Arexx

Martin Pfingstl

COLLABORATORS

	TITLE : Arexx	

ACTION	*NAME*	*DATE*	*SIGNATURE*
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Chapter 1

Arexx

1.1 The Arexx-Interface

The Arexx-Interface

The Arexx-port of the program is named ChaosPro.Rexx. Several commands aren't implemented, because I don't want to waste time for something, which perhaps nobody uses. So if you really use it and miss some commands, don't hesitate to suggest them to me.

The following commands are implemented:

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SetToDefault
ShowHelp
StopCalc
SystemInfo
Undo
WindowFallback
WindowType
Zoom

1.2 About

```
NAME
About

SYNOPSIS
About

FUNCTION
Corresponds to choosing the menu item About.  Shows some  information about the
version, the author, etc.

INPUT PARAMETERS
---

RESULTS
RC:
 always 0
Result:
  N.A.

BUGS
---

SEE ALSO
---
```

1.3 AddFractal

```
NAME
AddFractal

SYNOPSIS
AddFractal JULIA/S MANDEL/S BIFURCATION/S DYNAMICSYSTEM/S PLASMA/S LYAPUNOV/S

FUNCTION
This command adds a new fractal of the given type to the list and initializes it
with the standard parameters for the type.

INPUT PARAMETERS
Keywords for the different fractal types.

RESULTS
RC:
  5 ... fractaltype unknown
  8 ... too few parameters
 10 ... error during creation, most likely not enough memory
Result:
 Name of the newly added fractal

BUGS
---

SEE ALSO
```

```
---
```

1.4 BoxZoom

```
NAME
BoxZoom

SYNOPSIS
BoxZoom <Fractalname>/A <In>/A/N

FUNCTION
Just the same as choosing the menu item 'BoxZoom in/Out'.

INPUT PARAMETERS
<Fractalname> : Name of a fractal
<In>          : This is a number, if equal to 0, it means BoxZoom out, otherwise
                BoxZoom in...

RESULTS
RC:
 3 ... fractal not calculated
 5 ... fractalname unknown
 8 ... too few parameters
Result:
 N.A.

BUGS
---

SEE ALSO
---
```

1.5 CalcFract

```
NAME
CalcFract

SYNOPSIS
CalcFract <Fractalname>/A <LeftEdge>/A/N <TopEdge>/A/N <Width>/A/N <Height>/A/N

FUNCTION
Corresponds to  choosing the gadget  'Calculate picture'. But here you can also
define the screen coordinates for the window.

INPUT PARAMETERS
<Fractalname> : Name of a fractal
<LeftEdge>
<TopEdge>
<Width>
<Height>      : Numbers,  which define the  position and size  of the window. A
                virtual  coordinate-system  with a resolution of 10000x10000 is
                used.  If a coordinate is negative,  then the default value for
```

```
                this item is used.

RESULTS
RC:
  5  ... fractal unknown
  8  ... too few parameters
 10  ... not enough memory
Result:
 N.A.

BUGS
---

SEE ALSO
DelCalced
```

1.6 ChangeFractName

```
NAME
ChangeFractName

SYNOPSIS
ChangeFractName <Old name>/A <New name>/A

FUNCTION
Changes the name of the fractal. The name is always converted to uppercase, spaces
are replaced by a '_'.  The name is made  unique, i.e. if  already another fractal
with the same name exists, then a number is appended.

INPUT PARAMETERS
<Old name> : Name of the fractal, whose name should be changed
<New name> : New name for this fractal

RESULTS
RC:
 5 ... fractal <Old name> is unknown
 8 ... too few parameters
Result:
 New name of the fractal

BUGS
---

SEE ALSO
---
```

1.7 ChangePaletteName

```
NAME
ChangePaletteName

SYNOPSIS
```

```
ChangePaletteName <Old name>/A <New name>/A

FUNCTION
Alters the name of a palette.

INPUT PARAMETERS
<Old name> : Name of the palette
<New name> : New name for this palette

RESULTS
RC:
 5 ... palette not found
 8 ... too few parameters
Result:
 new name for the palette

BUGS
---

SEE ALSO
---
```

1.8 ChoiceRequest

```
NAME
ChoiceRequest

SYNOPSIS
ChoiceRequest <Body> <Choices>

FUNCTION
Creates and shows  a requester with the content <Body> and lets the user choose
something...

INPUT PARAMETERS
<Body>    : Bodytext.
<Choices> : Choices, separarated by '|'

RESULTS
RC:
 0 ... user has choosed, result in Result
 8 ... too few parameters
Result:
 choice (intuition-conform)

Example
ChoiceRequest "Please choose a number..." "1|2|3|Abort"

A requester appears, which looks like follows:

|---------------------------|
|                           |
| Please choose a number...  |
|                           |
|                           |
```

```
|  1     2     3      Abort  |
|                             |
|-----------------------------|
   ^     ^     ^       ^
   |     |     |       |
  '1'   '2'   '3'     '0'   <- choicenumber, placed in Result
```

Attention:
The rightmost choice has always the codenumber 0, because it's always ment to be some kind of 'Abort'. The other choices have numbers from left to right, starting with 1.

BUGS
RexxMast does some string-conversions. Normally it's possible, to start a new line with '\n', but Arexx replaces the backslash '\' by '\', makeing it impossible to start a new line in the body.

SEE ALSO

1.9 CloseAnim1 und CloseAnim2

NAME
CloseAnim1
CloseAnim2

SYNOPSIS
CloseAnim1
CloseAnim2

FUNCTION
Closes the animationwindow 1 or 2.

INPUT PARAMETERS

RESULTS
RC:
 3 ... window already closed
Result:
 N.A.

BUGS

SEE ALSO
OpenAnim1
OpenAnim2

1.10 CloseDataWindow

```
NAME
CloseDataWindow

SYNOPSIS
CloseDataWindow <Fractalname>

FUNCTION
Closes the datawindow of the fractal.

INPUT PARAMETERS
<Fractalname> : Name of the fractal

RESULTS
RC:
 3 ... window already closed
 5 ... unknown fractal
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
OpenDataWindow
```

1.11 ClosePalette

```
NAME
ClosePalette

SYNOPSIS
ClosePalette

FUNCTION
Closes the palettewindow.

INPUT PARAMETERS
---

RESULTS
RC:
 3 ... window already closed
Result:
 N.A.

BUGS
---

SEE ALSO
OpenPalette
```

1.12 ClosePalWork

```
NAME
ClosePalWork

SYNOPSIS
ClosePalWork

FUNCTION
Closes the palette-editing windows.

INPUT PARAMETERS
---

RESULTS
RC:
 3 ... windows already closed
Result:
 N.A.

BUGS
---

SEE ALSO
OpenPalWork
```

