GizmoLoupe Help Version 1.41

February 27, 2014

Figure 1: GizmoLoupe Version 1.41

Contents

List of Figures

1 What is the use of GizmoLoupe ?

GizmoLoupe is a simple utility to analyze (with zoom) images of your screen, measure the dimensions of objects on the screen and determine pixels color.

1.1 History

1.1.1 What is in version 1.41 ?

- The window is always present regardless of the active application.
- The image may be that of a film.
- Fixed minor bugs.

1.1.2 What is in version 1.40 ?

- Reticle On/Off.
- Recording the magnified image.

1.1.3 What is in version 1.39 ?

- Improved documentation
- Replacement of **cmd+H** by **F1**.
- Taking into account Retina displays.
- Fixed a bug display when the pointer was near the edges of the screen.

1.1.4 What is in version 1.28 ?

Documentation corrections and replacement of **F1** by **cmd + H**.

1.1.5 What is in version 1.27 ?

- In the definition of a path on a map, segments connecting the points are shown. Additionally you can choose the color of the points and segments for an optimum contrast on a map.
- Points of a path can be changed by drag and drop.
- The choice of scale dialog has been simplified.

1.1.6 What is in version 1.26 ?

We added a number of useful commands to measure the length of a route on a map.

2 Start of GizmoLoupe

At startup the screen has the appearance shown in Figure [2].

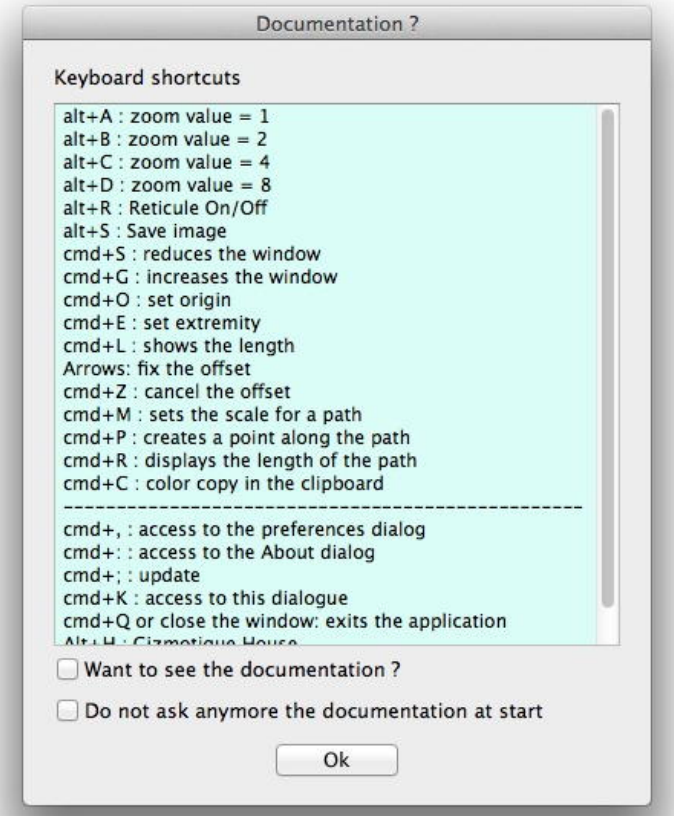

Figure 2: Start screen: it summarizes the functions of the program: lists the keyboard shortcuts and provides access to the complete documentation (this file).

By checking the box ***Want to see the documentation ?***, program documentation will be displayed as a. pdf file (this file) when you click on the button **Ok**.

By checking the box ***Do not ask anymore the documentation at start***, the list of keyboard shortcuts will no longer be displayed when the program starts.

You can always bring up the dialog ***Keyboard shortcuts*** by typing **cmd + K**.

Once past this dialogue, we have access to the main window of **GizmoLoupe** (see figure [3])

