

# **Piclcon**

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**COLLABORATORS**

	<i>TITLE :</i> PicIcon		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
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**REVISION HISTORY**

NUMBER	DATE	DESCRIPTION	NAME

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# Chapter 1

## PicIcon

### 1.1 PicIcon 1.03

PicIcon 1.03 - Icon Image Generator

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### 1.2 PicIcon: Introduction

PicIcon takes an IFF image file, both ILBM and ANIM formats are supported, and creates an icon image showing the contents of the file. This allows images to be more easily recognised from the Amiga Workbench.

PicIcon be used from both the CLI and Workbench, although it is more suited to the Workbench environment with some functions only being available via Workbench.

PicIcon is distributed as shareware. This version is fully functional

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however a requester saying that is not registered will appear after a number of files have been processed. See the copyright section for details on how to register.

PicIcon requires AmigaDOS 2.04 (V37) or later to run.

### 1.3 PicIcon: Copyright

PicIcon release 1.03

PicIcon 1.03 and PicIcon project icon (hereinafter "Files") and their related documentation and examples  
(c) Copyright 1994 Michael J. Sheppard. All Rights Reserved.

This version of PicIcon is shareware. Permission is given to distribute these Files freely via any means which preserves its copyrights. The Files may not be sold for profit. Any distribution must include both the PicIcon License file and the PicIcon documentation drawer complete with contents.

The registered version of PicIcon contains the full source code and removes the shareware message from it's operation. To register send 10 UK pounds, or \$15 US, to ;

PicIcon Registration.  
M.J.Sheppard  
163, Sapgate Lane,  
Thornton  
Bradford  
BD13 3DY

If you include an Internet email address with your registration then I will keep you informed of updates to PicIcon and their availability.

These Files and their related documentation and examples are provided "AS-IS" and subject to change without notice; no warranties are made. All use is at your own risk. No liability or responsibility is assumed.

### 1.4 Using PicIcon

PicIcon can be started from either the  
Workbench  
or  
CLI  
.

PicIcon has two modes of operation. It can either try and match the colours in the file with those currently in use by Workbench, or just assign colours on a modular basis i.e. Areas in colour 1 in the file appear as colour 1 in the icon. For any file whose image has greater than 256 colours PicIcon will always try to match the colours. For images with fewer than 256 colours the

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method used can be set by the user via the  
match colours  
checkbox  
on the  
settings window  
.

When matching colours PicIcon looks for the nearest colour based on colour intensity. This can result in some unexpected colour choices. For example for a greyscale image PicIcon may introduce some colour in the icon this is because there aren't enough greys in the Workbench palette to match all of the colours to a grey. More information about PicIcons colour matching can be found in the

Hints and Tips  
section of this document.

## 1.5 PicIcon: Workbench Startup

To start PicIcon from Workbench double-click on the PicIcon icon ←  
with the  
left mouse button. After a few seconds an application icon will appear on  
the Workbench.

PicIcon recognises an number of tooltypes to modify it's operation:

SETTINGS

WIDTH

HEIGHT

DEPTH

QUIET

FONT

FONTSIZE

To create an image drag the icon of a file onto the application ←  
icon and  
release the mouse button. PicIcon will then process the file and create  
an icon image.

If you double-click on the application icon a  
window  
is displayed allowing  
you to change the current settings used to create icons.

To stop PicIcon either double-click on the PicIcon disk icon, or select the  
quit  
item on the  
settings menu bar

---

.

## 1.6 PicIcon: Settings tooltype

SETTINGS=<filename>

This is the name of a file containing PicIcon settings to use when processing the files. New settings files can be created using the

Settings window

.

If this parameter is not present then PicIcon will load the default settings file, S:PicIcon.config.

## 1.7 PicIcon: Width tooltype

WIDTH=<pixels>

This is the width, in pixels, of the icons created by PicIcon. This value overrides the value stored in the settings file. Default = 48

## 1.8 PicIcon: Height tooltype

HEIGHT=<pixels>

This is the height, in pixels, of the icons created by PicIcon. This value overrides the value stored in the settings file. Default = 20

## 1.9 PicIcon: Depth tooltype

DEPTH=<planes>

This is the depth, in planes, of the icons created by PicIcon. This value overrides the value stored in the settings file. This effects the number of colours used in the icons and can be 2, 3 or 4 for 4, 8 or 16 colours respectively. Default = 3 ( 8 colours ).

