

Technical note

Volfoni active stereo configuration

(TcpStereo_en_v2.0_Volfoni_active_stereo_configuration)

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Objective

Configure NVidia Quadro graphics card and Volfoni EDGE RF or VR glasses, for displaying stereo pairs.

Requirements

Hardware:

- Volfoni RF emitter and EDGE RF or VR shutter glasses.
- NVidia Quadro graphics card with Dual-link DVI or VESA DisplayPort output (requires DisplayPort to Dual-link DVI adapter to convert to DVI)
- 3 pin mini DIN stereo connector (as part of the graphics card or as a stereo bracket slot).
- Stereo 3D monitor compatible with Volfoni EDGE RF/VR glasses.

Software:

- TcpStereo v2.0
- Volfoni Loader application, for EDGE RF and VR glasses configuration.
- Updated NVidia Quadro drivers.

Sistema Operativo: Windows 7, 8, 8.1 y 10

Details

- 1) Connect Volfoni RF emitter to the stereo connector of the graphics card.
- 2) Configure graphics card via NVIDIA Control Panel:
 - 2.1) In **3D Configuration > Control 3D settings**, set **Stereo - Enable** to Enabled, and **Stereo - Display Mode** to On-board DIN Connector, and apply the changes.
 - 2.2) In **Display > Change Resolution**, set the **Refresh rate** to 120HZ at a **Resolution** no higher than 1920 x 1080, and apply the changes.
- 3) Start TcpStereo, open a project and display a stereo pair. In the viewer toolbar should be active the drop-down that allows you to switch between real stereo and pseudo-stereo (anaglyphs). Set it to "Real Stereo" and turn on the glasses. If the stereo display is not acceptable and ghosting is visible (both images are seen by only one eye), close TcpStereo and continue with the next step.
- 4) Start the Volfoni Loader application and connect the glasses via USB cable to the PC. Once the application detects the glasses, click on **Edit > Parameters**, and set the following parameters:

- Dark Time to maximum (Contrast)
 - Delta Sync to minimum (-2000)
 - 3D Synchronization to maximum (Accuracy), only for EDGE VR glasses.
- 5) Disconnect the glasses from the PC, and repeat step 3. If you still experience ghosting, launch the NVIDIA Control Panel, and under **Display > Adjust desktop color settings**, enable the *Use NVIDIA settings* option, and set the *Brightness* and *Contrast* values to 25%.

Notes

- Check that the polarization of the 3D stereo monitor is compatible with that of the EDGE RF or VR glasses. If when looking at the monitor with the glasses, the entire screen is dark, the monitor is not compatible.

References

- Volfoni Loader: <http://volfonti.com/download/volfonti-loader-windows/>
- NVidia Quadro Drivers: <https://www.nvidia.com/Download/index.aspx?lang=en>