1.13 CloseParm1Window

```
NAME
CloseParm1Window

SYNOPSIS
CloseParm1Window <Fractalname>

FUNCTION
Closes the parameterwindow 1 of the fractal

INPUT PARAMETERS
<Fractalname>: Name of the fractal

RESULTS
RC:
 3 ... window already closed
 5 ... unknown fractal
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
OpenParm1Window
```

1.14 CloseParm2Window

```
NAME
CloseParm2Window

SYNOPSIS
CloseParm2Window <Fractalname>

FUNCTION
Closes the parameterwindow 2 of the fractal

INPUT PARAMETERS
<Fractalname>: Name of the fractal

RESULTS
RC:
 3 ... window already closed
 5 ... unknown fractal
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
OpenParm2Window
```

1.15 CloseParm3Window

```
NAME
CloseParm3Window

SYNOPSIS
CloseParm3Window <Fractalname>

FUNCTION
Closes the parameterwindow 3 of the fractal

INPUT PARAMETERS
<Fractalname>: Name of the fractal

RESULTS
RC:
 3 ... window already closed
 5 ... unknown fractal
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
```

```
OpenParm3Window
```

1.16 CloseParms3D1Window

```
NAME
CloseParms3D1Window

SYNOPSIS
CloseParms3D1Window <Fractalname>

FUNCTION
Closes the 3D-parameterwindow 1 of the fractal

INPUT PARAMETERS
<Fractalname>: Name of the fractal

RESULTS
RC:
 3 ... window already closed
 5 ... unknown fractal
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
OpenParms3D1Window
```

1.17 CloseParms3D2Window

```
NAME
CloseParms3D2Window

SYNOPSIS
CloseParms3D2Window <Fractalname>

FUNCTION
Closes the 3D-parameterwindow 2 of the fractal

INPUT PARAMETERS
<Fractalname>: Name of the fractal

RESULTS
RC:
 3 ... window already closed
 5 ... unknown fractal
 8 ... wrong number of parameters
Result:
 N.A.
```

```
BUGS
---

SEE ALSO
OpenParms3D2Window
---
```

1.18 CloseParms3D3Window

```
NAME
CloseParms3D3Window

SYNOPSIS
CloseParms3D3Window <Fractalname>

FUNCTION
Closes the 3D-parameterwindow 3 of the fractal

INPUT PARAMETERS
<Fractalname>: Name of the fractal

RESULTS
RC:
 3 ... window already closed
 5 ... unknown fractal
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
OpenParms3D3Window
```

1.19 CloseShowJulWindow

```
NAME
CloseShowJulWindow

SYNOPSIS
CloseShowJulWindow <Fractalname>

FUNCTION
Closes the window, in which a juliafractal can be choosed, whose parametervalue
can be displayed in the mandelbrot set.

INPUT PARAMETERS
<Fractalname> : Name of the fractal

RESULTS
RC:
```

```
 3 ... window already closed
 4 ... fractal not calculated
 5 ... unknown fractal
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
OpenShowJulWindow
```

1.20 CloseShowLocWindow

```
NAME
CloseShowLocWindow

SYNOPSIS
CloseShowLocWindow <Fractalname>

FUNCTION
Closes the window, in which one can choose the fractal, whose area values can be
displayed.

INPUT PARAMETERS
<Fractalname> : Name of the fractal

RESULTS
RC:
 3 ... window already closed
 4 ... fractal not calculated
 5 ... unknown fractal
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
OpenShowLocWindow
```

1.21 CloseUserWindow

```
NAME
CloseUserWindow

SYNOPSIS
CloseUserWindow <Num>

FUNCTION
```

```
Closes the user defined window <Num>

INPUT PARAMETERS
<Num>: Windownumber

RESULTS
RC:
 3 ... window already closed
 5 ... window with this number not available
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
OpenUserwindow
```

1.22 Colorcycling

```
NAME
Colorcycling

SYNOPSIS
Colorcycling ON/S OFF/S UPWARDS/S DOWNWARDS/S SPEED/K/N

FUNCTION
Controls colorcycling...

INPUT PARAMETERS
ON        : If given, ColorCycling is switched on
OFF       : If given, ColorCycling is switched off
UPWARDS   : If given, cycling is done in direction to higher colorregisters.
DOWNWARDS : same as before, but downwards
SPEED     : If given, the number after that defines the cycling speed.
            10 is fast, 50 is slow...

RESULTS
RC:
  8  ... Keyword 'Speed' given, but no number after that
 10  ... unknown keyword
Result:
 N.A.

BUGS
---

SEE ALSO
---
```

1.23 ContinueCalc

```
NAME
ContinueCalc

SYNOPSIS
ContinueCalc <Fractalname>/A
ContinueCalc

FUNCTION
Continues  calculation  of  the  fractal,  if  given. Otherwise it wakes up all
sleeping tasks.

INPUT PARAMETERS
<Fractalname> : Name of the fractal

RESULTS
RC:
 5 ... Fractalname unknown
Result:
 N.A.

BUGS
---

SEE ALSO
StopCalc
```

1.24 DelCalced

```
NAME
DelCalced

SYNOPSIS
DelCalced <Fractalname>/A

FUNCTION
Corresponds to clicking onto the closegadget of the 2D-fractalwindow.

INPUT PARAMETERS
<Fractalname> : Name of the fractal, whose window and task should be deleted.

RESULTS
RC:
 3 ... fractal not calculated
 5 ... fractal unknown
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
CalcFract
```

1.25 DelPicture

```
NAME
DelPicture

SYNOPSIS
DelPicture <Fractalname>/A

FUNCTION
Corresponds to choosing the gadget 'Clear Picture'. The fractal is completely
deleted.

INPUT PARAMETERS
<Fractalname> : Name of the fractal, which should be deleted

RESULTS
RC:
 0 ... success
 5 ... unknown fractal
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
AddFractal
CalcFract
DelCalced
```

1.26 DupPicture

```
NAME
DupPicture

SYNOPSIS
DupPicture <Fractalname>/A

FUNCTION
Corresponds to choosing the gadget 'Duplicate Picture'. A new entry will be ↩
    created.

INPUT PARAMETERS
<Fractalname> : Name of the fractal to duplicate

RESULTS
RC:
  5  ... unknown fractal
  8  ... wrong number of parameters
 10  ... not enough memory
Result:
 name of the new (duplicated) fractal
```

```
BUGS
---

SEE ALSO
AddFractal
```

1.27 GetActPicture

```
NAME
GetActPicture

SYNOPSIS
GetActPicture

FUNCTION
Returns the name of the active picture out of the picture list.

INPUT PARAMETERS
-none-

RESULTS
RC:
 5 ... none is active
Result:
 name of the active fractal

BUGS
---

SEE ALSO
GetPicture
```

