- `Curve.path_duration`
- `Curve.use_path`
- `Curve.use_path_follow`
- `Curve.use_path_clamp`
- `Curve.use_stretch`
- `Curve.use_deform_bounds`
- `Curve.use_radius`
- `Curve.bevel_mode`
- `Curve.texspace_location`
- `Curve.texspace_size`
- `Curve.materials`
- `Curve.bevel_factor_start`
- `Curve.bevel_factor_end`
- `Curve.is_editmode`
- `Curve.animation_data`
- `Curve.cycles`

## 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`
- `ID.rename`
- `ID.evaluated_get`
- `ID.copy`
- `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`
- `Curve.transform`
- `Curve.validate_material_indices`
- `Curve.update_gpu_tag`
- `Curve.bl_rna_get_subclass`
- `Curve.bl_rna_get_subclass_py`

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# SurfaceDeformModifier(Modifier)

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

**class** bpy.types.SurfaceDeformModifier(Modifier)

## falloff

Controls how much nearby polygons influence deformation

### TYPE:

float in [2, 16], default 4.0

## invert\_vertex\_group

Invert vertex group influence

### TYPE:

boolean, default False

## is\_bound

Whether geometry has been bound to target mesh

### TYPE:

boolean, default False, (readonly)

## strength

Strength of modifier deformations

### TYPE:

float in [-100, 100], default 1.0

## target

Mesh object to deform with

### TYPE:

[Object](#)

## use\_sparse\_bind

Only record binding data for vertices matching the vertex group at the time of bind

### TYPE:

boolean, default False

## vertex\_group

Vertex group name for selecting/weighting the affected areas

### TYPE:

string, default "", (never None)

**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`
- `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`

# SurfaceModifier(Modifier)

base classes — `bpy_struct`, `Modifier`

**class** `bpy.types.SurfaceModifier(Modifier)`

Surface modifier defining modifier stack position used for surface fields

**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`
- `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`
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- `bpy_struct.keyframe_insert`
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- `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`

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# TexMapping(bpy\_struct)

base class — `bpy_struct`

**class** `bpy.types.TexMapping(bpy_struct)`

Texture coordinate mapping settings

## mapping

- `FLAT` Flat – Map X and Y coordinates directly.
- `CUBE` Cube – Map using the normal vector.
- `TUBE` Tube – Map with Z as central axis.
- `SPHERE` Sphere – Map with Z as central axis.

### TYPE:

enum in ['FLAT', 'CUBE', 'TUBE', 'SPHERE'], default 'FLAT'

## mapping\_x

### TYPE:

enum in ['NONE', 'X', 'Y', 'Z'], default 'NONE'

## mapping\_y

### TYPE:

enum in ['NONE', 'X', 'Y', 'Z'], default 'NONE'

## mapping\_z

### TYPE:

enum in ['NONE', 'X', 'Y', 'Z'], default 'NONE'

## max

Maximum value for clipping

### TYPE:

`mathutils.Vector` of 3 items in [-inf, inf], default (0.0, 0.0, 0.0)

## min

Minimum value for clipping

### TYPE:

`mathutils.Vector` of 3 items in [-inf, inf], default (0.0, 0.0, 0.0)

## rotation

### TYPE:

`mathutils.Euler` rotation of 3 items in [-inf, inf], default (0.0, 0.0, 0.0)

## scale

### TYPE:

`mathutils.Vector` of 3 items in [-inf, inf], default (0.0, 0.0, 0.0)

## translation

### TYPE:

`mathutils.Vector` of 3 items in [-inf, inf], default (0.0, 0.0, 0.0)

## use\_max

Whether to use maximum clipping value

**TYPE:**

boolean, default False

**use\_min**

Whether to use minimum clipping value

**TYPE:**

boolean, default False

**vector\_type**

Type of vector that the mapping transforms

**TYPE:**

enum in [Mapping Type Items](#), default 'POINT'

**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`

## 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

- [ShaderNodeTexBrick.texture\\_mapping](#)
- [ShaderNodeTexChecker.texture\\_mapping](#)
- [ShaderNodeTexEnvironment.texture\\_mapping](#)
- [ShaderNodeTexGabor.texture\\_mapping](#)
- [ShaderNodeTexGradient.texture\\_mapping](#)
- [ShaderNodeTexImage.texture\\_mapping](#)
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# TexPaintSlot(bpy\_struct)

base class — `bpy_struct`

**class** `bpy.types.TexPaintSlot(bpy_struct)`

Slot that contains information about texture painting

**icon\_value**

Paint slot icon

**TYPE:**

int in  $[-\text{inf}, \text{inf}]$ , default 0, (readonly)

**is\_valid**

Slot has a valid image and UV map

**TYPE:**

boolean, default False, (readonly)

**name**

Name of the slot

**TYPE:**

string, default “”, (readonly, never None)

**uv\_layer**

Name of UV map

**TYPE:**

string, default “”, (never None)

