

Table of Contents

- Specifying Custom Fit Equation** 1
- Fit Parameters*** 1
- Adjusting Parameters with Mouse Wheel*** 2
- See Also*** 2

Specifying Custom Fit Equation

To specify custom fit function formula, press Add button and select Custom Equation in popup menu.

- Enter your formula in $y(x) =$ text field below. Use x as fit function argument. See [Expression Syntax](#) for details.
- You may recall last entered custom fit functions using Recently Used Custom item in Add popup menu.

The screenshot shows the 'Fit Curves' tab of the MagicPlot software. A table lists the fit curve 'Curve 4' with a custom type, legend, and sum. Below the table are checkboxes for 'Data', 'Sum', and 'Residual', along with 'Add', 'Guess', and 'Fit by Sum' buttons. A table of parameters shows 'A' (0.67), 'omega' (0.5993), and 'phi' (0.4021). The formula field contains 'A*sin(omega*x + phi) / x'. At the bottom are 'Join', 'Edit Interval', and 'Fit One Curve' buttons.

...	Type	Legend	Show	Baseli...	Sum
...	Custom ...	Curve 4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Parameter	Descripti...	Value	Lock	Std. Dev.
A		0.67	<input type="checkbox"/>	
omega		0.5993	<input type="checkbox"/>	
phi		0.4021	<input type="checkbox"/>	

$y(x) =$

```
A*sin(omega*x + phi) / x
```

Fit Parameters

You can introduce Fit Curve parameters with any names except argument x , and constants like e , π (see [predefined constants](#) for details):

- Parameters names are case-sensitive (a and A are different parameters).
- Parameters names lengths are not limited.
- Begin names with letter or $_$ sign. You can use numbers in the middle or in the end of the name: a_1 , a_{-1} , A_1 , a_1t , but the names like $1a$ are not allowed.

The parameters you introduce in formula will automatically and immediately occur in parameters list, you do not need to enter parameters names in the list manually. Random values are used as the

initial values of parameters. Do not forget to set more relevant initial values, otherwise fit algorithm may fail.

Adjusting Parameters with Mouse Wheel

You can adjust Parameters in table using mouse wheel scrolling when mouse cursor is on the desired parameter: Hold Ctrl key (Cmd key on Mac) and scroll. If Shift key is also pressed the parameter step for one wheel 'click' will be increased.

See Also

- [Nonlinear Curve Fitting: Fit Plot](#)
- [Using Spline for Baseline Subtraction](#)
- [Predefined Fit Curves Equations](#)

From:

<https://magicplot.com/wiki/> - **MagicPlot Manual**

Permanent link:

https://magicplot.com/wiki/custom_fit_equation

Last update: **Sat Jan 16 18:42:13 2021**