1.28 GetAttr

```
NAME
GetAttr

SYNOPSIS
GetAttr <Fractalname>/A <AttrIdent>/A

FUNCTION
Fetches the value of the parameter from the fractal.

INPUT PARAMETERS
<Fractalname> : Name of the fractal
<AttrIdent>   : identifies  the  attribut.  It  may be one out of  the following
                identifiers:

BUFTYPE       - read only, 0 means 16Bit-int-buffer, 1 means IEEESP-buffer,
                2 means no buffer
DATA          - read only, specifies, whether a datawindow is available
DIMSWIDTH
```

```
DIMSHEIGHT    - read only, specifies the size of the 3D-window
INT_FPU       - read only, 0 ==> FPU is used, otherwise integer-emulation
WIDTH
HEIGHT        - read only, specifies the size of the 2D-window
IS_3D         - read only, specifies, whether the 3D-window is opened
MOVE          - read only, specifies, whether the 2D-fractal can be moved around
NUMWINDOWS    - read only, 1 means 1 window for 2D&3D, 2 means one window for 2D
                and another for 3D
PALETTEMODE   - read only,  0 means,  using the own palette,  1  means using the
                global palette
PALOFFSET2D
PALSKIP2D     - read only, specify the offset-value and the skipvalue for the 2D-
                palette
PALOFFSET3D
PALSKIP3D     - read only, specify the offset-value and the skipvalue for the 3D-
                palette
PREVIEWWIDTH
PREVIEWHEIGHT - size of the preview
SHOWDONE      - read only, non null means, that it's displayed  in the  titlebar,
                how far the calculation is proceeded
SUBTYPE       - read only, fractal subtype, i.e. the number  of the used  formula
                user defined formulae always have numbers greater than 6 normally
                all these formulas have the number 6, but this may change in  the
                future
TYPE          - read only, fractaltype
ZOOM          - read only, zooming allowed?
```

For an explanation of the following type specific parameters you can refer to the chapters of the parameterwindows or the datawindows. The names of the parameters should lead you to the desired explanation.

1) Julia- and Mandelbrotsets

```
ANGLE         - rotation angle of the fractal
BAILIN
BAILOUT       - clear

BIOMORPHY     - biomorphy, switched on (TRUE) or off (FALSE)?
BIOMORPHTYPE  - biomorphtype: 'and' or 'or'...
BIOMORPHVAR   - the biomorphy variable

LEFT
TOP
RIGHT
BOTTOM        - the area values of the fractal

CIRCLEINVERSION - circle inversion: 0 means switched off, otherwise switched on
CIRCINVMIDREAL
CIRCINVMIDIMAG  - midpoint of the circle
CIRCINVRADIUS - the radius

DECOMP        - decomposition, 0 means switched off, otherwise switched on
CODING        - coding number

INFINITE      - 'infinite' considered as attractor ?
FINITE        - search for finite attractors, 0 means no, otherwise yes
FIXUSER       - search for user defined point as attractor
```

```
FIXCYCLUS     - search for a cyclus

FIXUSERR
FIXUSERI      - user defined fixpoint
ZYKSTART      - starting  with  this  iteration  level the program searches for a
                cyclus

INF_SUP_MULT  - the multiplicator for coloring=Infimum or Supremum
INSIDECOLOR   - inside color
INSIDECOLORING- mode for inside coloring
ITERATION     - maximum of iterations to be evaluated

OUTSIDECOLOR  - outside color
OUTSIDECOLORING - mode for outside coloring
OUTERMULT     - multiplicator for the outside colors
PARM1R
PARM1I
PARM2R
PARM2I        - the parameters

PASSES        - number of draw passes

2) Bifurcationdiagrams

AMIN
AMAX          - minimal/ maximal values for A
VARMIN
VARMAX        - minimal/ maximal values for the variable

ITERATION     - number of iterations to be evaluated
VARTOUSE      - variable to draw, 0:variable x, 1:variable y, 2:both


3) Dynamic Systems

A
B
C             - the 3 parameter for the system
ALPHA
BETA          - view angles

LEFT
TOP
RIGHT
BOTTOM        - area to draw (front view)

DELTA         - timeunit
LEGAL         - 0 means illegal, 1 means conform to the system
MIDDISPL      - average point-distance at the beginning
POINTS        - read only, number of points
SPEED         - speed of the drawing
SYSTDRAWMODE  - read only, 0 means 'draw points',  1 means draw lines,  2 means,
                draw a cloud of points
SYSTTYPE      - 0 means Lorenzattractor, 1 means Roesslerattractor
TIME          - the end time
X
Y
```

```
Z             - the coordinates of the start point


4) Plasma

COLORMULT     - the colormultiplicator
H             - indirectly the dimension
SEED          - initialization for the random number generator
SIGMA         - the square root of the variance


5) Lyapunov-Space

AMIN
AMAX
BMIN
BMAX          - specify the area
CHAOSCOL      - color to use for chaos
EXPMIN        - minimal exponent
ITERATION     - maximal number of iterations to evaluate
PASSES        - number of draw passes
SEQUENCE      - read only, the sequence
SETTLE        - number of iterations for stabilization
STARTX
STARTY        - start values for the points


6) 3D-Parameter

AMBIENT       - lightintensity of the surrounding
BACKGROUND    - background color
FRONTMULT
BACKMULT      - multiplicators

DIFFUSE       - proportion of the reflection light to the normal light
DISTANCE
DRAWMODE      - 0:points, 1:lines, 2:rectangles, 3:triangles
FIRST3DCOLOR
LAST3DCOLOR   - colors to use
GRIDX
GRIDY         - resolution of the raster

HLIGHTANGLE
VLIGHTANGLE   - position of the light source

HOBSANGLE
VOBSANGLE     - position of the observer
INVERS        - 0 means not inverse, 1 means inverse
LIGHT         - if TRUE ==> light source enabled
MOVEX
MOVEY         - object displacement
PLATEAU       - height of the plateau
REFLECTION    - reflection of the surface
SATURATION    - influence of light at the saturation of the color in percent
SLOPE         - slope
TYPE          - 0 means orthogonal, 1 means projection
UPDOWN        - movement of the heights up/down
```

```
VALUE         - influence of light at the value of the color in percent
WATER         - height of the water
YSTRETCH      - multiplicator for the depth
EXTBUFFER     - additional buffer

RESULTS
RC:
 5 ... fractal unknwon
 7 ... AttrIdent unknown
 8 ... too few parameters
Result:
 actual parameter value

BUGS
---

SEE ALSO
SetAttr
```