**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`

## 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

- `Material.texture_paint_slots`

base classes — `bpy_struct`, `ID`

**class** bpy.types.Text(ID)

Text data-block referencing an external or packed text file

**current\_character**

Index of current character in current line, and also start index of character in selection if one exists

**TYPE:**

int in [0, inf], default 0

**current\_line**

Current line, and start line of selection if one exists

**TYPE:**

`TextLine`, (readonly, never None)

**current\_line\_index**

Index of current TextLine in TextLine collection

**TYPE:**

int in [-inf, inf], default 0

**filepath**

Filename of the text file

**TYPE:**

string, default “”, (never None)

**indentation**

Use tabs or spaces for indentation

- `TABS` Tabs – Indent using tabs.
- `SPACES` Spaces – Indent using spaces.

**TYPE:**

enum in [‘TABS’, ‘SPACES’], default ‘TABS’

**is\_dirty**

Text file has been edited since last save

**TYPE:**

boolean, default False, (readonly)

**is\_in\_memory**

Text file is in memory, without a corresponding file on disk

**TYPE:**

boolean, default False, (readonly)

**is\_modified**

Text file on disk is different than the one in memory

**TYPE:**

boolean, default False, (readonly)

boolean, default False, (readonly)

## **lines**

Lines of text

### **TYPE:**

`bpy_prop_collection` of `TextLine`, (readonly)

## **select\_end\_character**

Index of character after end of selection in the selection end line

### **TYPE:**

int in [0, inf], default 0

## **select\_end\_line**

End line of selection

### **TYPE:**

`TextLine`, (readonly, never None)

## **select\_end\_line\_index**

Index of last TextLine in selection

### **TYPE:**

int in [-inf, inf], default 0

## **use\_module**

Run this text as a Python script on loading

### **TYPE:**

boolean, default False

## **clear()**

clear the text block

## **write(text)**

write text at the cursor location and advance to the end of the text block

### **PARAMETERS:**

**text** (*string, (never None)*) – New text for this data-block

## **from\_string(text)**

Replace text with this string.

## **as\_string()**

Return the text as a string

### **RETURN TYPE:**

string, (never None)

## **is\_syntax\_highlight\_supported()**

Returns True if the editor supports syntax highlighting for the current text datablock

### **RETURN TYPE:**

boolean

## **select\_set(line\_start, char\_start, line\_end, char\_end)**

Set selection range by line and character index

**PARAMETERS:**

- **line\_start** (*int in [-inf, inf]*) – Start Line
- **char\_start** (*int in [-inf, inf]*) – Start Character
- **line\_end** (*int in [-inf, inf]*) – End Line
- **char\_end** (*int in [-inf, inf]*) – End Character

**cursor\_set(line, \*, character=0, select=False)**

Set cursor by line and (optionally) character index

**PARAMETERS:**

- **line** (*int in [0, inf]*) – Line
- **character** (*int in [0, inf], (optional)*) – Character
- **select** (*boolean, (optional)*) – Select when moving the cursor

**as\_module()**

**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

**region\_as\_string(range=None)**

**PARAMETERS:**

**range** (*tuple[tuple[int, int], tuple[int, int]]*) – The region of text to be returned, defaulting to the selection when no range is passed. Each int pair represents a line and column: ((start\_line, start\_column), (end\_line, end\_column)) The values match Python's slicing logic (negative values count backwards from the end, the end value is not inclusive).

**RETURNS:**

The specified region as a string.

**RETURN TYPE:**

str.

**region\_from\_string(body, range=None)**

**PARAMETERS:**

- **body** (*str*) – The text to be inserted.
- **range** (*tuple[tuple[int, int], tuple[int, int]]*) – The region of text to be returned, defaulting to the selection when no range is passed. Each int pair represents a line and column: ((start\_line, start\_column), (end\_line, end\_column)) The values match Python's slicing logic (negative values count backwards from the end, the end value is not inclusive).

## Inherited Properties

## 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\_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
- ID.rename
- ID.evaluated\_get
- ID.copy
- 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

- bpy.context.edit\_text
- BlendData.texts
- BlendDataTexts.load
- BlendDataTexts.new
- BlendDataTexts.remove
- FreestyleModuleSettings.script
- NodeFrame.text
- PythonConstraint.text
- ShaderNodeScript.script
- ShaderNodeTexIES.ies
- SpaceTextEditor.text





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# TextBox(bpy\_struct)

base class — `bpy_struct`

**class** `bpy.types.TextBox(bpy_struct)`

Text bounding box for layout

**height**

**TYPE:**

float in [0, inf], default 0.0

**width**

**TYPE:**

float in [0, inf], default 0.0

**x**

**TYPE:**

float in [-inf, inf], default 0.0

**y**

**TYPE:**

float in [-inf, inf], default 0.0

**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.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`

- `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.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