## 1.10 PicIcon: Quiet tooltype



QUIET

By default PicIcon displays a window showing the progress as it makes processing each file. This option stops this window appearing. This can be overridden using the Quiet option on the Settings menu.

## 1.11 PicIcon: Font tooltype

```
FONT <name>
```

PicIcon uses the system default font for all windows. This option allows you to specify a particular font to use for the windows.

The

```
    FONTSIZE  
    tooltype should be used to set the
```

size of the font.

## 1.12 PicIcon: Fontsize tooltype

```
FONTSIZE <pixels>
```

This tooltype allows you to set the size of the font given in the

```
    FONT  
    tooltype.
```

## 1.13 PicIcon: CLI Startup

```
PicIcon processes all of the files listed on the command line and ↵  
exits.
```

If an error is detected when processing a file then PicIcon will continue to the next file if possible.

The command template for PicIcon is as follows;

PicIcon

```
    FILES/M  
    ,  
    SETTINGS/K  
    ,  
    WIDTH/K/N  
    ,  
    HEIGHT/K/N  
    ,  
    DEPTH/K/N  
    ,  
    QUIET/S  
    ,  
    ALL/S
```

## 1.14 PicIcon: Files parameter

FILES/M

A list of files to create icon images for. if this is an AmigaDOS pattern PicIcon will process all files that match the pattern.

E.g.

```
PicIcon #?.ham
```

Will create icon images for all files in the current drawer having names ending in '.ham'.

## 1.15 PicIcon: Settings parameter

SETTINGS/K

This is the name of a file containing PicIcon settings to use when processing the files. New settings files can be created using the

```
Settings window
```

.

If this parameter is not present then PicIcon will load the default settings file, S:PicIcon.config.

## 1.16 PicIcon: Width parameter

WIDTH/K/N

This is the width, in pixels, of the icons created by PicIcon. This value overrides the value stored in the settings file. Default = 48

## 1.17 PicIcon: Height parameter

HEIGHT/K/N

This is the height, in pixels, of the icons created by PicIcon. This value overrides the value stored in the settings file. Default = 20

## 1.18 PicIcon: Depth parameter

DEPTH/K/N

This is the depth, in planes, of the icons created by PicIcon. This value overrides the value stored in the settings file. This effects the number of colours used in the icons and can be 2, 3 or 4 for 4, 8 or 16 colours respectively. Default = 3 ( 8 colours ).

Note: Under Workbench 3.0 the choice of icon depth is limited to 2 or 3 giving 4 or 8 colours only. This is due to the change in colour handling introduced for Workbench 3.0.

## 1.19 PicIcon: Quiet parameter

QUIET

By default PicIcon displays the names of the files as it processes them. Setting this flag stops PicIcon from displaying this information.

## 1.20 PicIcon: All parameter

ALL

This flag causes PicIcon to process all of the files in the directories specified in the

FILES

argument, including any subdirectories that they might have.

## 1.21 PicIcon: Settings Window

The settings window allows you to modify the current settings used to create

icon images. It is activated by double-clicking on the PicIcon application icon. The effects of the changes are controlled by the three buttons at the bottom of the window, @{"Save" link sw\_save }, @{"Use" link sw\_use }, and @{"Cancel" link sw\_cancel }. No changes made to the window will have any effect on the creation of images until one of these three buttons is pressed.

The settings that can be changed from this window are ;

Width

The width of the icon in pixels

Height

The height of the icon in pixels

Colours  
The number of colours in the icon

Border  
Whether the icon should have a border

Match Colours  
Whether PicIcon should match image/workbench colours

Free Position  
Whether PicIcon should free the icon position

Replace Tool  
Whether PicIcon should set the icon default tool

Default Tool  
The default tool PicIcon should give icons

Tool types  
The Tool types to use with the default tool

As well as displaying the window a  
menu bar  
is installed allowing you  
to load and save settings and quit PicIcon.

## 1.22 PicIcon: Settings window - Width

Gadget Type : Slider  
Value range : 20 - 80 pixels  
Shortcut key : w

This gadget allows you to change the width of the icons produced. When making changes to the dimensions of the icon you should consider the dimensions of the original image to limit to amount of distortion in the resultant icon.

## 1.23 PicIcon: Settings window - Height

Gadget Type : Slider  
Value range : 10 - 40 pixels  
Shortcut key : h

This gadget allows you to change the height of the icons produced. When making changes to the dimensions of the icon you should consider the dimensions of the original image to limit to amount of distortion in the resultant icon.

## 1.24 PicIcon: Settings window - Colours

Gadget Type : Slider  
Value range : 4,8, or 16\* colours  
Shortcut key : l

This gadget allows you to change the number of colours in the resultant icon image. When selecting this bear in mind the number of colours that you normally use for your Workbench screen.

\*: Under Workbench 3.0 the option for 16 colours is not available.

## 1.25 PicIcon: Settings window - Border

Gadget Type : Checkbox  
Shortcut key : b

If this is checked then PicIcon will draw a box around the resultant image making it appear that icon has a border around it. PicIcon takes advantage of the Workbench 3D icons to produce a border with a minimum loss of image.

## 1.26 PicIcon: Settings window - Match Colours

Gadget Type : Checkbox  
Shortcut key : m

If this gadget is checked then PicIcon will attempt to match the colours in the image to those currently in use by Workbench. For images with more than 256 colours PicIcon ignores this and matches the colours anyway.

## 1.27 PicIcon: Settings window - Free Position

Gadget Type : Checkbox  
Shortcut key : p

If this box is checked then PicIcon 'UnSnapshots' the icon allowing Workbench to position it appropriately. This is useful if the size of the icon is changed.

## 1.28 PicIcon: Settings window - Replace Tool

Gadget Type : Checkbox  
Shortcut key : r

If this gadget is checked, and a default tool is given, PicIcon will replace the default tool in the icon with that defined. Otherwise PicIcon will only replace the default tool if the icon previously had no tool defined.

---

## 1.29 PicIcon: Settings window - Default Tool

Gadget Type : String  
Maximum size : 128 characters  
Shortcut key : t

This string is the name of the program to execute when the icon created is double clicked. How the value is used depends on the setting of the `@{ "Replace Tool" link sw_replace } gadget`.

## 1.30 PicIcon: Settings window - Tooltypes

Gadget Type : Listview  
Shortcut key : none

The tooltypes used when creating an icon are displayed in the listview gadget, these are only used when PicIcon sets the default tool of the icon it has created an image for.

It is not possible to edit the values in the listview directly so this has to be done using the

New  
and  
Del

gadgets. These allow tooltypes to be added and deleted from the list respectively.

## 1.31 PicIcon: Settings window - New

Gadget Type : Button  
Shortcut key : n

Pressing this button adds a new tooltype to the list of tooltypes. It allows you to type in the value of this tooltype into the string gadget to the left of the New and

Del

buttons. Each tooltype can be up to 128 characters long.

## 1.32 PicIcon: Settings window - Del

Gadget Type : Button  
Shortcut key : d

Pressing this button deletes the currently selected tooltype from the list of tooltypes. This button is only enabled if you have a tooltype selected.

---

### 1.33 PicIcon: Settings window - Save button

Gadget Type : Button  
Shortcut key : s

This button causes the settings in the window to be made the current ones used by the program and saves those settings to the default settings file. It also exits from the settings window.

### 1.34 PicIcon: Settings window - Use button

Gadget Type : Button  
Shortcut key : u

This button exits from the settings window and makes the settings displayed in the window the current settings.

### 1.35 PicIcon: Settings window - Cancel button

Gadget Type : Button  
Shortcut key : c

When this button is pressed the settings window is removed and all changes made are abandoned.

### 1.36 PicIcon: Settings Menu

Whilst the window is active PicIcon installs a menu bar ←  
allowing a number  
of extra features to be selected.

Project menu

Create Icon

About

Quit

Settings menu

Quiet

Load Settings

Save Settings

Save Settings As

---

### 1.37 PicIcon: Settings Menu - Create Icon

Shortcut Key: Amiga C

The option displays an ASL file requester allowing you to select a number of files to create icons for. Selecting the OK button on the file requester causes PicIcon to process all of the files selected.

If changes have been made to the values in the settings window they are not taken into account when creating the new images.

### 1.38 PicIcon: Settings Menu - About

Shortcut key: Amiga ?

A requester is displayed showing information about PicIcon. This includes the version number of the PicIcon being run.

### 1.39 PicIcon: Settings Menu - Quit

Shortcut key: Amiga Q

Selecting this menu option causes PicIcon to exit.

### 1.40 PicIcon: Settings Menu - Quiet

Shortcut key: none

This menu option toggles whether the progress window is displayed when files are being processed. If the tick symbol is shown by the option then the progress window will not be shown.

The initial setting of this can be set using the QUIET tooltype.

