



*Version 2b*

*Installation guide*

*for*

*(Mac) OS X*



*An easily operated user interface for Z88<sup>®</sup>  
for all Windows- (32- and 64-bit),  
Linux and (Mac) OS X computers (64-bit)*

*This freeware version is the literary property of the  
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## INSTALLATION

The installation for (Mac) OS X is managed by an archive (.tar.gz). Furthermore a GTK+-package is needed for the installation and execution of Z88Aurora. Following files are needed:

- **Z88Aurora for (Mac) OS X** **Z88auroraV2\_en.dmg**
- **GTK+ for Z88Aurora** **GTK+4Z88.dmg**
- **Flip4Mac** **.wmv-Videoplayer**

In addition for OS X from **10.8 Mountain Lion** (and also OS X **10.9 Mavericks**):

- **XQuartz** **<http://xquartz.macosforge.org>**

### 0. Installation of XQuartz (only required for OS X 10.8+)

If you use OS X Mountain Lion or Mavericks, you'll need to install XQuartz first. This is reasoned by the fact that Apple doesn't include X11 in their newest operating systems any more. XQuartz is an open-source project and it is a X window system for (Mac) OS X. XQuartz can be downloaded at <http://xquartz.macosforge.org>.

#### General hint for OS X 10.8+:

Programs, which aren't from App Store or certificated developers (like XQuartz or Z88Aurora), can't be executed by double-click. You have to right-click and then choose "open". After accepting a warning, the program can be executed as known before. If you are working with the terminal, you don't have this problem: executing programs from the terminal works the same way as before.

### 1. Installation of GTK+

Having downloaded the GTK+-package, there are two ways to install the GTK+-libraries:

- (a) **Automatically** with the Install-App: open the file GTK+4Z88.dmg and follow the instructions (cf. Figure 1). If the installation was successful, you can go on with step 2 and install Z88Aurora. Attention: There might be display problems with the DMG-file on Mac OS X 10.6 and earlier.

(b) **Manually** using Terminal: move the file gtk4z88.tar.gz from the GTK+4Z88.dmg to your root directory and run the following commands in Terminal:

- Start Terminal (*Applications > Utilities > Terminal.app*)
- Change to root-directory: `cd /`
- Decompress the package: `sudo gunzip gtk4z88.tar.gz`  
 (To use sudo you have to type in your admin password. If you use Safari, the package may be already decompressed and you can continue with the next step)
- Unpack the package: `sudo tar -xvf gtk4z88.tar`
- Check the installation (1): `ls -la`
- Change the directory: `cd opt`
- Check the installation (2): `ls -la`
- Change the directory: `cd local`
- Check the installation (3): `ls -la`

If you discover other owners of these folders than „root wheel“ (cf. Figure 2), you have to change the ownership: `sudo chown -R root:wheel /opt/local`

After that, please check again like above. If you don't like to use „root:wheel“, you may use „YOURUSERNAME:staff“ instead.



Figure 1: Automatic GTK+ installation (Screenshot of OS X Mavericks)

```

opt — bash — 88x48
~/lscad$ cd /
:/lscad$ ls -la
drwxr-xr-x@ 1 root wheel 170 30 Nov 17:33 opt
drwxr-xr-x@ 6 root wheel 204 30 Nov 13:47 local
drwxr-xr-x@ 6 root wheel 204 30 Nov 13:47 etc
drwxr-xr-x@ 126 root wheel 4284 30 Nov 13:47 lib
drwxr-xr-x@ 4 root_ wheel 136 30 Nov 13:47 var

```

Figure 2: Check GTK+ installation (Screenshot of OS X Mavericks)

## 2. Installation of Z88Aurora

Just like before, there are two ways to install Z88Aurora:

- (a) **Automatically** with the Install-App: open the file Z88AuroraV2\_en.dmg and follow the instructions (cf. Figure 3). If the installation was successful, you can start Z88Aurora. Attention: There might be display problems with the DMG-file on Mac OS X 10.6 and earlier.