- `TextCurve.text_boxes`

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# TextCharacterFormat(bpy\_struct)

base class — [bpy\\_struct](#)

**class** bpy.types.TextCharacterFormat(bpy\_struct)

Text character formatting settings

## kerning

Spacing between characters

### TYPE:

float in  $[-\infty, \infty]$ , default 0.0

## material\_index

Material slot index of this character

### TYPE:

int in  $[0, \infty]$ , default 0

## use\_bold

### TYPE:

boolean, default False

## use\_italic

### TYPE:

boolean, default False

## use\_small\_caps

### TYPE:

boolean, default False

## use\_underline

### TYPE:

boolean, default False

**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

- |   |  |
|---|--|
| • <code>bpy_struct.as_pointer</code>                      | • <code>bpy_struct.items</code>                            |
| • <code>bpy_struct.driver_add</code>                      | • <code>bpy_struct.keyframe_delete</code>                  |
| • <code>bpy_struct.driver_remove</code>                   | • <code>bpy_struct.keyframe_insert</code>                  |
| • <code>bpy_struct.get</code>                             | • <code>bpy_struct.keys</code>                             |
| • <code>bpy_struct.id_properties_clear</code>             | • <code>bpy_struct.path_from_id</code>                     |
| • <code>bpy_struct.id_properties_ensure</code>            | • <code>bpy_struct.path_resolve</code>                     |
| • <code>bpy_struct.id_properties_ui</code>                | • <code>bpy_struct.pop</code>                              |
| • <code>bpy_struct.is_property_hidden</code>              | • <code>bpy_struct.property_overridable_library_set</code> |
| • <code>bpy_struct.is_property_overridable_library</code> | • <code>bpy_struct.property_unset</code>                   |
| • <code>bpy_struct.is_property_readonly</code>            | • <code>bpy_struct.type_recast</code>                      |
| • <code>bpy_struct.is_property_set</code>                 | • <code>bpy_struct.values</code>                           |

# References

- `TextCurve.body_format` • `TextCurve.edit_format`

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# TextCurve(Curve)

base classes — `bpy_struct`, `ID`, `Curve`

**class** `bpy.types.TextCurve(Curve)`

Curve data-block used for storing text

**active\_textbox**

**TYPE:**

int in [-inf, inf], default 0

**align\_x**

Text horizontal alignment from the object or text box center

- `LEFT` Left – Align text to the left.
- `CENTER` Center – Center text.
- `RIGHT` Right – Align text to the right.
- `JUSTIFY` Justify – Align to the left and the right.
- `FLUSH` Flush – Align to the left and the right, with equal character spacing.

**TYPE:**

enum in ['LEFT', 'CENTER', 'RIGHT', 'JUSTIFY', 'FLUSH'], default 'LEFT'

**align\_y**

Text vertical alignment from the object center

- `TOP` Top – Align text to the top.
- `TOP_BASELINE` Top Baseline – Align text to the top line's baseline.
- `CENTER` Middle – Align text to the middle.
- `BOTTOM_BASELINE` Bottom Baseline – Align text to the bottom line's baseline.
- `BOTTOM` Bottom – Align text to the bottom.

**TYPE:**

enum in ['TOP', 'TOP\_BASELINE', 'CENTER', 'BOTTOM\_BASELINE', 'BOTTOM'], default 'TOP\_BASELINE'

**body**

Content of this text object

**TYPE:**

string, default "", (never None)

**body\_format**

Stores the style of each character

**TYPE:**

`bpy_prop_collection` of `TextCharacterFormat`, (readonly)

**edit\_format**

Editing settings character formatting

**TYPE:**

`TextCharacterFormat`, (readonly)

**family**

Use objects as font characters (give font objects a common name followed by the character they represent. eg. 'family-a', 'family-b', etc. set

Use objects as text characters (Give text objects a consistent name associated by the character they represent, eg family a, family b, etc, set this setting to 'family-', and turn on Vertex Instancing)

**TYPE:**

string, default "", (never None)

**follow\_curve**

Curve deforming text object

**TYPE:**

Object

**font**

**TYPE:**

VectorFont

**font\_bold**

**TYPE:**

VectorFont

**font\_bold\_italic**

**TYPE:**

VectorFont

**font\_italic**

**TYPE:**

VectorFont

**has\_selection**

Whether there is any text selected

**TYPE:**

boolean, default False, (readonly)

**is\_select\_bold**

Whether the selected text is bold

**TYPE:**

boolean, default False, (readonly)

**is\_select\_italic**

Whether the selected text is italics

**TYPE:**

boolean, default False, (readonly)

**is\_select\_smallcaps**

Whether the selected text is small caps

**TYPE:**

boolean, default False, (readonly)

**is\_select\_underline**

Whether the selected text is underlined

**TYPE:**

boolean, default False, (readonly)

## **offset\_x**

Horizontal offset from the object origin

### **TYPE:**

float in  $[-\text{inf}, \text{inf}]$ , default 0.0

## **offset\_y**

Vertical offset from the object origin

### **TYPE:**

float in  $[-\text{inf}, \text{inf}]$ , default 0.0

## **overflow**

Handle the text behavior when it doesn't fit in the text boxes

- `NONE` Overflow – Let the text overflow outside the text boxes.
- `SCALE` Scale to Fit – Scale down the text to fit inside the text boxes.
- `TRUNCATE` Truncate – Truncate the text that would go outside the text boxes.

