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Mandelbrot

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$ Introduction

A Mandelbrot map is pictured on the screen.
The following equation is adopted for the application software;
f = F(Z)*Z^n + C (where Z and C are complex numbers, and i is the imaginary unit).
F(Z) is 1.0, exp(Z*pi/2), sin(Z*pi/2), or, cos(Z*pi/2).
The exponent n can be set to a numerical value in 0 <= n <= 100.
Note : The default value of n is 2.0. pi = 3.14.....
If n is over 7.0, F(Z) = 1.0. If n = 0.0, F(Z) = exp(Z*pi/2), sin(Z*pi/2), or, cos(Z*pi/2).

$ Function

 **<Set Color> button:**
Sets the Mandelbrot color.
The gradations are 21, and one of 16 colors can be applied to each grade.
A set of colors (which has been selected) can be saved to the color table.
(Maximum number of color tables are 21.)

 **<Parameters> button:**
Sets the exponent n and F(Z).

 **<Mandelbrot> button :**
Shows a Mandelbrot map on the screen.
When double-clicking the left mouse button on the Mandelbrot map, a dialog for zooming in the Madelbrot map appears. Press OK button after selecting the magnification for zooming in the Mandelbrot map.

 **<Copy> button:**
Copies the Mandelbrot map to the Clipboard.

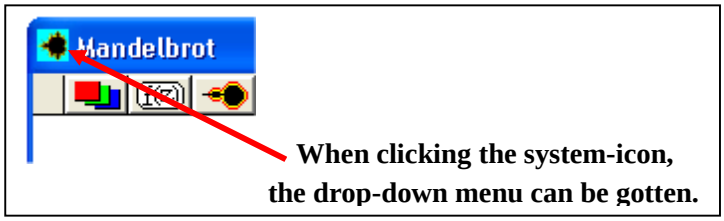
 **<Save As> button:**
Saves the Mandelbrot map as a bitmap file with a filename (e.g. filename = xxx.BMP).

 **<Print> button:**
Prints the Mandelbrot map.
<Printer Setup> and <Print Zoom> are in the drop-down menu of the System Menu, which can be gotten by pressing the button of the upper left corner of the window.

 **<About> button:**
Shows version information.

 **<Help> button:**
This file.

 **<Exit> button:**
Exits the application.



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If you want to interrupt the Mandelbrot Map during picturing, press Esc key.

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