(b) **Manually** using Terminal: move the file z88aurorav2\_en.tar.gz from Z88AuroraV2\_en.dmg to your home directory (illustrated with the house symbol, the folder is named after your username) and run the following commands in Terminal:

- Start Terminal (*Applications > Utilities > Terminal.app*)
- Change to home directory: `cd`
- Decompress the package: `sudo gunzip z88aurorav2_de.tar.gz`  
 (To use sudo you have to type in your admin password. If you use Safari, the package may be already decompressed and you can continue with the next step)
- Unpack the package: `sudo tar -xvf z88aurorav2_de.tar.gz`
- Check the installation (1): `ls -la`
- Change the directory: `cd z88aurorav2`
- Set access rights: `sudo chmod 777 *`
- Change the directory: `cd bin/mac`
- Set access rights: `sudo chmod -R 777 *`

If you discover other owners of these folders than „YOURUSERNAME staff“ (cf. Figure 4), you have to change the ownership:

```
sudo chown -R YOURUSERNAME:staff ~/z88aurorav2
```

(You get tilde in OS X by using hot key ALT + n)

You may have to set the access rights again.



Figure 3: Automatic Z88Aurora installation (Screenshot of OS X Mavericks)

```
z88aurorav2 — bash — 88x48
lscad$ ls -la
drwxr-xr-x  6 lscad  staff   204 24 Mär 15:32 z88aurorav2
lscad$ cd z88aurorav2
z88aurorav2 lscad$ ls -la
drwxr-xr-x  6 lscad  staff   204 24 Mär 15:32 .
drwxr-xr-x+ 26 lscad  staff   884 25 Mär 13:33 ..
drwxrwxrwx  5 lscad  staff   170 25 Mär 12:26 bin
drwxrwxrwx  3 lscad  staff   102 12 Aug 2012 data
drwxrwxrwx  6 lscad  staff   204 12 Aug 2012 docu
drwxrwxrwx 256 lscad  staff  8704 15 Nov 09:47 ico
```

Figure 4: Check Z88Aurora installation (Screenshot of OS X Mavericks)

### **3. Flip4Mac Plug-In**

In order to view the Z88Aurora video guides, the “Windows Media Components for QuickTime” have to be installed. You can download them e.g. from the Microsoft®-Homepage:

<http://windows.microsoft.com/en-us/windows/windows-media-components-quicktime>

Download the program and follow its installation manual.

## FIRST START OF Z88AURORA

There are two alternatives to start Z88Aurora:

(a) **With an app:** you can start Z88Aurora automatically using the Z88AuroraV2-start.app which is included in the Z88AuroraV2\_en.dmg and can easily be copied to your application folder. To start Z88Aurora, simply double-click the app.

(b) **Manually** using Terminal:

1. Start Terminal (Applications > Utilities > Terminal.app)
2. Change to home directory: `cd`
3. Change the directory: `cd z88aurorav2/bin/mac.`
3. Start Z88Aurora: `./aurorastartv2`

## OPERATION INSTRUCTIONS

Most controls for Z88Aurora under (Mac) OS X works similarly to the Windows/Linux versions. Nevertheless the following differences have to be pointed out:

- Trackpad-Controls
- Mighty Mouse Controls
- Magic Mouse Controls
- Uninstallation

### Trackpad-controls

If you want to use your Trackpad on a MacBook you have to activate the following options (*System Preferences > Trackpad*; cf. Figure 5):

