openWARP² designer HOWTO

This is a short introduction for the usage of the openWARP² designer software.

First steps:

- Unpack the openWARP2_designer.zip archive.
- Connect the devices via USB to the computer.

The openWARP² designer can control one ore multiple Warp channel. These devices should be connected to the computer via USB. A special device driver is needed for the openWARP² device connection. You can find the driver in the ‘driver’ sub directory. After plugging in the first openWARP USB connection, you will be asked for a driver installation. Choose the manual installation way and select the subfolder ‘driver\USB device driver’.

Now you can start the software.

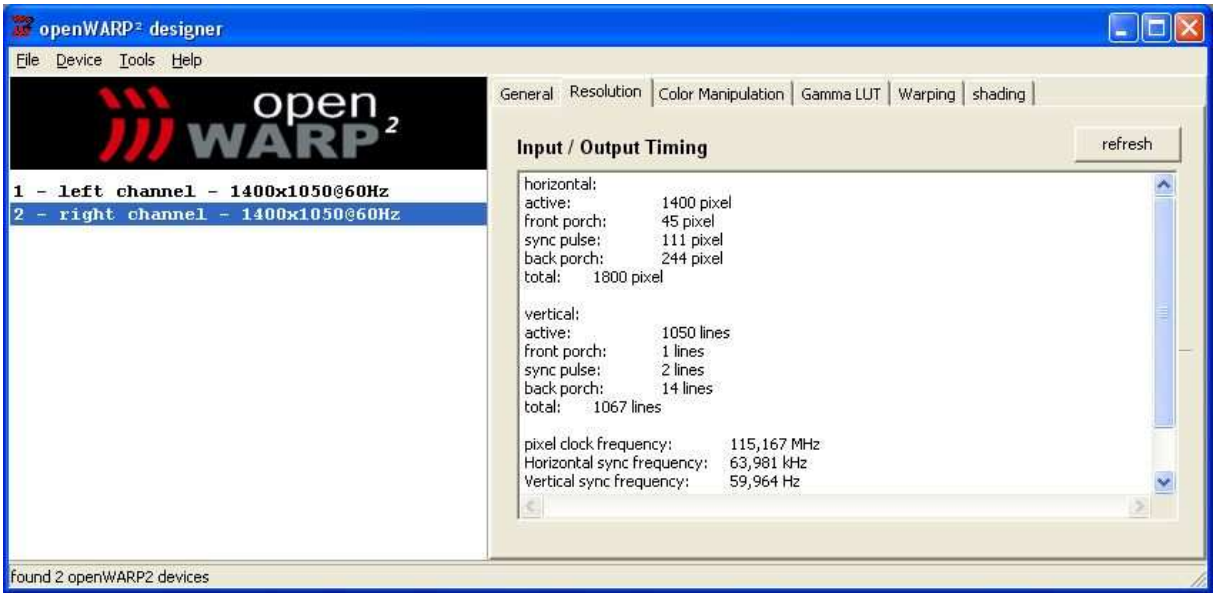
Hint: Sometimes there can be a problem by using the software because Windows means that the software is not installed properly. To solve this problem, pleas run the ‚vcredist_x86.exe‘ from the driver subfolder.

After you start the software, it searches automatically for connected openWARP devices. IF no device was found, the software automatically creates two dummy devices so that you can work with the software.

Otherwise there are the founded devices in the list at the left side.

Each device has an unique serial number. The devices always identified by these number. For multi channel installations, you can change the name of each device by entering the new name in the Name-Field and press the ‘set’ button.

The openWARP² Channel measure the exact video timing of the input signal. This is always also the output signal. You can find the exact timing in the ‘resolution’ tab:

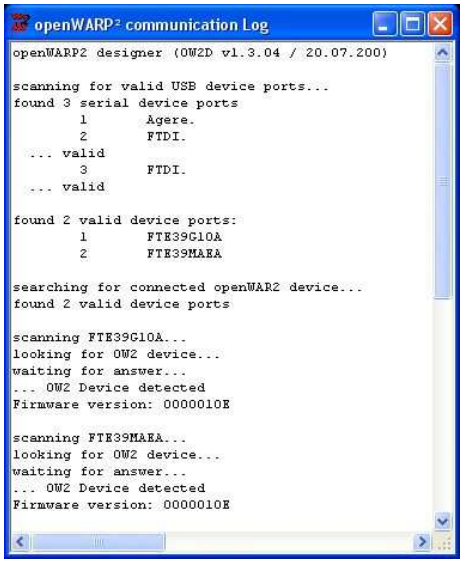


Trobleshooting:

If no devices are detected or a wrong or invalid resolution is shown, it can causes the following reasons:

1.) The device is not switched on
2.) There is no input signal present
3.) The device is hung up

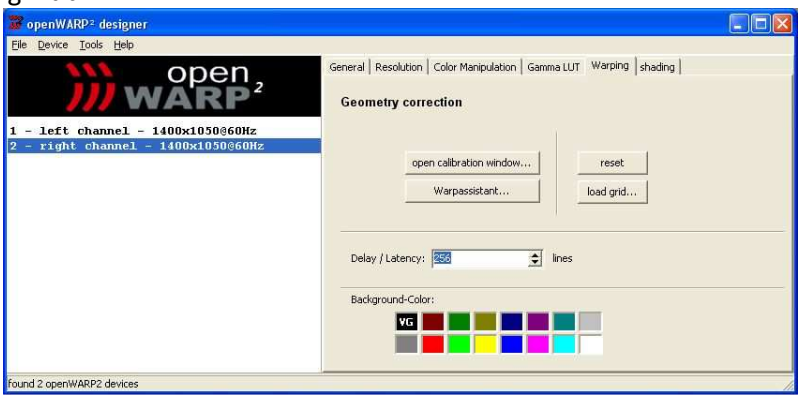
Try to check if a valid input signal is given (if you can see something on the connected display, this is OK) or try to switch the device off and on again.



If you are unable to get a connection to the connected device, please open the log window (Help menu) and send us the text..

Adjust Warping:

Select the 'warping' Tab:

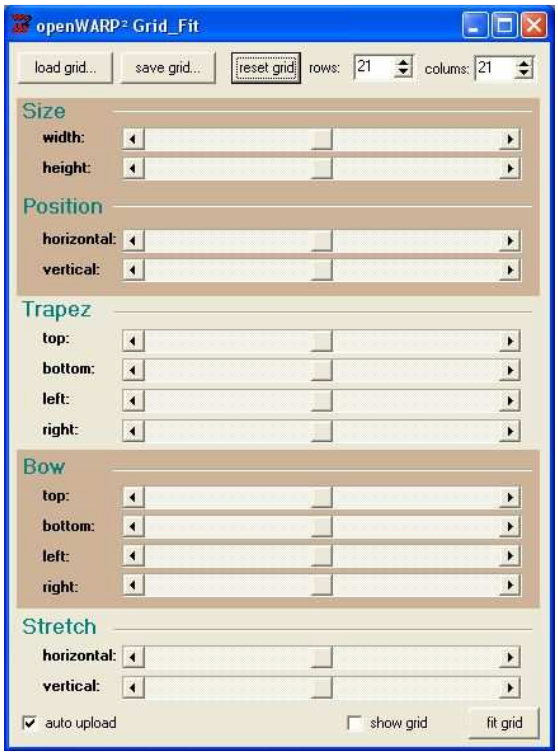


Hint: The settings are always related to the selected device. Each device from the list at the left side can hold its own settings for warping, shading and color correction.

