

CondorVR 0.7.0

User Guide

Introduction

This software give you **6DOF Stereoscopic VR** to the excellent and well known **Condor Soaring Simulator (V1 Version)**.

This software has been written during my very small free time. I began coding this software at the end of 2015. I used Oculus DK1, DK2 and now CV1 HMD to do it.

This software have been tested only by me under my two WinX computers which are both developer's machines, so probably, you will have to install some free redistribuable Microsoft package to run it. Let me know if it's the case.

This software has been recently tested with DK2 and CV1. I didn't use my DK1 since a long time so forget it. **This software will not work with other HMD than Oculus.**

This is still a beta version, even if Condor 2 came out, sorry it's like that...

The demo version is limited in time, and limited in number of loadable textures.

- If you fly too far away, you will have a Condor Rendering Error.
- If you fly a too long time, you will lose the 6DOF. Restart Condor, to run another time.

To play it, you need to copy the executable somewhere on your hard-disk. Condor directory is an excellent choice. To work CondorVR just need the write access to the Condor Directory.

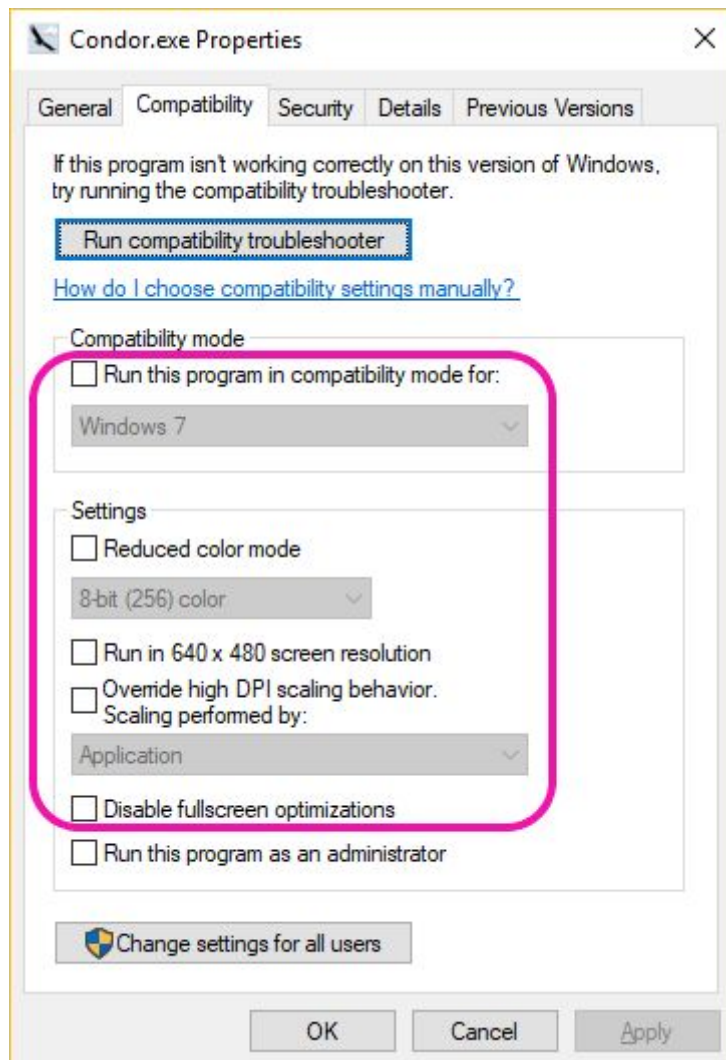
CondorVR has to be run in Administrator only when you want enable or disable CNDR Protocol. This protocol is used to start Condor network competition from all Condor server list web pages or other applications you know well. If you enable it, CondorVR will start instead Condor, and you will be able to start Condor in VR and join our selected network game server. If you disable it, CNDR will be restored to call Condor.exe as previously.

To run CondorVR you will need:

- Windows 10 (I didn't test previous version since a long time)
- Condor Soaring Simulator v1.1.5
- Oculus HMD DK2 or CV1 with 1.24 runtime or above
- A good graphics card like nvidia GTX 980, 1080 or above
- A good SDRAM memory speed

Important

Please don't change or set any option in the Condor.exe Properties Compatibility Panel. It could change the delta between the Client Rect and Window Rect of the Condor Window. CondorVR will failed to run if it's the case. Typically, I had the problem with the option Override High DPI scaling...
Override High DPI scaling...



