

How to prepare work on autostereoscopic display

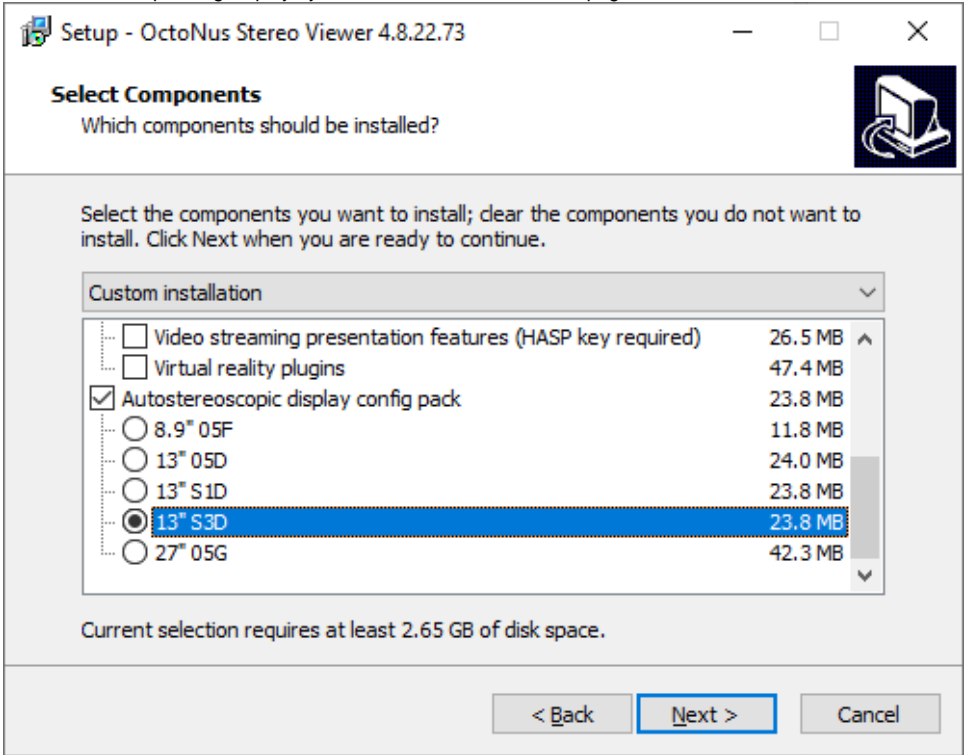
- [Prepare head tracking utility](#)
- [Prepare OctoNus Stereo Viewer program](#)
- [Adjust autostereoscopic visualization to reach best stereo quality](#)
 - [Adjust stereo for displays with a head tracking camera](#)
 - [Adjust stereo for displays without a head tracking camera](#)

Prepare head tracking utility

Install the latest version of the [3D Global View Optimizer](#) software and allow the installation of the camera driver.

Prepare OctoNus Stereo Viewer program

1. Run the latest OctoNus Stereo Viewer installer v4.8.22.73
2. Select the corresponding display by its size and ID on the second page:



The display ID is located on the back side of the display. It looks like 05F, 05D, S1D or similar.

3. At the end of the installation process the installer will try to run the registry file that is necessary for autostereoscopic display. Press “Yes” to install the registry file and finish installation:
[blocked URL](#)

OSV installers have different lists of built-in config files for 3d displays:

OSV version	IDs of 3d displays whose configuration files are built into the installer
4.8.18.69	05F 05D S1D 05G
4.8.19.70	
4.8.22.73	05F 05D S1D 05G S3D

To configure new autostereoscopic display that is not integrated into the OSV installer (05F, 05D, S1D, 05G) you should receive from 3d-global company:

1. the viewmap bitmap file;
2. integer number of native views;
3. registry file

Then:

1. Install OSV with any autostereoscopic configuration (i.e. 13" S1D)
2. Run the registry file that is provided by 3d-global.
3. Copy the viewmap bitmap file to the "%PROGRAMDATA%\OctoNus Software\Digital Microscope" folder.
4. Open the file "%PROGRAMDATA%\OctoNus Software\Digital Microscope\autostereoscopic_display.xml" and change:
 - a. NativeViewsNumber to the value provided by 3d-global
 - b. IndexMap: sum of zeros and ones count should be equal to NativeViewsNumber * AngleDenominator. So, if NativeViewsNumber is 6, we specify IndexMap as 15 zeros and 15 ones. Change IndexMap in two places in this config.
 - c. ViewMapPath: change its value to the new viewmap filename without path.