1.29 GetColor

```
NAME
GetColor

SYNOPSIS
GetColor <Palettename>/A <colornum>/A/N

FUNCTION
Fetches the red/green/blue values of the color or the palette

INPUT PARAMETERS
<Palettename>: name of the palette
<colornum>: color number

RESULTS
RC:
 5 ... palette unknwon
 8 ... too few parameters
Result:
 3 digits for red, space, 3 for green, space, 3 for blue, space, digit 0/1 for
ColCyc, then end of the string

BUGS
---

SEE ALSO
SetColor
RGBToHSV
HSVToRGB
SetPalette
```

1.30 GetPicture

```
NAME
GetPicture

SYNOPSIS
GetPicture <Num>/A/N

FUNCTION
Gets the 'Num'th picture in the picture list, 'Num' starts at 0...

INPUT PARAMETERS
<Num>: number of the picture

RESULTS
RC:
 5 ... fractal unknown
 8 ... too few parameters
RESULT:
 name of the <Num>th fractal

BUGS
---

SEE ALSO
GetActPicture
```

1.31 GetScreenDepth

```
NAME
GetScreenDepth

SYNOPSIS
GetScreenDepth

FUNCTION
Returns the depth of the fractalscreen in planes

INPUT PARAMETERS
---

RESULTS
RC:
 always 0
Result:
 depth of the screen

BUGS
---

SEE ALSO
---
```

1.32 HSVToRGB

```
NAME
HSVToRGB

SYNOPSIS
HSVToRGB <Hue>/A/N <Saturation>/A/N <Value>/A/N

FUNCTION
Converts HSV to RGB

INPUT PARAMETERS
<Hue>        : Hue from 0 to 359
<Saturation> : Saturation from 0 to 255
<Value>      : Value from 0 to 255

RESULTS
RC:
 8 ... too few parameters
Result:
 3 digits for red, space, 3 for green, space, 3 for blue, end

BUGS
---

SEE ALSO
GetColor
SetColor
RGBToHSV
SetPalette
```

1.33 IsTask

```
NAME
IsTask

SYNOPSIS
IsTask <Fractalname>/A

FUNCTION
Asks, whether the specified fractal is calculated (task available).

INPUT PARAMETERS
<Fractalname> : name of the fractal

RESULTS
RC:
 0 ... fractal calculated
 5 ... fractal not calculated, perhaps fractal even unknown
 8 ... too few parameters
Result:
 N.A.

BUGS
```

```
---

SEE ALSO
---
```

1.34 LoadPicData

```
NAME
LoadPicData <Name>/A
LoadPicData

SYNOPSIS
LoadPicData <Name>/A
LoadPicData

FUNCTION
Loads the data of a fractal picture and inserts it into the picture  list at the
right place.  Base  directory  is  the  directory,  from  which  the program was
started, i.e. PROGDIR:
If <Name> isn't specified, then a filerequester appears.  In  this case 'Result'
isn't defined (because you can load several files at once using filemultiselect)

INPUT PARAMETERS
<Name> : filename of the picture data to load

RESULTS
RC:
 5 ... error
 8 ... wrong number of parameters
Result:
 name of the new fractal picture, if name was specified

BUGS
---

SEE ALSO
SavePicData
```

1.35 MakeNewUndo

```
NAME
MakeNewUndo

SYNOPSIS
MakeNewUndo <Fractalname>/A

FUNCTION
This command examines the parameters. If they differ from the last entry in the
undo-list, then a new entry for this list is made.  This  command is useful, if
you alter some parameters...

INPUT PARAMETERS
```

```
<Fractalname> : Name of the fractal

RESULTS
RC:
 5 ... fractal unknown
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
Undo
Redo
```

1.36 MakeProportional

```
NAME
Makeproportional

SYNOPSIS
Makeproportional <Fractalname>/A

FUNCTION
Corresponds  to  choosing  the menuitem 'Proportional'. Alters the area values of
the fractal, so that it doesn't occur distorted.

INPUT PARAMETERS
<Fractalname> : Name of the fractal

RESULTS
RC:
 5 ... fractal unknwon
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
---
```

1.37 Move

```
NAME
Move

SYNOPSIS
Move <Fractalname>/A <DeltaX>/A/N <DeltaY>/A/N
```

```
FUNCTION
Corresponds to choosing the menuitem 'Move', but here you  can define the exact
movement.

INPUT PARAMETERS
<Fractalname>      : Name of the fractal
<DeltaX>, <DeltaY> : Movement in pixel

RESULTS
RC:
 3 ... fractal not calculated
 5 ... fractal unknwon
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
---
```

1.38 OpenAnim1 und OpenAnim2

```
NAME
OpenAnim1
OpenAnim2

SYNOPSIS
OpenAnim1 <left>/A/N <top>/A/N <place>/A
OpenAnim2 <left>/A/N <top>/A/N <place>/A

FUNCTION
Opens  the  Animationwindow  1 or 2 at the specified position  on the specified
screen.

INPUT PARAMETERS
<left>,<top>   - left top corner in the virtual coordinates system with the re-
                 solution of 10000x10000 pixel.
<Place>        - specifies the screen, the window should open on:
                 0 - on the fractalscreen
                 1 - on the parameterscreen (eventually opened)
                 2 - on the workbench
                 3 - on the public screen, specified in the preferences program

negative values ==> use defaultvalues

RESULTS
RC:
  3 ... window already open
  8 ... wrong number of parameters
 10 ... error, most likely not enough memory
Result:
 N.A.
```

```
BUGS
---

SEE ALSO
CloseAnim1
CloseAnim2
```

1.39 OpenDataWindow

```
NAME
OpenDataWindow

SYNOPSIS
OpenDataWindow <Fractalname>/A <left>/A/N <top>/A/N <Place>/A/N

FUNCTION
Opens the datawindow for the fractal, if it's supported by the type.

INPUT PARAMETERS
<left>,<top>   - left top corner in the virtual coordinates system with the re-
                 solution of 10000x10000 pixel.
<Place>        - specifies the screen, the window should open on:
                 0 - on the fractalscreen
                 1 - on the parameterscreen (eventually opened)
                 2 - on the workbench
                 3 - on the public screen, specified in the preferences program

negative values ==> use defaultvalues

RESULTS
RC:
  3 ... datawindow already open
  5 ... fractal unknown
  8 ... wrong number of parameters
 10 ... error, most likely not enough memory
Result:
 N.A.

BUGS
---

SEE ALSO
CloseDataWindow
```

