

MPIImage

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| COLLABORATORS |
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| | <i>TITLE :</i> MPImage | | |
| <i>ACTION</i> | <i>NAME</i> | <i>DATE</i> | <i>SIGNATURE</i> |
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| REVISION HISTORY |
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| NUMBER | DATE | DESCRIPTION | NAME |
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Chapter 1

MPImage

1.1 MPImage.guide

MPImage 4.2 Contents

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1.2 MPImage.guide/Overview

Quick overview

MPImage is a tool for viewing, scaling and converting Images.

It can load the following formats:

```
ILBM      : All standard ILBM formats including EHB, HAM6, HAM8 and 24bit;
PBM       : All formats (P1, P2, P3, P4, P5 and P6);
DataTypes: Any datatype supported format;
JPEG      : Loads JPEGs with Djpeg;
PNG       : Loads PNGs with pngtopnm.
DCTV      : DCTV ILBMs with dctv.library version 3.
```

It can view in the following modes:

```

Workbench      : View in a window on the Workbench;
Public Screen: View in a window on a named Public Screen;
EGS Screen     : View in a window on the default EGS screen.
Screen         : View on a custom screen

```

It can save in the following formats:

```

Greyscale: ILBM 16 shades and 256 shades;
HAM6      : ILBM HAM6 with fixed, computed or supplied palette;
HAM8      : ILBM HAM8 with fixed, computed or supplied palette;
EHB       : ILBM EHB with computed or supplied palette;
COLOUR    : ILBM with computed or supplied palette, 2 to 256 colours;
ILBM24    : 24 bit ILBM;
PPM       : P5 and P6 modes.
JPEG      : JPEG with Cjpeg.
PNG       : PNG with pnmtopng.
DCTV      : DCTV ILBMs with dctv.library version 3

```

1.3 MPImage.guide/Installation

Installation Instructions

The following files are included in this distribution and require installing in one directory:

You will also need to copy MPImage.library.??? to MPImage.library. Use .000 for 68000, .020 for 68020+, .881 for 68020+ and 68881+, .040 for 68040+.

The Install-MPImage script will do this for you. It will also let you set env: variables to enable JPEGs and PNGs to be loaded and saved.

```

MPImage          : IconX script for ConvertMPImage with Gui interface.
MPImage.guide    : This file.
ConvertMPImage   : Shell command to convert/scale/view images.
RunMPGui         : Shell command to display a parameter requester
MPImage.library.#?: Image conversion library.
MPGui.library    : Gui library.
Install-MPImage  : Installer script.
gui/MPImage.gui  : Gui definition file for MPImage.
si/#?           : Source code to ConvertMPImage.
include/#?       : Include files for MPImage.library.
docs/#?          : Autodocs for MPImage.library.

```

1.4 MPImage.guide/Requirements

Software and Hardware required

OS3.0+ is required.

egs.library is required to display on EGS screens.

dctv.library is required to load and save DCTV images.

1.5 MPImage.guide/Par

Shell and GUI parameters

The following parameters can be supplied:

| | |
|--------------|--------------------------------------|
| FROM/A | Input file |
| X/N/K | X size to scale to |
| Y/N/K | Y size to scale to |
| MINX/N/K | Minimum X to scale |
| MINY/N/K | Minimum Y to scale |
| MAXX/N/K | Maximum X to scale |
| MAXY/N/K | Maximum Y to scale |
| PUBSCREEN/K | Public screen to display image |
| EGS/S | Display on EGS screen |
| NOREMAP/S | Do not remap the image to the screen |
| CLONE/S | Clone the bit map before displaying |
| TO/K | Output file name |
| FORMAT/K | Output format |
| FORCEGREY/S | Force input to GreyScale |
| PALETTE/K | Palette to use for output |
| COLOURS/N/K | Number of colours to output |
| 12BIT/S | Use 12 bit colours |
| MODENAME/K | Screen Mode of output file |
| NOPROGRESS/S | Prevent progress requester |
| GUI/S | Display errors on Workbench |

MPImage displays a Gui with a View/Convert gadget to select the running mode and a Size gadget to select the sizing mode. It also displays Ok (keyboard shortcut O), Cancel (keyboard shortcut C) and Help (keyboard shortcut Help). The Esc key can also be used to cancel the requester. Help can also be used over/in any of the gadgets to display context sensitive help.

1.6 MPImage.guide/par-FROM

FROM parameter

=====

This parameter specifies the name of the input file. See Overview for a list of the image formats that can be loaded.

F can be used to activate the string gadget. With Right Shift a file requester is displayed.

