

# Legend

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*Version 1.0.0, by Giorgio Bianchini*

**Description:** Draws a Markdown legend.

**Module type:** Plotting

**Module ID:** 06888353-e930-4d08-ab24-5727bced8cd6

This module renders a snippet of [Markdown](#) code and draws it on the plot. This can be used e.g. to display a description or legend of the plot.

## Parameters

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### Markdown source

**Control type:** Markdown

**Default value:**

```
### **Legend**

*  Red circle
*  Blue square
*  Green star
```

This parameter is used to specify the Markdown source code for the legend that is drawn on the plot. See [Further information](#) for instructions on how to include some common symbols in this; if you wish to include more complicated things, you can create them in a graphics software, include them as attachments, and use the `attachment://` syntax.

### Background colour

**Control type:** Colour

**Default value:**  #FFFFFF (opacity: 100%)

The background colour for the legend.

### Font size

**Control type:** Number spin box


**Default value:** 14

**Range:** [ 0, +∞ )

The base font size used to render the legend. Headers use a larger font.

## Text colour

**Control type:** Colour

**Default value:**  #000000 (opacity: 100%)

The colour of the text in the legend.

## Width

**Control type:** Number spin box

**Default value:** 200

**Range:** [ 0,  $+\infty$  )

The width of the legend (the height is computed automatically).

## Left margin

**Control type:** Number spin box

**Default value:** 5

**Range:** (  $-\infty$ ,  $+\infty$  )

The left margin of the legend. Note that this can be  $< 0$ .

## Top margin

**Control type:** Number spin box

**Default value:** 5

**Range:** (  $-\infty$ ,  $+\infty$  )

The top margin of the legend. Note that this can be  $< 0$ .

## Right margin

**Control type:** Number spin box

**Default value:** 5

**Range:** (  $-\infty$ ,  $+\infty$  )

The right margin of the legend. Note that this can be  $< 0$ .

## Bottom margin

**Control type:** Number spin box


**Default value:** -5

**Range:** (  $-\infty$ ,  $+\infty$  )

The bottom margin of the legend. Note that this can be  $< 0$ , which is useful to counter excessive space after the last text line.

## Border colour

**Control type:** Colour

**Default value:**  #000000 (opacity: 100%)

The colour of the border drawn around the legend.

## Border thickness

**Control type:** Number spin box


**Default value:** 0

**Range:** [ 0,  $+\infty$  )

The thickness of the border drawn around the legend.

## Header line colour

**Control type:** Colour

**Default value:**  #B4B4B4 (opacity: 100%)

The colour of the line drawn below headers in the legend.

## Header line thickness

**Control type:** Number spin box

**Default value:** 0

**Range:** [ 0,  $+\infty$  )

The thickness of the line drawn below headers in the legend.

## Anchor

**Control type:** Drop-down list

**Default value:** Bottom-center

**Possible values:**

- Node
- Top-left
- Top-center
- Top-right
- Middle-left
- Middle-center
- Middle-right
- Bottom-left
- Bottom-center
- Bottom-right

This parameter is used to select the anchor used to determine the position of the legend. If the selected value is `Node`, the specified node is used as an anchor. Otherwise, the selected point on the tree plot is used. Note that these positions refer to the *tree* plot and do not take into account the presence of labels and other elements.

## Node

**Control type:** Node

If the [Anchor](#) was set to `Node`, this control is used to select the node that acts as an anchor.

## Alignment

**Control type:** Drop-down list

**Default value:** Top-center

**Possible values:**

- Top-left
- Top-center
- Top-right
- Middle-left
- Middle-center
- Middle-right
- Bottom-left
- Bottom-center
- Bottom-right

This parameter controls to which point on the legend the selected [Anchor](#) corresponds.

## Position

**Control type:** Point

**Default value:** ( 0, 10 )

This parameter determines how much the legend is shifted with respect to the position determined by the [Anchor](#) and the [Alignment](#).

## Further information

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In addition to the [Markdown features supported by VectSharp.Markdown](#), this module supports some special image protocols to draw coloured symbols that may aid in creating a legend for the tree plot.

These are used by inserting in the markdown source an image whose address starts with `attachment://`, `circle://`, `ellipse://`, `square://`, `rect://`, `poly://` or `star://`. For example:

```
 Blue star
```

Renders to:



After the special protocol, you need to supply a series of parameters that will be used to determine the size and colour of the shape that is drawn:

- `attachment://<name>`

This includes the image contained in the attachment with the specified name in the Markdown document. The correct format for the image is chosen automatically.

Example:

- `attachment://Legend`

- `circle://<diameter>,<colour>[,<stroke thickness>[,<stroke colour>]]`

This draws a circle with the specified diameter and colour. The `stroke thickness` and `stroke colour` parameters can be omitted, in which case the circle will only be filled and not stroked.

Examples:

- `circle://8,cornflowerblue`



- `circle://6,#009e76,1,black`



- `circle://10,,1,orange`



- `ellipse://<width>,<height>,<colour>[,<stroke thickness>[,<stroke colour>]]`

This draws an ellipse with the specified width, height and colour. The `stroke thickness` and `stroke colour` parameters can be omitted, in which case the ellipse will only be filled and not stroked.

Examples:

- `ellipse://12,8,cornflowerblue`



- `ellipse://10,6,#009e76,1,black`



- `ellipse://8,10,,1,orange`



- `square://<size>,<colour>[,<stroke thickness>[,<stroke colour>]]`

This draws a square with the specified size and colour. The `stroke thickness` and `stroke colour` parameters can be omitted, in which case the square will only be filled and not stroked.

Examples:

- `square://8,cornflowerblue`



- `square://6,#009e76,1,black`



- `square://10,,1,orange`



- `rect://<width>,<height>,<colour>[,<stroke thickness>[,<stroke colour>]]`

This draws a rectangle with the specified width, height and colour. The `stroke thickness` and `stroke colour` parameters can be omitted, in which case the rectangle will only be filled and not stroked.

Examples:

- `rect://12,8,cornflowerblue`



- `rect://10,6,#009e76,1,black`



- `rect://8,10,,1,orange`



- `poly://<width>[,<height>],<colour>[,<sides>[,<stroke thickness>[,<stroke colour>]]]`

This draws a polygon with the specified width, height, colour and number of sides. The `stroke thickness` and `stroke colour` parameters can be omitted, in which case the polygon will only be filled and not stroked. If the `height` is omitted, it will be equal to the `width`. If the number of `sides` is omitted, it will be equal to 3.

Examples:

- `poly://8,cornflowerblue`



- `poly://10,6,#009e76,5,1,black`



- `poly://8,10,,4,1,orange`



- `star://<width>[,<height>],<colour>[,<tips>[,<stroke thickness>[,<stroke colour>]]]`

This draws a star with the specified width, height, colour and number of tips. The `stroke thickness` and `stroke colour` parameters can be omitted, in which case the star will only be filled and not stroked. If the `height` is omitted, it will be equal to the `width`. If the number of `sides` is omitted, it will be equal to 5.

Examples:

- `star://8,cornflowerblue`



- `star://10,6,#009e76,3,1,black`



- `star://8,10,,4,1,orange`