1.40 OpenPalette

```
NAME
OpenPalette

SYNOPSIS
OpenPalette <left>/A/N <top>/A/N <Place>/A/N
```

```
FUNCTION
Opens the palettewindow.

INPUT PARAMETERS
<left>,<top>   - left top corner in the virtual coordinates system with the re-
                 solution of 10000x10000 pixel.
<Place>        - specifies the screen, the window should open on:
                 0 - on the fractalscreen
                 1 - on the parameterscreen (eventually opened)
                 2 - on the workbench
                 3 - on the public screen, specified in the preferences program

negative values ==> use defaultvalues

RESULTS
RC:
  3 ... palettewindow already open
  8 ... wrong number of parameters
 10 ... error, most likely not enough memory
Result:
 N.A.

BUGS
---

SEE ALSO
ClosePalette
```

1.41 OpenPalWork

```
NAME
OpenPalWork

SYNOPSIS
OpenPalWork <CW:left> <CW:top> <PW:left> <PW:top> <PW:width> <PW:height>
            <FW:left> <FW:top> <FW:width> <FW:height>

FUNCTION
Opens the windows for editing the palette.

INPUT PARAMETERS
<CW:left>
<CW:top>       - left top corner in the virtual coordinates system with the re-
                 solution of 10000x10000 pixel.

<PW:left>
<PW:top>
<PW:width>
<PW:height>    - left top  corner, width  and height in the virtual coordinates
                 system with the resolution of 10000x10000 pixel.

<FW:left>
<FW:top>
<FW:width>
<FW:height>    - left top  corner, width  and height in the virtual coordinates
```

```
                system  with the resolution of 10000x10000 pixel. Whether this
                window appears, depends of  course on the ToolType COLORWHEEL.
                In  addition  to  that the operation  system  must support the
                colorwheel (OS3.0 or higher).

negative values ==> use defaultvalues

RESULTS
RC:
  3 ... palette editing windows already open
  8 ... wrong number of parameters
 10 ... error while opening windows

BUGS
---

SEE ALSO
ClosePalWork
```

1.42 OpenParm1Window

```
NAME
OpenParm1Window

SYNOPSIS
OpenParm1Window <Fractalname>/A <left>/A/N <top>/A/N <Place>/A/N

FUNCTION
Opens the parameterwindow 1 for the specified fractal.

INPUT PARAMETERS
<Fractalname>  - Name of the fractal
<left>,<top>   - left top corner in the virtual coordinates system with the re-
                 solution of 10000x10000 pixel.
<Place>        - specifies the screen, the window should open on:
                 0 - on the fractalscreen
                 1 - on the parameterscreen (eventually opened)
                 2 - on the workbench
                 3 - on the public screen, specified in the preferences program

negative values ==> use defaultvalues

RESULTS
RC:
  3 ... window already open
  5 ... fractal unknown
  8 ... wrong number of parameters
 10 ... error while opening windows
Result:
 N.A.

BUGS
---

SEE ALSO
```

```
CloseParm1Window
```

1.43 OpenParm2Window

```
NAME
OpenParm2Window

SYNOPSIS
OpenParm2Window <Fractalname>/A <left>/A/N <top>/A/N <Place>/A/N

FUNCTION
Opens the parameterwindow 2 for the specified fractal.

INPUT PARAMETERS
<Fractalname>  - Name of the fractal
<left>,<top>   - left top corner in the virtual coordinates system with the re-
                 solution of 10000x10000 pixel.
<Place>        - specifies the screen, the window should open on:
                 0 - on the fractalscreen
                 1 - on the parameterscreen (eventually opened)
                 2 - on the workbench
                 3 - on the public screen, specified in the preferences program

negative values ==> use defaultvalues

RESULTS
RC:
  3 ... window already open
  5 ... fractal unknown
  8 ... wrong number of parameters
 10 ... error while opening window
Result:
 N.A.

BUGS
---

SEE ALSO
CloseParm2Window
```

1.44 OpenParm3Window

```
NAME
OpenParm3Window

SYNOPSIS
OpenParm3Window <Fractalname>/A <left>/A/N <top>/A/N <Place>/A/N

FUNCTION
Opens the parameterwindow 3 for the specified fractal.

INPUT PARAMETERS
```

```
<Fractalname>  - Name of the fractal
<left>,<top>   - left top corner in the virtual coordinates system with the re-
                 solution of 10000x10000 pixel.
<Place>        - specifies the screen, the window should open on:
                 0 - on the fractalscreen
                 1 - on the parameterscreen (eventually opened)
                 2 - on the workbench
                 3 - on the public screen, specified in the preferences program

negative values ==> use defaultvalues

RESULTS
RC:
  3 ... window already open
  5 ... fractal unknown
  8 ... wrong number of parameters
 10 ... error while opening window
Result:
 N.A.

BUGS
---

SEE ALSO
CloseParm3Window
```

1.45 OpenParms3D1Window

```
NAME
OpenParms3D1Window

SYNOPSIS
OpenParms3D1Window <Fractalname>/A <left>/A/N <top>/A/N <Place>/A/N

FUNCTION
Opens the 3D-parameterwindow 1 for the specified fractal.

INPUT PARAMETERS
<Fractalname>  - Name of the fractal
<left>,<top>   - left top corner in the virtual coordinates system with the re-
                 solution of 10000x10000 pixel.
<Place>        - specifies the screen, the window should open on:
                 0 - on the fractalscreen
                 1 - on the parameterscreen (eventually opened)
                 2 - on the workbench
                 3 - on the public screen, specified in the preferences program

negative values ==> use defaultvalues

RESULTS
RC:
  3 ... window already open
  5 ... fractal unknown
  8 ... wrong number of parameters
 10 ... error while opening window
```

```
Result:
 N.A.

BUGS
---

SEE ALSO
CloseParms3D1Window
```

1.46 OpenParms3D2Window

```
NAME
OpenParms3D2Window

SYNOPSIS
OpenParms3D2Window <Fractalname>/A <left>/A/N <top>/A/N <Place>/A/N

FUNCTION
Opens the 3D-parameterwindow 2 for the specified fractal.

INPUT PARAMETERS
<Fractalname>  - Name of the fractal
<left>,<top>   - left top corner in the virtual coordinates system with the re-
                 solution of 10000x10000 pixel.
<Place>        - specifies the screen, the window should open on:
                 0 - on the fractalscreen
                 1 - on the parameterscreen (eventually opened)
                 2 - on the workbench
                 3 - on the public screen, specified in the preferences program

negative values ==> use defaultvalues

RESULTS
RC:
  3 ... window already open
  5 ... fractal unknown
  8 ... wrong number of parameters
 10 ... error while opening window
Result:
 N.A.

BUGS
---

SEE ALSO
CloseParms3D2Window
```