How to run ?

Connect your HMD to you computer.

Launch CondorVR executable and you will see this dialog box.

CondorVR 0.0.7 (Demo Version) X

Graphics Device: NVIDIA GeForce GTX 980 Ti

Condor Version: 1.1.5.0

OVR Version: 1.24.0

HMD Type: 14

HMD Serial: 0000000000000000

User Mail: [Reset] [Email Address]

HMD Rendering

☒ Enable Stereo ☒ Use System Bit

HMD Ratio: ☐ 1/2 ☐ 3/4 ☒ 1

Window Rendering

☒ Show Left View

Window Ratio: ☐ 1/2 ☒ 3/4 ☐ 1

Condor Player: VR4Condor_Flyingtux

Enable CNDR: ☒ Info... Run Condor Classic Run Condor VR

Set a valid email and press enter (only the first time of course).

Select a valid Condor Player (it should be the last one used). CondorVR will manage for you two settings for each Condor Player. One for Classic and one for VR. So you can fly with the same player name without any problem in Classic or VR mode.

Select the resolution for the HMD you want depending on your machine performance. Select the window size for the left eye representation (optional but useful). If you don't have a 4K screen, the window size will be probably smaller than the HMD rendering texture. So you will see a reduced version of the condor rendering in the window. That's normal. In the HMD that's ok. You can try to turn your screen in portrait mode to reduce this issue. You can try after to setup and set oversized resolution on your screen, please but begin with a simple way and optimise after. Screen rendering is not the finality.

Just Press Run CondorVR, Condor will start "normally", well, almost normally...

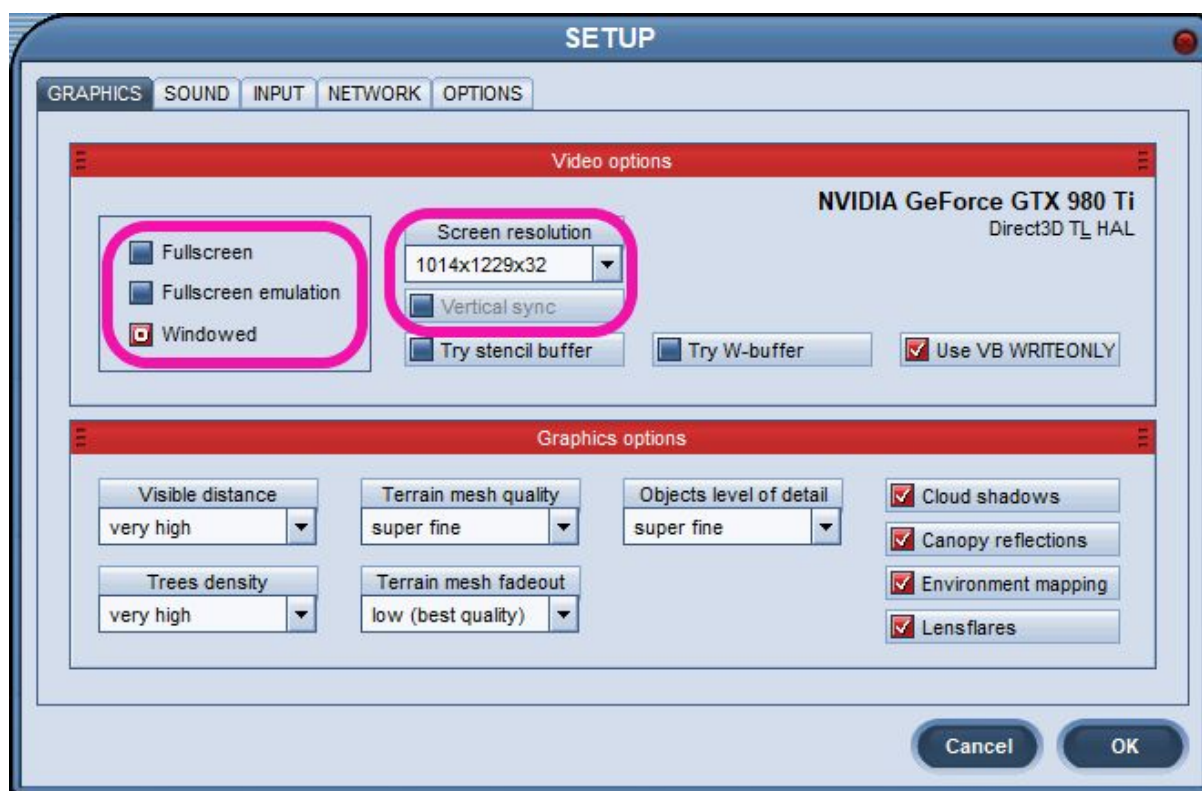
Usage Precautions

CondorVR, forces some Condor settings values in the selected player. Please avoid to modify value surrounded in pink.