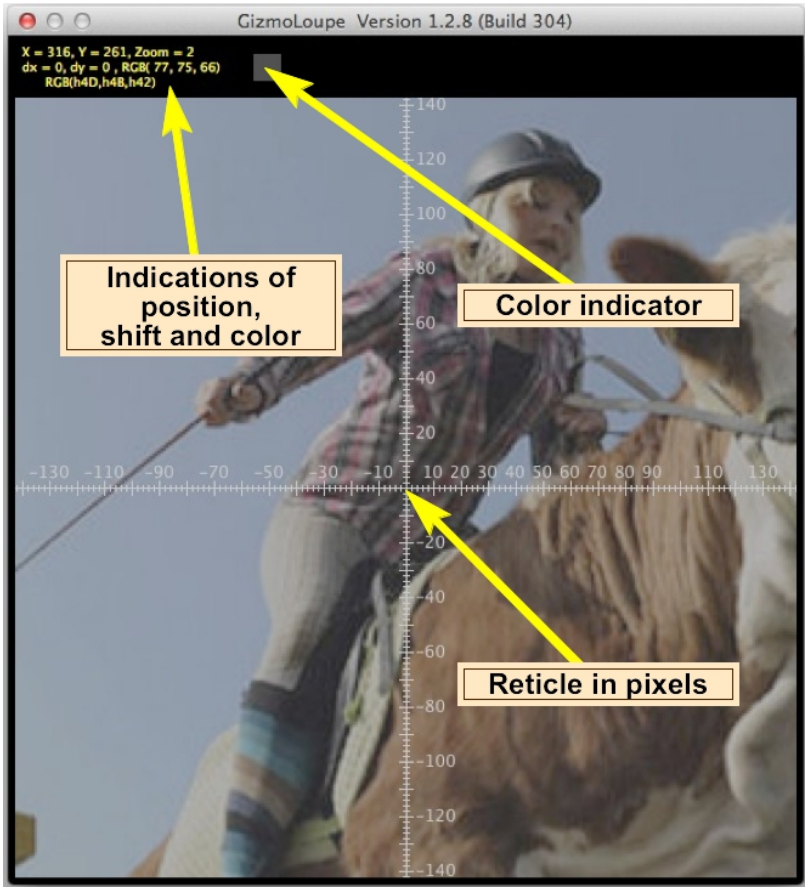

Figure 3: Sample screen of **GizmoLoupe** at startup. Note the reticle graduated in pixels, the origin (0,0) corresponds to the position of the cursor in the screen with a shift of dx and dy. Indications include: the position of the cursor in the screen (X, Y), if the shifts are zero, the zoom applied to the image, the image shifts (dx, dy) and finally the color (red, green, blue) at cursor position, in decimal and hexadecimal notation, and visible with color indicator.

3 The functions of GizmoLoupe by their keyboard shortcuts.

All functions are accessible by **keyboard shortcuts**.

Remark Keyboard shortcuts are available only if the application is **active**.

3.1 alt + A

Set the zoom to 1.

3.2 alt + B

Set the zoom to 2.

3.3 alt + C

Set the zoom to 4. When starting the zoom is 4.

3.4 alt + D

Set the zoom to 8.

3.5 alt + R

Reticle On/Off.

3.6 alt + S

Recording the magnified image.

3.7 cmd + S

Reduces the window size by **GizmoLoupe** a factor $\sqrt[4]{2}$.

3.8 cmd + G

Increases the size of the window by **GizmoLoupe** a factor $\sqrt[4]{2}$.

3.9 cmd + O

Note the origin of a measure as the cursor position (X, Y) affected by the shift (dx, dy):

$$X_o = X + dx \quad et \quad Y_o = Y + dy \tag{1}$$

3.10 cmd + E

Note the end of a measure as the cursor position (X, Y) affected by the shift (dx, dy):

$$X_e = X + dx \quad et \quad Y_e = Y + dy \tag{2}$$

3.11 cmd + L

Displays the **dialog Length** which gives the length between the origin and the end of the measurement as well as:

$$\delta X = X_e - X_o \quad et \quad \delta Y = Y_e - Y_o \tag{3}$$

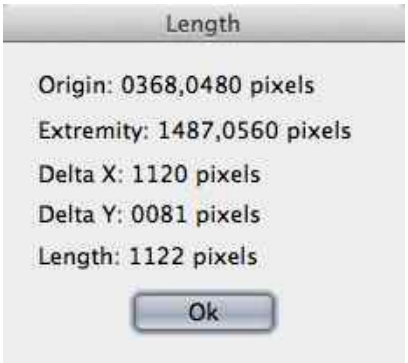

Figure 4: Dialog Length.

Note that leaving this dialogue, the points **O** and **E** disappear. But they reappear again by typing **cmd + L**. The same behavior is observed with **cmd + M**.

3.12 The arrows

Arrows are used to define the shifts dx, dy by increments of one pixel screen.

3.13 cmd + Z

Cancel the shifts: $dx = 0, dy = 0$.

3.14 cmd + M

After defining the origin and the end (by **cmd + O** and **cmd + E**) of a segment whose actual length is known (as the segment representing scale on a map), this command sets throughout a course. Just give the actual length, possibly the unit and click on Calculate scale (see Figure [5]).