### **TYPE:**

enum in `['NONE', 'SCALE', 'TRUNCATE']`, default `'NONE'`

## **shear**

Italic angle of the characters

### **TYPE:**

float in  $[-1, 1]$ , default 0.0

## **size**

### **TYPE:**

float in  $[0.0001, 10000]$ , default 1.0

## **small\_caps\_scale**

Scale of small capitals

### **TYPE:**

float in  $[-\text{inf}, \text{inf}]$ , default 0.75

## **space\_character**

### **TYPE:**

float in  $[0, 10]$ , default 1.0

## **space\_line**

### **TYPE:**

float in  $[0, 10]$ , default 1.0

## **space\_word**

### **TYPE:**

float in  $[0, 10]$ , default 1.0

## **text\_boxes**

### **TYPE:**

`bpy_prop_collection` of `TextBox`, (readonly)

## **underline\_height**

----

**TYPE:**

float in [0, 0.8], default 0.05

**underline\_position**

Vertical position of underline

**TYPE:**

float in [-0.2, 0.8], default 0.0

**use\_fast\_edit**

Don't fill polygons while editing

**TYPE:**

boolean, default False

**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`
- `Curve.bevel_profile`
- `Curve.bevel_resolution`
- `Curve.offset`
- `Curve.extrude`
- `Curve.bevel_depth`
- `Curve.resolution_u`
- `Curve.resolution_v`
- `Curve.render_resolution_u`
- `Curve.render_resolution_v`
- `Curve.eval_time`
- `Curve.bevel_object`
- `Curve.taper_object`
- `Curve.dimensions`
- `Curve.fill_mode`
- `Curve.twist_mode`
- `Curve.taper_radius_mode`
- `Curve.bevel_factor_mapping_start`



- `ID.library_weak_reference`
- `ID.asset_data`
- `ID.override_library`
- `ID.preview`
- `Curve.shape_keys`
- `Curve.splines`
- `Curve.path_duration`
- `Curve.use_path`
- `Curve.use_path_follow`
- `Curve.use_path_clamp`
- `Curve.use_stretch`
- `Curve.use_deform_bounds`
- `Curve.use_radius`
- `Curve.bevel_mode`
- `Curve.bevel_factor_mapping_end`
- `Curve.twist_smooth`
- `Curve.use_fill_caps`
- `Curve.use_map_taper`
- `Curve.use_auto_texspace`
- `Curve.texspace_location`
- `Curve.texspace_size`
- `Curve.materials`
- `Curve.bevel_factor_start`
- `Curve.bevel_factor_end`
- `Curve.is_editmode`
- `Curve.animation_data`
- `Curve.cycles`

## 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`
- `ID.rename`
- `ID.evaluated_get`
- `ID.copy`
- `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`
- `Curve.transform`
- `Curve.validate_material_indices`
- `Curve.update_gpu_tag`
- `Curve.bl_rna_get_subclass`
- `Curve.bl_rna_get_subclass_py`

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# TextLine(bpy\_struct)

base class — `bpy_struct`

**class** `bpy.types.TextLine(bpy_struct)`

Line of text in a Text data-block

## body

Text in the line

## TYPE:

string, default ‘’, (never None)

**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

- `Text.current_line`
- `Text.select_end_line`
- `Text.lines`

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# TextStrip(EffectStrip)

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

**class** bpy.types.TextStrip(EffectStrip)

Sequence strip creating text

**alignment\_x**

Horizontal text alignment

**TYPE:**

enum in ['LEFT', 'CENTER', 'RIGHT'], default 'LEFT'

**anchor\_x**

Horizontal position of the text box relative to Location

**TYPE:**

enum in ['LEFT', 'CENTER', 'RIGHT'], default 'LEFT'

**anchor\_y**

Vertical position of the text box relative to Location

**TYPE:**

enum in ['TOP', 'CENTER', 'BOTTOM'], default 'TOP'

**box\_color**

**TYPE:**

float array of 4 items in [0, inf], default (0.0, 0.0, 0.0, 0.0)

**box\_margin**

Box margin as factor of image width

**TYPE:**

float in [0, 1], default 0.01

**box\_roundness**

Box corner radius as a factor of box height

**TYPE:**

float in [0, 1], default 0.0

**color**

Text color

**TYPE:**

float array of 4 items in [0, inf], default (0.0, 0.0, 0.0, 0.0)

**font**

Font of the text. Falls back to the UI font by default.

