

Version 5

Installation guide for macOS

<u>compatibility</u>: macOS High Sierra 10.13 macOS Mojave 10.14





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

You have successfully downloaded and extracted the file Z88AuroraV5_en_macOS.zip from the Z88 website. The following files are located in the folder Z88AuroraV5_en_macOS:

Z88Aurora[®] V5 archive GTK for Z88Aurora[®] V5 archive Z88Aurora[®] V5 start script z88aurorav5_en.tar.gz GTK4Z88V5.tar.gz Z88AuroraV5.app

Please download in addition: XQuartz

https://www.xquartz.org

1. Installation of XQuartz

For using Z88Aurora[®] you will need to install XQuartz first. This is reasoned by the fact that Apple does not include X11 in their newer operating systems any more. XQuartz is an open-source project and provides an X Window System for macOS. XQuartz can be downloaded at https://www.xquartz.org.

General hint for macOS:

Applications, which are not downloaded from App Store or certified developers (like XQuartz or Z88Aurora[®]), eventually cannot 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 do not have this problem: executing programs from the Terminal works the same way as before.

2. Installation of GTK for Z88Aurora®

You have to install the GTK package manually:

Copy the file *GTK4Z88V5.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 GTK4Z88V5.tar.gz -C /



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

3. Install Z88Aurora® V5

You have to install Z88Aurora[®] V5 manually:

Copy the file *z88aurorav5_en.tar.gz* 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. Afterwards, run this command:

tar -xvf z88aurorav5_en.tar.gz

A directory called *z88aurorav5* will be created in your home directory. The installation is finished.

4. Install the Z88Aurora® V5 start script

To facilitate the start of Z88Aurora[®], copy the Z88Aurora[®] start script *Z88AuroraV5.app* 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 *Z88AuroraV5.app* in your application folder.
 Z88Aurora[®] V5 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 z88aurorav5/bin/mac. You are now in the directory containing the Z88Aurora® V5 loading modules.
 - 3. Here you can start the program with this command: ./aurorastartv5



OPERATION INSTRUCTIONS

Most of the controls for Z88Aurora[®] on macOS work similarly to the Windows/Linux versions. Nevertheless, the following differences have to be pointed out:

- Trackpad-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*] (see figure 1):

- Secondary click
- Tap to click

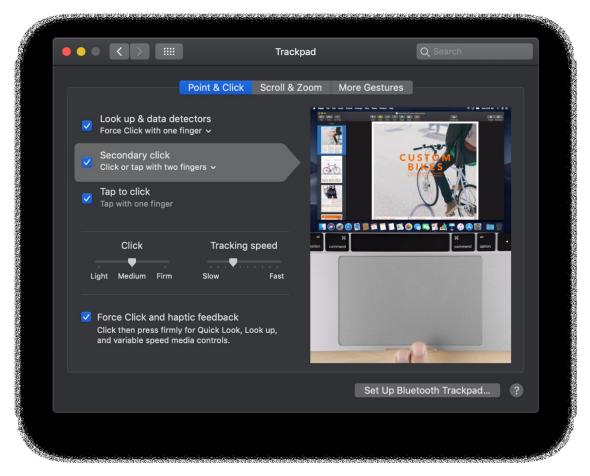


Figure 1: configuration of your Trackpad



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).

Magic Mouse Controls

If you have an Apple Magic Mouse, you can use it for Z88Aurora[®] as well. Use the [*System Preferences > Mouse*] *d*ialog as follows (see figure 2):

• Secondary click



Figure 2: Configuration of Magic Mouse



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 *z88aurorav5* from your home directory and */opt/Z88* from your root directory (admin rights required). Then delete the start script *Z88AuroraV5.app* from your application folder.