1.47 OpenParms3D3Window

```
NAME
OpenParms3D3Window
```

```
SYNOPSIS
OpenParms3D3Window <Fractalname>/A <left>/A/N <top>/A/N <Place>/A/N

FUNCTION
Opens the 3D-parameterwindow 3 for the specified fractal.

INPUT PARAMETERS
<Fractalname>  - Name of the fractal
<left>,<top>   - left top corner in the virtual coordinates system with the re-
                 solution of 10000x10000 pixel.
<Place>        - specifies the screen, the window should open on:
                 0 - on the fractalscreen
                 1 - on the parameterscreen (eventually opened)
                 2 - on the workbench
                 3 - on the public screen, specified in the preferences program

negative values ==> use defaultvalues

RESULTS
RC:
  3 ... window already open
  5 ... fractal unknwon
  8 ... wrong number of parameters
 10 ... error while opening window
Result:
 N.A.

BUGS
---

SEE ALSO
CloseParms3D3Window
```

1.48 OpenShowJulWindow

```
NAME
OpenShowJulWindow

SYNOPSIS
OpenShowJulWindow <Fractalname> <Left> <Top> <Place>

FUNCTION
See menuitem 'Set Juliaparameter'.  Opens the window, in which you can choose a
juliafractal, whose parametervalue will be displayed in the mandelbrotset.

INPUT PARAMETERS
<Fractalname>  - Name of the fractal, must be a mandelbrot-fractal
<left>,<top>   - left top corner in the virtual coordinates system with the re-
                 solution of 10000x10000 pixel.
<Place>        - specifies the screen, the window should open on:
                 0 - on the fractalscreen
                 1 - on the parameterscreen (eventually opened)
                 2 - on the workbench
                 3 - on the public screen, specified in the preferences program
```

```
negative values ==> use defaultvalues

RESULTS
RC:
  3 ... window already open
  4 ... fractal not calculated
  5 ... fractal unknown
  8 ... wrong number of parameters
 10 ... error while opening window
Result:
 N.A.

BUGS
---

SEE ALSO
CloseShowJulWindow
SetShowJul
```

1.49 OpenShowLocWindow

```
NAME
OpenShowLocWindow

SYNOPSIS
OpenShowLocWindow <Fractalname> <Left> <Top> <Place>

FUNCTION
See menuitem 'Show position'.  This command opens the window,  in which you can
choose a fractal, whose area values should be displayed in the fractal.

INPUT PARAMETERS
<Fractalname>  - Name of the fractal
<left>,<top>   - left top corner in the virtual coordinates system with the re-
                 solution of 10000x10000 pixel.
<Place>        - specifies the screen, the window should open on:
                 0 - on the fractalscreen
                 1 - on the parameterscreen (eventually opened)
                 2 - on the workbench
                 3 - on the public screen, specified in the preferences program

negativ values ==> use defaultvalues

RESULTS
RC:
  3 ... window already open
  4 ... fraktal not calculated
  5 ... fractal unknown
  8 ... wrong number of parameters
 10 ... error while opening window
Result:
 N.A.

BUGS
---
```

```
SEE ALSO
CloseShowLocWindow
SetShowLoc
```

1.50 OpenUserWindow

```
NAME
OpenUserWindow

SYNOPSIS
OpenUserWindow <WindowNum>/A <left>/A/N <top>/A/N <Place>/A/N

FUNCTION
Opens the user defined window with the specified number.

INPUT PARAMETERS
<WindowNum>    - number of the window
<Fractalname>  - name of the fractal
<left>,<top>   - left top corner in the virtual coordinates system with the reso-
                 lution of 10000x10000 pixel.
<Place>        - specifies the screen, the window should open on:
                 0 - on the fractalscreen
                 1 - on the parameterscreen (eventually opened)
                 2 - on the workbench
                 3 - on the public screen, specified in the preferences program

negative values ==> use defaultvalues

RESULTS
RC:
  3 ... window already open
  5 ... window with this number not available
  8 ... wrong number of parameters
 10 ... error while opening window
Result:
 N.A.

BUGS
---

SEE ALSO
CloseUserWindow
```

1.51 Quit

```
NAME
Quit

SYNOPSIS
Quit <Force>/S
```

```
FUNCTION
Corresponds to choosing the menu item 'Quit', if <Force> is TRUE, then the pro-
gram will quit in every case.

INPUT PARAMETERS
<Force> : Variable

RESULTS
RC:
 0 ... Quit, ChaosPro runs not any more
 5 ... not quitted, ChaosPro runs...
Result:
 N.A.

BUGS
---

SEE ALSO
---
```

1.52 Recalc

```
NAME
Recalc

SYNOPSIS
Recalc <Fractalname> <Force>

FUNCTION
Corresponds to choosing the menu item 'Recalc'.

INPUT PARAMETERS
<Fractalname>  : Name of the fractal
<Force>        : non null ==> the whole fractal will be calced again
                 0        ==> the fractal will only be drawn again according to
                 the buffer values

RESULTS
RC:
 3 ... fractal not calculated
 5 ... fractal unknown
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
---
```

1.53 Redo

```
NAME
Redo

SYNOPSIS
Redo <Fractalname>

FUNCTION
Undoes the last undo. Internally there's a list with all the changes made. With
undo you step back through this list, with redo you step forward.

INPUT PARAMETERS
<Fractalname> : Name of the fractal

RESULTS
RC:
 5 ... fractal unknwon
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
Undo
```

1.54 RefreshParms

```
NAME
RefreshParms

SYNOPSIS
RefreshParms <Fractalname> 3D1|3D2|3D3|PARM1|PARM2|PARM3|ALL

FUNCTION
Refreshes the parameters of the specified fractal in the specified window.

INPUT PARAMETERS
<Fractalname>  : Name of the fractal
3D1, 3D2, 3D3,
PARM1, PARM2,
PARM3, ALL     : keyword  for  the  desired window (you may specify only one per
                 call)

RESULTS
RC:
 5 ... unknown keyword or unknown fractal
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---
```

```
SEE ALSO
SetAttr
```

1.55 RGBToHSV

```
NAME
RGBToHSV

SYNOPSIS
RGBToHSV <Red>/A/N <Green>/A/N <Blue>/A/N

FUNCTION
Converts RGB-values to HSV-values.

INPUT PARAMETERS
<Red>   :  Red  from 0 to 255
<Green> : Green from 0 to 255
<Blue> : Blue from 0 to 255

RESULTS
RC:
 8 ... too few parameters
Result:
 3 digits for hue, space, 3 for saturation, space, 3 for value, end

BUGS
---

SEE ALSO

GetColor
SetColor
HSVToRGB
SetPalette
```

1.56 SavePicData

```
NAME
SavePicData

SYNOPSIS
SavePicData <Fractalname>

FUNCTION
Saves the data of a picture. A filerequester appears.

INPUT PARAMETERS
<Fractalname> : Name of the fractal

RESULTS
RC:
 3 ... userabort in filerequester
```

```
 5 ... fractal unknwon
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
LoadPicData
```

