

Chapter 17

Attributes Inspectors

The Attributes Inspector is used to change parameters that are unique to the selected element. The options available and the title of the Attributes inspector panel change to reflect the properties and type of the selected element. The unique attributes of many of EquationBuilder's element types are accessible here. Indeed, much of the typesetting functionality available in EqB is malleable through its various Attributes inspector.

Each unique Attributes inspector provided by EquationBuilder is detailed below, in alphabetical order.

Accent Inspector

AccentInspector.tiff ↵

When an Accent element is selected, the Attributes inspector becomes the Accent Inspector, allowing you to change the style of the selected Accent.

Note that the overbar accent does not scale to encompass the width of the element that it is accenting. If you wish to place an overline over a group of elements, select those elements and then press the overline button in the Accents, Braces, & Bars palette (or equivalently, **Control-o**).

Brace Inspector

BraceInspector.tiff ↵

When a Brace element is selected, the Attributes inspector becomes the Brace Inspector, allowing you to toggle the number and position of braces used by the selected Brace element. Note that you can also use the Brace Inspector to remove a Brace from your equation by choosing to have no braces at all.

Unlike accents, braces scale to encompass the width of the elements they contain.

Delimiter Inspector

DelimiterInspector.tiff ↵

When a Delimiter is selected, the Attributes inspector becomes the Delimiter Inspector, giving you access to a number of options for the selected Delimiter element. The Delimiter Inspector is one of EqB's more involved Attributes inspectors, and gives you a great deal of control over the form of delimiters.

- **Style**

The style column allows you to independently set the open (left) and close (right) delimiter types for the selected Delimiter element.

Note that the empty buttons at the top of the column are used to indicate that no delimiter should be used on that particular side. (The utility of this is demonstrated in Chapter 8).

- **Scale**

By default, the open and close delimiters scale to encompass whatever they delimit. If

you wish to override the default scaling of either the open or close delimiter, switch off auto-scaling by clicking the Auto switch and enter the scale factor you want in the corresponding text field.

Note that for a particular scale factor to take effect, you must press return to signify to EqB that you are done and that it should accept your input. All of EquationBuilder's text fields operate in a similar manner.

If you change your mind and decide to accept EqB's default scaling, click on the Auto switch again to re-enable automatic scaling: EquationBuilder will calculate and use the proper automatic scale.

- **Custom Style**

If the delimiter you want to use is not available in the style column, click the appropriate Custom switch and enter the proper delimiter symbol. Note that although you can override the scale of a delimiter (see above), EqB assumes that all custom delimiters do not scale.

- **Inner Element Alignment**

Delimiters can be typeset in two different ways. One way is to align the center of the delimiter with the mathematical axis of the element being delimited, i. e. the inner contents of the Delimiter. Another possibility is to align the center of the delimiter without regard for the mathematical axis.

When you create a Delimiter, EquationBuilder assumes that you wish to center that

Delimiter on its mathematical axis.

Fraction Inspector

FractionInspector.tiff ↵

When a Fraction element is selected, the Attributes inspector becomes the Fraction Inspector, allowing you to change the style of the selected Fraction. Fractions can have one of three styles: vertical, horizontal, or vertical without a bar.

Remember that when working with horizontal fractions, it is a good idea to work in composition mode, so that it is clear where the Fraction ends and adjacent elements of the equation begin.

Matrix Inspector

MatrixInspector.tiff ↵

When a Matrix element is selected, the Attributes inspector becomes the **Matrix Inspector**, allowing you to alter the number of rows and columns in the selected Matrix.

Note that if you decrease the number of rows or columns, anything contained in those extra elements will be deleted! *Use with caution.*

Multiline Inspector

MultilineInspector.tiff ↵

When a Multiline element is selected, the Attributes inspector becomes the Multiline Inspector, allowing you to change the number of lines in the selected Multiline.

Note that if you decrease the number of lines in a Multiline, the lines are permanently removed from the bottom and cannot be recovered! *Use with caution.*

Operator Inspector

OperatorInspector.tiff ↵

When an Operator element is selected, the Attributes inspector becomes the Operator Inspector. Remember that EquationBuilder automatically changes the limit position and scale of an operator depending upon its position and relationship in the equation. With the Operator Inspector, you can override the default limit position and size of the selected Operator.

Over/Underline Inspector

OverInspector.tiff ↵

When an Over/Underline is selected, the Attributes inspector becomes the Over/Underline Inspector. Similar to the Brace inspector, the Over/Underline inspector allows you to toggle between various combinations of overlines and underlines for the selected Over/Underline element. Note that you can also use the Over/Underline Inspector to remove an Over/Underline element from your equation by simply choosing to have no overlines or underlines at all.

Unlike accents, overlines and underlines scale to encompass the width of the elements they

contain.

Relation Inspector

RelationInspector.tiff ↵

When an Relation element is selected, the Attributes inspector becomes the Relation Inspector which allows you to negate the selected Relation.

Space Inspector

SpaceInspector.tiff ↵

EquationBuilder supports four different sizes of spaces: thin, medium, thick, and quad. Each of these sizes is really just an attribute of a single Space element. When you select a Space, the Attributes inspector becomes the Space Inspector, allowing you to choose the size of space you need.

String Inspector

StringInspector.tiff ↵

String elements, created through the Functions palette or the keyword text field, can really contain any arbitrary string. When you select a String element, the Attributes inspector becomes the String Inspector, allowing you to alter the contents for the selected String. Simply type in the string you want and press return.

Super/Subscript Inspector

SuperSubscriptInspector.tiff ↵

If you have added a superscript or subscript to any other element type, you can change its position with the Super/Subscript Inspector. Typically, EquationBuilder positions superscripts and subscripts to the side of the element they modify. However, for some elements, such as

the functions `^max()` and `^min()`, EquationBuilder chooses the default position for superscripts and subscripts to be above and below. You may override the default position for any selected Super/Subscript element using the Super/Subscript Inspector.