1.7 MPIImage.guide/par-X

X parameter
=====

If this parameter is specified then the X size of the image is scaled to the number supplied.

X can be used to toggle the selection of the parameter and activate the number gadget. With Left Shift the number gadget is activated.

If viewing on the Workbench or a Public screen then simple scaling is used. If saving or viewing using EGS then more clever scaling is used.

1.8 MPIImage.guide/par-Y

Y parameter
=====

If this parameter is specified then the Y size of the image is scaled to the number supplied.

Y can be used to toggle the selection of the parameter and activate the number gadget. With Left Shift the number gadget is activated.

If viewing on the Workbench or a Public screen then simple scaling is used. If saving or viewing using EGS then more clever scaling is used.

1.9 MPIImage.guide/par-MINX

MINX parameter
=====

This parameter (with the MAXX parameter overrides the X parameter. If the input image is narrower than then specified size then it is scaled to this width.

W can be used to toggle the selection of the parameter and activate the number gadget. With Left Shift the number gadget is activated.

1.10 MPIImage.guide/par-MINY

MINY parameter
=====

This parameter (with the MAXY parameter overrides the Y parameter. If the input image is shorter than then specified size then it is scaled to this height.

H can be used to toggle the selection of the parameter and activate the number gadget. With Left Shift the number gadget is activated.

1.11 MPIImage.guide/par-MAXX

MAXX parameter
=====

This parameter (with the MINX parameter overrides the X parameter. If the input image is wider than then specified size then it is scaled to this width.

I can be used to toggle the selection of the parameter and activate the number gadget. With Left Shift the number gadget is activated.

1.12 MPIImage.guide/par-MAXY

MAXY parameter
=====

This parameter (with the MINY parameter overrides the Y parameter. If the input image is taller than then specified size then it is scaled to this height.

E can be used to toggle the selection of the parameter and activate the number gadget. With Left Shift the number gadget is activated.

1.13 MPIImage.guide/par-PUBSCREEN

PUBSCREEN parameter
=====

This specifies the name of a Public screen on which to open a window and display the image.

P can be used to activate the string gadget.

1.14 MPIImage.guide/par-EGS

EGS parameter
=====

Specifiying this parameter displays the image on the default EGS screen.

This parameter is automatically specified if the View/Convert gadget is set to EGS.

1.15 MPIImage.guide/par-NOREMAP

NOREMAP parameter
=====

Specifying this parameter prevents the image being remapped to the screen palette it is to be displayed on.

R can be used to toggle this gadget.

1.16 MPIImage.guide/par-CLONE

CLONE parameter
=====

Specifying this parameter can reduce the amount of chip memory used when loading Datatype images.

L can be used to toggle this gadget.

1.17 MPIImage.guide/par-TO

TO parameter
=====

This parameter specifies the name of the output file the image will be saved to.

If FORMAT is supplied TO is not supplied or supplied as "" then the image is displayed on a screen. Note FORMAT=PPM is not valid for this option.

T can be used to activate the string gadget. With Right Shift a file requester is displayed.

1.18 MPImage.guide/par-FORMAT

FORMAT parameter

=====

This parameter specifies the output format.

The following formats are available:

```

BW16      : 16 colour grey scale ILBM
BW256     : 256 colour grey scale ILBM
HAM6      : HAM6 ILBM with fixed (internal) palette
HAM6P     : HAM6 ILBM with computed or supplied palette
HAM8      : HAM8 ILBM with fixed (internal) palette
HAM8P     : HAM8 ILBM with computed or supplied palette
EHB       : EHB ILBM with computed or supplied palette
COLOUR    : 2 to 256 colour ILBM with computed or supplied palette
ILBM24    : 24 bit ILBM
PPM       : P5 (if grey input) or P6 PBM format
JPEG      : JPEG format (using cjpeg)
PNG       : PNG format (using pnmtopng)
DCTV3     : 3 plane DCTV ILBM with dctv.library version 3
DCTV4     : 4 plane DCTV ILBM with dctv.library version 3

```

If the output format is not a 24 bit format then the image is dithered using the Floyd–Steinberg method.

S can be used to cycle the list view. With Shift the list view cycles backwards.

1.19 MPImage.guide/par-FORCEGREY

FORCEGREY parameter

=====

If the image is being saved or viewed on screen then this forces the input to grey scale. This can save memory and speed up processing when scaling and saving GreyScale images as only one chunky buffer has to be scaled.

1.20 MPImage.guide/par-PALETTE

PALETTE parameter

=====

If FORMAT is set to HAM6P, HAM8P, EHB or COLOUR then this paramter can be used to specify the palette to use for the output file.