- Tap to click
- Dragging
- Secondary Tap

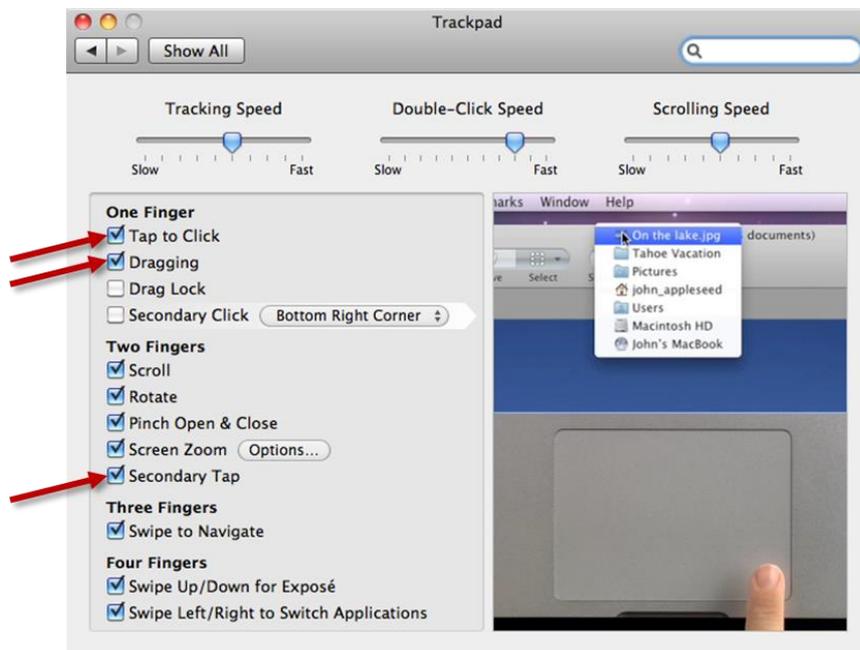


Figure 5: Configuration of your Trackpad (Screenshot of Mac OS X Snow Leopard)

In the 3D view you can move the model as follows:

- Moving:  
Use one finger to *click* and *hold* to move the model  
Alternatively: *double-tap* and hold with one finger

- Zooming:  
Drag slowly up and down with two fingers (similar to scrolling) to zoom in or out
- Rotation:  
Click with two fingers and keep pressed to rotate the model spatially

Given you prefer using a classic mouse the controls work just like on Windows/Linux computers (see user manual).

### Mighty Mouse Controls

If you have an Apple Mighty Mouse, you can use it for Z88Aurora, too. Use the *System Preferences > Mouse* - Dialog as follows (cf. Figure 6):

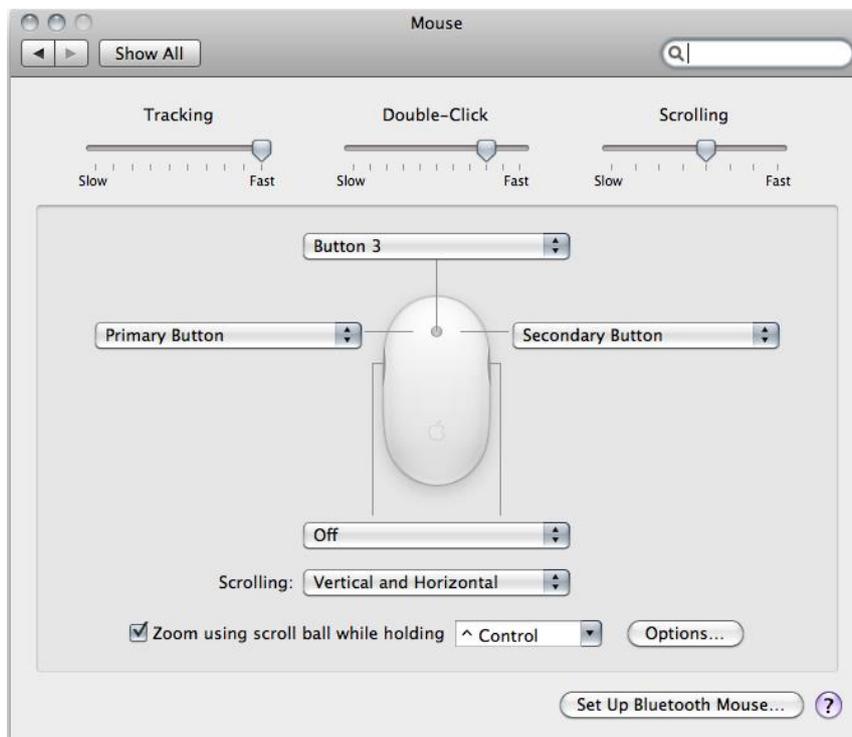


Figure 6: Configuration of Mighty Mouse (Screenshot of Mac OS X Snow Leopard)

