ImageFX

COLLABORATORS

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1.2 Information

IMAGEFX AREXX COMMANDS
RELEASE 2.0

This document assumes that you are familiar with programming in the
Arexx language, and only describes the commands specific to ImageFX.

All commands, unless otherwise noted, return a non-zero error code if
something went wrong. This includes cancelling the operation. If the
return code is 0, then a result string may be provided.

Those commands marked with (Arexx Only) may only be used properly from
an Arexx macro. All other commands may be used in scripts, key
definitions, toolbox definitions, the command shell, or Arexx macros at
will.

When a command is invoked from the shell, any result string returned
will be printed to the console. Arexx errors will also be displayed on the
console.

Commands and arguments marked with (2.0) are new for ImageFX 2.0.

HOW TO READ THIS DOCUMENT

FORMAT
    This gives the command name followed by its argument template. The
    argument template follows the standard AmigaDOS CLI command format.
    Each keyword (separated by commas) represents a possible argument.
    Here are the types of arguments:

        /A   Always required (cumulative with other modifiers).
        /F   Final argument (rest of line).
        /K   Keyword required.
        /N   Number argument.
        /S   Switch keyword.

    Example:

    FORMAT
        RequestFile Title/A,Path,File,Pattern

    There are four possible arguments to this command. The first one
    MUST be specified. The remaining three are optional. All are text
    arguments. This template can be filled in any of the following ways:

    /* the complete longhand format: */
    RequestFile TITLE "Load Image" PATH "DH0:" FILE "Image" PATTERN
    "#?.pic"

```
/* the abbreviated format (if the keywords are not specified, the
arguments are filled in in order.) */
RequestFile "Load Image" "DH0:" "Image" "#?.pic"

/* only the first argument is required: */
RequestFile "Load Image"

/* to skip arguments... you MUST use the "pattern" keyword in this
case otherwise the "#?.pic" will go into the "path" argument: */
RequestFile "Load Image" PATTERN "#?.pic"

/* quotation marks around arguments are only necessary if there are
spaces in the argument. */
```

FUNCTION
    Describes what this command actually does.

INPUTS
    Describes in detail all of the possible arguments to the command.

RESULT
    Describes the result string returned from the command, if one is in
    fact returned. If the command is used from Arexx, this result string
    will be found in the RESULT variable. If the command is typed in the
    command shell, then the result string is just printed out to the
    console. The result string is lost when invoked from a key, script,
    or the toolbox.

    All commands will return a result code in the Arexx variable RC
    regardless of whether they return a result string or not. A result
    code of zero indicates success.

SEE ALSO
    Possible related commands.

1.3 ActiveColor

ACTIVECOLOR

    FORMAT
        ActiveColor Register/N,Next/S,Prev/S

    FUNCTION
        Select the "active" color register in the palette. The active color
        is used for all drawing functions.

    INPUTS
        Register
            Specific color register to activate. Should be in the range of 0
            - 255.

        Next
            Activate the next higher color register.

        Prev

```
        Activate the next lower (previous) color register.

    RESULT
        Returns the previous active color register, before the change.

    EXAMPLES
        /* activate fourth color register: */
            ActiveColor 4
            /* jump to next higher color register: */
            ActiveColor NEXT
```

1.4 ActiveRange

```
ACTIVERANGE

    FORMAT
        ActiveRange Range/N,Next/S,Prev/S

    FUNCTION
        Set the active palette range.

    INPUTS
        Range
            Palette range to make active directly (0-8).  Range 0 is taken to
            mean the ALL range.

        Next
            Cycle up through the ranges.

        Prev
            Cycle down through the ranges.

        Note: If no arguments are given, no change is made.

    RESULT
        Returns the current active range number, before any changes are made.

    EXAMPLES
        /* activate the "all" range */
            ActiveRange 0
            /* activate color range 4 */
            ActiveRange 4
```

1.5 Add

```
ADD (OBSOLETE)

    FORMAT
        Add Alpha/S,Scale/S

    FUNCTION
        Perform a composite add operation to the main and swap buffers.  For
```

```
backwards compatibility, this command uses the old-style Add routine.
See the Composite hook for details on the new-style compositing
functions.
```

```
INPUTS
   Alpha
      If specified, the alpha channel will be used as a blend control
      image during the composite.

   Scale
      If specified, the swap buffer will be scaled to fit the region
      processed.

RESULT
   None.

EXAMPLES
   /* composite add the main and swap buffers */
      Add
      /* composite add, using alpha channel */
      Add ALPHA
      /* composite add, scaling swap into region */
      Add SCALE
```

1.6 AddArea

```
ADDAREA

   FORMAT
      AddArea X/N/A,Y/N/A

   FUNCTION
      Add a point to the current area definition.

   INPUTS
      X,Y
         Coordinates of the new point, in buffer pixels.

   RESULT
      None.

   EXAMPLES
      /* add point 100,50 to current area */
         AddArea 100 50

   SEE ALSO
      NewArea,Poly,FilledPoly,Airbrush,FreeDraw,
         FreeLine,FilledFree,PolyRegion
```

1.7 Airbrush

```
AIRBRUSH

    FORMAT
       Airbrush

    FUNCTION
       Draw into the main buffer using the airbrush.  The path the airbrush
       follows is defined by calls to NewArea/AddArea.

    INPUTS
       None.

    RESULT
       None.

    EXAMPLES
       Airbrush

    SEE ALSO
       NewArea,AddArea
```

1.8 AirbrushSettings

```
AIRBRUSHSETTINGS

    FORMAT
       AirbrushSettings
          Radius/N,Nozzle/N,Spray/S,Smudge/S,Paint/S,Realtime/S

    FUNCTION
       Define the airbrush state.

    INPUTS
       Radius
          Radius of the airbrush, in pixels (1-255).

       Nozzle
          Nozzle size of the airbrush (1-100).

       Spray,Smudge,Paint
          Airbrush operation mode.

       Realtime
          Enable realtime airbrush.  (2.0)

    RESULT
       Returns the state of the airbrush before any changes are made, in the
       form "radius nozzle mode [REALTIME]".

    EXAMPLES
       /* radius=10, nozzle=50, smudge */
          AirbrushSettings 10 50 SMUDGE
```

1.9   AllowPainting

```
ALLOWPAINTING (2.0)

   FORMAT
      AllowPainting On/S,Off/S,Toggle/S

   FUNCTION
      Set the state of the "Allow Painting" flag in the region window.
      When enabled, you can use the painting tools and draw while a region
      is defined.  The drawing will be constrained to the region.

   INPUTS
      On
         Allow painting with regions.

      Off
         Do not allow painting - drawing will affect the region mask.

      Toggle
         Toggle the state of the flag.

   RESULT
      Returns the previous state of the flag in RESULT.
```

1.10   Alpha2Buffer

```
ALPHA2BUFFER

   FORMAT
      Alpha2Buffer Force/S
      CopyFromAlpha Force/S
      AlphaToBuffer Force/S  (1.50)

   FUNCTION
      Copy the contents of the alpha channel into the main image buffer,
      destroying the previous contents.

   INPUTS
      Force
         Bypass the normal "Are you sure?" requester.

   RESULT
      None.

   EXAMPLES
      /* copy alpha to main, disable "okay" req */
         Alpha2Buffer FORCE
```

1.11   AlphaChannel

```
ALPHACHANNEL

   FORMAT
      AlphaChannel Off/S,Frisket/S,Texture/S,Toggle/S

   FUNCTION
      Select the role of the alpha channel during drawing operations.

   INPUTS
      Off
         Alpha channel is not used at all.

      Frisket
         Alpha channel is used as a frisket.

      Texture
         Alpha channel is used to texturize the drawing.

      Toggle
         The state is toggled between either Frisket or Texture.

   RESULT
      Returns the state of the alpha channel before any change is made,
      either "Off", "Frisket", or "Texture".
```

1.12 AntiAlias

```
ANTIALIAS (OBSOLETE)

   FORMAT
      AntiAlias Threshold/N

   FUNCTION
      Perform an anti-aliasing effect on the current image or region.  For
      backwards compatibility, this command uses the old-style (1.5) anti-
      alias routine.  See the AntiAlias hook for details on the new anti-
      alias routine.

   INPUTS
      Threshold
         Threshold to control how heavy the anti-aliasing is (0-255).

   RESULT
      None.
```

1.13 Bar

```
BAR

   FORMAT
      Bar Iteration/N/A
```

```
FUNCTION
    Advance the status bar to show the completion of the given number of
    iterations.

INPUTS
    Iteration
       Number of iterations completed.

RESULT
    None.

SEE ALSO
    BeginBar,EndBar
```

1.14 BeginBar

```
BEGINBAR

    FORMAT
        BeginBar Title/A,Max/N/A

    FUNCTION
        Start a status bar operation.  Locks out user input to the menus,
        initializes the status bar area, and displays a "busy" pointer.

        You should ALWAYS remember to follow any calls to BeginBar with an
        eventual call to EndBar.  The user will not be able to click on any
        gadgets until you do.

    INPUTS
        Title
           Title to put in the status area, should be short enough to fit
           (around 10 characters or so).

        Max
           Total number of iterations expected in the operation.

    RESULT
        None.

    SEE ALSO
        EndBar,Bar
```

1.15 Bezier

```
BEZIER

    FORMAT
        Bezier X1/N,Y1/N,X2/N,Y2/N,X3/N,Y3/N,X4/N,Y4/N

    FUNCTION
```

```
   Draw a bezier curve in the main buffer, using the supplied
   coordinates to define the curve.

INPUTS
   X1,Y1
      Starting point of the curve.

   X2,Y2
      Ending point of the curve.

   X3,Y3
      Control point #1.

   X4,Y4
      Control point #2.

   Note:  A three-point curve may be simulated by making X3,Y3 and
      X4,Y4 the same spot.

RESULT
   None.
```

1.16 Blend

```
BLEND

   FORMAT
      Blend Percent/N

   FUNCTION
      Change and/or retrieve the current blending percentage.

   INPUTS
      Percent
         New blend percentage, in the range of 1 - 100.  If not specified,
         no change is made.

   RESULT
      Old blend percentage, before the change.
```

1.17 Blue

```
BLUE

   FORMAT
      Blue Adjust/N

   FUNCTION
      Adjust the blue content of the current image or region.

   INPUTS
      Adjust
```

```
     Amount to adjust the blue (-127 to +127).  This number is added
     directly to each blue value.
```

```
RESULT
   None.
```

1.18 Blur

```
BLUR
```

```
FORMAT
   Blur Amount/N
```

```
FUNCTION
   Perform a blur effect on the current image or region.
```

```
INPUTS
   Amount
      Intensity of the blur effect, should be 1 - 16.  If not given, a
      requester will be presented.
```

```
RESULT
   None.
```

1.19 Box

```
BOX
```

```
FORMAT
   Box Left/N,Top/N,Width/N,Height/N
```

```
FUNCTION
   Draw a box into the current buffer at the given location, using the
   current pen or brush, and all of the current drawing settings.  If
   Scissors or MagicScissors has been turned on, this will cut the area
   defined by the box out as a brush.
```

```
INPUTS
   Left,Top
      Upper left corner of the box, in pixels.
```

```
   Width,Height
      Width and height of the box, in pixels.
```

```
RESULT
   None.
```

1.20 BoxRegion

```
BOXREGION

   FORMAT
      BoxRegion Add/S,Subtract/S,X1/N,Y1/N,X2/N,Y2/N

   FUNCTION
      Define a rectangular region in the main buffer.  Subsequent image
      processing operations will be constrained to this region.

   INPUTS
      Add
         If specified, this region is to be merged in with the existing
         region.  Otherwise the new region supercedes any existing regions.

      Subtract (2.0)
         If specified, this region will be subtracted from the existing
         region.

      X1,Y1
         Upper left corner of the region, in buffer pixels.

      X2,Y2
         Lower right corner of the region, in buffer pixels.

   RESULT
      None.
```

1.21 Brightness

```
BRIGHTNESS

   FORMAT
      Brightness Adjust/N

   FUNCTION
      Adjust the brightness of the current image or region.

   INPUTS
      Adjust
         Amount to adjust the brightness (-127 to +127).

   RESULT
      None.
```

1.22 BrushHandle

```
BRUSHHANDLE

   FORMAT
      BrushHandle XOffset/N,YOffset/N
```

```
FUNCTION
    Modify the position of the current brush's handle.  The handle is the
    position where the mouse pointer appears over the brush, by default
    it is the middle of the brush.  You can modify the position with this
    command.

INPUTS
    XOffset
        X coordinate of the new brush handle, in pixels.

    YOffset
        Y coordinate of the new brush handle, in pixels.

    Note:  If no arguments are given, the program will allow you to
        interactively adjust the brush handle.

RESULT
    None.
```

1.23 Brush2Swap

```
BRUSH2SWAP

    FORMAT
        Brush2Swap
        BrushToSwap (1.50)

    FUNCTION
        Copy the current brush into the swap buffer, destroying whatever was
        there previously.

    INPUTS
        None.

    RESULT
        None.
```

1.24 BrushToBack

```
BRUSH2BACK (2.0)

    FORMAT
        BrushToBack
        Brush2Back

    FUNCTION
        Push the current brush into the "background", to make room for
        another one.

    INPUTS
        None.
```

```
RESULT
    None.

SEE ALSO
    SelectBrush,NextBrush,PrevBrush
```

1.25   Buffer2Alpha

```
BUFFER2ALPHA

    FORMAT
       Buffer2Alpha
       CopyToAlpha
       BufferToAlpha (1.50)

    FUNCTION
       Copy the contents of the main image buffer into the alpha channel.
       Even though the alpha channel may be color, only the first plane is
       used for alpha channel operations.

    INPUTS
       None.

    RESULT
       None.
```

1.26   Buffer2Swap

```
BUFFER2SWAP

    FORMAT
       Buffer2Swap
       BufferToSwap (1.50)
       CopyToSwap (1.50)
       Copy2Swap (1.50)

    FUNCTION
       Copy the main image buffer into the swap buffer, destroying whatever
       may have been in the swap buffer.

    INPUTS
       None.

    RESULT
       None.
```

1.27   BufferToBack

```
BUFFER2BACK (2.0)
```

```
    FORMAT
       BufferToBack
       Buffer2Back
```

```
    FUNCTION
       Pushes the main buffer into the "background".  This puts the buffer
       into the multiple buffer list and allows a new buffer to be loaded
       while keeping the old one.
```

```
    INPUTS
       None.
```

```
    RESULT
       None.
```

```
    SEE ALSO
       SelectBuffer,NextBuffer,PrevBuffer
```

1.28 Channel

```
CHANNEL
```

```
    FORMAT
       Channel ChanSpec
```

```
    FUNCTION
       Define the channel mask for subsequent image processing and drawing
       operations.
```

```
    INPUTS
       ChanSpec
          A string indicating which channels are to be active.  The string
          consists of the letters R, G, and B in varying combinations.
          For example, a channel spec of RG would turn on the Red and
          Green channels, while turning off the Blue channel.  B would
          turn on only the Blue channel.  RGB enables all channels (the
          normal default).
```

```
       Note:  If no arguments are given, no change is made.
```

```
    RESULT
       Returns the channel state before any changes are made.
```

1.29 ClearBuffer

```
CLEARBUFFER
```

```
    FORMAT
       ClearBuffer Force/S,Red/N,Green/N,Blue/N
```

```
FUNCTION
   Clear the current image buffer to a certain color, usually black.

INPUTS
   Force
      If specified, the normal "Are you sure?" requester will be
      bypassed.

   Red
      Red value (0 - 255) of new buffer color.

   Green
      Green value (0 - 255) of new buffer color.

   Blue
      Blue value (0 - 255) of new buffer color.

RESULT
   None.
```

1.30 CmdShell

```
CMDSHELL

   FORMAT
      CmdShell Console

   FUNCTION
      Enters the ImageFX command shell window.  Within this window, you can
      enter commands directly for ImageFX to execute.  This is a handy way
      to experiment with the ImageFX command language.  To exit the command
      shell, press RETURN on a blank line by itself.

      The command shell detaches from the program, so you can leave it open
      and continue to use program features.

   INPUTS
      Console
         A standard console specification used for the command shell
         window.

   RESULT
      None.
```

1.31 Color2Grey

```
COLOR2GREY

   FORMAT
      Color2Grey RWgt/N,GWgt/N,BWgt/N,Luma/S,Grey/S
      Color2Gray RWgt/N,GWgt/N,BWgt/N,Luma/S,Grey/S  (1.50)
```

```
        ColorToGrey RWgt/N,GWgt/N,BWgt/N,Luma/S,Grey/S  (1.50)
        ColorToGray RWgt/N,GWgt/N,BWgt/N,Luma/S,Grey/S  (1.50)
```

    FUNCTION
        Convert a 24-bit color image to 8-bit greyscale, using a specified
        weighting.