**TYPE:**

[VectorFont](#)

**font\_size**

Size of the text

**TYPE:**

float in [0, 2000], default 0.0

**input\_count****TYPE:**

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

**location**

Location of the text

**TYPE:**

`mathutils.Vector` of 2 items in [-inf, inf], default (0.0, 0.0)

**outline\_color****TYPE:**

float array of 4 items in [0, inf], default (0.0, 0.0, 0.0, 0.0)

**outline\_width****TYPE:**

float in [0, 1], default 0.05

**shadow\_angle****TYPE:**

float in [0, 6.28319], default 1.13446

**shadow\_blur****TYPE:**

float in [0, 1], default 0.0

**shadow\_color****TYPE:**

float array of 4 items in [0, inf], default (0.0, 0.0, 0.0, 0.0)

**shadow\_offset****TYPE:**

float in [0, 1], default 0.04

**text**

Text that will be displayed

**TYPE:**

string, default “”, (never None)

**use\_bold**

Display text as bold

**TYPE:**

boolean, default False

**use\_box**

Display colored box behind text

**TYPE:**

boolean, default False

**use\_italic**

**use\_italic**

Display text as italic

**TYPE:**

boolean, default False

**use\_outline**

Display outline around text

**TYPE:**

boolean, default False

**use\_shadow**

Display shadow behind text

**TYPE:**

boolean, default False

**wrap\_width**

Word wrap width as factor, zero disables

**TYPE:**

float in [0, inf], default 0.0

**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`
- `Strip.name`
- `Strip.type`
- `Strip.select`
- `Strip.select_left_handle`
- `Strip.select_right_handle`
- `Strip.mute`
- `Strip.lock`
- `Strip.frame_final_duration`
- `Strip.frame_duration`
- `Strip.color_tag`
- `Strip.modifiers`
- `Strip.use_cache_raw`
- `Strip.use_cache_preprocessed`
- `Strip.use_cache_composite`
- `Strip.override_cache_settings`
- `Strip.show_retiming_keys`
- `EffectStrip.use_deinterlace`
- `EffectStrip.alpha_mode`
- `EffectStrip.use_flip_x`

- `Strip.frame_start`
- `Strip.frame_final_start`
- `Strip.frame_final_end`
- `Strip.frame_offset_start`
- `Strip.frame_offset_end`
- `Strip.channel`
- `Strip.use_linear_modifiers`
- `Strip.blend_type`
- `Strip.blend_alpha`
- `Strip.effect_fader`
- `Strip.use_default_fade`
- `EffectStrip.use_flip_y`
- `EffectStrip.use_float`
- `EffectStrip.use_reverse_frames`
- `EffectStrip.color_multiply`
- `EffectStrip.multiply_alpha`
- `EffectStrip.color_saturation`
- `EffectStrip.strobe`
- `EffectStrip.transform`
- `EffectStrip.crop`
- `EffectStrip.use_proxy`
- `EffectStrip.proxy`

## 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`
- `Strip.strip_elem_from_frame`
- `Strip.swap`
- `Strip.move_to_meta`
- `Strip.parent_meta`
- `Strip.invalidate_cache`
- `Strip.split`
- `Strip.bl_rna_get_subclass`
- `Strip.bl_rna_get_subclass_py`
- `EffectStrip.bl_rna_get_subclass`
- `EffectStrip.bl_rna_get_subclass_py`

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# Texture(ID)

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

subclasses — [BlendTexture](#), [CloudsTexture](#), [DistortedNoiseTexture](#), [ImageTexture](#), [MagicTexture](#), [MarbleTexture](#), [MusgraveTexture](#), [NoiseTexture](#), [StucciTexture](#), [VoronoiTexture](#), [WoodTexture](#)

**class** bpy.types.Texture(ID)

Texture data-block used by materials, lights, worlds and brushes

## animation\_data

Animation data for this data-block

### TYPE:

[AnimData](#), (readonly)

## color\_ramp

### TYPE:

[ColorRamp](#), (readonly)

## contrast

Adjust the contrast of the texture

### TYPE:

float in [0, 5], default 1.0

## factor\_blue

### TYPE:

float in [0, 2], default 1.0

## factor\_green

### TYPE:

float in [0, 2], default 1.0

## factor\_red

### TYPE:

float in [0, 2], default 1.0

## intensity

Adjust the brightness of the texture

### TYPE:

float in [0, 2], default 1.0

## node\_tree

Node tree for node-based textures

### TYPE:

[NodeTree](#), (readonly)

## saturation

Adjust the saturation of colors in the texture

### TYPE:

float in [0, 2], default 1.0



**type**

**TYPE:**

enum in [Texture Type Items](#), default 'IMAGE'

**use\_clamp**

Set negative texture RGB and intensity values to zero, for some uses like displacement this option can be disabled to get the full range

**TYPE:**

boolean, default False

**use\_color\_ramp**

Map the texture intensity to the color ramp. Note that the alpha value is used for image textures, enable "Calculate Alpha" for images without : alpha channel.

