Glass-Free 3D Monitor

User Guide

v1.3

**Revisions**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Revision** |
| V1.0 | 2019-5-23 | Weixiang Zhang | Create document |
| V1.1 | 2019-5-24 | Weixiang Zhang | Add tracker component |
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# PC Requirements

For full functions usage, the PC configuration must meet following requirements.



# Hardware

## Interface



* HDMI 2.0 Input
* HDMI 2.0 Input
* DP 1.2 Input
* DP 1.2 Input
* USB 2.0
* Micro USB 3.0
* 22V Power
* Keys

## Base Installation



## USB Connection



 Connect the USB 2.0 port to PC USB2.0 port and Micro USB 3.0 port to PC USB 3.0 port.

# Software Installation

## Camera Driver

Open the *Camera Driver* directory in the downloaded software packages and run “intel\_rs\_dcm\_sr300\_3.3.27.5718.exe” to install camera driver and then run “intel\_rs\_sdk\_offline\_package\_10.0.26.0396.exe” to install SDK. Keep all the options as default during installation.



Figure 3

 After installation, following steps to check if camera works fine.

* 1. Open “Intel RealSense SDK Gold” directory in Windows Desktop.



Figure 4

* 1. Run “Intel RealSense SDK Sample Browser”



Figure 5

* 1. Click “Tools” tab and run “Camera Explorer”



Figure 6

* 1. If you can camera information, as illustrated in Figure 7, then it works.



Figure 7

## USB Driver

Open the *USB Driver* directory in the downloaded software packages and run the installer. Click the 1st button to install, as illustrated in Figure 8.



Figure 8

## Glass-Free 3D Player

Open the *Player* directory in the downloaded software packages and run the installer.

Keep all options as default during installation, after finished a shortcut is created on Windows Desktop, as illustrated in Figure 8.



Figure 8

## Glass-Free 3D Controller

Open the *Glass-Free 3D Controller* directory in the downloaded software packages and run the installer. Keep all options as default during installation, after finished a shortcut is created on Windows Desktop, as illustrated in Figure 9.



Figure 9

# Software Usage

Following the below sequence to start the software.

## Glass-Free 3D Controller

To experience Glass-Free 3D effect, the Glass-Free 3D Controller application MUST be running. Find and click the shortcut on Windows Desktop to start the controller application, as illustrated in Figure 12.



Figure 12

After running, there are two windows, one is command window and the other is camera preview window. In camera preview window, if there are two red circle on eyes, then the user is tracked and the tracked user will get the best Glass-Free 3D effect, as illustrated in Figure 13.

Click START button to start.

Hotkey CTRL + ALT + M is registered to switch between 2D mode and 3D mode.



Figure 13

## Glass-Free 3D Player

Click the shortcut on Windows Desktop to start the player, as illustrated in Figure 14.



Figure 14

When start, the main UI is as below. You can drop a video file to play or drop files into playlist, as illustrated in Figure 15.



Figure 15

This player is customized to detect file format automatically according to a specified suffix in file name. You can follow the rules to rename video file.

|  |  |  |
| --- | --- | --- |
| Video Type | Name Suffix | Examples |
| Normal 2D video | \_1V2D or add nothing | Jobs\_1V2D.mp4 |
| Side-By-Side 3D video | \_2V3D | Avatar\_2V3D.mp4 |

For example, when play a video *Avatar\_2V3D.mp4*, player detects the suffix *\_2V3D* and when user double click to enter full-screen mode, player will send command to switch to 3D mode and switch back to normal 2D mode when exit from full-screen mode.

Note:

please keep the file name simple only with English characters and number, better not to use SPACE。

# FAQ

## Glass-Free 3D Controller hangs or crashes

Please make sure monitor’s two USB ports are well connected with PC USB 3.0 ports.

Please don’t use very long USB extension cable which may cause power lost.

The application is still in beta stage, if encounter some issues, please try to restart the application or restart the PC.

## Bad performance of eyes tracking

To get the best eyes tracking performance

* Use monitor in a place with enough illumination.
* User should sit in front of monitor in 30 degree and in 70cm to 100cm, as illustrated in Figure 17.
* Don’t cover face with mask or hat.



Figure 17

## Monitor power off

When there is no signal input, the monitor will power off.

## Display side-by-side content

Please make sure all cables are well connected.

Please check if the Glass-Free 3D controller is running, as illustrated in chapter 4.1.