    INPUTS
        RWgt,GWgt,BWgt
            The weights to assign to each of the red, green, and blue
            components respectively. Each weight is expressed as a
            percentage, where 1000 represents 100%. The total of the weights
            should normally add to 100%, but certain interesting effects can
            be acheived with non-unity weight dispersions.

        Luma
            Uses a preset "lumascale" weight distribution (R=299,G=587,B=114).

        Grey
            Uses a preset "average" weight distribution (R=333,G=334,B=333).

        Note: If no arguments are given, the standard Color To Grey
            window is presented.

    RESULT
        None.

1.32 ColorLimit

COLORLIMIT

    FORMAT
        ColorLimit RLo/N,RHi/N,GLo/N,GHi/N,BLo/N,BHi/N

    FUNCTION
        Perform a color limiting effect on the current image or region.

    INPUTS
        RLo,RHi
            Lower and upper clipping points of red channel.

        GLo,GHi
            Lower and upper clipping points of green channel.

        BLo,BHi
            Lower and upper clipping points of blue channel.

        Note: For greyscale images, only the red channel is used.

        Note: If no arguments are given, the standard Color Limit
            window is presented.

    RESULT
        None.
```

## 1.33 ColorSpace

```
COLORSPACE

    FORMAT
        ColorSpace RGB/S,HSV/S,CMY/S,YIQ/S,YUV/S,Next/S,Prev/S

    FUNCTION
        Set the colorspace used by the palette display, updating the palette
        sliders and such if appropriate.

    INPUTS
        RGB,HSV,CMY,YIQ,YUV
            Color space to set the palette to directly.

        Next
            Cycle up through the color space choices.

        Prev
            Cycle down through the color space choices.

        Note:  If no arguments are given, no change is made.

    RESULT
        Returns the name of the current colorspace, before any changes.
```

1.34 ColorTransform

```
COLORTRANSFORM

    FORMAT
        ColorTransform File

    FUNCTION
        Perform a user color transformation on the current image or region,
        using the table found in the given file.

    INPUTS
        File
            Name of a transformation file.  If not given, the standard Color
            Transform editor will be presented.  If a full path is not given,
            the file is assumed to reside in the current Transform path (as
            set in prefs).

    RESULT
        None.
```

1.35 ComplexRequest

```
COMPLEXREQUEST

    FORMAT
```

```
     ComplexRequest Title/A,NumGads/N/A,Stem/A,Width/N,Height/N
```

FUNCTION
   Build a complex requester to present to the user, consisting of a
   number of types of gadgets.

INPUTS
   Title
      Title of the requester, to appear at its top.

   NumGads
      Number of gadgets defined for the requester, not including "Okay"
      and "Cancel", which are always present.

   Stem
      Stem variable where the gadgets are defined. Each element in the
      stem array contains an encoded string defining a type of gadget.
      The array starts at Stem.1 and goes through Stem.N. The strings
      are generally encoded as follows:

                 Type/LeftEdge/TopEdge[/Argument(s)]

      Some gadget types may have more than one argument; each argument
      is separated by a slash (/).

      Here is a list of all the gadget types available:

   B/x/y/Label/ReturnCode (2.0)
      Button gadget. The X,Y coordinates define the upper left corner
      of the gadget. Label is the text to put inside of the button.
      ReturnCode is the value returned to Arexx if this button is
      pressed (defaults to 1000) - you should use values higher than
      1000 to avoid confusion with regular error codes.

   F/x/y/Label/Title/Path/Pattern/File (1.50)
      File Request button. The X,Y coordinates define the upper left
      corner of the gadget. Label is the text to put inside of the
      button. Title is the title for the file requester that appears
      after hitting the button, Path is the initial path for the file
      requester, Pattern is the initial file pattern for the file
      requester, and File is the initial file.

   G/x/y/Label/Title/Path/Pattern/File (2.0)
      File Request image button. The X,Y coordinates define the upper
      left corner of the gadget. Label is the text to put inside of the
      button. Title is the title for the file requester that appears
      after hitting the button, Path is the initial path for the file
      requester, Pattern is the initial file pattern for the file
      requester, and File is the initial file. Same as F but uses a
      disk image in the button.

   I/x/y/Label/Default
      Integer string gadget. The X,Y coordinates define the upper left
      corner of the gadget. Label is the text to appear to the left of
      the gadget. Default indicates the initial contents of the gadget.

   J/x/y/w/Label/Default (1.50)
```

Variable-width Integer string gadget. The X,Y coordinates define
the upper left corner of the gadget. W is the width of the
integer gadget in pixels. Label is the text to appear to the left
of the gadget. Default indicates the initial contents of the
gadget.

S/x/y/Label/Default
    String gadget. The X,Y coordinates define the upper left corner
    of the gadget. Label is the text to appear to the left of the
    gadget. Default indicates the initial contents of the gadget.

T/x/y/w/Just/Label/Default (1.50)
    Varible-width String gadget. The X,Y coordinates define the upper
    left corner of the gadget. W is the width of the string gadget in
    pixels. Just is the justification of the text within the gadget;
    0 = left justified, 1 = right justified, 2 = center justified.
    Label is the text to appear to the left of the gadget. Default
    indicates the initial contents of the gadget.

X/x/y/Label/Default
    Checkbox gadget. The X,Y coordinates define the upper left corner
    of the gadget. Label is the text that is to appear to the right
    side of the gadget. Default indicates the initial state of the
    checkbox (0 or 1).

C/x/y/Label/Count/Choice1/Choice2/.../ChoiceN
    Cycler gadget. The X,Y coordinates define the upper left corner
    of the gadget. Label is the text to appear to the left of the
    gadget. Count indicates how many choices there are in this cycle
    gadget. Following the count is the actual text of the choices,
    each separated by a slash (/). There must be the indicated number
    of choice labels.

D/x/y/w/Label/Count/Choice1/Choice2/.../ChoiceN/Initial (2.0)
    Variable-width Cycler gadget. The X,Y coordinates define the
    upper left corner of the gadget. W is the width of the string
    gadget in pixels. Label is the text to appear to the left of the
    gadget. Count indicates how many choices there are in this cycle
    gadget. Following the count is the actual text of the choices,
    each separated by a slash (/). There must be the indicated number
    of choice labels. Initial is the initially selected choice.

L/x/y/pen/just/Label (1.50)
    Label "gadget". Defines a text element to be placed in the
    complex requester, not an actual gadget. The X,Y coordinates
    normally define the upper left corner of the text. Pen is the pen
    number to use in rendering the text (in the default ImageFX
    palette, 0=grey, 1=black, 2=white, 3=blue). Just is the
    justification to use in rendering the text; 0 = left justify, 1 =
    right justify (ie. the X coordinate is really the right edge of
    the text), and 2 = center justify (ie. the X coordinate is really
    the center of the text). Label is the text to render.

 Width,Height
    Optional width and height of the requester. Defaults to 400 width
    and 65 height.

```
   Note:  In ImageFX 2.0, a new recessed border is placed around
      the Complex requester, which may affect your gadget
      placement slightly.
```

RESULT
    Returns the user's selection for each gadget in a stem variable
    called RESULT. Thus, RESULT.1 is the user's choice for the first
    gadget, RESULT.2 is the choice for the second gadget, etc.

1.36 Contrast

CONTRAST

    FORMAT
       Contrast Adjust/N

    FUNCTION
       Adjust the contrast of the current image or region.

    INPUTS
       Adjust
          Amount to adjust the contrast (-127 to +127).

    RESULT
       None.

1.37 Convolve

CONVOLVE

    FORMAT
       Convolve File

    FUNCTION
       Perform a user convolution effect on the current image or region,
       using a specified matrix file.

    INPUTS
       File
          Filename containing the convolution matrix definition. If not
          given, then the standard User Convolve editor window will be
          presented. If a full path is not given, the file is assumed to
          reside in the current Convolve path.

    RESULT
       None.

1.38 CopyColor

```
COPYCOLOR

   FORMAT
      CopyColor From/N,To/N

   FUNCTION
      Copy one color region over another in the palette.

   INPUTS
      From
         Source color register (0-255).

      To
         Destination color register (0-255).

      Note:  If no arguments are given, the program goes into
         interactive "Copy Color" mode, requiring the user to select
         the destination color register.

   RESULT
      None.
```

1.39 CountColors

```
COUNTCOLORS

   FORMAT
      CountColors Quiet/S

   FUNCTION
      Count the number of unique colors in the main image buffer.

   INPUTS
      Quiet
         If specified, the number of colors will not be displayed onscreen
         to the user but instead be returned in the result string.

   RESULT
      If "Quiet" is specified, the number of colors will be returned in the
      result variable.
```

1.40 CreateAlpha

```
CREATEALPHA

   FORMAT
      CreateAlpha
         Black/S,Matte/S,Region/S,Brush/S,Waves/S,Length/N,CenterX/N,Center
         Y/N,Angle/N,Dampen/N

   FUNCTION
```

Create a particular type of alpha channel.

INPUTS
   Black
      Create a black alpha channel.

   Matte
      Create an alpha channel matte based on the main image buffer.

   Region
      Create an alpha channel based on the currently defined region.

   Brush (2.0)
      Create an alpha channel composed of the current brush.

   Waves
      Invoke the wave generator to create the alpha channel. The
      following parameters deal with the type of waves to generate.

   Length
      Wavelength in pixels (distance between waves).

   CenterX,CenterY
      Center point of the waves, in buffer pixels. Need not be visible.

   Angle
      Angle of the waves. By varying the angle over a series of
      frames, you create moving waves.

   Dampen
      Wave dampening, expressed as a percentage of wave force reduction
      per wavelength distance from the center. Thus, a dampening of 50%
      would have the waves losing 50% of their size every wavelength.

   Note: Better waves can be produced with the new Wave hook.

RESULT
   None.

1.41 CreateBuffer

CREATEBUFFER

   FORMAT
      CreateBuffer
         Width/N,Height/N,Grey/S,VMem/S,Force/S,Red/N,Green/N,Blue/N,Aspect
         X/N,AspectY/N,DPIX/N,DPIY/N

   FUNCTION
      Create a new empty image buffer, replacing any existing one.

   INPUTS
      Width
         Width of the new buffer in pixels.

```
    Height
        Height of the new buffer in pixels.

    Grey
        If specified, the new buffer will be greyscale (8-bit). Otherwise
        it will be color (24-bit).

    VMem
        If specified, the new buffer will use virtual memory. Normally,
        the program will attempt to allocate the buffer from RAM before
        resorting to virtual memory.

    Force
        If specified, this will bypass the normal "Are you sure?"
        requester that normally appears.

    Red,Green,Blue (2.0)
        Specifies the background color of the new buffer.

    AspectX,AspectY (2.0)
        Specifies the pixel aspect ratio of the new buffer.

    DPIX,DPIY (2.0)
        Specifies the DPI of the new buffer.

    Note:  If no arguments are specified, the standard Create
        Buffer window will be presented.

RESULT
    None.
```

1.42 CreateNailFile

```
CREATENAILFILE (2.0)

    FORMAT
        CreateNailFile File/A,Depth/N

    FUNCTION
        Create a thumbnail file from the main buffer and save to the given
        file.

        Note:  If thumbnail.library is not installed properly, this
            function does nothing.

    INPUTS
        File
            Name of the file to save to.  Note that ".nail" will be appended
            to the filename.  Presumably, there is already a 'real' image file
            that exists under the name "File".

        Depth
            Depth of the thumbnails, either 12 or 24.  Defaults to 24.

    RESULT
```

None.

1.43 Crop

CROP

   FORMAT
      Crop Left/N,Top/N,Width/N,Height/N,ToSwap/S,Auto/S

   FUNCTION
      Crop the main image buffer to the specified size.

   INPUTS
      Left,Top
         Upper left corner of the cropped region, given in pixel
         coordinates.

      Width,Height
         Width and height of the cropped region, in pixels.

      ToSwap
         If specified, the cropped region will be placed into the swap
         buffer instead of replacing the main buffer.

      Auto (2.0)
         Does an autocrop.

      Note: If no arguments are given, the standard Crop window will
        be presented.

   RESULT
      None.

1.44 Cyan

CYAN

   FORMAT
      Cyan Adjust/N

   FUNCTION
      Adjust the cyan content of the current image or region.

   INPUTS
      Adjust
         Amount to adjust the cyan (-127 to +127).

   RESULT
      None.

1.45   Disperse

DISPERSE

    FORMAT
       Disperse Count/N

    FUNCTION
       Perform a disperse effect on the current image or region.

    INPUTS
       Count
          Number of times to apply the dispersion (1-8). High iterations
          take longer to process.

    RESULT
       None.

1.46   Distort

DISTORT

    FORMAT
       Distort Amount/N

    FUNCTION
       Perform a distortion effect on the current image or region. Note
       that this command requires an alpha channel.

    INPUTS
       Amount
          Amount of distortion to apply (1-255). If not given, a requester
          will be presented.

    RESULT
       None.

1.47   Dither

DITHER

    FORMAT
       Dither Command,Args/F

    FUNCTION
       Send a command to the current Dither module. It is entirely up to
       the module to interpret and act upon the command.