For example, here is the Setup of Condor, I started in VR mode with my screen HD configured in portrait mode. I set 1 for HMD Ratio and 3/4 for the Window Ratio. This explain the window resolution of $1 \times \frac{3}{4}$ of ideal rendering CV1 resolution per eye which is (1472, 1184) plus the delta between the Window Rect and the Client Rect whic is (6, 29) on Condor.

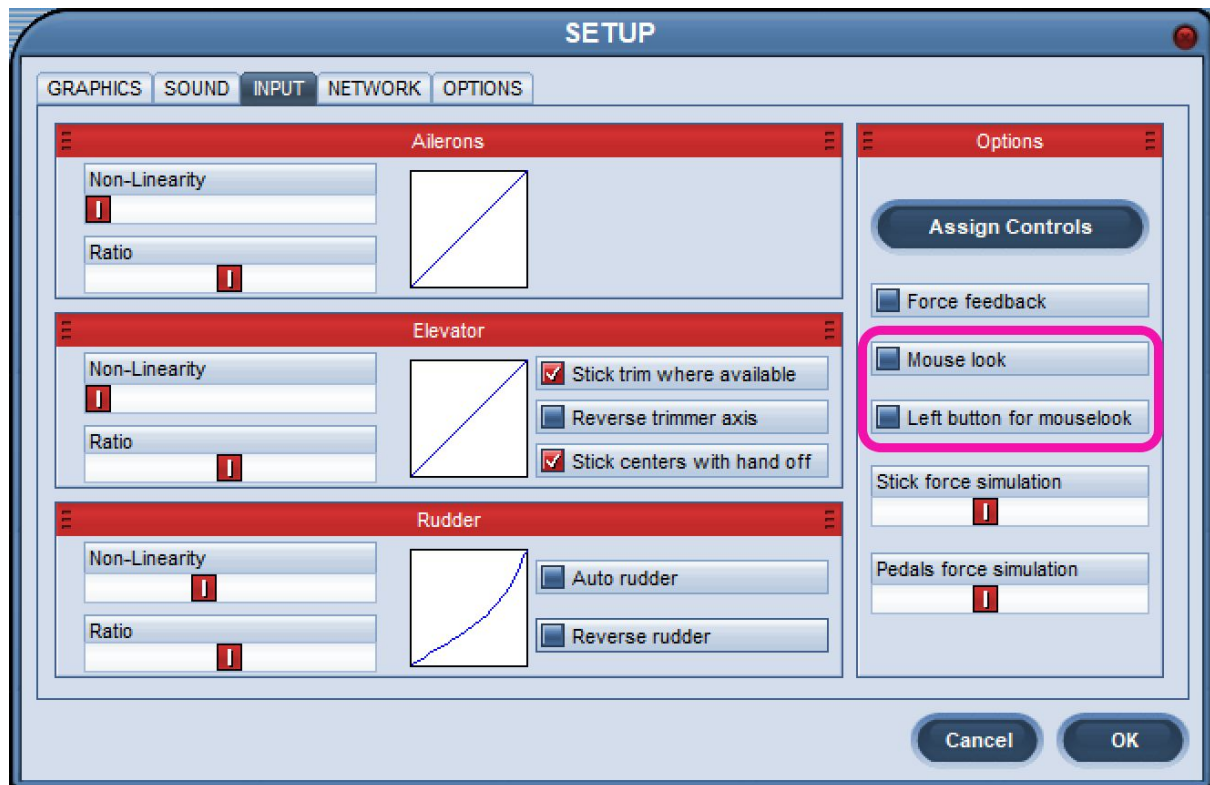
$$1 \times \frac{3}{4} \times (1472, 1184) + (6, 29) = (1014, 1229)$$