The file specified should be an ILBM file.

A can be used to toggle the selection of the parameter and activate the string gadget. With Left Shift the string gadget is activated. With Right Shift a file requester is displayed.

1.21 MPIImage.guide/par-COLOURS

COLOURS parameter
=====

if FORMAT is set to COLOUR then this gadget can be used to specify the number of colours in the output image (from 2 to 256). If not specified (not possible from the Gui) then the default is the number of colours in the PALETTE file or 16 if no palette is supplied.

U can be used to increase the value. With Shift the value is decreased.

1.22 MPIImage.guide/par-12BIT

12BIT paramter
=====

if FORMAT is set to COLOUR then this gadget can be used to specify that colour remapping should use a 12 bit palette. The default is to generate an 18 bit palette.

You should specifying this parameter if you are viewing the image on a pre AGA machine as the image conversion is much quicker.

B can be used to toggle this gadget.

1.23 MPIImage.guide/par-MODENAME

MODENAME parameter
=====

If the FORMAT parameter specifies an ILBM then this parameter can be used to specify the screen mode (CAMG chunk) of the output file.

If not specified then a reasonable one is generated.

M can be used to activate the string gadget. With Right Shift a screen mode requester is displayed.

1.24 MPImage.guide/par-NOPROGRESS

NOPROGRESS parameter
=====

If this is specified then no progress requester is shown.

1.25 MPImage.guide/par-GUI

GUI parameter
=====

If this is specified then error messages are displayed on a Workbench requester rather than the console.

1.26 MPImage.guide/View-Convert

View/Convert gadget
=====

This gadget selects the action. It has the following values:

| | |
|---------------------|--------------------------------------------------|
| View Workbench | : View on the Workbench |
| View Public Screen: | View on a named public screen |
| View EGS | : View on the default EGS screen |
| Save/View Screen | : Convert and save the image or view on a screen |

V can be used to cycle this gadget. With Shift the gadget cycles in reverse.

1.27 MPImage.guide/Specify-Restrict

Size gadget
=====

This gadget enables either the X and Y gadgets or the MINX, MINY, MAXX and MAXY gadgets.

This lets either the actual or minimum and maximum scaled image sizes to be specified.

Z can be used to cycle this gadget. With Shift the gadget cycles in reverse.

1.28 MPImage.guide/Bugs

Known (and unknown) errors

A Palette file requires a body which is also loaded and then discarded.

The MODENAME may lose the monitor part.

1.29 MPImage.guide/History

Version History

- * Version 4.2

- * Minor fix to HAM6 and HAM8 saving.

- * Version 4.1

- * Removed MPGui docs and includes. Now in seperate archive.
 - * Can now load and save PNG images.
 - * Added documentation of NOPROGRESS parameter.
 - * Added 68000 version.
 - * Gives an error when PUBSCREEN does not exist.
 - * Now loads P1 and P4 images.
 - * Fixed remapping of grey scale white to screen.
 - * Added MINX, MINY, MAXX and MAXY parameters.
 - * Can now correctly load HAM8 images on non AGA.

- * Version 4.0

- * Included multiple library versions and Installer script.
 - * Included source code to ConvertMPImage.
 - * Included Autodocs and includes for MPGui.library and MPImage.library.
 - * MPImage.library can now be called by more than one caller.
 - * MPGui.library now tries to create requesters in columns if screen not deep enough.
 - * Added option to view on a screen.
-

- * Fixed a bug when scaling EGS images.
 - * Included other docs.
 - * MPImage.library now show progress requester unless loading without remapping.
 - * Checkboxes now scale.
 - * Listviews have selectable number of items displayed.
 - * Uses env:mpimage/djpeg for non bitmap jpegs and env:mpimage/cjpeg.
 - * Added FORCEGREY parameter.
 - * Added GUI parameter.
 - * Fixed loading of 24bit ILBMs (used to hang).
- * Version 3.3
- * Initial release

1.30 MPImage.guide/Distribution

Copyright and distribution requirements

If you want the full source - EMail me and I will see what I can do.

MPImage 4.2 is copyright © 1995 Mark John Paddock.

I can be contacted at:

mark@topic.demon.co.uk or mpaddock@cix.compulink.co.uk.

It can be freely distributed.

The palette construction is from Dr Dobbs Journal and is Copyright (c) Truda Software by Anton Kruger.

215 Marengo Rd, #2,
Oxford, IA 52322-9383

The chunky<->planar conversion is by Morten Eriksen
(mortene@stud.unit.no).

1.31 MPImage.guide/Index

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