**TYPE:**

boolean, default False

**use\_nodes**

Make this a node-based texture

**TYPE:**

boolean, default False

**use\_preview\_alpha**

Show Alpha in Preview Render

**TYPE:**

boolean, default False

**users\_material**

Materials that use this texture

(readonly)

**users\_object\_modifier**

Object modifiers that use this texture

(readonly)

**evaluate(value)**

Evaluate the texture at the a given coordinate and returns the result

**PARAMETERS:**

**value** ([mathutils.Vector](#) of 3 items in [-inf, inf]) – The coordinates (x,y,z) of the texture, in case of a 3D texture, the z value is the slice of the texture that is evaluated. For 2D textures such as images, the z value is ignored.

**RETURNS:**

The result of the texture where (x,y,z,w) are (red, green, blue, intensity). For grayscale textures, often intensity only will be used.

**RETURN TYPE:**

[mathutils.Vector](#) of 4 items in [-inf, inf]

**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_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`
- `ID.rename`
- `ID.evaluated_get`
- `ID.copy`
- `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

- [bpy.context.texture](#)
- [BlendData.textures](#)
- [BlendDataTextures.new](#)
- [BlendDataTextures.remove](#)
- [Brush.mask\\_texture](#)
- [Brush.texture](#)
- [CompositorNodeTexture.texture](#)
- [DisplaceModifier.texture](#)
- [DynamicPaintSurface.init\\_texture](#)
- [FieldSettings.texture](#)
- [FluidFlowSettings.noise\\_texture](#)
- [FreestyleLineStyle.active\\_texture](#)
- [NodeSocketTexture.default\\_value](#)
- [NodeTreeInterfaceSocketTexture.default\\_value](#)
- [ParticleSettings.active\\_texture](#)
- [TextureNodeTexture.texture](#)
- [TextureSlot.texture](#)
- [VertexWeightEditModifier.mask\\_texture](#)
- [VertexWeightMixModifier.mask\\_texture](#)
- [VertexWeightProximityModifier.mask\\_texture](#)
- [VolumeDisplaceModifier.texture](#)
- [WarpModifier.texture](#)
- [WaveModifier.texture](#)

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# TEXTURE\_UL\_texpaintslots(UIList)

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

**class** bpy.types.TEXTURE\_UL\_texpaintslots(UIList)

**draw\_item**(*\_context*, *layout*, *\_data*, *item*, *\_icon*, *\_active\_data*, *\_active\_propname*, *\_index*)

**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](#)
- [UIList.bl\\_idname](#)
- [UIList.list\\_id](#)
- [UIList.layout\\_type](#)
- [UIList.use\\_filter\\_show](#)
- [UIList.filter\\_name](#)
- [UIList.use\\_filter\\_invert](#)
- [UIList.use\\_filter\\_sort\\_alpha](#)
- [UIList.use\\_filter\\_sort\\_reverse](#)
- [UIList.use\\_filter\\_sort\\_lock](#)
- [UIList.bitflag\\_filter\\_item](#)

## 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.path\\_resolve](#)
- [bpy\\_struct.pop](#)
- [bpy\\_struct.property\\_overridable\\_library\\_set](#)
- [bpy\\_struct.property\\_unset](#)
- [bpy\\_struct.type\\_recast](#)
- [bpy\\_struct.values](#)
- [UIList.draw\\_item](#)
- [UIList.draw\\_filter](#)
- [UIList.filter\\_items](#)
- [UIList.append](#)
- [UIList.is\\_extended](#)
- [UIList.prepend](#)

- [bpy\\_struct.keyframe\\_delete](#)
- [bpy\\_struct.keyframe\\_insert](#)
- [bpy\\_struct.keys](#)
- [bpy\\_struct.path\\_from\\_id](#)

- [UIList.remove](#)
- [UIList.bl\\_rna\\_get\\_subclass](#)
- [UIList.bl\\_rna\\_get\\_subclass\\_py](#)

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# TEXTURE\_UL\_texslots(UIList)

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

**class** bpy.types.TEXTURE\_UL\_texslots(UIList)

**draw\_item**(\_context, layout, \_data, item, icon, \_active\_data, \_active\_propname, \_index)

**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](#)
- [UIList.bl\\_idname](#)
- [UIList.list\\_id](#)
- [UIList.layout\\_type](#)
- [UIList.use\\_filter\\_show](#)
- [UIList.filter\\_name](#)
- [UIList.use\\_filter\\_invert](#)
- [UIList.use\\_filter\\_sort\\_alpha](#)
- [UIList.use\\_filter\\_sort\\_reverse](#)
- [UIList.use\\_filter\\_sort\\_lock](#)
- [UIList.bitflag\\_filter\\_item](#)