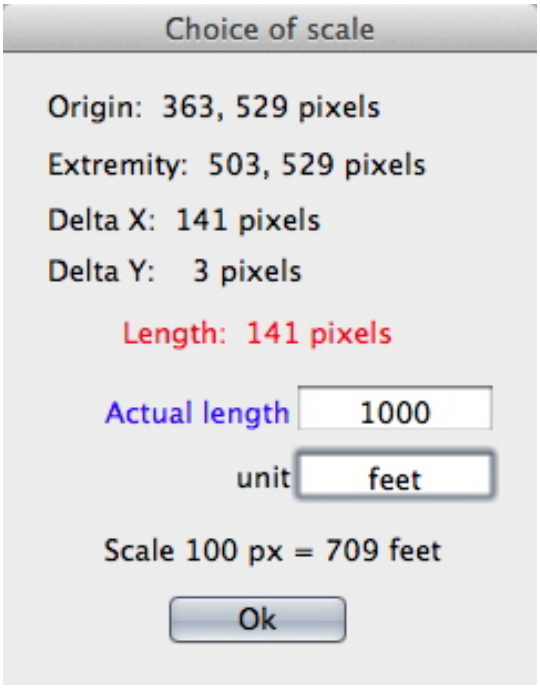

Figure 5: Dialog Choice of scale.

3.15 cmd + P

Creates a point of the path. Points of the path appear on the screen connected by lines (see Figure [6]).

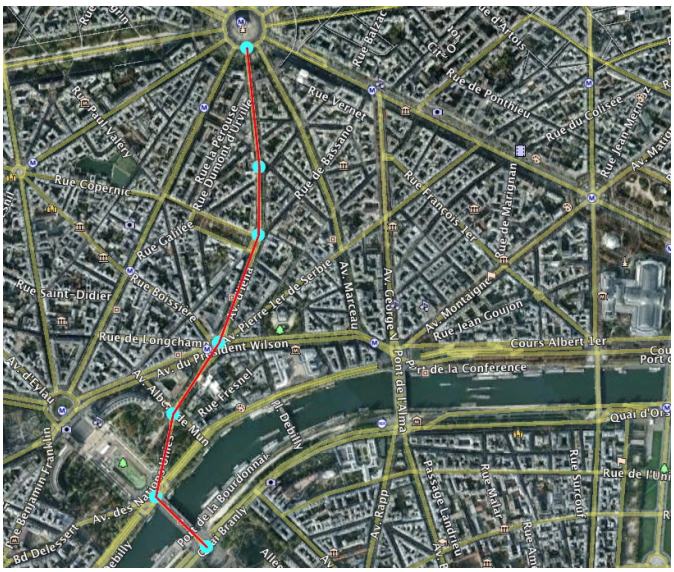

Figure 6: Path example.

3.16 cmd + R

Access to the dialog data of the path of : the number of steps, the length in pixels on the screen and the actual length. **This dialogue also erases all the path**.

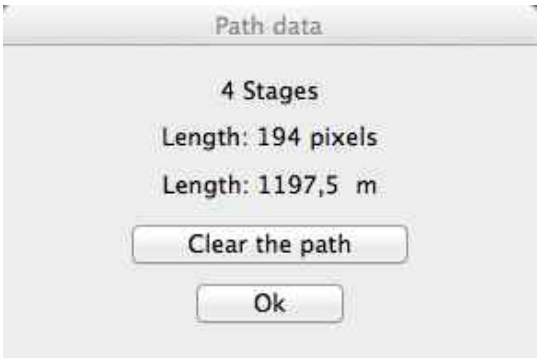

Figure 7: Dialog Path data.

3.17 cmd + C

Copy to the clipboard the color at the cursor position. According to preferences [3.18], the color can be coded in decimal or hexadecimal.

Example in decimal:

000,000,255 (for blue).

Example in hexadécimal:

h00,h00,hFF (for blue).

3.18 cmd + ,

Provides access to preferences. See figure [8].