       Note: There are no Arexx arguments for the standard Dither
          module.

    INPUTS

```
        Depends on the module.

    RESULT
        Depends on the module.
```

1.48 DrawMode

```
DRAWMODE (2.0)

    FORMAT
        DrawMode Name,Options/S,Args/F

    FUNCTION
        Change or set arguments for the current drawmode.

    INPUTS
        Name
            Name of the new drawmode to change to.  If not provided, the
            drawmode is not changed.

        Options
            Show the options window for the current drawmode, if the current
            drawmode has any options.

        Args
            Arguments to be passed to the new drawmode.

    RESULT
        Returns the name of the previous drawmode.
```

1.49 DrawStyle

```
DRAWSTYLE (2.0)

    FORMAT
        DrawStyle Name,Options/S,Args/F

    FUNCTION
        Change or set the parameters for the current drawstyle.

    INPUTS
        Name
            Name of the new drawstyle to change to.  If not provided, the
            drawstyle is not changed.

        Options
            Show the options window for the current drawstyle, if the current
            drawstyle has any options.

        Args
            Arguments to be passed to the new drawstyle.
```

```
RESULT
   Returns the name of the previous drawstyle.
```

1.50 DrawTool

```
DRAWTOOL

   FORMAT
      DrawTool Tool

   FUNCTION
      Set the current drawing tool.  Updates the display if appropriate.

   INPUTS
      Tool
         Name of the drawing tool to activate.  Should be one of the
         following choices:

         Airbrush Bezier Box FilledBox FilledFree FilledOval FilledPoly
            Flood FreeDraw FreeLine Line Oval Poly
      Note:  If no arguments are specified, no change is made.

   RESULT
      Returns the name of the active drawing tool before any changes are
      made.
```

1.51 DynamicRange

```
DYNAMICRANGE

   FORMAT
      DynamicRange Lower/N,Upper/N

   FUNCTION
      Perform a dynamic range effect on the current image or region.

   INPUTS
      Lower
         Lower color limit (0-255).

      Upper
         Upper color limit (0-255).

      Note:  If no arguments are given, the standard dynamic range
         requester is presented.

   RESULT
      None.
```

1.52 EdgeDetect

```
EDGEDETECT
```

```
    FORMAT
       EdgeDetect Threshold/N
```

```
    FUNCTION
       Perform an edge detect function on the current image or region.
```

```
    INPUTS
       Threshold
          Detection threshold (1-255).  The smaller the number, the more
          pronounced the edges.
```

```
    RESULT
       None.
```

1.53 EdgeMode

```
EDGEMODE
```

```
    FORMAT
       EdgeMode Mode,Radius/N
```

```
    FUNCTION
       Change and/or get information on the current the edge mode.
```

```
    INPUTS
       Mode
          New edge mode.  Should be a single case-insensitive word:
```

```
          Normal AntiAlias FeatherIn FeatherOut
       Radius
          For "FeatherIn" and "FeatherOut" modes, this describes the radius
          of the effect, in pixels.
```

```
       Note:  If no arguments are given, no change is made.
```

```
    RESULT
       Previous edge mode and radius, before the change, in the form of
       "EdgeMode Radius".
```

1.54 EndBar

```
ENDBAR
```

```
    FORMAT
       EndBar
```

```
    FUNCTION
       Complete a status bar operation.  Returns control of the program to
       the user, clears the "busy" pointer.
```

You should ALWAYS remember to follow any calls to BeginBar with an
eventual call to EndBar. The user will not be able to click on any
gadgets until you do.

INPUTS
   None.

RESULT
   None.

SEE ALSO
   BeginBar,Bar

1.55 ExpandRegion

EXPANDREGION

   FORMAT
      ExpandRegion

   FUNCTION
      Expand the current region area by a pixel on all sides.

   INPUTS
      None.

   RESULT
      None.

   SEE ALSO
      ShrinkRegion

1.56 ExportBuffer

EXPORTBUFFER

   FORMAT
      ExportBuffer

   FUNCTION
      Indicate that you are finished using a buffer that was created using
      the ImportBuffer command. You MUST call this when you are done,
      otherwise bad things may happen.

      WARNING: This is a very dangerous command. Don't use it
         lightly.

   INPUTS
      None.

   RESULT

```
        None.

    SEE ALSO
        ImportBuffer
```

1.57 FalseColor

```
FALSECOLOR

    FORMAT
        FalseColor Standard/S,Palette/S

    FUNCTION
        Perform a false color effect on the current image or region.

    INPUTS
        Standard
            Uses the standard table for creating false color images.

        Palette
            Uses the current palette for generating the false color image.

        Note:  If no option is specified, a requester will be presented
            to ask for standard or palette.

    RESULT
        None.
```

1.58 FilledBox

```
FILLEDBOX

    FORMAT
        FilledBox Left/N,Top/N,Width/N,Height/N

    FUNCTION
        Draw a filled box into the current image buffer at the given
        location, using the current fill settings.  If Scissors or
        MagicScissors has been activated, this will cut out the area defined
        by the box as a brush.

    INPUTS
        Left,Top
            Upper left corner of the box, in pixels.

        Width,Height
            Width and height of the box, in pixels.

    RESULT
        None.
```

1.59 FilledFree

FILLEDFREE

```
FORMAT
   FilledFree

FUNCTION
   Draw a filled freehand polygon into the main buffer, using the
   current fill settings.  The points defining the freehand outline is
   set by calls to NewArea/AddArea.

INPUTS
   None.

RESULT
   None.

SEE ALSO
   NewArea,AddArea
```

1.60 FilledOval

FILLEDOVAL

```
FORMAT
   FilledOval XC/N,YC/N,XRadius/N,YRadius/N

FUNCTION
   Draw a filled oval into the current image buffer, using the current
   fill settings.  If Scissors or MagicScissors has been specified, the
   area defined by the oval will be picked up as a brush.

INPUTS
   XC,YC
      Coordinates of the center point of the oval, in pixels.

   XRadius,YRadius
      Major and minor radii of the oval, in pixels.

RESULT
   None.
```

1.61 FilledPoly

FILLEDPOLY

```
FORMAT
   FilledPoly

FUNCTION
   Draw a filled polygon into the main buffer, using the current drawing
```

```
color and fill settings.  The points of the polygon are defined by
calls to NewArea/AddArea.
```

```
INPUTS
   None.
```

```
RESULT
   None.
```

```
SEE ALSO
   NewArea,AddArea
```

1.62 FillMode

```
FILLMODE
```

```
FORMAT
   FillMode Mode,Range/N,Skew/N,Rough/N,Smooth/S
```

```
FUNCTION
   Select the current fill settings, which are used for all subsequent
   filling operations.
```

```
INPUTS
   Mode
      New fill type.  Should be one of the following choices:

      Solid Vert Horiz Radial DiagLR DiagRL Tile Warp Brick Wheel
   Range
      For gradient fill types, this specifies the range number from
      which to take the colors for the gradient.  Should be 0-8, with
      range 0 being taken as the ALL range (the entire palette).
```

```
   Skew
      Amount of skew to apply to gradient fills (-50 to +50).
```

```
   Rough
      Roughness to add to any fill operation (1-31).
```

```
   Smooth
      If selected, gradient fills will automatically smooth between the
      colors in the selected range.  Otherwise, the colors in the range
      are used literally with no smoothing between them (resulting in
      bands of color).
```

```
   Note:  If no arguments are given, no changes are made.
```

```
RESULT
   Returns the current fill settings before any changes are made, in the
   form "mode range skew rough smooth".
```

1.63 FloodFill

```
FLOODFILL

    FORMAT
        FloodFill X/N/A,Y/N/A,Close/N

    FUNCTION
        Flood fill an area using the current drawing color, starting at the
        given buffer coordinates.

    INPUTS
        X,Y
            Coordinates at which to begin the flood fill.

        Close
            Optional flood closeness (1-255).

    RESULT
        None.
```

1.64 FloodRegion

```
FLOODREGION

    FORMAT
        FloodRegion Add/S,Subtract/S,X/N/A,Y/N/A,Close/N

    FUNCTION
        Define a region in the main buffer by doing a flood fill at a given
        location.  Subsequent image processing operations will be constrained
        to this region.

    INPUTS
        Add
            If specified, this region is to be merged in with the existing
            region.  Otherwise the new region supercedes any existing regions.

        Subtract (2.0)
            If specified, this region will be subtracted from the existing
            region.

        X,Y
            Location from which to do the flood fill.

        Close
            Optional closeness value to use in the flood fill operation.  If
            not specified, the current default will be used.

    RESULT
        None.
```

1.65 FreeDraw

```
FREEDRAW

    FORMAT
       FreeDraw

    FUNCTION
       Draw into the main buffer using the freehand drawing tool.  The path
       the drawing follows is defined by calls to NewArea/AddArea.

    INPUTS
       None.

    RESULT
       None.

    SEE ALSO
       NewArea,AddArea
```

1.66 FreeLine

```
FREELINE

    FORMAT
       FreeLine

    FUNCTION
       Draw into the main buffer using the freehand line tool.  The path the
       drawing follows is defined by calls to NewArea/AddArea.

    INPUTS
       None.

    RESULT
       None.

    SEE ALSO
       NewArea,AddArea
```

1.67 Gamma

```
GAMMA

    FORMAT
       Gamma Adjust/N

    FUNCTION
       Adjust the gamma of the current image or region.

    INPUTS
       Adjust
          Amount to adjust the gamma (-127 to +127).
```

```
RESULT
   None.
```

1.68   GetAlpha

```
GETALPHA

   FORMAT
      GetAlpha

   FUNCTION
      Return information about the alpha channel.

   INPUTS
      None.

   RESULT
      Returns a string containing information about the alpha channel, in
      the following format:

         name width height depth aspectx aspecty dpix dpiy rp gp bp


      A null string is returned if the alpha channel is empty.
```

1.69   GetBrush

```
GETBRUSH

   FORMAT
      GetBrush

   FUNCTION
      Return information about the current brush.

   INPUTS
      None.

   RESULT
      Returns a string containing information about the brush, in the
      following format:

         name width height depth aspectx aspecty dpix dpiy redp greenp
            bluep

      A null string is returned if there is no brush.
```

1.70   GetMain

GETMAIN

    FORMAT
        GetMain

    FUNCTION
        Return information about the main buffer.

    INPUTS
        None.

    RESULT
        Returns a string containing information about the current buffer, in
        the following format:

            name width height depth aspectx aspecty dpix dpiy redp greenp
                bluep

        A null string is returned if the buffer is empty.

1.71 GetPalette

GETPALETTE

    FORMAT
        GetPalette Register/N/A

    FUNCTION
        Retrieve the color value of a specified color register in the current
        palette.

    INPUTS
        Register
            Register to look at, should be in the range 0 - 255 or '-1', to
            get the color of the current active register.

    RESULT
        Color value of the register, in the form "R G B" where each component
        is an integer in the range of 0 - 255.

1.72 GetPixel

GETPIXEL

    FORMAT
        GetPixel X/N/A,Y/N/A

    FUNCTION
        Read the color value of a pixel at a given location.

    INPUTS

```
    X,Y
       Coordinates of the pixel to read, in buffer pixels.

    RESULT
       Returns the RGB value of the given pixel, in the form "Red Green
       Blue", where each component is an integer from 0-255.  In the case of
       a greyscale buffer, all three components will be the same.

    SEE ALSO
    PutPixel
```

1.73 GetPointList

```
GETPOINTLIST

    FORMAT
       GetPointList

    FUNCTION
       Returns in a stem variable the points in the currently defined area
       as set by calls to NewArea/AddArea.  The points may also be set by
       the user's use of certain drawing tools (FreeDraw, FreeLine, etc.).

    INPUTS
       None.

    RESULT
       Returns the list of points in RESULT.1 through RESULT.N.  RESULT.0 is
       set to the number of points.  Each point is given as integers in the
       form "X Y".
```

1.74 GetPrefs

```
                GETPREFS

    FORMAT
       GetPrefs Object/A

    FUNCTION
       Retrieve the state of a certain preferences object.

    INPUTS
       Object
          Which preference item you want to get information on.  It should
          be a single case-sensitive word.

          For a list of the available preferences objects, see the
          description of the
                  SETPREFS
                  command.

    RESULT
```

    Depends on the preference object; for flags the result will be either
    "On" or "Off", for path objects, the result string will contain the
    path.

  SEE ALSO
    SetPrefs

1.75   GetPreview

GETPREVIEW

  FORMAT
    GetPreview

  FUNCTION
    Returns the current preview module.

  INPUTS
    None.

  RESULT
    Returns the name of the current preview module.

1.76   GetPrinter

GETPRINTER

  FORMAT
    GetPrinter

  FUNCTION
    Returns the current printer module.

  INPUTS
    None.

  RESULT
    Returns the name of the current printer module.

1.77   GetRange

GETRANGE

  FORMAT
    GetRange Range/N/A

  FUNCTION
    Retrieve the upper and lower register boundaries of a given color
    range.

```
INPUTS
   Range
      Range number to examine, 1 - 8.

RESULT
   Lower and upper registers in the range, expressed as integers in the
   form "Low High".

SEE ALSO
   SetRange
```

1.78   GetRegionArea

```
GETREGIONAREA

   FORMAT
      GetRegionArea

   FUNCTION
      Returns the area covered by the currently defined region.

   INPUTS
      None.

   RESULT
      Returns the region in the following form: "leftedge topedge width
      height"
```

1.79   GetRender

```
GETRENDER

   FORMAT
      GetRender

   FUNCTION
      Return the current render module.

   INPUTS
      None.

   RESULT
      Returns the name of the current render module.
```

1.80   GetScanner

```
GETSCANNER

   FORMAT
```

```
        GetScanner
```

    FUNCTION
        Return the current scanner module.

    INPUTS
        None.

    RESULT
        Returns the name of the current scanner module.

1.81 GetStatus

```
GETSTATUS (2.0)
```

    FORMAT
        GetStatus Object/A

    FUNCTION
        Return information about the current status of ImageFX.

    INPUTS
        Object
          The name of an ImageFX attribute to obtain information about. The
          following attributes are defined:

        ProgramDir   Full pathname of ImageFXs current
                         directory.
        HelpDir   Full pathname of the directory where help
                         text is stored.
        TextDir   Full pathname of the directory where
                         localization text is stored.
        EnvDir   Directory in ENV: where ImageFXs
                         environment variables are stored.
        PubScrName   Name of ImageFXs public screen (if open
                         on a screen).
        HostName   Name of ImageFXs Arexx port (if
                         available).
        AssignDir   Assign name of the ImageFX directory.

    RESULT
        Returns a text string as described above.