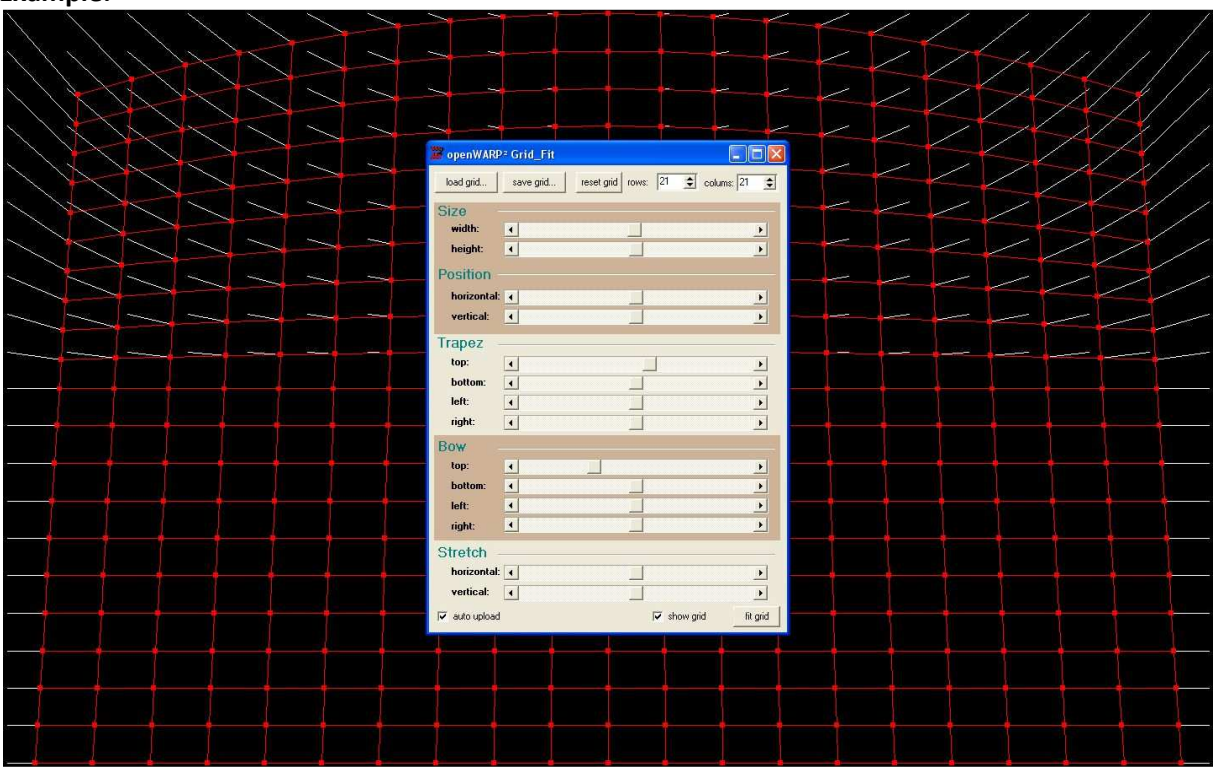
You can load a grid directly or rest the actual warping. You can use the Warp assistant for a easy adjustment or use the calibration grid for grid based calibrations.

Warpassistant:

The Warpassistant let you adjust basic warping parameters. This can be helpful for a pre adjustment or for simple warping. Every change in the settings is shown in realtime in the output of the openWARP device.



Example:

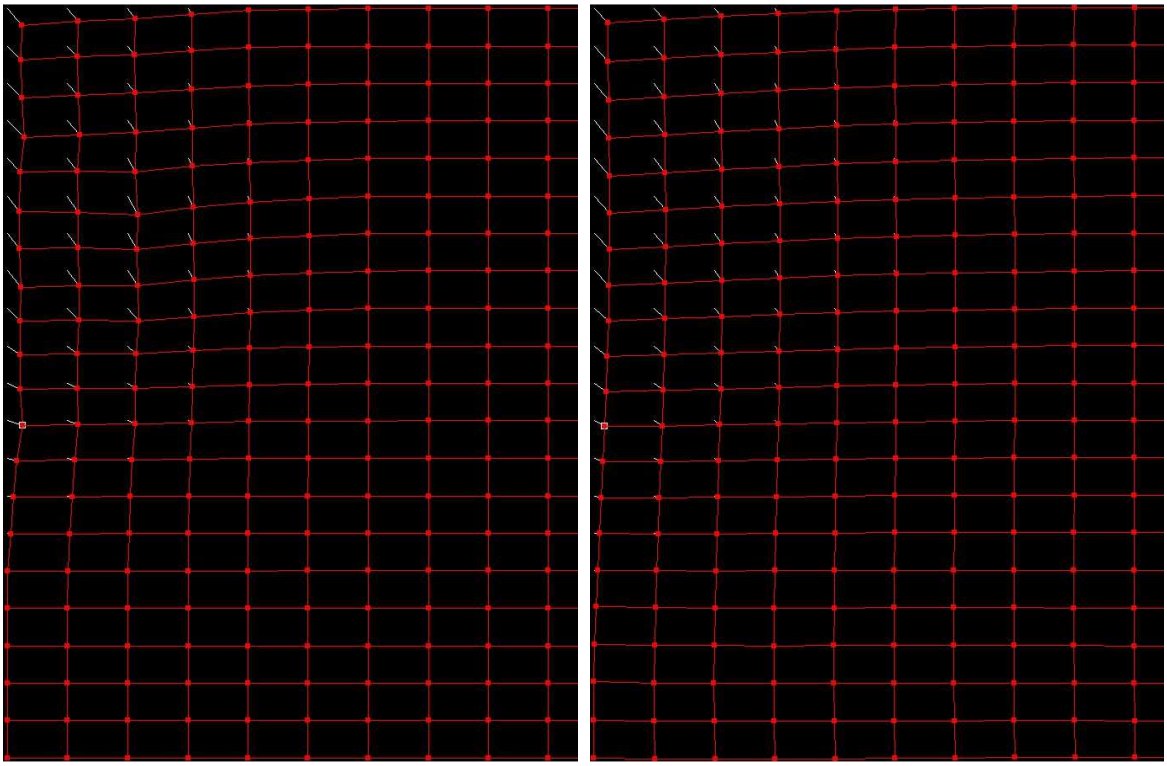


To do a more accurate adjustment, you can use the calibration grid:

You can use the mouse to pick a single grid point and move it to a given position or you can use the arrow keys to move the grid point. By holding the CTRL key, you can use the arrow keys to jump to the next grid point. By holding the CTRL key and move a grid point with the mouse, you can move a grid area instead of the single grid point.
Use the 'P', 'O', 'I' and 'L' key to toggle the target grid, source grid, Vectors and Lines.

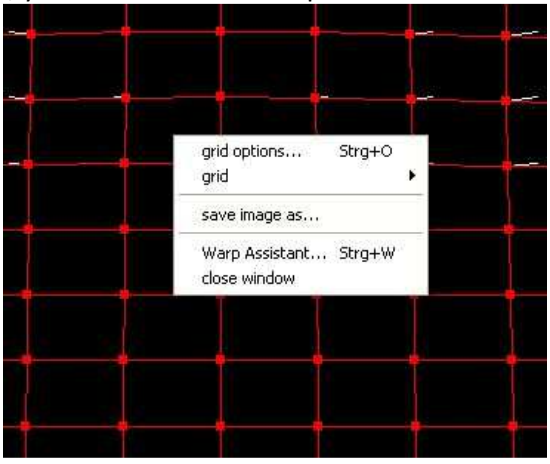
The grid movements are not updated in realtime. You have to fit the mathematically expression to the new grid by pressing the 'F' Key. Now you see the result in the grid and also in the output image.

NOTE: Not every gridpoint movement is possible. The software will fit the grid to the mathematically expression (fifth order polynoms) Here you can see a possible result:

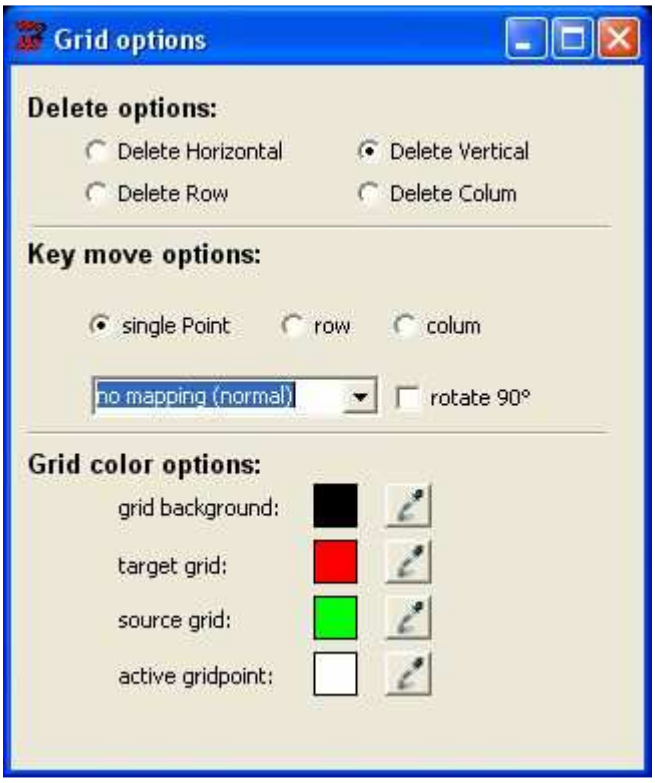


Left image: hand adjusted grid manipulation. Right Image: result after fit.

Hint: Save the grid as often as possible!
With the right mouse button, you also find the Grid-Options:



Here you can adjust the grid color:



And some other things…

After you did the corrections for all channel, you can save the settings as a framework file set.

If you want the software to load the settings automatically each time you start the software, you should save the settings as default framework. After that the setting is loaded automatically after you start the software.