CondorVR do the job for you, depending on the HMD model you connected and on HMD and Window Rendering Ratios you presetted ;-)

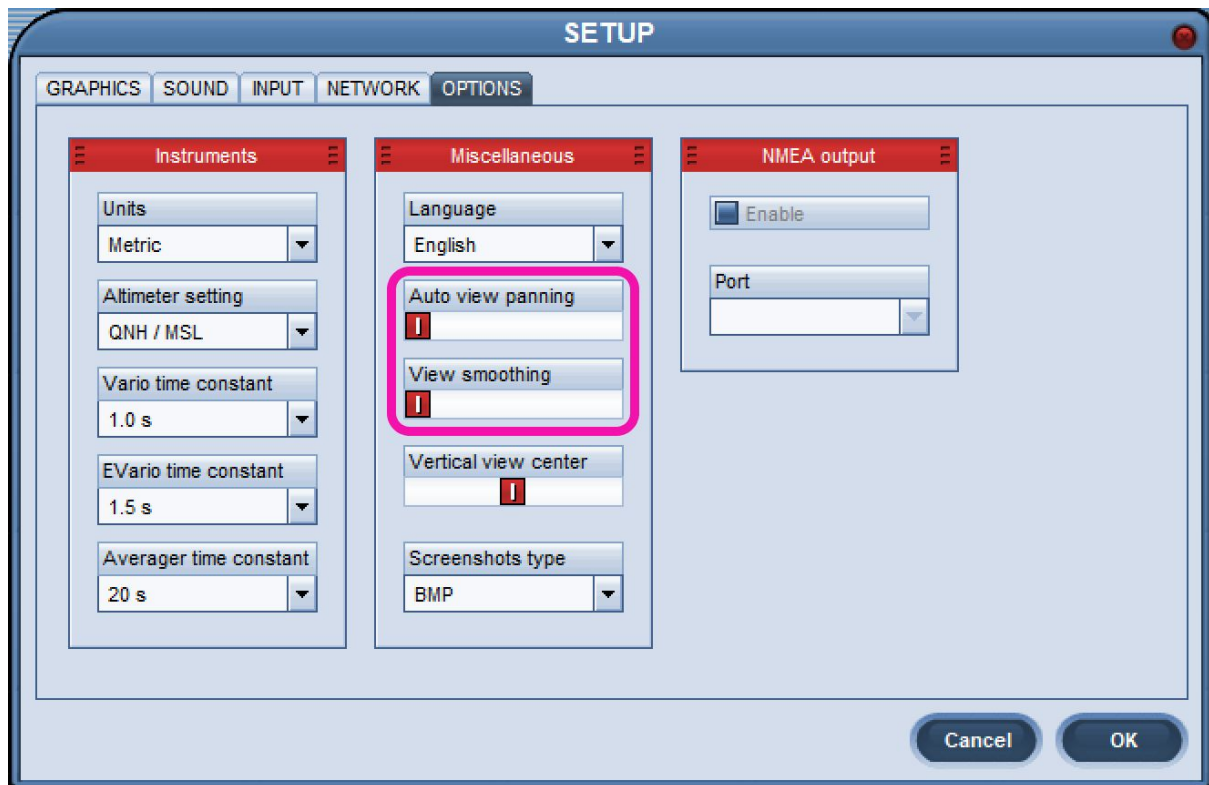


- **Windowed** mode is preset by CondorVR and shouldn't be modified
- **Resolution** is preset by CondorVR and shouldn't be modified
- **Vertical Sync** is preset by CondorVR and shouldn't be modified