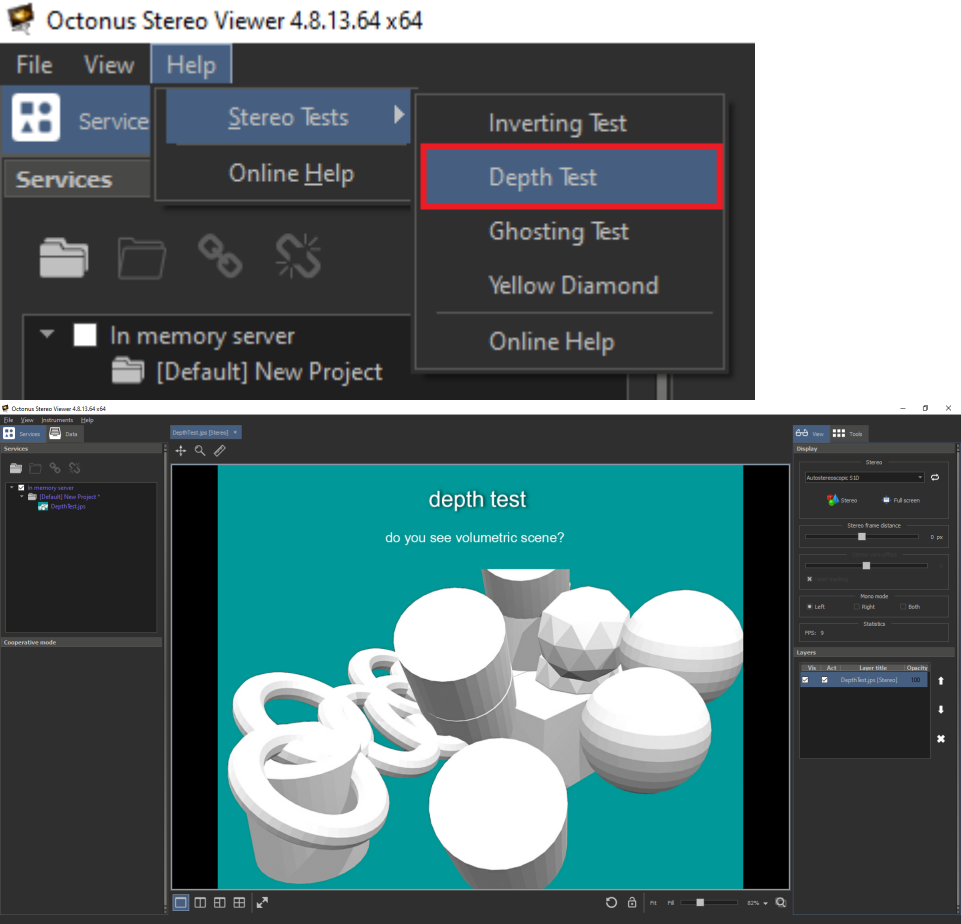
Adjust autostereoscopic visualization to reach best stereo quality

If the stereo on your workstation is configured incorrectly, you will not be able to see a volumetric image via the **Otonus Stereo Viewer** app: ghosting will be very noticeable, left and right pictures will not be combined into one 3D image etc.

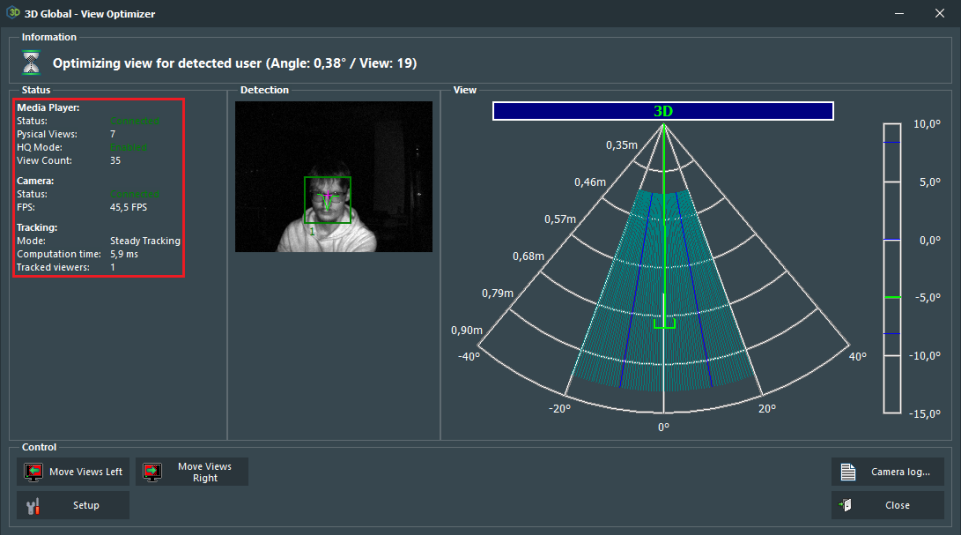
Adjust stereo for displays with a head tracking camera