1.82 GetSwap

```
GETSWAP
```

    FORMAT
        GetSwap

    FUNCTION
        Return information about the swap buffer.

```
INPUTS
   None.

RESULT
   Returns a string containing information about the swap buffer, in the
   following format:

      name width height depth aspectx aspecty dpix dpiy redp greenp
          bluep
   A null string is returned if the buffer is empty.
```

1.83   GetVersion

```
GETVERSION

   FORMAT
      GetVersion

   FUNCTION
      Return the version string for the program.

   INPUTS
      None.

   RESULT
      Version string in the standard 2.0 version string format.
```

1.84   GhostBrush

```
GHOSTBRUSH

   FORMAT
      GhostBrush On/S,Off/S

   FUNCTION
      Enable or disable the "ghost brush" feature on the current brush.

   INPUTS
      On
         Enable ghost brush; the current brush will be made semi-
         transparent.

      Off
         Disable ghost brush; the current brush will be shown normally.

   RESULT
      None.
```

1.85   GrabBrush

GRABBRUSH

```
   FORMAT
      GrabBrush ScreenName

   FUNCTION
      Capture an Amiga screen as the current brush.

   INPUTS
      ScreenName
         If specified, indicates the name of a screen to grab.  You do not
         have to specify the entire screen name, just enough to distinguish
         it from other screens.

      Note:  If no arguments are specified, the standard Grab Screen
         requester is presented.

   RESULT
      None.
```

1.86 GrabBuffer

GRABBUFFER

```
   FORMAT
      GrabBuffer ScreenName,Force/S

   FUNCTION
      Capture an Amiga screen and convert into an image buffer.  The screen
      image will become the new main buffer, destroying whatever may have
      been there.

   INPUTS
      ScreenName
         If specified, indicates the name of a screen to grab.  You do not
         have to specify the entire screen name, just enough to distinguish
         it from other screens.

      Force
         Bypass the normal "Are you sure?" requester.

      Note:  If no arguments are specified, the standard "Grab
         Screen" requester will be presented.

   RESULT
      None.
```

1.87 GrabPalette

GRABPALETTE

```
FORMAT
   GrabPalette ScreenName

FUNCTION
   Grab the colors from an Amiga screen in memory, storing it into the
   first entries of the current palette.

INPUTS
   ScreenName
      Name of the screen to examine.  If not given, the standard Grab
      Screen requester will be presented.

RESULT
   None.
```

1.88 Green

```
GREEN

   FORMAT
      Green Adjust/N

   FUNCTION
      Adjust the green content of the current image or region.

   INPUTS
      Adjust
         Amount to adjust the green (-127 to +127).  This number is added
         directly to each green value.

   RESULT
      None.
```

1.89 Grey2Color

```
GREY2COLOR

   FORMAT
      Grey2Color
      Gray2Color (1.50)
      GreyToColor (1.50)
      GrayToColor (1.50)

   FUNCTION
      Convert an 8-bit grey image to 24-bit color.

   INPUTS
      None.

   RESULT
      None.
```

1.90 Grid

```
GRID

    FORMAT
        Grid On/S,Off/S,OffsetX/N,OffsetY/N,Width/N,Height/N

    FUNCTION
        Enable or disable the grid, and set the size of the grid in pixels.

    INPUTS
        On
            Turn on the grid.  (2.0)

        Off
            Turn off the grid.

        OffsetX,OffsetY
            Grid offset from the upper left corner of the display, given in
            pixels.

        Width,Height
            Grid block size in pixels.

    RESULT
        Returns the state of the grid before any changes are made, as
        integers in the form "offsetx offsety width height ON|OFF".
```

1.91 Halftone

```
HALFTONE

    FORMAT
        Halftone Type/N

    FUNCTION
        Apply one of several types of halftone dithering algorithms to the
        current image or region.

    INPUTS
        Type
            Type of halftone to apply.  Should be one of the following values:

            0       45 degree cluster
                1       0 degree cluster
                2       Spiral cluster
                3       Line cluster
                4       (Unused)
                5       4x4 dispersed
                6       6x6 dispersed
                7       Use brush as pattern
                8       Use alpha channel as pattern
                9       50% threshold
```

```
      Note:  If no arguments are given, a requester will be
         presented.

   RESULT
      None.
```

1.92   Help

```
HELP

   FORMAT
      Help Command/A,Quiet/S

   FUNCTION
      Obtain the argument template for a specified command.

   INPUTS
      Command
         The name of the command to retreive help on.

      Quiet  (2.0)
         When specified, simply prints the template for the command to the
         console (or returns it in RESULT).  Otherwise, an AmigaGuide node
         containing the command will be searched for.

   RESULT
      Returns the argument template string for the specified command.
```

1.93   HidePanel

```
HIDEPANEL

   FORMAT
      HidePanel

   FUNCTION
      Hide the ImageFX menu panel screen.

   INPUTS
      None.

   RESULT
      None.

   SEE ALSO
      ShowPanel
```

1.94   Hook

```
HOOK

   FORMAT
      Hook File,Args/F

   FUNCTION
      Call an external hook program.  This command will not return until
      the hook program has finished.  Consult the documentation for the
      hook program in question to find out the appropriate arguments and
      possible result strings.

   INPUTS
      File
         Filename of the hook program to run.  If not specified, a file
         requester will be presented.

      Args
         Optional arguments to pass to the hook program.

   RESULT
      Depends on the hook program.
```

1.95 HorizFlip

```
HORIZFLIP

   FORMAT
      HorizFlip

   FUNCTION
      Perform a horizontal flip on the current image or region.

   INPUTS
      None.

   RESULT
      None.

   SEE ALSO
      VertFlip
```

1.96 HorizMirror

```
HORIZMIRROR

   FORMAT
      HorizMirror

   FUNCTION
      Perform a horizontal mirror effect on the current image or region.
```

```
INPUTS
    None.

RESULT
    None.
```

1.97 Hue

```
HUE

    FORMAT
        Hue Adjust/N

    FUNCTION
        Adjust the hue of the current image or region.

    INPUTS
        Adjust
            Amount to adjust the hue (-127 to +127).

    RESULT
        None.
```

1.98 Iconify

```
ICONIFY

    FORMAT
        Iconify

    FUNCTION
        Iconify the program.  All buffers remain intact.

    INPUTS
        None.

    RESULT
        None.

    SEE ALSO
        Uniconify
```

1.99 ImageMap

```
IMAGEMAP (OBSOLETE)

    FORMAT
        ImageMap Blend/N,Alpha/S,Scale/S

    FUNCTION
```

Perform an image mapping composition process between the main and
swap buffers. This function is still provided for backwards
compatibility; see the Composite hook for greater image composition
control.

INPUTS
   Blend
      Percentage of image mapping applied to the main buffer (1-100).

   Alpha
      If given, uses the alpha channel as an extra blend control plane.

   Scale
      If given, the swap buffer is scaled to fit within the region being
      processed.

RESULT
   None.

1.100 ImportBuffer

IMPORTBUFFER

   FORMAT
      ImportBuffer Width/N/A,Height/N/A,Red/N/A,Green/N/A,Blue/N/A

   FUNCTION
      Directly import a block of image data memory into the program as an
      image buffer. Basically sets up an image buffer in the program which
      points to the block of memory you indicate. A copy is NOT made of
      the image data. This would (theoretically) allow one to use
      ImageFXs image processing features on image data from other
      programs.

      WARNING: This is a very dangerous command. Don't use it
         lightly.

   INPUTS
      Width,Height
         Size of the image data in pixels.

      Red,Green,Blue
         Red, green, and blue plane pointers. Each should be an integer
         representing the address in memory of where the particular pointer
         is.

   RESULT
      None.

   SEE ALSO
      ExportBuffer

1.101   InvertRegion

INVERTREGION

     FORMAT
        InvertRegion

     FUNCTION
        Inverts the currently defined region mask.

     INPUTS
        None.

     RESULT
        None.

1.102   KillAlpha

KILLALPHA

     FORMAT
        KillAlpha

     FUNCTION
        Erase the alpha channel, freeing all memory associated with it.

     INPUTS
        None.

     RESULT
        None.

1.103   KillBrush

KILLBRUSH

     FORMAT
        KillBrush

     FUNCTION
        Erase the current brush, freeing all memory associated with it.

     INPUTS
        None.

     RESULT
        None.

1.104   KillBuffer

```
KILLBUFFER
```

```
    FORMAT
       KillBuffer Force/S
```

```
    FUNCTION
       Erase the main image buffer, freeing all memory associated with it.
       You cannot get it back after doing this.
```

```
    INPUTS
       Force
          If specified, the normal "Are you sure?" requester is bypassed.
```

```
    RESULT
       None.
```

1.105 KillMapped

```
KILLMAPPED (2.0)
```

```
    FORMAT
       KillMapped
```

```
    FUNCTION
       Free the memory used by any colormapped images loaded with
       LoadMapped.
```

```
    INPUTS
       None.
```

```
    RESULT
       None.
```

1.106 KillSwap

```
KILLSWAP
```

```
    FORMAT
       KillSwap Force/S
```

```
    FUNCTION
       Erase the swap buffer, freeing all memory associated with it.
```

```
    INPUTS
       Force
          If given, bypasses the "are you sure?" requester.
```

```
    RESULT
       None.
```

1.107 KillUndo

KILLUNDO

FORMAT
    KillUndo

FUNCTION
    Free the memory associated with the current undo buffer.

INPUTS
    None.

RESULT
    None.

1.108 Learn

LEARN

FORMAT
    Learn File,Stop/S,NoHeader/S,Header/S,Quiet/S,Force/S

FUNCTION
    Control ImageFXs macro recording feature (aka. learning).

INPUTS
    File
        The name of an Arexx program to generate. If no name is given, a
        file requester will be presented. The extension of .ifx is
        automatically appended if not provided.

    Stop
        Stop recording and close the Arexx program file.

    NoHeader, Header
        Specify whether or not to write the current drawing information.
        If neither is specified, then a requester is presented to the
        user.

    Quiet
        Specify this to disable the macro recording stopped requester.

    Force
        Specify this to force overwriting existing files without prompting
        the user.

RESULT
    None.

1.109 LightTable

```
LIGHTTABLE

   FORMAT
      LightTable On/S,Off/S,Toggle/S

   FUNCTION
      Enable or disable the light table mode.  Light table mode allows you
      to see the swap buffer through the main buffer.  Both buffers must be
      the same size for this to work.

   INPUTS
      On,Off
         Enable or disable the light table mode.

      Toggle
         Toggle the state of the light table mode.

      Note:  If no arguments are given, then no change is made.

   RESULT
      Returns the state of the light table mode before any changes are
      made.
```

1.110   LightTableView

```
LIGHTTABLEVIEW

   FORMAT
      LightTableView Swap/S,Alpha/S,Toggle/S

   FUNCTION
      Select the buffer that the light table shows through.

   INPUTS
      Swap
         When selected, the light table will show the swap buffer.

      Alpha
         When selected, the light table will show the alpha channel.

      Toggle
         Toggles between the two views.

   RESULT
      Returns the former light table view, "Swap" or "Alpha".

   SEE ALSO
      LightTable
```

1.111   Line

```
LINE
```

```
    FORMAT
        Line X1/N,Y1/N,X2/N,Y2/N
```

```
    FUNCTION
        Draw a line at the given location in the current image buffer, using
        the current drawing pen or brush, and all of the current drawing
        settings.
```

```
    INPUTS
        X1,Y1
            Starting coordinates of the line.
```

```
        X2,Y2
            Ending coordinates of the line.
```

```
    RESULT
        None.
```

1.112 ListRequest

```
LISTREQUEST
```

```
    FORMAT
        ListRequest Count/N/A,Stem/A
```

```
    FUNCTION
        Present a pop-up vertical list requester to the user, similar to the
        type that the program uses in the toolbox.  The user must choose one
        of the selections before proceeding, or hit cancel.
```

```
    INPUTS
        Count
            Number of gadgets to appear in the requester, plus one for the
            title entry.
```

```
        Stem
            Stem variable where the gadget labels are stored.  The first label
            is taken to be the title for the requester, thus the first
            gadget's label should be in Stem.2, the second label in Stem.3,
            the third in Stem.4, and so on.
```

```
    RESULT
        Returns the number of the gadget the user chose, from 1 - N, if
        successful.
```

1.113 LoadAlpha

```
LOADALPHA
```

```
FORMAT
   LoadAlpha File,Args/F

FUNCTION


INPUTS
   File
      Filename of the image to load.  If not specified, a file requester
      will be presented.

   Args
      Optional arguments passed to the Loader module.

RESULT
   None.
```

1.114 LoadBrush

```
LOADBRUSH

   FORMAT
      LoadBrush File,Args/F

   FUNCTION
      Load an image as a brush, destroying the old brush.  The program will
      automatically determine the format of the file being loaded and call
      the appropriate Loader module.

   INPUTS
      File
         Filename of the image to load.  If not specified, a file requester
         will be presented.  If a full pathname is not given, the file is
         assumed to be in the current brush load path (as set in prefs).

      Args
         Passed to the Loader module that gets called.

   RESULT
      None.
```

1.115 LoadBrushClip

```
LOADBRUSHCLIP

   FORMAT
      LoadBrushClip

   FUNCTION
      Load the image in the clipboard in as the current brush, destroying
      the previous brush.
```

```
INPUTS
   None.

RESULT
   None.
```

1.116 LoadBuffer

```
LOADBUFFER

   FORMAT
      LoadBuffer File,Force/S,Args/F

   FUNCTION
      Load an image into the main buffer, destroying the old contents.
      ImageFX will automatically determine the format of the file being
      loaded and call the appropriate Loader module.

   INPUTS
      File
         Pathname of the image to load.  If a full path is not given, then
         the file is assumed to reside in the current Load path (as set in
         prefs).

      Force
         Bypass the normal "Are you sure?" requester.

      Args
         Passed to the loader module that gets used.  For example, you can
         pass the exact frame number you want to load to the ANIM loader.

   RESULT
      None.
```

1.117 LoadBufferAs

```
LOADBUFFERAS

   FORMAT
      LoadBufferAs Format,File,Force/S,Args/F

   FUNCTION
      Force the program to load a file using a specified file format. This
      can be used if a particular file format (such as the Sculpt RGB
      format) cannot be automatically detected for some reason.

   INPUTS
      Format
         File format to load as.  If not specified, a file format requester
         will be presented.

      File
```

```
             Name of the file to load.  If not specified, a file requester will
             be presented.  If a full path is not given, the file is assumed to
             reside in the current load path (as set in prefs).

        Force
             If specified, bypass the normal "are you sure?" requester.

        Args
             Arguments passed to the loader module.  See the documentation for
             the particular loader module.

    RESULT
        None.
```

1.118 LoadBufferClip

```
LOADBUFFERCLIP

    FORMAT
        LoadBufferClip Force/S

    FUNCTION
        Load the image in the clipboard into the main image buffer.

    INPUTS
        Force
            If specified, bypasses the normal "are you sure?" requester.

    RESULT
        None.
```

1.119 LoadMapped

```
LOADMAPPED (2.0)

    FORMAT
        LoadMapped File,Args/F

    FUNCTION
        Load a file from disk directly as a colormapped image.  The image may
        then be saved immediately using the SaveRenderedAs command, without
        having to render.  This command is ideally suited for converting
        colormapped images from one format to another.

        Note that you should follow any LoadMapped commands with an eventual
        call to KillMapped to free the memory used by the colormapped image.

    INPUTS
        File
           Name of the file to load.  If not specified, a file requester will
           be presented.
```

```
    Args
       Arguments to be passed to the loader module.

  RESULT
    None.
```

1.120 LoadMask

```
LOADMASK (2.0)

  FORMAT
    LoadMask File,Add/S,Subtract/S

  FUNCTION
    Load a mask file from disk and make it the current region.

  INPUTS
    File
       Name of the file to load.  If not provided, a file requester will
       be presented.

    Add
       If specified, the new mask will be added to the current region to
       combine the two masks.

    Subtract
       If specified, the new mask will be subtracted from the current
       region.

  RESULT
    None.

  SEE ALSO
    SaveMaskAs
```

1.121 LoadPalette

```
LOADPALETTE

  FORMAT
    LoadPalette File,Number/N

  FUNCTION
    Load colors from the given file into the current palette.  May also
    load range definitions, depending on the file format.

  INPUTS
    File
       Name of the file to read colors from.  If not given, a file
       requester will be presented.  If a full path is not given, the
       file is assumed to be in the current Palette path (as set by
       prefs).
```

```
Number (1.50)
   Palette number to load into.  -1 to load into the currently
   displayed palette, or a palette number from 1 - 8.  (Palette
   number 8 is the render palette.)
```

```
RESULT
   None.
```

1.122 LockGui

LOCKGUI

```
FORMAT
   LockGui
```

```
FUNCTION
   Prevents the program from drawing or refreshing anything on the menu
   display, including gadgets, mode indicators, etc.  This is extremely
   useful when performing a long series of operations which would
   normally update corresponding gadgets on the display at each step.
   Disabling the gadget refreshing can considerably speed up the
   operation in question.  This command will also disable the status bar
   completely, as well as preview redrawing.

   You are wise to follow this command with an eventual call to
   UnlockGui, to return things to normal.
```

```
INPUTS
   None.
```

```
RESULT
   None.
```

1.123 LockInput

LOCKINPUT

```
FORMAT
   LockInput
```

```
FUNCTION
   Prevent the user from clicking on any gadgets.  This is useful if you
   don't want the user messing with things while your Arexx script is
   running.  Be sure to eventually follow this with a call to
   UnlockInput to restore things to normal.
```

```
INPUTS
   None.
```

```
RESULT
   None.
```

```
SEE ALSO
   UnlockInput
```

1.124 LockRange

```
LOCKRANGE

   FORMAT
      LockRange Range/N/A,On/S,Off/S

   FUNCTION
      Lock or unlock the given palette range.

   INPUTS
      Range
         Palette range to affect (0-8).  Range 0 indicates you want to
         affect the entire palette.

      On
         Lock the given range.

      Off
         Unlock the given range.

   RESULT
      None.
```

1.125 Magenta

```
MAGENTA

   FORMAT
      Magenta Adjust/N

   FUNCTION
      Adjust the magenta content of the current image or region.

   INPUTS
      Adjust
         Amount to adjust the magenta (-127 to +127).

   RESULT
      None.
```

1.126 MagicCycle

```
MAGICCYCLE

   FORMAT
```

```
   MagicCycle
```

FUNCTION
    Cycles to the next application that has opened the MAGIC image in the
    main buffer.

INPUTS
    None.

RESULT
    None.

1.127 MagicOpen

MAGICOPEN

FORMAT
    MagicOpen Name,Force/S

FUNCTION
    Open a selected MAGIC image for processing within ImageFX.

INPUTS
    Name
        Name of the MAGIC image to open. If not specified, a requester
        will be presented from which the user can choose one of the
        current MAGIC images in memory.

    Force/S
        Disables the "are you sure you want to overwrite the current
        buffer" requester.

RESULT
    None.

1.128 MagicScissors

MAGICSCISSORS

FORMAT
    MagicScissors

FUNCTION
    Initiate a brush cut operation. Issuing this command places the
    program into brush cut mode; you must then follow with a standard
    drawing command to cut out a brush in that shape. This command
    differs from Scissors in that it uses the special magic scissors
    mode which will attempt to trim the background area from the brush as
    it is picked up.

INPUTS
    None.

```
RESULT
   None.
```

1.129 Matte

```
MATTE

   FORMAT
      Matte Red/N,Green/N,Blue/N,Alpha/S,Scale/S

   FUNCTION
      Perform a composite matte operation between the main and swap
      buffers.

   INPUTS
      Red,Green,Blue
         The color value to be taken as transparent in the main buffer.

      Alpha
         If specified, the alpha channel will be used as extra control in
         the composite operation.

      Scale
         If specified, the swap buffer will be scaled to the size of the
         main buffer region affected.

   RESULT
      None.
```

1.130 Menu

```
MENU

   FORMAT
      Menu Name

   FUNCTION
      Jump to the specified action menu.

   INPUTS
      Name
         Name of the action menu to enter, must be one of the following:

         Scanner Palette Toolbox Render Printer
      Note:  If no menu is specified, no change is made.

   RESULT
      Returns the name of the current action menu, before the change.
```

1.131   Merge

```
MERGE

   FORMAT
      Merge Blend/N,Alpha/S,Scale/S

   FUNCTION
      Perform a composite merge operation between the main and swap
      buffers.

   INPUTS
      Blend
         Percentage of blend (1-100).  Higher percentages will blend in
         more of the swap buffer.

      Alpha
         If specified, the alpha channel will be used in the composite
         operation.

      Scale
         If specified, the swap buffer will be scaled to the size of the
         main buffer's region.

   RESULT
      None.
```

1.132   Message

```
MESSAGE

   FORMAT
      Message Text/F

   FUNCTION
      Display a message in the Arexx status window.  If the macro was
      lauched asynchronously or without the status window, then this
      command has no effect.

   INPUTS
      Text
         Text of the message.

   RESULT
      None.
```

1.133   Mono2Grey

```
MONO2GREY

   FORMAT
      Mono2Grey Area/N
```

```
     Mono2Gray Area/N  (1.50)
     MonoToGrey Area/N  (1.50)
     MonoToGray Area/N  (1.50)
```

   FUNCTION
      Convert monochrome image data to 8-bit greyscale.

   INPUTS
      Area
         Area to use in the translation, should be one of 2, 4, or 8. The
         higher the number, the longer the process takes, but the more
         color depth in the resulting image.

   RESULT
      None.

1.134 MotionBlur

```
MOTIONBLUR
```

   FORMAT
      MotionBlur Angle/N,Length/N

   FUNCTION
      Perform a motion blur effect on the current image or region.

   INPUTS
      Angle
         Angle of the motion blur, in degrees (0-360).

      Length
         Length of the blur, in pixels.

   RESULT
      None.

1.135 Negative

```
NEGATIVE
```

   FORMAT
      Negative

   FUNCTION
      Perform a negative effect on the current image or region.

   INPUTS
      None.

   RESULT
      None.

1.136 NewArea

NEWAREA

    FORMAT
       NewArea

    FUNCTION
       Clear the current area definition, in preparation for defining a new
       area. Subsequent AddArea commands will define points in the new
       area.

    INPUTS
       None.

    RESULT
       None.

    SEE ALSO
       AddArea

1.137 NextBrush

NEXTBRUSH

    FORMAT
       NextBrush

    FUNCTION
       Select the next available brush as the current brush. The previous
       brush is shuffled into the "background".

    INPUTS
       None.

    RESULT
       None.

    SEE ALSO
       PrevBrush,SelectBrush,BrushToBack

1.138 NextBuffer

NEXTBUFFER

    FORMAT
       NextBuffer

    FUNCTION
       Select the next available image buffer as the main buffer. The
       previous main buffer is shuffled into the "background".

```
INPUTS
   None.

RESULT
   None.

SEE ALSO
   PrevBuffer,SelectBuffer,BufferToBack
```

1.139 OilTransfer

```
OILTRANSFER (OBSOLETE)

   FORMAT
      OilTransfer

   FUNCTION
      Perform an oil transfer effect on the current image or region.

      Note:  The new hook OilPaint provides better and faster oil
         effects.

   INPUTS
      None.

   RESULT
      None.
```

1.140 OtherToRGB

```
OTHERTORGB (2.0)

   FORMAT
      OtherToRGB Mode/N/A,V1/N/A,V2/N/A,V3/N/A,V4/N
      Other2RGB Mode/N/A,V1/N/A,V2/N/A,V3/N/A,V4/N

   FUNCTION
      Convert from a foreign colorspace back to RGB.

   INPUTS
      Mode
         Colorspace to convert from:

         0 = RGB         (3 args)
            1 = HSV       (3 args)
            2 = CMY       (3 args)
            3 = CMYK      (4 args)
            4 = YIQ       (3 args)
            5 = YUV       (3 args)

      V1,V2,V3,V4
         The values of the color components that are being converted.
```

```
RESULT
    Returns the converted color in RESULT in the form:

        <red:0-255> <green:0-255> <blue:0-255>
SEE ALSO
    RGBToOther
```

1.141 OutlineBrush

```
OUTLINEBRUSH

    FORMAT
        OutlineBrush

    FUNCTION
        Outline the current brush with a pixel's worth of the current drawing
        color.

    INPUTS
        None.

    RESULT
        None.

    SEE ALSO
        TrimBrush
```

1.142 Oval

```
OVAL

    FORMAT
        Oval XC/N,YC/N,XRadius/N,YRadius/N

    FUNCTION
        Draw an oval into the current image buffer, using the current pen or
        brush, and the current drawing settings.  If Scissors or
        MagicScissors has been specified, the area defined by the oval will
        be picked up as a brush.

    INPUTS
        XC,YC
            Coordinates of the center point of the oval, in pixels.

        XRadius,YRadius
            Major and minor radii of the oval, in pixels.

    RESULT
        None.
```

1.143 Palette

PALETTE

    FORMAT
      Palette Number/N

    FUNCTION
      Activate either the drawing or render palette. All subsequent
      palette operations will affect the palette selected with this
      command.

    INPUTS
      Number (1.50)
        Palette number to switch to. Should range from 1 – 8,
        representing one of the eight palettes. Palette number 8 is the
        render palette.

    RESULT
      None.

1.144 Pan

PAN

    FORMAT
      Pan Direction/A,Distance/N

    FUNCTION
      Pan around in the preview display (presumably a zoomed preview
      display).

    INPUTS
      Direction
        Direction to pan the display; should be one of "Up", "Down",
        "Left", or "Right".

      Distance
        Optional distance to move the display, expressed as a percentage
        of the current width of the display. Thus a value of 50 will move
        half the size of display each time it pans.

    RESULT
      None.

1.145 PantoCenter

PANTOCENTER (OBSOLETE)

    FORMAT
      PantoCenter XC/N/A,YC/N/A

FUNCTION
    Selects the pantograph center point.

    Note: This command is no longer supported in 2.0. You can set
        the pantograph center by sending commands to the new
        Pantograph drawing style.

INPUTS
    XC,YC
        Center coordinates, in buffer pixels.

RESULT
    None.

1.146 Pen

PEN

    FORMAT
        Pen Type,Size/N

    FUNCTION
        Select the type and size of drawing pen to use in all subsequent
        drawing operations.

    INPUTS
        Type
            Type of pen; a number representing one of the following choices:

            0 = Circular
                1 = Square
                2 = Diagonal Right
                3 = Diagonal Left
                4 = Random

        Size
            Size of the drawing pen, in pixels (1-255).

        Note: If no arguments are given, no change is made.

    RESULT
        Returns the state of the drawing pen before any change is made, in
        the form "pentype size".

1.147 Pick

PICK

    FORMAT
        Pick

    FUNCTION

```
    Initiate the pick color function.  The pointer will change to "pick"
    pointer, and the user will be able to select a color from the
    display.  The current palette will be changed to reflect the color at
    the location chosen.

INPUTS
    None.

RESULT
    None.
```

1.148   Point

```
POINT

    FORMAT
        Point X/N,Y/N

    FUNCTION
        Draw a point at the selected location, using the current drawing pen
        or brush, and all the current drawing settings.

    INPUTS
        X,Y
            Coordinates of the point, in buffer pixels.

    RESULT
        None.
```

1.149   Poly

```
POLY

    FORMAT
        Poly

    FUNCTION
        Draw an unfilled polygon into the main buffer, using the current
        drawing mode settings and drawing color.  The points of the polygon
        are defined by calls to NewArea/AddArea.

    INPUTS
        None.

    RESULT
        None.

    SEE ALSO
        NewArea,AddArea
```

1.150 PolyRegion

```
POLYREGION

   FORMAT
      PolyRegion Add/S,Subtract/S

   FUNCTION
      Define a polygon region for the main buffer, using the points defined
      by calls to NewArea/AddArea.  Subsequent image processing operations
      will be constrained to this region.

   INPUTS
      Add
         If specified, this region is to be merged in with the existing
         region.  Otherwise the new region supercedes any existing regions.

      Subtract (2.0)
         If specified, this region will be subtracted from the existing
         region.

   RESULT
      None.
```

1.151 Posterize

```
POSTERIZE

   FORMAT
      Posterize Levels/N

   FUNCTION
      Perform a posterize effect on the current image or region.

   INPUTS
      Levels
         Number of color levels to posterize to.  If not given, a requester
         will be presented.

   RESULT
      None.
```

1.152 PrevBrush

```
PREVBRUSH (2.0)

   FORMAT
      PrevBrush

   FUNCTION
      Select the previous brush as the current brush.  The previous brush
      is shuffled into the "background".
```

```
INPUTS
   None.

RESULT
   None.

SEE ALSO
   NextBrush,SelectBrush,BrushToBack
```

1.153   PrevBuffer

```
PREVBUFFER (2.0)

   FORMAT
      PrevBuffer

   FUNCTION
      Select the previous buffer as the main buffer.  The previous main
      buffer is shuffled into the "background".

   INPUTS
      None.

   RESULT
      None.

   SEE ALSO
      NextBuffer,SelectBuffer,BufferToBack
```

1.154   Preview

```
PREVIEW

   FORMAT
      Preview Command,Args/F

   FUNCTION
      Send a command to the current Preview module.  It is entirely up to
      the module to interpret and act upon the command.

   INPUTS
      Depends on the module.

   RESULT
      Depends on the module.
```

1.155   Printer

PRINTER

    FORMAT
       Printer Command,Args/F

    FUNCTION
       Send a command to the current Printer module. It is entirely up to
       the printer module to interpret and act upon the command.

    INPUTS
       Depends on the Printer module.

    RESULT
       Depends on the Printer module.

1.156 PutMsg

PUTMSG

    FORMAT
       PutMsg Port/A,Message/F

    FUNCTION
       Send a text command to a specified Arexx port. You will rarely (if
       ever) need to use this command.

    INPUTS
       Port
          Name of the arexx port to send the message.

       Message
          Text of the message.

    RESULT
       None.

1.157 PutPixel

PUTPIXEL

    FORMAT
       PutPixel X/N/A,Y/N/A,Red/N/A,Green/N/A,Blue/N/A

    FUNCTION
       Set the color value of a pixel at the specified coordinates.

    INPUTS
       X,Y
          Coordinates of the pixel to modify, in buffer pixels.

       Red,Green,Blue

New color to store at that pixel location. Each component should
be in the range of 0-255. For a greyscale buffer, all three
components should be the same.

RESULT
None.

SEE ALSO
GetPixel

1.158   Quantize

QUANTIZE

FORMAT
Quantize Command,Args/F

FUNCTION
Send a command to the current Quantize module. It is entirely up to
the module to interpret and act upon the command.

INPUTS
Depends on the module.

RESULT
Depends on the module.

1.159   Quit

QUIT

FORMAT
Quit Force/S

FUNCTION
Exit ImageFX, freeing all associated memory.

INPUTS
Force
If specified, the "Are you sure?" requester will not be shown;
thus the program will exit quietly.

RESULT
None.

1.160   ReadPixels

READPIXELS (AREXX ONLY)

    FORMAT
        ReadPixels Var/A,Row/N/A,Width/N,LeftEdge/N

    FUNCTION
        This function will directly read a block of pixels from a specified
        scanline of the Main buffer. This can only be used from Arexx, as it
        requires a variable in which to store the results.

    INPUTS
        Var
            Specifies the name of the Arexx variable in which to store the
            resulting pixel information. The information is stored as a byte-
            packed string of digits in the order RGBRGBRGB...; for example
            FF0000 00FF00 0000FFx would be three pixels of bright red,
            green, and blue respectively. When reading from a greyscale
            buffer, only one byte per pixel is stored; thus FF 00 40x would
            be 3 pixels of high, medium, and low intensity grey. Be careful
            that Arexx does not expard you variable name; you must enclose it
            in quotes within the Arexx program like this:

            ReadPixels 'MYVAR' 0 320 0
               newpixels = REVERSE(myvar)
               /* etc.... */

            You should always specify the variable in upper case, as all
            variables are converted to upper case by Arexx.

        Row
            Scanline of the image from which to read pixel information.
            Scanlines are numbered starting with 0 at the top and going down
            to Height-1 at the bottom. An error will be returned if you try
            to read outside the bounds of the main buffer.

        Width
            Number of pixels to read from the specified scanline. If not
            specified, the entire width of the scanline is read.

        LeftEdge
            How far from the left edge of the image to start reading. This
            value should range from 0 (at the leftmost edge) to the width of
            the image minus 1. If not specified, a left offset of 0 is used.

    RESULT
        Pixel information will be returned in the variable specified, in the
        format detailed above.

1.161 Red

RED

    FORMAT

```
        Red Adjust/N
```

    FUNCTION
       Adjust the red content of the current image or region.

    INPUTS
       Adjust
          Amount to adjust the red (-127 to +127). This number is added
          directly to each red value.

    RESULT
       None.

1.162 Redo

```
REDO
```

    FORMAT
       Redo

    FUNCTION
       Redo the last operation performed.

    INPUTS
       None.

    RESULT
       None.

1.163 Redraw

```
REDRAW
```

    FORMAT
       Redraw On/S,Off/S,Left/N,Top/N,Width/N,Height/N

    FUNCTION
       Redraw some or all of the main image buffer. Also used to control
       the automatic redrawing function. Automatic redraw will redraw the
       portion of the screen that was affected by an operation as soon as
       the operation is completed. You may want to turn this feature off
       when performing a long series of functions to speed the operation up,
       the redraw the screen when the operations are finished.

       Redrawing the screen includes re-rendering the current brush (if
       any).

    INPUTS
       On
          Enable automatic redraw.

       Off

```
        Disable automatic redraw.

    Left
        Left edge (in buffer pixels) of area to redraw.

    Top
        Top Edge (in buffer pixels) of area to redraw.

    Width
        Width (in buffer pixels) of area to redraw.

    Height
        Height (in buffer pixels) of area to redraw.

    Note:  If no arguments are given, the entire screen is redrawn.

  RESULT
    None.
```

1.164 Region

```
REGION

  FORMAT
    Region Type,Next/S,Prev/S

  FUNCTION
    Set the region selector tool.

  INPUTS
    Type
        Set the region tool directly.  Should be one of the following:

        Full Box Oval Poly Free Flood Brush
    Next
        Cycle the region selector up one.

    Prev
        Cycle the region selector down one.

    Note:  If no arguments given, no change is made.

  RESULT
    Name of the previous region selection, before any changes.
```

1.165 ReliefMap

```
RELIEFMAP

  FORMAT
    ReliefMap
```

```
FUNCTION
   Perform a relief map effect on the current image or region.

INPUTS
   None.

RESULT
   None.
```

1.166   RemoveFeature

```
REMOVEFEATURE

   FORMAT
      RemoveFeature

   FUNCTION
      Perform a remove feature effect on the current image or region.

   INPUTS
      None.

   RESULT
      None.
```

1.167   RenameBuffer

```
RENAMEBUFFER (2.0)

   FORMAT
      RenameBuffer Name

   FUNCTION
      Give the main buffer a new name.

   INPUTS
      Name
         New name to give to the buffer.  If not provided, a string entry
         requester will be presented.

   RESULT
      None.
```

1.168   Render

```
RENDER

   FORMAT
      Render Command,Args/F
```

```
FUNCTION
   Send a command to the current Render module.  It is entirely up to
   the render module to interpret the command and possibly act upon it.
   See the documentation for the individual modules for details of the
   available commands.

INPUTS
   Command
      Command for the render module.

   Args
      Arguments for the command.

RESULT
   Depends on the command and render module.
```

1.169 RenderPalette

```
RENDERPALETTE

   FORMAT
      RenderPalette

   FUNCTION
      Render a palette based on the current main buffer, using the current
      quantize module to choose a suitable palette.  The entire visible
      palette will be filled with rendered colors.

   INPUTS
      None.

   RESULT
      None.
```

1.170 RenderToBack

```
RENDER2BACK (2.0)

   FORMAT
      RenderToBack
      Render2Back

   FUNCTION
      Pushes the current render screen to the back, if possible. If there
      is no render screen, nothing happens.  Some render screens cannot be
      moved this way, such as OpalVision and IV24.

   INPUTS
      None.

   RESULT
      None.
```

```
SEE ALSO
   RenderToFront
```

1.171   RenderToFront

```
RENDER2FRONT (2.0)

   FORMAT
      RenderToFront
      Render2Front

   FUNCTION
      Brings the current render screen to the front.  If there is no render
      screen, nothing happens.

   INPUTS
      None.

   RESULT
      None.

   SEE ALSO
      RenderToBack
```

1.172   Requesters

```
REQUESTERS

   FORMAT
      Requesters On/S,Off/S,PubScreen/K

   FUNCTION
      Enable or disable error requesters.  Also sets the public screen
      where requesters are shown.

   INPUTS
      On,Off
         Enable or disable error requesters.  If disabled, requesters will
         not be shown to notify the user of errors.

      PubScreen (2.0)
         Sets the name of the public screen where requesters are shown
         (includes boolean, string, integer, complex, and list requesters).

   RESULT
      None.
```

1.173   RequestFile

REQUESTFILE

    FORMAT
        RequestFile Title/A,Path,File,Pattern

    FUNCTION
        Display a file requester from which the user can select filename.

    INPUTS
        Title
            Title to appear in the titlebar of the requester.

        Path
            Initial pathname to go in the path gadget.

        File
            Initial filename to go in the file gadget.

        Pattern
            Initial pattern to go in the pattern gadget.

    RESULT
        Full pathname of selected file, if not cancelled.

        New for 2.0: The Arexx variables FILEREQ.FILE, FILEREQ.PATH, and
        FILEREQ.PAT are set to the selected file, path, and pattern of the
        requester if successful.

1.174 RequestNotify

REQUESTNOTIFY

    FORMAT
        RequestNotify Prompt/A/F

    FUNCTION
        Display an information requester to the user. The user must click
        the Okay gadget to proceed.

    INPUTS
        Prompt
            Text in the body of the requester.

    RESULT
        None.

1.175 RequestNumber

REQUESTNUMBER

    FORMAT

```
RequestNumber Prompt/A,Default/N
```

FUNCTION
   Display a number requester to the user. The user must enter a number
   and hit Okay or Cancel to proceed.

INPUTS
   Prompt
      Title of the requester.

   Default
      Default starting value of the requester.

RESULT
   Returns the number the user entered if successful.

1.176 RequestResponse

REQUESTRESPONSE

   FORMAT
      RequestResponse Prompt/A/F

   FUNCTION
      Display a boolean (yes/No) requester to the user; Okay and Cancel
      gadgets will appear at the bottom of the requester. The user must
      click one of the gadgets to proceed.

   INPUTS
      Prompt
         Text to appear in the body of the requester.

   RESULT
      Non-zero return code if the user chooses Cancel; zero if he chooses
      Okay.

1.177 RequestSlider

REQUESTSLIDER

   FORMAT
      RequestSlider Prompt/A,Lowest/N,Highest/N,Default/N

   FUNCTION
      Display a slider requester to the user, allowing a choice of number
      within a distinct range.

   INPUTS
      Prompt
         Prompt string; the title of the requester.

      Lowest,Highest

Range of values allowed in the slider gadget.

Default
Initial starting value of the slider gadget.

RESULT
Returns the number selected by the user if successful.

1.178 RequestString

REQUESTSTRING

FORMAT
RequestString Prompt/A,Default

FUNCTION
Display a string requester to the user, the user must enter a string
or press Cancel to proceed.

INPUTS
Prompt
Title of the string requester.

Default
Default starting string to go in the requester.

RESULT
Returns the string entered if successful.

1.179 RGBToOther

RGBTOOTHER (2.0)

FORMAT
RGBToOther Mode/N/A,Red/N/A,Green/N/A,Blue/N/A
RGB2Other Mode/N/A,Red/N/A,Green/N/A,Blue/N/A

FUNCTION
Convert an RGB color to a different colorspace.

INPUTS
Mode
Colorspace to convert to:

0 = RGB
1 = HSV
2 = CMY
3 = CMYK
4 = YIQ
5 = YUV

Red,Green,Blue

```
        RGB color to convert.  Values range from 0-255.

    RESULT
        Returns the converted color in RESULT in one of the following forms:

            HSV:  "<hue:0-359> <sat:0-255> <val:0-255>"
              CMY:  "<cya:0-255> <mag:0-255> <yel:0-255>"
              CMYK: "<cya:0-100> <mag:0-100> <yel:0-100> <black:0-100>"
              YIQ:  "<luma> <i> <q>"
              YUV:  "<luma> <u> <v>"

    SEE ALSO
        OtherToRGB
```

1.180 RIP

```
RIP

    FORMAT
        RIP Threshold/N

    FUNCTION
        Perform a remove isolated pixels function on the current image or
        region.

    INPUTS
        Threshold
            Isolation threshold (0-255).

    RESULT
        None.
```

1.181 Roll

```
ROLL

    FORMAT
        Roll DX/N,DY/N

    FUNCTION
        Perform a roll function on the current image or region.

    INPUTS
        DX,DY
            Number of pixels to move in the horizontal and vertical
            directions, respectively.  If not given, requesters will be
            presented.

    RESULT
        None.
```

1.182 RollScreenDown

ROLLSCREENDOWN

    FORMAT
       RollScreenDown

    FUNCTION
       Roll the screen back down into its normal position.

    INPUTS
       None.

    RESULT
       None.

1.183 RollScreenUp

ROLLSCREENUP

    FORMAT
       RollScreenUp Height/N/A

    FUNCTION
       Roll the menu screen upward to fit a new window on it.

    INPUTS
       Height
          The height of the object that needs to fit on the screen, this
          indicates how far up to roll the screen.

    RESULT
       None.

1.184 Rotate

ROTATE

    FORMAT
       Rotate Angle/N,Red/N,Green/N,Blue/N

    FUNCTION
       Rotate the current image by a specified angle.

    INPUTS
       Angle
          Number of degrees of clockwise rotation. Negative numbers
          indicate counter-clockwise rotation, posisitive numbers indicate
          clockwise rotation. The special case of -90, 90, and 180 are
          handled much faster than other arbitrary angles. Fractional
          values are accepted.

```
    Red,Green,Blue (2.0)
       Specifies the background color (defaults to 0 0 0).

    Note:  If no arguments are given, the standard Rotate window is
       presented.

 RESULT
    None.
```

1.185 Roughen

```
ROUGHEN

 FORMAT
    Roughen Amount/N

 FUNCTION
    Perform a roughening effect on the current image or region.

 INPUTS
    Amount
       Amount of roughening to apply (1-255).  If not given, a requester
       will be presented.

 RESULT
    None.
```

1.186 Rx

```
RX

 FORMAT
    Rx Async/S,Quiet/S,Command/F

 FUNCTION
    Invoke an Arexx macro.

 INPUTS
    Async
       If specified, the macro will be run as separate task, and this
       command will return immediately.  Most of the time you will not
       need to use this.  Make sure that you stop the macro before
       exiting ImageFX.  If the macro is not run asynchronously, the RX
       command will not return until the macro is finished.

    Quiet
       If specified, the "arexx macro in progress" window will not be
       shown.

    Command
       Arexx command to run, with optional arguments.  If not given, a
       file requester will be presented.
```

```
    RESULT
        None.

    SEE ALSO
        RXS
```

1.187 RxHalt

```
RXHALT

    FORMAT
        RxHalt Global/S

    FUNCTION
        Halt any and all asynchronous Arexx programs launched by the program.

    INPUTS
        Global
            If specified, the global Arexx HALT flag is set, which will stop
            ALL executing Arexx processes, no matter who started them.  You
            generally shouldn't have to use this.

    RESULT
        None.
```

1.188 Rxs

```
RXS

    FORMAT
        Rxs Command/F/A

    FUNCTION
        Invoke an Arexx "string program".

    INPUTS
        Command
            String program to run.  The entire contents are taken as an Arexx
            program and are passed to the Arexx interpretor for processing.
            The string may contain any valid Arexx commands.

    RESULT
        None.
```

1.189 Saturation

```
SATURATION

    FORMAT
```

```
    Saturation Adjust/N
```

FUNCTION
    Adjust the saturation of the current image or region.

INPUTS
    Adjust
        Amount to adjust the saturation (-127 to +127).

RESULT
    None.

1.190   SaveAlphaAs

SAVEALPHAAS

FORMAT
    SaveAlphaAs Format,File,Args/F

FUNCTION
    Save the current alpha channel to a file using a specified file
    format.

INPUTS
    Format
        File format in which to save the alpha channel. If not given, a
        scrolling list of choices will be presented.

    File
        Name of the file to save the alpha channel as. If not given, a
        file requester will be presented. If a full path is not given,
        the file will be saved to the current alpha channel save path (as
        set in prefs).

    Args
        Arguments passed to the saver module. See the documentation of
        the particular saver module in question.

RESULT
    None.

1.191   SaveBrushAs

SAVEBRUSHAS

FORMAT
    SaveBrushAs Format,File,Args/F

FUNCTION
    Save the current brush, using the requested file format.

INPUTS

```
Format
   File format in which to save the brush.  If not given, a scrolling
   list of choices will be presented.

File
   Filename of the output image.  If not given, a file requester will
   be presented to the user.  If Create Icons? in Prefs is turned
   on, the default brush icon will also be saved with the image.  If
   a full pathname is not given, then the fill be saved to the
   current Brush path (as set in Prefs).

Args
   Arguments passed to the saver module.
```

```
RESULT
   None.
```

1.192   SaveBufferAs

```
SAVEBUFFERAS
```

```
FORMAT
   SaveBufferAs Format,File,Force/S,Args/F
```

```
FUNCTION
   Save the current image buffer, using the requested file format.
```

```
INPUTS
   Format
      File format to save file in.  If not given, a scrolling list of
      choices will be presented.

   File
      Name of the file in which to save the image.  If Create Icons?
      in Prefs is on, an icon will be saved with the image.  If no file
      is given, a file requester will be presented to the user.  If a
      full path is not given, then the file will be saved in the current
      buffer save path (as set in Prefs).

   Force
      If given, this will overwrite existing files without prompting the
      user.

   Args
      Passed to the saver module that gets called.  See the
      documentation for the various saver modules.
```

```
RESULT
   None.
```

1.193   SaveMaskAs

```
SAVEMASKAS (2.0)

    FORMAT
       SaveMaskAs File

    FUNCTION
       Save the currently defined region to disk.  Currently the region is
       always saved as an IFF ILBM file.

    INPUTS
       File
          Name of the disk file to save to.  If not provided, a requester is
          presented.

    RESULT
       None.

    SEE ALSO
       LoadMask
```

1.194 SavePaletteAs

```
SAVEPALETTEAS

    FORMAT
       SavePaletteAs File,Number/N

    FUNCTION
       Save the current palette to a file on disk, including range
       information if possible.  Currently palettes may only be saved as
       ILBM files.

    INPUTS
       File
          Name of the file to store the palette in.  If not given, a file
          requester will be presented.  If a full path is not given, the
          file will be saved to the current Palette path (as set in prefs).

       Number (1.50)
          Palette number to save.  -1 to save the currently displayed
          palette, or a palette number ranging from 1 - 8.  (Palette 8 is
          the render palette.)

    RESULT
       None.
```

1.195 SavePrefsAs

```
SAVEPREFSAS (2.0)

    FORMAT
```

```
      SavePrefsAs File

   FUNCTION
      Save the current preferences settings to a given disk file.

   INPUTS
      File
         Name of the file to store the preferences in.  If not given, a
         file requester will be presented.

   RESULT
      None.
```

1.196 SavePreviewAs

```
SAVEPREVIEWAS

   FORMAT
      SavePreviewAs Format,File,Args/F

   FUNCTION
      Save the current preview screen to a file, in the file format
      specified.  This is basically just a screen grab of the preview
      screen.

   INPUTS
      Format
         File format to save in; if not specfied, a save format requester
         will be presented.

      File
         Filename to store the image in.  If not specified, a file
         requester will be presented.  If a full path is not given, the
         file will be saved in the current rendered image save path (as
         defined in prefs).

      Args
         Arguments passed to the Saver module.  See the documentation for
         the various saver modules.

   RESULT
      None.
```

1.197 SaveRenderedAs

```
SAVERENDEREDAS

   FORMAT
      SaveRenderedAs Format,File,Args/F

   FUNCTION
      Save the current rendered image to a file, in the file format
```

specified. Note that some render modules to do support saveable
files (Firecracker render, for example). In this case, nothing will
be saved.

   INPUTS
      Format
         File format to save in; if not specified, a save format requester
         will be presented to the user.

      File
         Filename to store the rendered image in. If not specified, a file
         requester will be presented. If a full path is not given, the
         file will be saved to the current rendered image path (as set in
         prefs).

      Args
         Passed to the saver module that gets called. See the
         documentation for the various saver modules.

   RESULT
      None.

1.198 SaveUndo

SAVEUNDO

   FORMAT
      SaveUndo Left/N,Top/N,Width/N,Height/N

   FUNCTION
      Save an area of the main image buffer to the undo buffer, for later
      retreival via. the Undo function.

      Normally, functions that destroy the image automatically save the
      area affected to the undo buffer, but you might want to explicitly
      control when and where the undo gets saved. For example, if you do a
      long series of processes, the undo will be saved at each step, so
      that if the user does an undo after its all over hell only restore
      the last step done. But if you use SaveUndo at the beginning of the
      series and then turn the undo off during the series, you will have a
      copy of the original buffer in the undo buffer.

   INPUTS
      Left
         Left edge (in buffer pixels) of area to save.

      Top
         Top Edge (in buffer pixels) of area to save.

      Width
         Width (in buffer pixels) of area to save.

      Height
         Height (in buffer pixels) of area to save.

```
        Note:  If no arguments are given, the entire buffer is saved.

    RESULT
        None.
```

1.199 Scale

```
SCALE

    FORMAT
        Scale Width/N,Height/N,Percent/S,Fast/S,Border/S

    FUNCTION
        Scale the current image buffer to a new size.

    INPUTS
        Width,Height
            New size of the buffer in pixels.

        Percent
            Indicates that the width and height are given as percentages
            instead of absolute pixel sizes.

        Fast
            Use the fast scaling method, which does not do any anti-aliasing.

        Border
            Use the border scale method.

        Note:  If no arguments are given, the standard Scale window is
            presented.

    RESULT
        None.
```

1.200 Scanner

```
SCANNER

    FORMAT
        Scanner Command/A,Args/F

    FUNCTION
        Send a command to the current Scanner module.  It is entirely up to
        the module to interpret the command.  See the documentation for the
        individual scanner modules for details of available commands and
        their results.

    INPUTS
        Depends on the command.

    RESULT
```

```
    Depends on the command.
```

1.201 Scissors

```
SCISSORS

   FORMAT
      Scissors

   FUNCTION
      Initiate a brush cut operation.  Issuing this command places the
      program into brush cut mode; you must then follow with a standard
      drawing command to cut out a brush in that shape.

   INPUTS
      None.

   RESULT
      None.

   SEE ALSO
      MagicScissors
```

1.202 ScreenToBack

```
SCREENTOBACK

   FORMAT
      ScreenToBack
      Screen2Back (1.50)

   FUNCTION
      Send the ImageFX screen(s) to the back.

   INPUTS
      None.

   RESULT
      None.
```

1.203 ScreenToFront

```
SCREENTOFRONT

   FORMAT
      ScreenToFront
      Screen2Front (1.50)

   FUNCTION
      Bring the ImageFX screen(s) to the front.
```

```
INPUTS
   None.

RESULT
   None.
```

1.204   SelectBrush

```
SELECTBRUSH (2.0)

   FORMAT
      SelectBrush Name

   FUNCTION
      Select one of the multiple brushes in memory to be shown as the
      current brush.  The previous brush is shuffled into the "background".

   INPUTS
      Name
         Name of the brush to select.  If not provided, a select brush
         requester will be presented from which the user can select a brush
         by name or thumbnail.

   RESULT
      None.

   SEE ALSO
      BrushToBack,NextBrush,PrevBrush
```

1.205   SelectBuffer

```
SELECTBUFFER

   FORMAT
      SelectBuffer Name

   FUNCTION
      Select one of the multiple image buffers in memory to be shown as the
      main buffer.  The previous main buffer is shuffled into the
      "background".

   INPUTS
      Name
         Name of the image buffer to select.  If not provided, a select
         buffer requester will be presented from which the user can select
         a buffer by name or thumbnail.

   RESULT
      None.

   SEE ALSO
```

```
NextBuffer,PrevBuffer,BufferToBack
```

1.206 SetAspect

```
SETASPECT

   FORMAT
      SetAspect AspectX/N,AspectY/N,DPIX/N,DPIY/N,ScaleX/S,ScaleY/S

   FUNCTION
      Set the pixel aspect ratio and/or the DPI of the main image buffer.

   INPUTS
      AspectX,AspectY
         New pixel aspect ratio to assign to the buffer.

      DPIX,DPIY
         New DPI setting to assign to the buffer.  DPI is always specified
         in dots-per-inch.

      ScaleX
         Scale the buffer's width such that it will remain the same size at
         the new aspect/dpi settings.

      ScaleY
         Scale the buffer's height such that it will remain the same size
         at the new aspect/dpi settings.

   RESULT
      None.
```

1.207 SetPalette

```
SETPALETTE

   FORMAT
      SetPalette Register/N/A,Red/N/A,Green/N/A,Blue/N/A

   FUNCTION
      Modify the color of a single palette entry.  Also updates the palette
      display if applicable.

   INPUTS
      Register
         Color register to modify.  Should be in the range of 0 - 255. You
         may also specify register '-1', which is translated to mean the
         current active color.

      Red,Green,Blue
         The new color value.  Each gun should be in the range 0 - 255.

   RESULT
```

None.

1.208 SetPrefs

SETPREFS

    FORMAT
       SetPrefs Object/A,Setting/F

    FUNCTION
       Set the state one of a variety of preferences options.

    INPUTS
       Object
          Which preference you want to modify. It is a single case-
          insensitive word.

       Setting
          The setting to apply to the preference object. The actual setting
          depends on the type of object. For flag objects, the setting
          should be either "On", "Off", or "Toggle". For path objects, the
          setting should be a complete pathname.

          Here is a list of all the possible objects, with brief
          descriptions:

```
Coords            Use coordinates setting.
Undo              Undo buffer state.
Icons             Save Icons flag.
Metric            Metric Units flag.
Lace              Interlaced Panel flag.
CloseWB           Close Workbench flag.
ToolPalette       Toolbox Palette flag.
AutoRender        Enable post-redraw macro.
AreYouSure        "Are you sure?" requester enable.
RollScreen        Enable/disable the screen
                   rolling.
OpaquePanel       Opaque panel setting.
AspectLock        Preview aspect lock setting.
Pressure          Pressure sensitivity setting.
UseNails (2.0)    Use preview thumbnails.
SaveNails (2.0)   Save thumbnails with files.

LoadPath          Buffer load path.
SavePath          Buffer save path.
RendPath          Rendered image save path.
BrushLoadPath     Brush load path.
BrushSavePath     Brush save path.
AlphaLoadPath     Alpha channel load path.
AlphaSavePath     Alpha channel save path.
ConvolvePath      Convolve matrix path.
TransformPath     Color Transform array path.
VmemPath          Virtual memory path.
ArexxPath         Arexx macro path.
HookPath          Hook program path.
```

```
        FontPath            Fonts directory.
        PalettePath         Palette load and save path.
        SepPath             Color separations path.
        TexturePath (2.0)   Texture path.

        FileReq             File requester type
                             (0=internal,1=asl,2=arp,3=req).
                             (OBSOLETE)
        VPageSize           Virtual memory page size
                             (scanlines).
        VMaxMem             Maximum memory to be used by vmem
                             (in KB).
        UseVmem             Use virtual memory type (Never,
                             Ask, Quiet, or Always).
        Palette             Screen palette (Four 3-digit hex
                             values).
        MaxUndo             Maximum levels of undo.
        LoadReq (2.0)       Load image requester (0=asl,
                             1=thumbnail).
        SaveReq (2.0)       Save image requester (0=asl,
                             1=thumbnail).
        MiscReq (2.0)       Misc requester (0=asl,
                             1=thumbnail).
        FontReq (2.0)       Font requester (0=font, 1=file).
        BufReq (2.0)        Buffer requester (0=name,
                             1=thumbnail).

  RESULT
     None.

  SEE ALSO
     GetPrefs
```

1.209 SetPreview

```
SETPREVIEW

  FORMAT
     SetPreview Name

  FUNCTION
     Set the current preview module.

  INPUTS
     Name
        Name of the preview module to change to.  If not given, a file
        requester will be presented.  If a full path is not given, the
        module is assumed to reside in the current Preview modules path.

  RESULT
     None.
```

1.210 SetPrinter

```
SETPRINTER
```

```
   FORMAT
      SetPrinter Name
```

```
   FUNCTION
      Set the current Printer module.
```

```
   INPUTS
      Name
         Name of the printer module to change to.  If not given, a file
         requester will be presented.  If a full path is not given, the
         module is assumed to reside in the current Printer modules path.
```

```
   RESULT
      None.
```

1.211 SetRange

```
SETRANGE
```

```
   FORMAT
      SetRange Range/N/A,Low/N/A,High/N/A
```

```
   FUNCTION
      Modify the upper and lower boundaries of a given color range.
```

```
   INPUTS
      Range
         Color range to modify, 1 - 8.
```

```
      Low
         Lower register boundary of the range, 0 - 255.
```

```
      High
         Upper register boundaryof the range, 0 - 255.
```

```
   RESULT
      None.
```

```
   SEE ALSO
      GetRange
```

1.212 SetRender

```
SETRENDER
```

```
   FORMAT
      SetRender Name
```

```
FUNCTION
   Set the current Render module.

INPUTS
   Name
      Name of the render module to change to.  If not given, a file
      requester will be presented.  If a full path is not given, the
      module is assumed to reside in the current Render modules path.

RESULT
   None.
```

1.213 SetScanner

```
SETSCANNER

   FORMAT
      SetScanner Name

   FUNCTION
      Set the current Scanner module.

   INPUTS
      Name
         Name of the scanner module to change to.  If not given, a file
         requester will be presented.  If a full path is not given, the
         module is assumed to reside in the current Scanner modules path.

   RESULT
      None.
```

1.214 Sharpen

```
SHARPEN

   FORMAT
      Sharpen Amount/N

   FUNCTION
      Perform a sharpening effect on the current image or region.

   INPUTS
      Amount
         Amount of sharpening to apply, should be 1 - 255.  The higher the
         number, the more sharpening.  If not specified, a requester will
         be presented.

   RESULT
      None.
```

1.215 ShowPanel

SHOWPANEL

    FORMAT
       ShowPanel

    FUNCTION
       Brings the ImageFX menu panel to the front.

    INPUTS
       None.

    RESULT
       None.

1.216 ShrinkRegion

SHRINKREGION

    FORMAT
       ShrinkRegion

    FUNCTION
       Reduce the current region area by a pixel on all sides.

    INPUTS
       None.

    RESULT
       None.

    SEE ALSO
       ExpandRegion

1.217 Solarize

SOLARIZE

    FORMAT
       Solarize

    FUNCTION
       Perform a solarize effect on the current image or region.

    INPUTS
       None.

    RESULT
       None.

1.218 SortPalette

SORTPALETTE

    FORMAT
       SortPalette Up/S,Down/S

    FUNCTION
       Sort the colors in the active range of current palette.