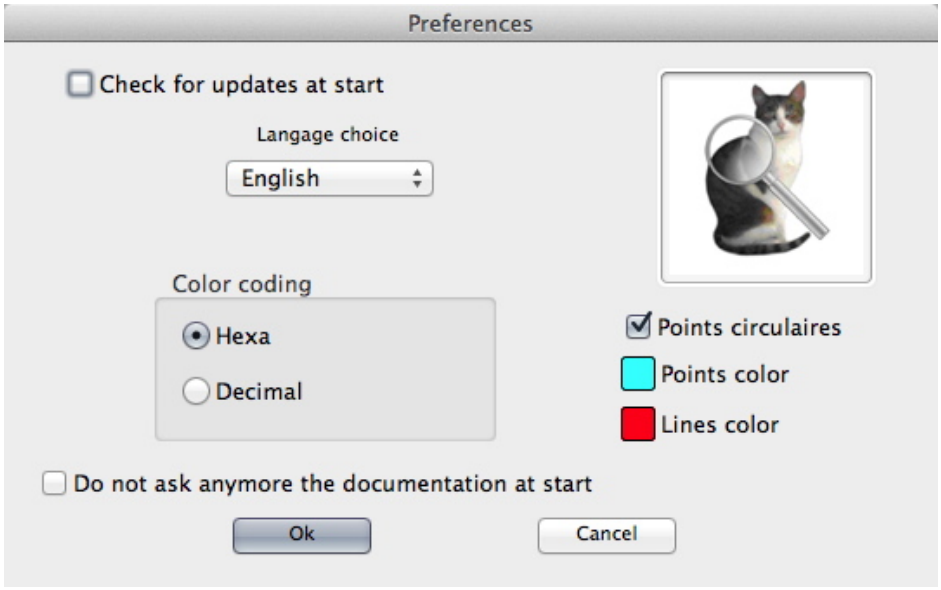

Figure 8: Dialog Preferences.

- Check for updates at startup. If this option is unchecked, you can always check for updates by typing **cmd +;**.
- Choice of interface language:
  - **Automatic**: chooses the language of the interface depending on the system language system if it is in English, French or German.
  - **English**:The interface will be in English (regardless of the language system).
  - **French**:The interface will be in French (regardless of the language system).
  - **German**:The interface will be in German (regardless of the language system).
  - ***Choice of color coding* for the clipboard** (see keyboard shortcut **cmd + C**).
  - **Choice to display the boot screen** about the documentation (see figure [2]) at startup.

3.19 cmd + :

Displays the dialog "À propos..."

3.20 cmd + ;

Check for updates.

3.21 cmd + K

Access to the boot screen and keyboard shortcuts (see figure [2]).

3.22 cmd + Q or close the window

Exit the application.

3.23 alt + H

To access the site Gizmotique.

3.24 F1

Provides access to the help file (this file).

4 Tips

Recall that to be operational, **GizmoLoupe** must be enabled (see Fig[9]).

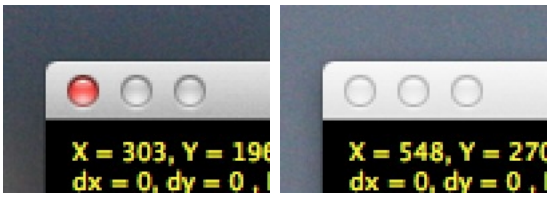

Figure 9: **GizmoLoupe activated** (*left*), **deactivated** (*right*).

4.1 How to determine the position of an object on the screen.

- Place the cursor on the object. Read the position (X, Y) pixels in the indications (see figure [3]).
- Vary the zoom for more precision (**Alt+a, Alt+b, Alt+c, Alt+d**).
- Adjust with the arrows to move the (0,0) of the reticle on the object. The position of the object is then X and Y + dx + dY.
- Type **cmd+O** and **cmd+L**. The dialog **Length** tells you the coordinates of the origin which are the coordinates of the position sought.

4.2 How to determine a length on the screen.

- Place the cursor on the **origin**.
- Vary the zoom for more precision (**Alt+a, Alt+b, Alt+c, Alt+d**).
- Adjust with the arrows to move the (0,0) of the reticle on the origin.
- Type **cmd+O**.
- Place the cursor on the **extremity**.
- Vary the zoom for more precision (**Alt+a, Alt+b, Alt+c, Alt+d**).
- Adjust with the arrows to move the (0,0) of the reticle on the extremity.
- Type **cmd+E**.
- Type **cmd+L**. The dialog **Length**[4] tells you the coordinates of the origin, of the extremity, δX, δY[3] and of the length sought.

4.3 How to set the scale of the screen.

If the origin and end have not been created, it is time to do (see [4.2]). Choose two points whose actual distance (in km, inches, etc ...) is known. If the two points exist, you can change them by recreating.

Type **cmd+M**. The dialog **Choice of scale**[5] gives you the length in pixels of the segment **OE**, up to you to give its **real length** and **unit**.

4.4 How to note the color of a point on the screen.

- Place the cursor on the **selected point**.
- Vary the zoom for more precision (**Alt+a, Alt+b, Alt+c, Alt+d**).
- Adjust with the arrows to move the (0,0) of the reticle on the point.
- The color of the pixel appears in the indications (voir figure [3]).
- Type **cmd+C** to copy thé color in thé clipboard. It will be coded according to the selection in the preferences (decimal or hexadecimal)[3.17].
- The clipboard can then be used to transfer the color value in another program.

4.5 How to create and use a path.

By typing **cmd + P**, you create a point on a path. Points of the path are connected by straight line. The position of each point of the path can be changed by drag and drop.

If the scale was set by typing **cmd + R**, you can know the path length and the number of segments that compose it (see Fig [7]).