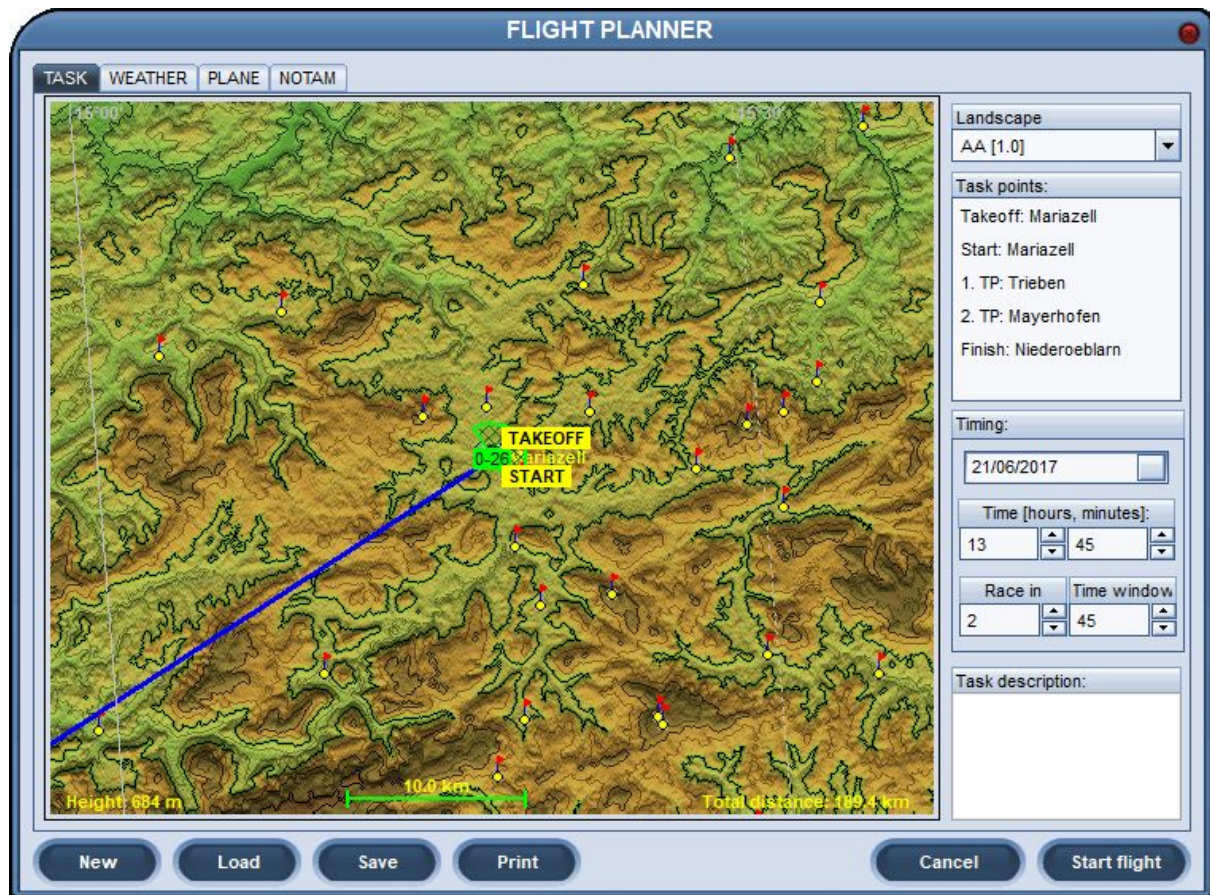
In the same spirit, in the Input panel, for the head tracking, please avoid to modify the values surrounded in pink in the next screenshot.



At last but not least, in the Options panel, to avoid undesirable latency in head tracking please avoid to modify the values surrounded in pink in the next screenshot.



The HMD will start just after when you press on the « Start Flight » button from the Task Panel and will stop just after you leaving the fly.



As soon as the game is loading you can mount the HMD on your head. Please configure most possible buttons on your joystick like gear, release, airbrake etc. It's not always easy to find keyboard's keys when you wear an HMD.

Shortcuts

Inside CondorVR, some useful shortcuts are hardcoded (it means not configurable). Please avoid to use the same keys in your Condor configuration. I tried to use key compatible with Condor and peripherally located on the keyboard (to be easier to find).

- **F12** : Reset the head position (ie above the pilot body).
- **F10-F11** : Increase/Decrease the IPD independently of the CV1 button.
- **NUMPAD +/-** : Offset the head position in front or back way respectively.

Download

You can download the zipped demo here :

http://lineofcode.freeboxos.fr/vr4condor/download/0.7.0/CondorVR_Demo.zip

And of course there is no guaranty with this software and you use it at your own risk.

Conclusion

This is the first version, and I hope not the last one...

If you have any questions or suggestions, nice or bad comments, you can write me at VR4Condor@gmail.com.

You can write too on VR4Condor Facebook Page, <https://www.facebook.com/VR4Condor-144447949510388>, it will be better to share your experience with the CondorVR community (if there is one)...

Enjoy,

Jean-Pierre Dumont.