    INPUTS
       Up,Down
         Direction in which to sort the colors. Up is in order of
         increasing brightness, and Down is in order of decreasing
         brightness. If neight is specified, the standard sort order
         choice requester is presented. Only the colors in the active
         range are affected.

    RESULT
       None.

1.219 SpreadColors

SPREADCOLORS

    FORMAT
       SpreadColors From/N,To/N

    FUNCTION
       Spread (generate smooth gradient) colors between two color registers
       in the current palette.

    INPUTS
       From
         Source color register (0-255).

       To
         Destination color register (0-255).

       Note: If no arguments are given, the program goes into
         interactive "spread colors" mode.

    RESULT
       None.

1.220 Subtract

SUBTRACT

    FORMAT
       Subtract Alpha/S,Scale/S

```
FUNCTION
   Perform a composite subtract operation between the main and swap
   buffers.

INPUTS
   Alpha
      If specified, the alpha channel will be used as a blend control
      image.

   Scale
      If specified, the swap buffer will be scaled to fit the region
      processed.

RESULT
   None.
```

1.221 Swap

```
SWAP

   FORMAT
      Swap

   FUNCTION
      Swap the secondary buffer and main buffers.  The secondary buffer
      becomes the new main buffer and vice versa.

   INPUTS
      None.

   RESULT
      None.
```

1.222 SwapAlpha

```
SWAPALPHA

   FORMAT
      SwapAlpha

   FUNCTION
      Exchange the main image buffer with the alpha channel.  The main
      buffer becomes the new alpha channel and vice versa.

   INPUTS
      None.

   RESULT
      None.
```

1.223   Swap2Brush

```
SWAP2BRUSH

   FORMAT
      Swap2Brush
      PickupSwap
      SwapToBrush (1.50)

   FUNCTION
      Pickup the entire swap buffer as the current brush.

   INPUTS
      None.

   RESULT
      None.
```

1.224   SwapColors

```
SWAPCOLORS

   FORMAT
      SwapColors From/N,To/N

   FUNCTION
      Swap two color registers in the current palette.

   INPUTS
      From
         Source color register (0-255).

      To
         Destination color register (0-255).

      Note:  If no arguments are given, the program goes into
         interactive "swap colors" mode.

   RESULT
      None.
```

1.225   SwapRegions

```
SWAPREGIONS

   FORMAT
      SwapRegions

   FUNCTION
      Exchange the regions in the main and swap buffers.  The region
      defined in the swap buffer becomes the new region in the main buffer,
      and vice versa.
```

```
INPUTS
   None.


RESULT
   None.
```

1.226 Text

```
TEXT (OBSOLETE)

   FORMAT
      Text Font,Size/N,Aspect/N,Text/F

   FUNCTION
      Create a text string, using the selected font name and size.  The
      text is made into a brush.  This command is provided for backwards
      compatibility reason; see the Text hook for more detailed text
      creation tools.

   INPUTS
      Font
         Name of the font to use in building the text.  If not given, it
         uses the last font used.  Be sure to include the ".font" extension
         on the end of the font name, eg. "topaz.font".

      Size
         Height of the font in pixels.  Under 2.0, the chosen font will be
         scaled to your chosen size.  Under 1.3, the nearest existing size
         will be used.

      Aspect
         Under Kickstart 2.0, this controls the aspect ratio of the font.
         The value given is a percentage representing the amount to scale
         the width of the font.  For example, a value of 100 is standard,
         50 is half normal width, and 200 is twice normal width.

      Text
         The actual string of text to use in creating the brush.

      Note:  If no arguments are specified, the program will go into
         the Text menu.

   RESULT
      None.
```

1.227 Transparency

```
TRANSPARENCY

   FORMAT
      Transparency Include/N,Exclude/N,Closeness/N
```

FUNCTION
    Select the current include and exclude transparency color ranges,
    along with the color closeness.

INPUTS
    Include
        Color range to be included in all subsequent processes. Should be
        in the range 0 - 8, where 0 disables the include range entirely.

    Exclude
        Color range to be excluded in all subsequent processes. Should be
        in the range of 0 - 8, where 0 disables the exclude range
        entirely.

    Closeness
        Color closeness to apply to the selected color ranges. Should be
        in the range 1 - 255.

    Note: If no arguments are given, no change is made.

RESULT
    Returns the previous transparency settings, before any changes, in
    the form "IncludeRange ExcludeRange Closeness".

1.228 TrimBrush

TRIMBRUSH

FORMAT
    TrimBrush

FUNCTION
    Trim a pixel off of the outside edge of the current brush.

INPUTS
    None.

RESULT
    None.

SEE ALSO
    OutlineBrush

1.229 Undo

UNDO

FORMAT
    Undo Quiet/S,On/S,Off/S,Back/S

FUNCTION

Restore the contents of the undo buffer into the main image buffer.
Also used for enabling or disabling the undo buffer.

INPUTS
   Quiet
      If specified, the screen will not be redrawn after restoring the
      undo buffer.

   On
      Enable the undo buffer.

   Off
      Disable the undo buffer.

   Back (1.5)
      Un-undo - the equivalent of holding down shift and clicking the
      undo gadget.

RESULT
   None.

1.230 UndoPalette

UNDOPALETTE

FORMAT
   UndoPalette

FUNCTION
   Undo the last changes made to the palette (if any).

INPUTS
   None.

RESULT
   None.

1.231 Uniconify

UNICONIFY

FORMAT
   Uniconify

FUNCTION
   Uniconify the program from its iconified state, restoring the display
   to normal.

INPUTS
   None.

RESULT

None.

SEE ALSO
    Iconify

1.232   Units

UNITS

FORMAT
    Units Pixels/S,Ruled/S,Toggle/S

FUNCTION
    Select the units in which to display the coordinates.

INPUTS
    Pixels
        Select pixel units.

    Ruled
        Select ruled units (inches or metric, depending or your prefs
        settings).

    Toggle
        Toggle between pixels and ruled units.

    Note: If no arguments are given, then no change is made.

RESULT
    Returns the state of the units, before any changes.

1.233   UnlockGui

UNLOCKGUI

FORMAT
    UnlockGui Quiet/S

FUNCTION
    Restore the locked state of the program, to allow gadgets and such to
    be updated and clicked on again. Normally all gadgets are refreshed
    to be sure they reflect the true state of the program.

INPUTS
    Quiet
        Do not refresh all the gadgets in the current menu. Normally you
        would only want to do this if you know you will be following soon
        after with another LockGui.

RESULT
    None.

1.234 UnlockInput

UNLOCKINPUT

    FORMAT
      UnlockInput

    FUNCTION
      Restore normal operation of gadgets; allow the user to click on
      gadgets and such again. You should always follow any calls to
      LockInput with a call to UnlockInput to return things to normal.

    INPUTS
      None.

    RESULT
      None.

    SEE ALSO
      LockInput

1.235 UnsharpMask

UNSHARPMASK

    FORMAT
      UnsharpMask Amount/N

    FUNCTION
      Perform an unsharp mask function on the current image or region.

    INPUTS
      Amount
        Amount of masking to apply (1-16). If not given, a requester will
        be presented.

    RESULT
      None.

1.236 Value

VALUE

    FORMAT
      Value Adjust/N

    FUNCTION
      Adjust the value (aka. brightness) of the current image or region.

    INPUTS
      Adjust
        Amount to adjust the value (-127 to +127).

```
RESULT
    None.
```

1.237 VersionDump

```
VERSIONDUMP

    FORMAT
       VersionDump

    FUNCTION
       Show the version numbers for all modules.

    INPUTS
       None.

    RESULT
       None.
```

1.238 VertFlip

```
VERTFLIP

    FORMAT
       VertFlip

    FUNCTION
       Perform a vertical flip on the current image or region.

    INPUTS
       None.

    RESULT
       None.
```

1.239 VertMirror

```
VERTMIRROR

    FORMAT
       VertMirror

    FUNCTION
       Perform a vertical mirror effect on the current image or region.

    INPUTS
       None.

    RESULT
```

```
   None.
```

1.240 VirtualBox

```
VIRTUALBOX

   FORMAT
      VirtualBox X1/N/A,Y1/N/A,X2/N/A,Y2/N/A

   FUNCTION
      Draw a box directly on the preview display.  This does not affect the
      current buffer.  The box is drawn in complement mode, so to erase it
      draw over the same location with another box.

   INPUTS
      X1,Y1
         Upper left corner of the box, in buffer pixels.

      X2,Y2
         Lower right corner of the box, in buffer pixels.

   RESULT
      None.
```

1.241 VirtualLine

```
VIRTUALLINE

   FORMAT
      VirtualLine X1/N/A,Y1/N/A,X2/N/A,Y2/N/A

   FUNCTION
      Draw a line directly on the preview display.  This does not affect
      the current buffer.  The line is drawn in complement mode, so to
      erase it draw over the same location with another line.

   INPUTS
      X1,Y1
         Starting coordinates of the line, in buffer pixels.

      X2,Y2
         Ending coordinates of the line, in buffer pixels.

   RESULT
      None.

   SEE ALSO
      VirtualBox
```

1.242 VisibleColors

```
VISIBLECOLORS

   FORMAT
      VisibleColors Count/N

   FUNCTION
      Set the number of visible colors in the palette display.  This
      determines how far up the palette is scrolled.

   INPUTS
      Count
         Number of colors to be visible on the palette display.

   RESULT
      Returns the current number of visible colors, before any change is
      made.
```

1.243 WaitFor

```
WAITFOR

   FORMAT
      WaitFor Object/A

   FUNCTION
      Wait for a specific event to happen before proceeding with the
      current Arexx script.  The events to wait for correspond to the
      available Wedge objects.

   INPUTS
      Object
         Event to wait for.  See the WEDGE command for descriptions of the
         available objects.

   RESULT
      None.

   SEE ALSO
      Wedge
```

1.244 WBToFront

```
WBTOFRONT

   FORMAT
      WBToFront
      WB2Front (1.50)

   FUNCTION
      Bring the Workbench screen to the front.
```

```
INPUTS
   None.

RESULT
   None.
```

1.245 Wedge

```
WEDGE

   FORMAT
      Wedge Object/A,Name/A,Remove/S,Port/S

   FUNCTION


      Port Wedges are generally only useful in asynchronous Arexx programs.

      WARNING:  Only use this if you know exactly what you are doing,
         especially port wedges.

   INPUTS
      Object
         Wedge object.  The following wedge types are defined:

      SELECTDOWN
         You will be notified whenever the left mouse button is pressed
         down in the preview window.  The message will be in the form
         "SELECTDOWN x y".

      SELECTUP
         You will be notified whenever the left mouse button is released in
         the preview window.  The message will be in the form "SELECTUP x
         y".

      MOUSEMOVE
         You will be notified whenever the mouse is moved with the left
         button pressed in the preview window.  The message will be in the
         form "MOUSEMOVE x y".

      TOOLUP
         You will be notified whenever the user completes any of the
         drawing tools.  The message will be in the form "TOOLUP
         toolnumber".

      TOOLTRAP
         Like TOOLUP, except the drawing operation will not be performed.
         Same format as TOOLUP.

       Name
         Name of an Arexx macro to execute when the wedge object occurs;
         wedge parameters will be passed as command line arguments.

       Remove
         If specified, the given wedge will be removed from the system. You
```

should always remove your wedges when you are done with them.

    Port
        If specified, the Name argument is taken to be an Arexx port name,
        where a message will be sent when the wedge object occurs.

RESULT
    None.

1.246 Window

WINDOW

    FORMAT
        Window Name/A

    FUNCTION
        Open the specified window, identified by name. The command does not
        return until the window is closed.

    INPUTS
        Name
            Name of the window to open. Should be one of the following:

            Prefs   Preferences window.
            About   About window.
            Modes   Drawing modes window.
            Fill   Fill options window.
            Scale   Scaling window.
            Airbrush   Airbrush options window.
            Balanc   Balanc window.
            Composit   Composite window.
            Rotate   Rotate window.
            Buffer   Buffer menu window.
            Brush   Brush menu window.
            WaveGen   Wave generator window.
            Wave   Save format window.
            Pen   Pen/grid window.
            Aspect   Set Aspect window.
            Crop   Crop window.
            Delete   Delete Buffer window.
            Region (2.0)   Region window.

    RESULT
        None.

1.247 WritePixels

WRITEPIXELS (AREXX ONLY)

    FORMAT
        WritePixels Var/A,Row/N/A,Width/N,LeftEdge/N

FUNCTION
    Write a block of pixels to a specified scanline of the main buffer.
    This can only be used from Arexx, as it requires a variable from
    which to read the pixel data.

INPUTS
    Var
        Specifies the name of the Arexx variable from which to read the
        pixel information. The information is stored as a byte-packed
        string of digits in the order RGBRGBRGB...; for example FF0000
        00FF00 0000FFx would be three pixels of bright red, green, and
        blue respectively. When writing to a greyscale buffer, only one
        byte per pixel is used; thus FF 80 40x would be 3 pixels of
        high, medium, and low intensity grey. Be careful that Arexx does
        not expand your bariable name; you must enclose it in quotes
        within the Arexx program like this:

        newpixels = REVERSE(myvar)
            WritePixels 'NEWPIXELS' 0 320 0
            /* etc.... */

        You should always specify the variable in upper case, as all
        variables are converted to upper case by Arexx.

    Row
        Scanline of the image where the pixel information is stored.
        Scanlines are numbered starting with 0 at the top and going down
        to Height-1 at the bottom. An error will be returned if you try
        to write outside the bounds of the main buffer.

    Width
        Number of pixels to write to the specified scanline. If not
        specified, the entire width of the scanline is assumed.

    LeftEdge
        How far from the left edge of the image to start writing. This
        value should range from 0 (at the leftmost edge) to the width of
        the image minus 1. If not specified, a left offset of 0 is
        assumed.

RESULT
    None.

1.248 Xor

XOR

    FORMAT
        Xor Alpha/S,Scale/S

    FUNCTION
        Perform a composite exclusive-or operation between the main and swap
        buffers.

```
INPUTS
   Alpha
      If specified, the alpha channel will be used as a blend to control
      image during the composite.

   Scale
      If specified, the swap buffer will be scaled to the size of the
      region processed.

RESULT
   None.
```

1.249 Yellow

```
YELLOW

   FORMAT
      Yellow Adjust/N

   FUNCTION
      Adjust the yellow content of the current image or region.

   INPUTS
      Adjust
         Amount to adjust the yellow (-127 to +127).

   RESULT
      None.
```

1.250 Zoom

```
ZOOM

   FORMAT
      Zoom Direction/A,Mouse/S

   FUNCTION
      Zoom the preview display into or out of the current buffer.

   INPUTS
      Direction
         Direction of zoom; should be one of "In", "Out", or "Full" (to
         zoom all the way back out to full screen).

      Mouse
         If specified, the zoom will be centered around the current mouse
         coordinates.  Otherwise, it will be centered on the display.

   RESULT
      None.
```