1.57 SavePicture

```
NAME
SavePicture

SYNOPSIS
SavePicture <Fractalname> <NumPlanes>

FUNCTION
Saves the fractal picture as an IFF-ILBM with the choosed planedepth. If NumPlanes
contains an illegal value, then the program offers a requester, which asks for the
desired planedepth.  If both a 2D- and a 3D-fractal exist, then the program offers
a requester, in which you make your choice.  If you save the 3D-fractal, then Num-
Planes has no effect. 3D-fractals are always saved in the screen depth.

INPUT PARAMETERS
<Fractalname> : Name of the fractal
<NumPlanes>   : Number  of  planes,  ranging  from  3  to  8, additionally you may
                specify 24

RESULTS
RC:
 3 ... fractal not calculated
 5 ... fractal unknwon
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
The Routine 'SavePicture' of ChaosPro offers more possibilities, as example saving
only a part of the fractal. But this possibility at this time isn't implemented.

SEE ALSO
---
```

1.58 SetAttr

```
NAME
SetAttr

SYNOPSIS
```

```
SetAttr <Fractalname> <AttrIdent> <Value> <NewUndo> <Update> <ForceNew>

FUNCTION
Sets the attribut to the new value specified by <Value>.

INPUT PARAMETERS
<Fractalname> : Name of the fractal
<AttrIdent>   : Keyword for the attribute. For the possible keywords please refer
                to GetAttr.
<NewUndo>     : TRUE means, that you can undo the change.
<Update>      : TRUE means, that the values are immediatly actualized in the para-
                meterwindows.  Because the program can only update  whole windows,
                this can take a long time, perhaps 1 second
<ForceNew>    : TRUE means,  that  the fractal is calculated  again  immediatly in
                order to reflect the changes of the parameter.

Hint:
If  you  want  to  change more parameters at a time, I recommend to set NewUndo,
Update  and ForceNew to FALSE (=0) and when you set the last parameter,  then to
set all of them  to  TRUE.  The attribut  identificators  are  the  same as with
GetAttr. Refer to  that  command. Please notice, that some values are read only,
and you can't alter them...

RESULTS
RC:
 3 ... value is READ ONLY
 5 ... fractal unknown
 7 ... AttrIdent unknown
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
GetAttr
```

1.59 SetColor

```
NAME
SetColor

SYNOPSIS
SetColor <Palettename> <colornumber> <red> <green> <blue> <colcyc>

FUNCTION
Sets the color <ColNum> of the palette  <PaletteName>  to  the specified color.
<ColCyc> defines, whether the color should take part on the colorcycling.

INPUT PARAMETERS
<Palettenname> : Name of the palette
<Farbnummer>   : color number from 4 to 255
<Red>
<Green>
```

```
<Blue>         : color components from 0 to 255
<ColCyc>       : 0 ==> color takes part at colorcycling, 1 ==> color doesn't take
                 part

RESULTS
RC:
 3 ... color number, red, green or blue too small or too large
 5 ... palette unknown
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
GetColor
RGBToHSV
HSVToRGB
SetPalette
```

1.60 SetPalette

```
NAME
SetPalette

SYNOPSIS
SetPalette <Palettename> <coloroffset> <skip>

FUNCTION
Sets a new palette for the Fractalscreen. If the palettename doesn't exist, then
the defaultpalette is used.

INPUT PARAMETERS
<coloroffset>  : Specifies the first color to use from the palette
<Überspringen> : Let x be equal to <skip>.  Then  only every x-th color from the
                 palette is used.

RESULTS
RC:
 3 ... coloroffset or skip out of range (4-255, or 1 to 252)
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
GetColor
SetColor
RGBToHSV
HSVToRGB
```

1.61 SetShowJul

```
NAME
SetShowJul

SYNOPSIS
SetShowJul <Fractalname> <fractal to show>

FUNCTION
If the  ShowJul-window for  the fractal <Fractalname> is open, then it shows the
parameter of the specified julia-fractal.

INPUT PARAMETERS
<Fractalname>     : Name of a fractal of type Mandelbrot.
<fractal to show> : Name of a fractal of type Julia, whose  parameter  should be
                    displayed graphically inside the mandelbrot-fractal.

RESULTS
RC:
 3 ... Mandelbrotfractal not calculated, or ShowJul-window not open.
 4 ... fraktals don't match (one must be a Mandelbrot, the other a Juliaset)
 5 ... one of the two fraktals is unknown
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
OpenShowJulWindow
CloseShowJulWindow
```

1.62 SetShowLoc

```
NAME
SetShowLoc

SYNOPSIS
SetShowLoc <Fractalname> <fractal to show>

FUNCTION
If the ShowLoc-window  for  the fractal <Fractalname> is open, then it shows the
area of the fractal <fractal to show> inside it.

INPUT PARAMETERS
<Fractalname>     : Name of a fractal
<fractal to show> : Name of the fractal, whose area should be displayed. The two
                    fractals must be of the same type.

RESULTS
RC:
 4 ... fractals not of the same type
 5 ... one of the two fractals is unknwon
```

```
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
OpenShowLocWindow
CloseShowLocWindow
```

1.63 SetTaskPri

```
NAME
SetTaskPri

SYNOPSIS
SetTaskPri <TaskPri>

FUNCTION
Corresponds  to  choosing  the  menu item 'Taskpriority'. This function sets the
priority of the mothertask to the specified value and after  that the priorities
of all of its subtasks to the priority <TaskPri> minus 1.

INPUT PARAMETERS
<TaskPri> : Taskpriority, value must be something between -10 and 10

RESULTS
RC:
 5 ... <TaskPri> out of range
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
---
```

1.64 SetToDefault

```
NAME
SetToDefault

SYNOPSIS
SetToDefault <Fractalname>

FUNCTION
Corresponds  to  choosing the menuitem 'Data to default'. Sets  all  data of the
fractal to the standard values (stored in the program).
```

```
INPUT PARAMETERS
<Fractalname> : Name of the fractal

RESULTS
RC:
 5 ... fractal unknown
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
---
```