## 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.path\\_resolve](#)
- [bpy\\_struct.pop](#)
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- [bpy\\_struct.property\\_unset](#)
- [bpy\\_struct.type\\_recast](#)
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- [UIList.draw\\_item](#)
- [UIList.draw\\_filter](#)
- [UIList.filter\\_items](#)
- [UIList.append](#)
- [UIList.is\\_extended](#)
- [UIList.prepend](#)

- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`

- `UIList.remove`
- `UIList.bl_rna_get_subclass`
- `UIList.bl_rna_get_subclass_py`

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# TextureNode(NodeInternal)

base classes — `bpy_struct`, `Node`, `NodeInternal`

subclasses — `TextureNodeAt`, `TextureNodeBricks`, `TextureNodeChecker`, `TextureNodeCombineColor`, `TextureNodeCompose`, `TextureNodeCoordinates`, `TextureNodeCurveRGB`, `TextureNodeCurveTime`, `TextureNodeDecompose`, `TextureNodeDistance`, `TextureNodeGroup`, `TextureNodeHueSaturation`, `TextureNodeImage`, `TextureNodeInvert`, `TextureNodeMath`, `TextureNodeMixRGB`, `TextureNodeOutput`, `TextureNodeRGBToBW`, `TextureNodeRotate`, `TextureNodeScale`, `TextureNodeSeparateColor`, `TextureNodeTexBlend`, `TextureNodeTexClouds`, `TextureNodeTexDistNoise`, `TextureNodeTexMagic`, `TextureNodeTexMarble`, `TextureNodeTexMusgrave`, `TextureNodeTexNoise`, `TextureNodeTexStucci`, `TextureNodeTexVoronoi`, `TextureNodeTexWood`, `TextureNodeTexture`, `TextureNodeTranslate`, `TextureNodeValToNor`, `TextureNodeValToRGB`, `TextureNodeViewer`

**class** `bpy.types.TextureNode(NodeInternal)`

**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`
- `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.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.color_tag`
- `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.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`
- `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`
- `NodeInternal.poll_instance`
- `NodeInternal.update`
- `NodeInternal.draw_buttons`
- `NodeInternal.draw_buttons_ext`
- `NodeInternal.bl_rna_get_subclass`
- `NodeInternal.bl_rna_get_subclass_py`

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# TextureNodeAt(TextureNode)

base classes — [bpy\\_struct](#) , [Node](#) , [NodeInternal](#) , [TextureNode](#)

**class** bpy.types.TextureNodeAt(TextureNode)

**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](#)

**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`
- `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.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`
- `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`
- `NodeInternal.poll_instance`
- `NodeInternal.update`
- `NodeInternal.draw_buttons`
- `NodeInternal.draw_buttons_ext`
- `NodeInternal.bl_rna_get_subclass`
- `NodeInternal.bl_rna_get_subclass_py`
- `TextureNode.poll`
- `TextureNode.bl_rna_get_subclass`
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# TextureNodeBricks(TextureNode)

base classes — `bpy_struct`, `Node`, `NodeInternal`, `TextureNode`

**class** `bpy.types.TextureNodeBricks(TextureNode)`

## **offset**

Determines the brick offset of the various rows

### **TYPE:**

float in [0, 1], default 0.0

## **offset\_frequency**

Offset every N rows

### **TYPE:**

int in [2, 99], default 0

## **squash**

Factor to adjust the brick's width for particular rows determined by the Offset Frequency

### **TYPE:**

float in [0, 99], default 0.0

## **squash\_frequency**

Squash every N rows

### **TYPE:**

int in [2, 99], default 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`

**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`
- `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`
- `Node.poll_instance`
- `Node.update`
- `Node.insert_link`
- `Node.init`
- `Node.copy`

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

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# TextureNodeChecker(TextureNode)

base classes — [bpy\\_struct](#) , [Node](#) , [NodeInternal](#) , [TextureNode](#)

**class** bpy.types.TextureNodeChecker(TextureNode)

**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  $[0, \infty]$ ) – Index

**RETURNS:**

result

**RETURN TYPE:**

[NodeInternalSocketTemplate](#)

**classmethod** output\_template(index)

Output socket template

**PARAMETERS:**

**index** (*int* in  $[0, \infty]$ ) – Index

**RETURNS:**

result

**RETURN TYPE:**

[NodeInternalSocketTemplate](#)

**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`
- `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.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`
- `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`
- `NodeInternal.poll_instance`
- `NodeInternal.update`
- `NodeInternal.draw_buttons`
- `NodeInternal.draw_buttons_ext`
- `NodeInternal.bl_rna_get_subclass`
- `NodeInternal.bl_rna_get_subclass_py`
- `TextureNode.poll`
- `TextureNode.bl_rna_get_subclass`
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# TextureNodeCombineColor(TextureNode)

base classes — [bpy\\_struct](#), [Node](#), [NodeInternal](#), [TextureNode](#)

