

Version 4

Installation guide

for

macOS

Compatibility: OS X 10.11 macOS 10.12

El Capitan Sierra





An easily operated user interface for Z88[®] for Windows, Linux and macOS (64-bit).

This freeware version is the literary property of the Chair for Engineering Design and CAD, University of Bayreuth, Germany, composed and edited by Professor Dr.-Ing. Frank Rieg.

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INSTALLATION

Download the file Z88AuroraV4_en.dmg from the Z88 webseite and open it. The following files can be found in your Z88Aurora-DMG:

Z88Aurora V4 install script Z88Aurora V4 archive GTK for Z88Aurora install script GTK for Z88Aurora archive Z88Aurora V4 start script Setup.app z88aurorav4_en.tar.gz GTK-setup.app GTK4Z88.tar.gz Z88AuroraV4.app

Please download in addition:

XQuartz

https://www.xquartz.org/

1. Installation of XQuartz

For Z88Aurora and Z88Arion, you will need to install XQuartz first. This is reasoned by the fact that Apple doesn't include X11 in their newer operating systems any more. XQuartz is an open-source project and provides an X Window System for OS X. XQuartz can be downloaded at https://www.xquartz.org/.

General hint for macOS:

Programs which aren't from App Store or certificated developers (like XQuartz or Z88Aurora), eventually can't be executed by double click. You have to do a 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.

2. Installation of GTK for Z88Aurora

You can install the GTK-Package <u>automatically</u> by using the install script *GTK-setup.app* in your Z88Aurora-DMG. You will be prompted for your admin password.

If the install script does not work correctly, you can <u>manually</u> install the GTK-Package: Copy the file *GTK4Z88.tar.gz* to an arbitrary directory (for example your home directory). Now you have to unzip the archive. Please open a Terminal window. You can find Terminal in Finder under *Go* > *Utilities* > *Terminal*.



Navigate to the folder containing the GTK package (for your home directory, the terminal should be there by default, otherwise use **cd** to switch to the home directory) and execute the following command:

sudo tar -xvf GTK4Z88.tar.gz -C /opt

You will be asked for your admin password, afterwards the GTK package is extracted.

3. Install Z88Aurora V4

Use the install script *Setup.app* to install Z88Aurora <u>automatically</u>. You will be prompted for your admin password.

If the install script does not work correctly, you can run the installation manually:

Copy the file *z88aurorav4_en.tar.gz* from your Z88Aurora-DMG to your home directory. Extract the files by running the following commands in Terminal. You can find Terminal in Finder under *Go* > *Utilities* > *Terminal*. With the command **cd** you can switch to your home directory. Then run this command (admin password required):

• sudo tar -xvf z88aurorav4_en.tar.gz

A directory called *z88aurorav4* will be created in your home directory. Finish the installation by setting the correct file permissions via Terminal:

- cd z88aurorav4
- sudo chmod 777 *
- cd bin/mac
- sudo chmod 777 *

4. Install the Z88Aurora V4 start script

Copy the Z88Aurora start script *Z88AuroraV4.app* from the Z88Aurora-DMG to your application folder.

5. Install a video player

In order to watch the Z88Aurora example videos under macOS you need to install a WMVcompatible video player (for example VLC Player).

Just download the program of your choice and follow its installation guide.



FIRST START OF Z88AURORA

There are two ways to start Z88Aurora: by start script or manually via Terminal.

- A. <u>by start script</u>: Run the application *Z88AuroraV4.app* in your application folder.
 Z88Aurora V4 should start automatically. A Terminal window and a XQuartz window are opened as well. Please leave those windows open.
- B. manually:
 - 1. Open a Terminal window (Finder > Go > Utilities > Terminal)
 - Switch to your home directory by running the command cd. Then run cd z88aurorav4/bin/mac. You are now in the directory conaining the Z88Aurora V4 loading modules.
 - 3. Here you can start the program with this command: ./aurorastartv4



OPERATION INSTRUCTIONS

Most of the controls for Z88Aurora under macOS work 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;* figure 2):

- Tap to Click
- Dragging
- Secondary Tap

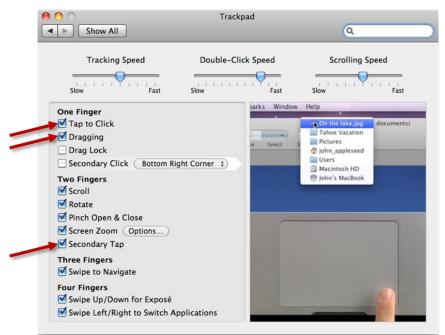


Figure 2: configuration of your Trackpad (Screenshot of Mac OS X Snow Leopard)

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

<u>Moving:</u>

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



• <u>Zooming:</u>

Drag slowly up and don with two fingers (similar to scrolling) to zoom in or out

<u>Rotation:</u>

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 (figure 3):

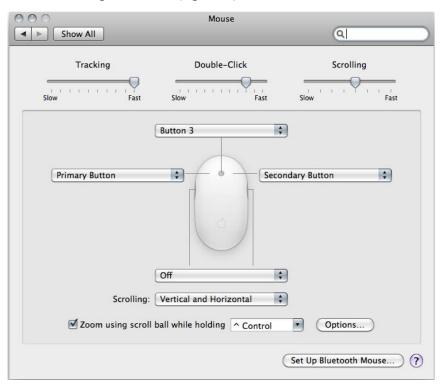


Figure 3: Configuration of Mighty Mouse (Screenshot of Mac OS X Snow Leopard)

- Left: Primary Button
- Right: Sekundary 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 (figure 4):



Figure 4: 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 directories *z88aurorav4* from your home directory and */opt/Z88* from your root directory. Then delete the start script *Z88AuroraV4.app* from your application folder.