

# Virtual Magnifying Glass 3.3.2

## Index

About Virtual Magnifying Glass .....	pag. 1
Licence .....	pag. 1
Installation Guide for Windows.....	pag. 2
Installation Guide for Linux and FreeBSD.....	pag. 3
Installation Guide for Mac OS X.....	pag. 4
Using the Glass .....	pag. 5
Plugins .....	pag. 6
Using the Dynamic Mode .....	pag. 6
Authors .....	pag. 6

## About Virtual Magnifying Glass

Virtual Magnifying Glass is designed for visually-impaired and others who need to magnify a part of the screen. Unlike most similar programs it does not open a separate window for the magnification but instead puts a movable magnifying glass on screen.

This software is the multiplatform version of Virtual Magnifying Glass. Any feedback you can give us about this software will be greatly appreciated and can greatly enhance the quality of the software. You can give us feedback on our source-forge page: <http://sourceforge.net/projects/magnifier>

## Licence

Virtual Magnifying Glass is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 as published by the Free Software Foundation.

Virtual Magnifying Glass is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

Please note that the General Public License version 2 does not permit incorporating Virtual Magnifying Glass into proprietary programs.

## **Installation Guide for Windows**

Just follow the steps in the order they appear. If you need help installing, go to our website (<http://sourceforge.net/projects/magnifier>) and describe your problem.

- 1 - Download the .exe installation file to a known location.
- 2 - Execute the install software.
- 3 - Follow the instructions on the screen to install the software

# Installation Guide for Linux and FreeBSD

Just follow the steps in the order they appear. If you need help installing, go to our website (<http://sourceforge.net/projects/magnifier>) and describe your problem.

- 1 - Download the magnifier tar.bz2 package to a known location
- 2 - Open a terminal session and change to root by issuing the "su" command
- 3 - Go to the directory where the package was downloaded
- 4 - Uncompress the file with the command: "tar -jxvf package\_name.tar.bz2" e enter the directory which is created with "cd magnifier"
- 5 - Run the install script: ./install.sh
- 6 - If you wish to create a link on the desktop just type:  
  
ln -s /usr/share/magnifier/magnifier \$HOME/Desktop/magnifier

In case you receive error messages, check if all the dependencies of the program are installed.

Note: There is also a uninstall script called uninstall.sh

Another Note: If your distribution doesn't use the standard directories for Install, please run magnifier once so it will create a .magnifier.conf file on your user directory (most times /home/username). Now edit that file and change the MyDirectory field to the correct location.

**Important Note: In case you have problems executing the program, please run it from the command line so you can see any error messages.**

## Dependencies

This are the most important dependencies of the software:

- Gtk 2.6 or superior
- libgtk\_pixbuf2

You can see a complete list of .so files needed by the software using the command:

```
ldd magnifier
```

In case you cannot run the program and it displays a message saying it cannot find one of this libraries (you must run the program from the command line to see error messages), you need to download and install a package for the necessary library:

On RPM-based distributions you can find packages here: <http://rpm.pbone.net/>

On Debian-based distributions you can find packages here: <http://www.debian.org/distrib/packages>

## **Installation Guide for Mac OS X**

Just follow the steps in the order they appear. If you need help installing, go to our website (<http://sourceforge.net/projects/magnifier>) and describe your problem.

- 1 - Download the .zip installation file to a known location.
- 2 - Uncompress the install .zip file.
- 3 - Double click the Qt\_libraries.mpkg to install the Qt 4.4 Framework
- 4 - Double click the Qt4Intf.pkg Package to install the Qt 4.4 Pascal Interface Framework
- 5 - Drag the Magnifier application bundle to your "Applications" folder
- 6 - You can also drag the magnifier to the Dock to have a quick and comfortable way to start it.

## Using the Glass

To start the software just double click it's shortcut on the Desktop.

Under Linux or FreeBSD you may also open a terminal and type: `vmg <enter>`

After it opens, Just move the cursor and the glass will follow it, enlarging the background with variable magnification from 1x to 16x.

<i>Key</i>	<i>Command</i>
[ ENTER ] or [ ESC ]	Hides the glass
Q	Closes the application
Up Arrow	Increases the lens height
Down Arrow	Decreases the lens height
Right Arrow	Increases the lens width
Left Arrow	Decreases the lens width
W	Moves the lens up
S	Moves the lens down
D	Moves the lens to the right
A	Moves the lens to the left
[ PAGE UP ]	Moves the lens up in big steps
[ PAGE DOWN ]	Moves the lens down in big steps
B	Activates and Deactivates the graphical border
[MOUSE WHELL UP]	Increase the magnification in small steps
[MOUSE WHELL DOWN]	Decrease the magnification in small steps
+	Increase the magnification in small steps
-	Decrease the magnification in small steps

## Plugins

On the version 3.3 of the magnifier, a plugin system was introduced. This systems allows the software to be extended. The first plugin developed gives suport for the Windows BETA Dynamic Mode. You can switch plugins on the configurations dialog on the magnifier menu.

## Using the Dynamic Mode

First, make sure that you have DirectX installed on your computer. Version 9 or superior is recomendado. The Dynamic Mode only works under Windows.

To activate the dynamic mode open the magnifier, right-click it's tray icon, select "Use Plugin (Usually Dynamic Mode)" and then activate the glass. While using the dynamic mode none of the default magnifier keys will work. We have, instead, 4 special keys to move the glass while in Dynamic Mode. To exit the dynamic mode, right click the tray icon of the magnifier and quit it, or start a non-dynamic mode session.

The following keys are available to use the glass with the dynamic mode:

<i>Key</i>	<i>Command</i>
[Ctrl] + [Alt] + Up Arrow	Move the lens up
[Ctrl] + [Alt] + Down Arrow	Move the lens down
[Ctrl] + [Alt] + Right Arrow	Move the lens right
[Ctrl] + [Alt] + Left Arrow	Move the lens left

If you experience problems using the dynamic mode, you can try editing the configuration file magnifier.ini while the magnifier is not running. Look for the section "[Plugins]". There you can find a field that sets the color mode for the magnifier. You must use a color mode supported by your video card. The following values can be utilized on the PluginData field:

<i>Value</i>	<i>Description</i>
0	Uses YUY2 color mode (YUV) - The default value
1	Uses UYVY color mode (YUV)
2	Uses 16-bits 5-5-5 color mode (RGB)
3	Uses 16-bits 5-6-5 color mode (RGB)
4	Uses 32-bits color mode (RGB)

## Authors

Felipe Monteiro de Carvalho  
Chris O'Donnell  
Harri Pyy