1.65 ShowHelp

```
NAME
ShowHelp

SYNOPSIS
ShowHelp <Topic>

FUNCTION
Displays the help-text correspondig to the topic in the amigaguide-window, which
is eventually opened, if closed.

INPUT PARAMETERS
<Topic> : Keyword for the topic, if unknown, then  the  content  will  be  shown
          (Node MAIN).

'Topic' may contain any of the following strings:

Topicidentificator              Contents

 Animation                  animationwindows
 Author                     author
 Bifurk_Data                bifurcationdiagrams, datawindow
 Bifurk_Parm1               bifurcationdiagrams, window 1
 Bifurk_Theory              bifurcationdiagrams, theory
 Dims_Intro                 3D-view, introduction
 Dims_Parm1                 3D-view, window 1
 Dims_Parm2                 3D-view, window 2
 Dims_Parm3                 3D-view, window 3
 DSyst_Parm1                dynamic systems, window 1
 DSyst_Parm2                dynamic systems, window 2
 DSyst_Theory               dynamic systems, theory
 Fractals                   2D/3D-fractalwindows
 Index                      index
 Installation               installation
 JulMand_Data               julia- and mandelbrotsets, datawindow
 JulMand_Formula            julia- and mandelbrotsets, formula-editor
 JulMand_Parm1              julia- and mandelbrotsets, window 1
 JulMand_Parm2              julia- and mandelbrotsets, window 2
```

```
 JulMand_Parm3             julia- and mandelbrotsets, window 3
 JulTheory                 juliasets, theory
 Lyap_Data                 lyapunov-space, datawindow
 Lyap_Parm1                lyapunov-space, window 1
 Lyap_Theory               lyapunov-space, theory
 MAIN                      table of contents
 MandTheory                mandelbrotsets, theory
 Menu_Extras               menus/extras
 Menu_Fractal              menus/fractal
 Menu_Fractalwindows       menus/fractalwindows
 Menu_System               menus/project
 Menu_UserMenu             user defined menu
 Menu_Windows              menus/windows
 Others                    others worth mentioning
 Palette                   colorpalettes
 PalWork                   palette-editing
 Pictask                   PicTask-window
 Plasma_Parm1              plasma, window 1
 Plasma_Theory             plasma, theory
 Preface                   preface
 Preferences               preferencesprogram
 Problems                  some problems
 ProgDirs                  program directories and their contents
 Reasons                   Why should I use this program?
 Requirements              requirements
 Rights                    legal stuff
 ToolTypes                 tooltypes
 Userwindows               user defined window

RESULTS
RC:
 always 0
Result:
 N.A.

BUGS
---

SEE ALSO
---
```

1.66 StopCalc

```
NAME
StopCalc

SYNOPSIS
StopCalc <Fractalname>

FUNCTION
Stops the calculation of the fractal

INPUT PARAMETERS
<Fractalname> : Name of the fractal, whose calculation should be stopped. If not
                specified,  then,  every  calculation  of  any  fractal  will be
```

```
                stopped.

RESULTS
RC:
 5 ... unknown fractal
Result:
 N.A.

BUGS
---

SEE ALSO
ContinueCalc
```

1.67 SystemInfo

```
NAME
SystemInfo

SYNOPSIS
SystemInfo

FUNCTION
Corresponds to choosing the menu item 'SystemInfo'. Shows some information about
the current system.

INPUT PARAMETERS
---

RESULTS
RC:
 always 0
Result:
 N.A.

BUGS
---

SEE ALSO
---
```

1.68 Undo

```
NAME
Undo

SYNOPSIS
Undo <Fractalname>

FUNCTION
Undoes the last change. Internally there's a list with all the changes made. With
'Undo' you step back through this list, with 'Redo' you step forward.
```

```
INPUT PARAMETERS
<Fractalname> : Name of the fractal

RESULTS
RC:
 5 ... fractal unknwon
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
Redo
```

1.69 WindowFallback

```
NAME
Windowfallback

SYNOPSIS
Windowfallback <ScreenID> <Window> <left> <top> <Num> <Fractalname>

FUNCTION
Closes the window and opens it again on the scren defined by the <SceenID>.

INPUT PARAMETERS
<Window> may contain any of the following strings:
            PicTask    Palette    Anim1    Anim2
            User       Parm1      Parm2    Parm3
            Data       ShowLoc    ShowJul  Parm3D1
            Parm3D2    Parm3D3    Formula  CycleControl

<Num>         : Only needed, if <Window>=User. In this case <Num> specifies the
                number of the user defined window.
<Fractalname> : Must  be  specified,  if  <Window> = Parm1, Parm2, Parm3, Data,
                ShowLoc, ShowJul, Parm3D1, Parm3D2 or Parm3D3.
<left>,<top>  : left  top  corner  in  the virtual coordinates  system with the
                resolution of 10000x10000 pixel.
                Negative values ==> use defaultvalues
<ScreenID>    : specifies the screen, the window should open on:
                0 - on the fractalscreen
                1 - on the parameterscreen (eventually opened)
                2 - on the workbench
                3 - on the public screen, specified in the preferences program

RESULTS
RC:
 5 ... fractal unknown or <Window> unknown
 8 ... wrong number of parameters, or <Window> unknown
Result:
 N.A.
```

```
BUGS
The errors can be somehow confusing under some circumstances. If <Window> is un-
equal to PicTask, Palette, Anim1, Anim2 and User, then the program thinks,  that
a fractal must be specified. If no additional parameter is specified,  then  the
routine returns RC=8, for example the following call:

WindowFallback 2 "PALETTEN" 5000 5000

PALETTEN is a slight mistake, should be PALETTE, but the program says 'not enough
parameters' (?) ...

SEE ALSO
---
```

1.70 Windowtype

```
NAME
WindowType

SYNOPSIS
WindowType <Fractalname> <Backdrop>

FUNCTION
Specifies the windowtype. <Backdrop> determines, whether is should be a backdrop-
window.

INPUT PARAMETERS
<Fractalname> : Name of the fractal
<Backdrop>    : 1 ==> window should be a backdropwindow, 0 ==> window should be a
                normal window with border, sizegadget, etc.

RESULTS
RC:
 3 ... fractal not calculated
 5 ... fractal unknown
 8 ... wrong number of parameters
Result:
 N.A.

BUGS
---

SEE ALSO
---
```

1.71 Zoom

```
NAME
Zoom

SYNOPSIS
Zoom <Fractalname> <PosX> <PosY> <Faktor> <Frames>
```

FUNCTION
This command makes the same as a double click onto a place of the window.

INPUT PARAMETERS
<Fractalname> : Name of the fractal
<PosX>
<PosY> : Specify the place in the virtual coordinates system of the size 10000x10000 , i.e. PosX=5000, PosY=5000 means the mid of the window, independent of the actual size of the window.
<Faktor> : Specifies the zooming factor, greater than 1 means zoom in, values between 0 and 1 zoom out. The maximum and minimum for this value are 0.5 and 2. Values, which exceeds this range, are brought to the nearest extremevalue.
<Frames> : Specifies, how often the content of the window is scaled. Minimum is 0, maximum is 20.

RESULTS
RC:
3 ... fractal not calculated
5 ... fractal unknown
8 ... wrong number of parameters
Result:
N.A.

BUGS

SEE ALSO