To configure autostereoscopic visualization with head tracking, you should do the following:

- 1. Run **Octonus Stereo Viewer** on regular display
- 2. Open a stereo test, for example, the **Depth Test** (Main menu: **Help Stereo Tests Depth Test**)



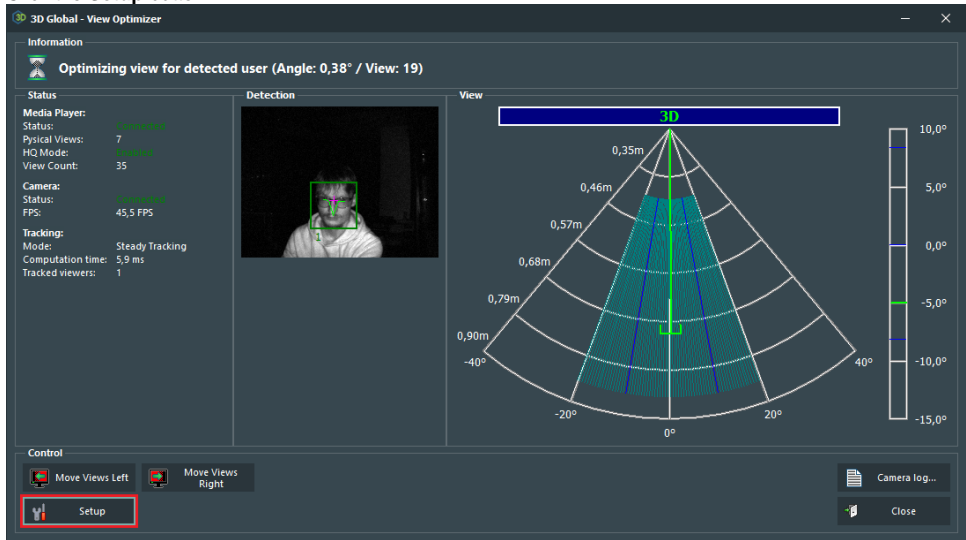
- 3. Activate **AutostereoscopicS1D** full screen mode with checked **Head tracking** flag (how to do this, see [here steps 3 to 6](#))
- 4. Open **3D Global View Optimizer**. Check with the app if there is head tracking when you are at the right distance from the autostereoscopic display (eyes about 70 cm from the screen):



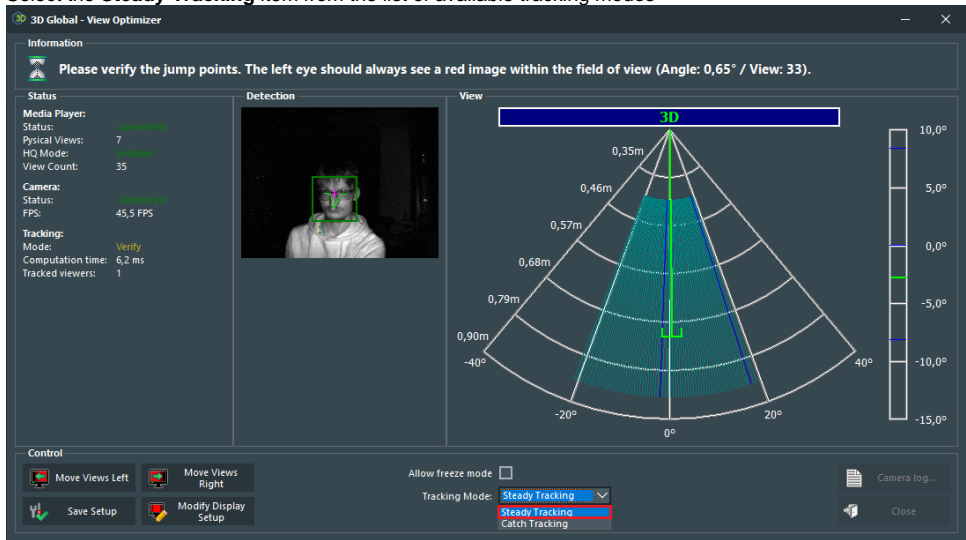
Also, please check these parameters:

- a. **Media Player** status is connected
 - b. **HQ mode** is enabled
 - c. **Camera** is connected
 - d. **FPS** 35
 - e. **Tracking mode** is **steady tracking**
5. If another tracking mode is selected, please follow these additional steps:

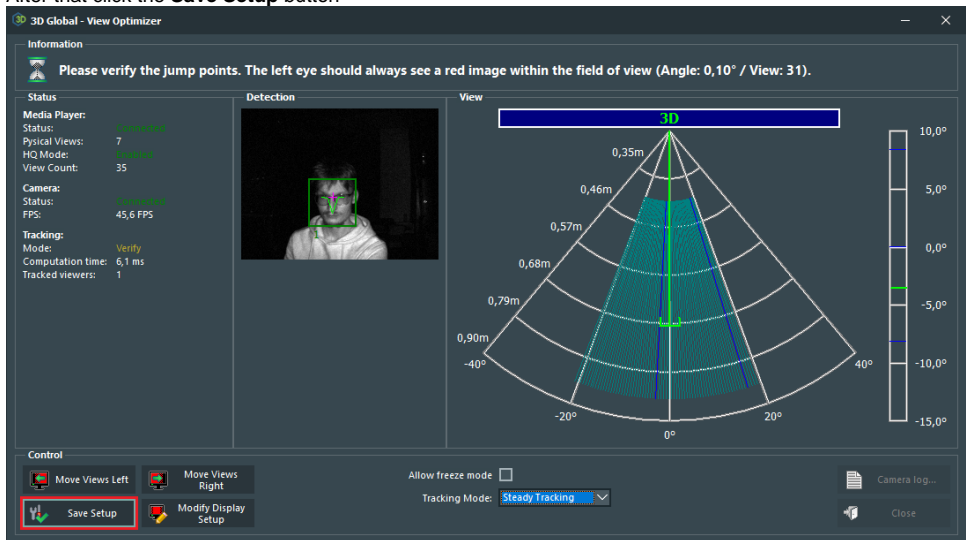
a. Click the **Setup** button



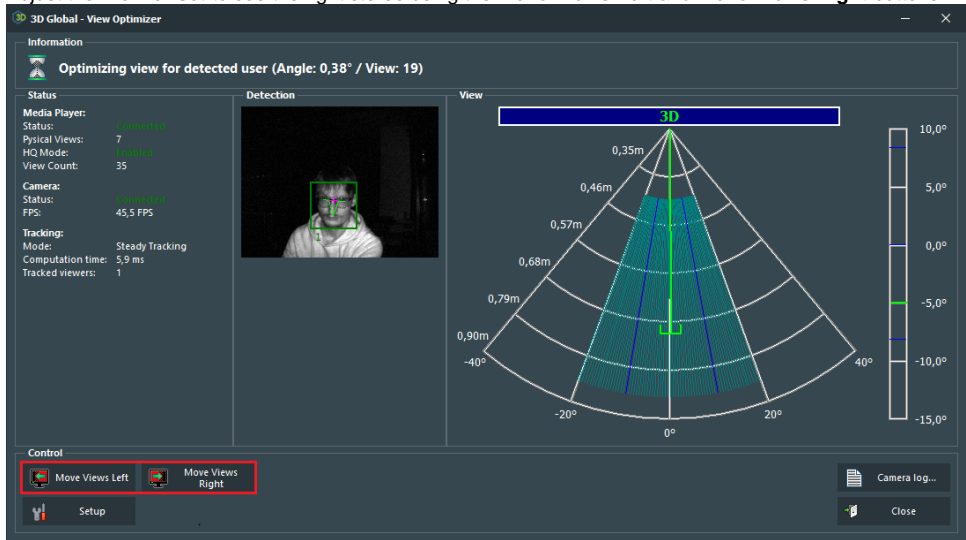
b. Select the **Steady Tracking** item from the list of available tracking modes



c. After that click the **Save Setup** button



d. Adjust the **View offset** to see the right stereo using the **Move Views Left** and **Move Views Right** buttons:



Adjust stereo for displays without a head tracking camera

Procedure is the same, but:

- 1. Uncheck "Head tracking" checkbox in the OSV
- 2. Adjust stereo view using the appropriate slider in the **Octonus Stereo Viewer** or **Ctrl+Alt+Left** / **Ctrl+Alt+Right** shortcuts:

