

**PBM**

**COLLABORATORS**

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# Contents

<b>1</b>	<b>PBM</b>	<b>1</b>
1.1	PBM Tool . . . . .	1
1.2	pbm description . . . . .	1
1.3	pbm tool description . . . . .	3
1.4	installation . . . . .	3
1.5	main window . . . . .	4
1.6	input filename . . . . .	4
1.7	output filename . . . . .	4
1.8	input formatlist . . . . .	5
1.9	output formatlist . . . . .	5
1.10	add button . . . . .	5
1.11	edit button . . . . .	5
1.12	del button . . . . .	5
1.13	move buttons . . . . .	6
1.14	temp file . . . . .	6
1.15	copy input filename . . . . .	6
1.16	change output extention . . . . .	6
1.17	detece input format automatically . . . . .	6
1.18	go button . . . . .	7
1.19	detect button . . . . .	7
1.20	quit button . . . . .	7
1.21	add window . . . . .	7
1.22	add window file . . . . .	8
1.23	add window format . . . . .	8
1.24	add window title . . . . .	8
1.25	add window magic-ext . . . . .	8
1.26	add window options . . . . .	9
1.27	add window ok . . . . .	9
1.28	add window cancel . . . . .	9
1.29	arexx . . . . .	9

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---

1.30 thank you . . . . .	9
1.31 contacting the author . . . . .	10
1.32 copyright . . . . .	10
1.33 gnu general public license . . . . .	10

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# Chapter 1

## PBM

### 1.1 PBM Tool

```

                                PBM Tool
    A great application for all us lazy people
    Copyright (C) 1994 Hakan Ardo
  
```

You can get help about the different gadgets in this program by simply placing the mouse pointer on top of the object you want some help about and press the help key. A of MUI's fantastic possibilities.

What is PBM?	A short description of PBM
What is PBM Tool?	A short description of PBM Tool
Installation	Describes the installation
Main window	Describes all the functions of the main windows
Add window	Describes all the functions of the Add window
Arexx	Describes how to use the Arexx port
Thank you	A big thanks to all who have supported me
License	GNU GENERAL PUBLIC LICENSE
Contacting me	Troubles, Bug reports, suggestions: look here

### 1.2 pbm description

PBMPLUS is a toolkit for converting various image formats to and from portable formats, and therefore to and from each other. The idea is, if you want to convert among N image formats, you only need 2\*N conversion filters, instead of the N<sup>2</sup> you would need if you wrote each one separately.

The package is broken up into four parts. First is PBM, for bitmaps (1 bit per pixel). Then there is PGM, for gray scale images. Next is PPM, for full-color images. Last, there is PNM, which does content-independent manipulations on any of the three internal formats, and also handles external formats that have multiple types.

You can get the pbm toolkit from aminet, /gfx/pbm.  
 Here are a list of supported format, I don't know if it's the most recently  
 but here it is anyway:

PBM handles the following black&white formats:

Sun icon file	reading	writing
X10 and X11 bitmap file	reading	writing
MacPaint	reading	writing
CMU window manager format	reading	writing
MGR format	reading	writing
Group 3 FAX	reading	writing
GEM .img format	reading	writing
Bennet Yee's "face" format	reading	writing
Atari Degas .pi3 format	reading	writing
Andrew Toolkit raster object	reading	writing
Xerox doodle brushes	reading	
ASCII graphics	writing	
HP LaserJet format	writing	
GraphOn graphics	writing	
BBN BitGraph graphics	writing	
Printronic format	writing	
Gemini 10x printer format	writing	
Epson printer format	writing	
Unix plot(5) file	writing	
Zinc Interface Library icon	writing	

PGM handles the following grayscale formats:

Usenix FaceSaver(tm) file	reading	writing
FITS	reading	writing
Lisp Machine bit-array-file	reading	writing
raw grayscale bytes	reading	
HIPS	reading	
PostScript "image" data	reading	

PPM handles the following color formats:

GIF	reading	writing
IFF ILBM	reading	writing
PICT	reading	writing
Atari Degas .pil format	reading	writing
XPM (X Window System ASCII pmaps)	reading	writing
PC Paintbrush .pcx format	reading	writing
TrueVision Targa file	reading	writing
HP PaintJet format	reading	writing
Abekas YUV format	reading	writing
MTV/PRT ray-tracer output	reading	
QRT ray-tracer output	reading	
Img-whatnot file	reading	
Xim file	reading	
Atari uncompressed Spectrum	reading	
Atari compressed Spectrum	reading	
NCSA Interactive Color Raster	writing	
X11 "puzzle" file	writing	
Motif UIL icon file	writing	
DEC sixel format	writing	

PNM handles the following multi-type formats:

```
Sun raster file      reading writing
TIFF                 reading writing
X11 window dump file reading writing
X10 window dump file reading
PostScript           writing
```

### 1.3 pbm tool description

What PBM Tool does is to simplify the use of PBM, by popping up a intuitive interface which lets you click your way instead of using the cli. It's created using MUI which means it's very user friendly. To convert a picture to another format all you have to do is to select the picture from a standard ask file requester, choose the output format, and click go. Now just wait and you'll have your new picture. In most cases that is :-). It's also very easy to add new formats, all you need is a PBM like program...

Now if you already have installed the program, and feel like reading some more documentation before starting the use of PBM-Tool, you can read the section about the Main window to get a description for every function of that one.

### 1.4 installation

First you got to get and install mui (see separate readme file), then you got to get the PBM conversion programs for the formats you are planning to use. They can be found on aminet in /gfx/pbm. The currently installed formats can be found in these files:

```
pbmbin.lha
pgmbin.lha
pnmbin.lha
ppmbin1.lha
ppmbin2.lha
```

When you got what you want, put them in your path.

Then it's time to install this program, the simplest way to do that is to run the install script by typing "execute install" in a shell window. If you want a more freely use of the program you could put it in your path. Type pbm to start it.

If you don't like scripts messing around with your system this is what the script does:

1. Copy the config (the env dir) to env:mui and envarc:mui
2. Copy the manual (PBM-Tool.guide) to help:english

That's it. If you have any trouble with this feel free to drop me a mail.

---





## 1.8 input formatlist

To be able to convert a picture PBM must know the format of the picture that you want to convert. In this list you can choose that format. If you have the Detect input format automatically switch turned on PBM-Tool will try to select this format itself. But to do this the Magic number of the format that it is supposed to detect must be specified. And since I don't have the magic number of most the formats it will not work too good yet. If you know any of the missing magic numbers I would be very happy if you could contact me.

See also: Detect format button  
Main window

## 1.9 output formatlist

Select the format you want to convert your picture to here.

See also: Main window

## 1.10 add button

Clicking here will pop up the Add window where you can add new formats.

To add a format you need a PBM type program. That, to become an input format, shall convert the picture to PBM, and to become an output format, shall convert from PBM.

See also: Main window

## 1.11 edit button

This button will pop up the Add window and let you edit the selected format.

See also: Add button  
Main window

## 1.12 del button

Take it easy with this one. It will delete the selected format, and there are no way to get it back, except for typing it in again.

See also: Main window

---

## 1.13 move buttons

The buttons Up, Down, Top and Bottom, will move the selected format up, down to the top of the list respectively to the bottom of the list. The idea is to let you put the formats you use often at the top so that you can find them easier and faster. But they can ofcourse be used in anyway you want...

Se also: Main window

## 1.14 temp file

PBM needs a temporary file to save a "half converted" picture. The main reason that I let you specify that file is to let you specify where it is supposed to be put i.e. in ram or on you HD. So if you are out of memory and this file is put in ram: try to change it to you HD. Anyway, its in this field that you specify that file.

Se also: Main window

## 1.15 copy input filename

If this checkmark is selected the input filename will as soon as you change it be copied to the output filename.

Se also: Change output extention  
Main window

## 1.16 change output extention

If this checkmark is selected the output filename's extention will be changed to the one of the selected output format.

Se also: Main window

## 1.17 detece input format automatically

If this checkmark is selected PBM-Tool will try to select input format automatically. But to do this the Magic number of the format that it is supposed to detect must be speciyed. And since I don't have the magic number of most the formats it will not work to good yet. If you know any of the missing magic numbers I would be very happy if you could contact me.

Se also: Main window

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Where x is the start position and aaa is a 3 digit dec number being the first byte at position x, bbb is the second, ccc the third and so on.

## 1.26 add window options

In a later version I am planning to also let each format contain a set of options that the user can specify at conversion time, but that's not in this version so just ignore this field.

## 1.27 add window ok

Click here when you are ready with your format.

## 1.28 add window cancel

Click here if you want to abandon the changes you made.

## 1.29 arexx

Since the MUI documentation says that MUI will do the job to add a Arexx port to your code is it probably very simple to add one. But it got to be done and documented, and I have not looked at that just yet. But it will probably show up a Arexx port in a later version.

## 1.30 thank you

My greatest thanks is pointed to Lionel VINTENAT <vintenat@irit.fr>, the guy who brought E to muibuilder, the guy who created the phantastic Mac2E, the guy who taught me E, the guy who taught the use of MUI. Without you Lionel VINTENAT this tool of mine would not be reality until several years later, and you saved me a lot a lot of work. My bad english is not enough to express my gratitude to you, you're just grate.

I would also like to thank Stefan Stuntz (stuntz@informatik.tu-muenchen.de) for the creation of mui, a phantastic thing that have made my life a lot easier.

And then I thank Wouter van Oortmerssen for the Amiga E compiler, a lovely piece of work.

And before I end I just got to thank internet for its existence and for bringing this wonderful world of grate PD program and its huge quantities of people willing to help, especially Lionel VINTENAT.

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## 1.31 contacting the author

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## 1.32 copyright

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Contacting me

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