- Left: *Primary Button*
- Right: *Secondary Button*
- Middle: *Button 3*

Now you can control Z88Aurora as follows:

- Left: *move part*
- Right: *rotate part*

- Middle: zoom (either by clicking and moving the mouse backward and forward or by using the scroll ball )

### Magic Mouse Controls

If you have an Apple Magic Mouse, you can use it for Z88Aurora as well. Use the *System Preferences > Mouse* - Dialog as follows (cf. Figure 7):

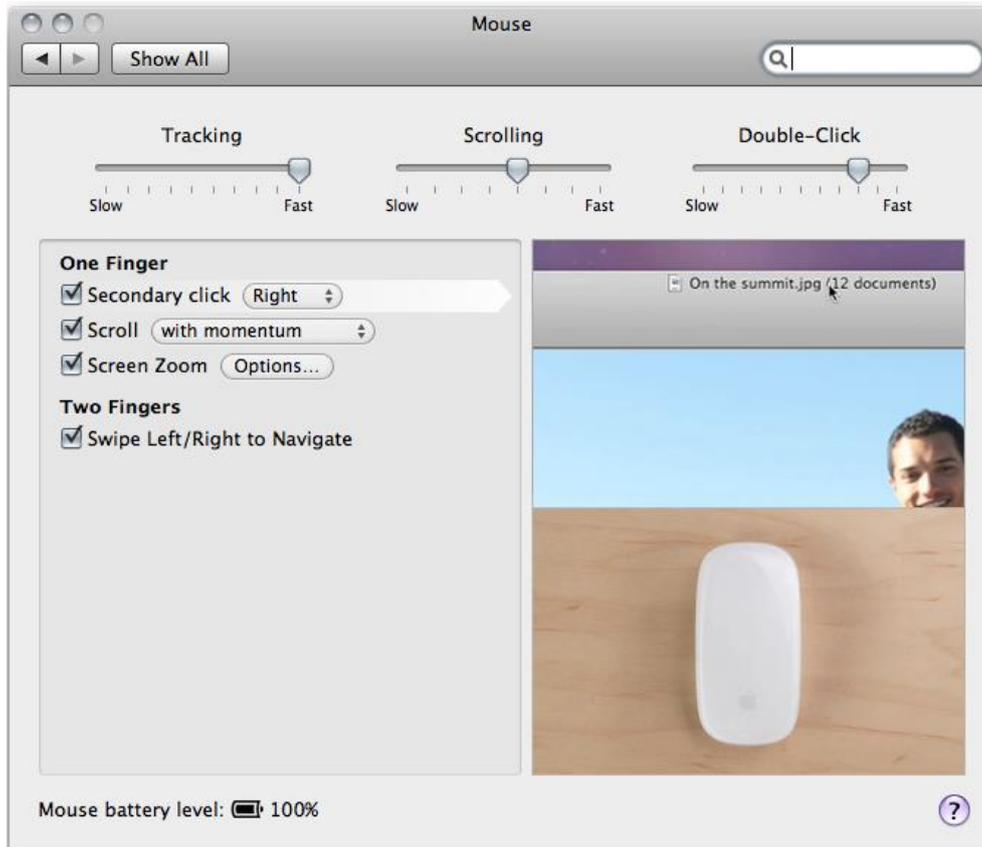


Figure 7: Configuration of Magic Mouse (Screenshot of Mac OS-X Snow Leopard)

- activate secondary click: *Right*
- activate scroll (“with” or “without momentum”-option is arbitrary)

Now you can control Z88Aurora as follows:

- Left: *move part*
- Right: *rotate part*
- Middle: *zoom (move one finger on the middle surface)*

## **Uninstallation**

Z88Aurora can be uninstalled by deleting the directory `z88aurorav2`.