**class** `bpy.types.TextureNodeCombineColor(TextureNode)`

**mode**

Mode of color processing

**TYPE:**

enum in [Node Combsep Color Items](#), default 'RGB'

**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](#)

**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`
- `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.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `Node.poll_instance`
- `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`
- `NodeInternal.poll_instance`
- `NodeInternal.update`
- `NodeInternal.draw_buttons`
- `NodeInternal.draw_buttons_ext`
- `NodeInternal.bl_rna_get_subclass`

- `bpy_struct.type_recast`
- `bpy_struct.values`
- `Node.socket_value_update`
- `Node.is_registered_node_type`
- `Node.poll`

- `NodeInternal.bl_rna_get_subclass_py`
- `TextureNode.poll`
- `TextureNode.bl_rna_get_subclass`
- `TextureNode.bl_rna_get_subclass_py`

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# TextureNodeCompose(TextureNode)

base classes — `bpy_struct`, `Node`, `NodeInternal`, `TextureNode`

**class** `bpy.types.TextureNodeCompose(TextureNode)`

**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`

**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`
- `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.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`
- `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`
- `NodeInternal.poll_instance`
- `NodeInternal.update`
- `NodeInternal.draw_buttons`
- `NodeInternal.draw_buttons_ext`
- `NodeInternal.bl_rna_get_subclass`
- `NodeInternal.bl_rna_get_subclass_py`
- `TextureNode.poll`
- `TextureNode.bl_rna_get_subclass`
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# TextureNodeCoordinates(TextureNode)

base classes — `bpy_struct`, `Node`, `NodeInternal`, `TextureNode`

**class** `bpy.types.TextureNodeCoordinates(TextureNode)`

**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`

**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`
- `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.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`
- `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`
- `NodeInternal.poll_instance`
- `NodeInternal.update`
- `NodeInternal.draw_buttons`
- `NodeInternal.draw_buttons_ext`
- `NodeInternal.bl_rna_get_subclass`
- `NodeInternal.bl_rna_get_subclass_py`
- `TextureNode.poll`
- `TextureNode.bl_rna_get_subclass`
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# TextureNodeCurveRGB(TextureNode)

base classes — `bpy_struct`, `Node`, `NodeInternal`, `TextureNode`

**class** `bpy.types.TextureNodeCurveRGB(TextureNode)`

**mapping**

**TYPE:**

`CurveMapping`, (readonly)

**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`

**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`
- `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.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.poll_instance`
- `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`
- `NodeInternal.poll_instance`
- `NodeInternal.update`
- `NodeInternal.draw_buttons`
- `NodeInternal.draw_buttons_ext`
- `NodeInternal.bl_rna_get_subclass`
- `NodeInternal.bl_rna_get_subclass_py`

- [Node.socket\\_value\\_update](#)
- [Node.is\\_registered\\_node\\_type](#)
- [Node.poll](#)

- [TextureNode.poll](#)
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# TextureNodeCurveTime(TextureNode)

base classes — [bpy\\_struct](#), [Node](#), [NodeInternal](#), [TextureNode](#)

**class** bpy.types.TextureNodeCurveTime(TextureNode)

**curve**

**TYPE:**

[CurveMapping](#), (readonly)

**frame\_end**

**TYPE:**

int in [-32768, 32767], default 0

**frame\_start**

**TYPE:**

int in [-32768, 32767], default 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](#)

**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`
- `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`
- `Node.poll_instance`
- `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`



- [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](#)
- [NodeInternal.poll](#)
- [NodeInternal.poll\\_instance](#)
- [NodeInternal.update](#)
- [NodeInternal.draw\\_buttons](#)
- [NodeInternal.draw\\_buttons\\_ext](#)
- [NodeInternal.bl\\_rna\\_get\\_subclass](#)
- [NodeInternal.bl\\_rna\\_get\\_subclass\\_py](#)
- [TextureNode.poll](#)
- [TextureNode.bl\\_rna\\_get\\_subclass](#)
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# TextureNodeDecompose(TextureNode)

base classes — `bpy_struct`, `Node`, `NodeInternal`, `TextureNode`

**class** bpy.types.TextureNodeDecompose(TextureNode)

**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`

**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`
- `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.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`
- `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`
- `NodeInternal.poll_instance`
- `NodeInternal.update`
- `NodeInternal.draw_buttons`
- `NodeInternal.draw_buttons_ext`
- `NodeInternal.bl_rna_get_subclass`
- `NodeInternal.bl_rna_get_subclass_py`
- `TextureNode.poll`
- `TextureNode.bl_rna_get_subclass`
- `TextureNode.bl_rna_get_subclass_py`

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# TextureNodeDistance(TextureNode)

base classes — `bpy_struct`, `Node`, `NodeInternal`, `TextureNode`

**class** bpy.types.TextureNodeDistance(TextureNode)

**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`

**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`
- `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.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`
- `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`
- `NodeInternal.poll_instance`
- `NodeInternal.update`
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