### 1.41 PicIcon: Settings Menu - Load Settings

Shortcut key: Amiga L

An ASL file requester is displayed allowing a settings file to be selected for loading. Pressing the OK button causes the values in the file to be loaded into the window. This will not effect the current settings used by PicIcon when creating images until either the Save



or  
 Use  
 buttons are selected,  
 the loaded values can be removed by selecting the  
 Cancel  
 button.

## 1.42 PicIcon: Settings Menu - Save Settings

Shortcut key: Amiga S

This saves the current values displayed in the window to the default settings file S:PicIcon.config. If no Settings

tooltype  
 or  
 parameter  
 is given when

PicIcon is started then these settings will be used whenever PicIcon is run.

## 1.43 PicIcon: Settings Menu - Save Settings As

Shortcut key: Amiga A

This option displays an ASL save requester allowing you to save the values displayed in the window to a named settings file. This file can be used in future, either by giving it as the settings

tooltype  
 or  
 parameter  
 or from

the

Load Settings

menu option, to change the values used by PicIcon to create images.

## 1.44 PicIcon: Hints and Tips

If you are using a 4 colour Workbench then set PicIcon to not match colours. There are not enough different display colours available to allow meaningful colour matching.

If you are using an 8 colour Workbench with colour matching adjust the palette so that you get at least one red, green, blue and yellow. This will give PicIcon an easier job in trying to match the colours and result in better, more recognisable icons. An example 8 colour palette is present in the PicIcon release.

If you find that PicIcon is matching colours in an unexpected manner you should try and adjust the Workbench palette. If you find that PicIcon is using changing the colour of an area in the image when a similar colour

is present in the palette try adjusting the RGB values of both palette colours so that they are similar in intensity. An example of this would be a dark green area on the image being represented by a dark brown area on the icon when a light green is present in the palette. To solve this problem make the green a little darker until the correct result is obtained.

For complex images try and make the icon image as large as possible. Small icons of complex pictures look cluttered and are not easily recognisable.

## 1.45 Notes for Workbench 3.0

With Workbench 3.0 a number of changes were introduced regarding the way in which colours are defined and used by Workbench. This can result in some odd behaviour from PicIcon.

For correct operation under Workbench 3.0 you should either create only 4 colour Icons, in which case PicIcon will use the first 4 colours defined by Workbench, or use an 8 colour screen mode with 8 colour icons.

If you try and create 8 colour icons using a screen mode with more than 8 colours then PicIcon may have problems trying to match with colours 5 to 8.

## 1.46 PicIcon Limitations

PicIcon will process all ILBM files with 6 or fewer planes, including HAM and extra-half brite files. In addition PicIcon will process 24 bit ILBM files. All ANIM files made up of images of any of the above formats will also be processed.

This version of PicIcon will not process 256 colour or HAM8 files. Also it will not process 24bit DEEP, NewTek 21bit, HAME or DCTV files.

## 1.47 PicIcon Change History

Version	Change description
1.03	- The Workbench colours are now read directly from the screen rather than the preferences file. This corrected operation under Workbench 3.0. See @{"Notes for Workbench 3.0" link wb3} ← above. PicIcon now notices when the palette is changed and updates it's internal colour table accordingly.
1.02	- The tooltype array used to create the new icon was not NULL terminated causing random errors when trying to add tooltypes to an icon, including infinite updating and spurious tooltype entries. Fixed.
1.01	- Changed name of button used to create a new tooltype from

Add to New to be consistent with other programs.

- If PicIcon expects to be able to match colours but there is no CMAP chunk in the ILBM IFF form then a warning is displayed before the file is processed.

1.00 - Initial Release.

## 1.48 PicIcon Bug reports

If you find a bug in PicIcon or have a file that it will not process then please contact;

Michael J. Sheppard  
163 Sappgate Lane,  
Thornton.  
Bradford.  
BD13 3DY.  
United Kingdom

Email: [mick@genasys.co.uk](mailto:mick@genasys.co.uk)

If the problem is one where you cannot process a file please include details of the format of the file, if known, and the software used to produce it. The more information you provide me with the more likely I am to be able to find an answer.

## 1.49 Acknowledgments

PicIcon was written and tested on an unaccelerated Commodore Amiga A2000 with a GVP Series II SCSI controller card and 52MB Quantum Hard Disk.

PicIcon was developed using SAS/C 5.10 and the Commodore V37 Native Developer Kit.

The windows were designed using GadToolsBox 2.0. Thanks to Jan van den Baard of Jaba Development for this very useful product.

Thanks to David Sheppard for testing and suggestions.

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