

# DEON on Microsoft Surface Hubs 84



You can currently use DEON on Microsoft Surface Hubs Generation 1 (84 and 55 inch) by connecting an external PC. For optimal performance please follow the instructions below.

*NOTE: We have discontinued the former DEON UWP App for Surface Hub which could be installed on the integrated PC because new DEON features could not be ported to the limited UWP operating system. The release of a fully new solution which will overcome some of the limitations and still allow the usage of the integrated PC is planned for the end of this year. Until then, please connect an external PC to the Hub.*

When using an external PC to run DEON on the Surface Hub 84 or 55 we highly recommend to switch the Hub to “Replacement-PC-Mode”.

This will give you the full performance and all features of the [DEON Windows Version](#).

IMPORTANT: The high refreshrate of 120Hz at the full UHD resolution of 3.840×2160 is only possible in “Replacement-PC-Mode”. Without this you can only use the “Guest-Mode” which will allow a maximum of 30Hz at full resolution. The Multitouch and Stylus operation at 30Hz is almost unusable.

You can switch back from “Replacemet-PC-Mode” to normal mode at any time without losing any configurations.

If you can't use the “Replacement-PC-Mode” for whatever reason we recommend to lower the resolution of your PC to Full-HD to get at least 60Hz refresh rate.

**What you need to run a Surface Hub 84 in Replacement-PC-Mode at 120Hz UHD:**

- A PC with two video outputs capable of displaying four DisplayPort 1.2-Streams (two streams per cable). NOTE: Using only one output will still work but offer you a lower refresh rate and/or a lower resolution.
- Two video cables from the PC output (DP or mini DP or USB-C Thunderbolt 3 or mixed) to the two Displayport inputs of the Surface Hub. Short cables (<=2m) recommended.
- A USB cable to use touch, stylus, cameras and the microphone array of the Surface Hub.

**Connecting the Surface Hub 84 in Replacement-PC-Mode:**

1. Switch the Surface Hub off: Shut it down first with the button at the side, then use the main power switch at the bottom next to the power chord to swith it completely off. Remove the lid from the Replacement-PC slot at the bottom of the Hub:



2. Put the small dip switch to Replacement PC mode.
3. Attach two video cables from the PC (DP or mini DP or USB-C Thunderbolt 3 or mixed) to the two Displayport inputs (Short ( $\leq 2\text{m}$ ), 4K capable cables recommended). Attach a USB cable from the PC to the “Internal Devices” USB port.
4. Power up the Surface Hub and choose “PC” as input (Use the input selector button at the side of the Surface Hub). Do not use “DP” as this refers only to the additional single Display Port input.
5. Power up your PC.  
 If the Hub is not automatically recognized at  $3840 \times 2160 @ 120\text{Hz}$ :  
 Check that you don't use “duplicate screen” mode in Windows but single screen.  
 To check if you are running at  $3840 \times 2160 @ 120\text{Hz}$ :  
 Search for and open “Display settings”. Scroll down and click “Advanced display settings”.
6. If touch, stylus, microphone and cameras are not recognized by default you can download the drivers from Microsoft: [SurfaceHubReplacementPCDrivers.1.1.003.msi](#)