

**UPTab DisplayPort to HDMI 2.0a adapter**  
**UPTab MiniDisplayPort to HDMI 2.0a adapter**  
**Configuration Suggestions**

Many TV manufacturers (Sony, Visio, LG, Samsun) are labeling their HDMI ports as 4k at 60Hz which are NOT HDMI 2.0 capable. Make sure the HDMI port you are using on the TV is HDMI 2.0 capable and not just 4K at 60HZ capable. HDMI port 4K at 60Hz indicates it is HDMI 1.4 capable of running 4K at 60Hz with color sampling of 4:2:0. Our adapters are full specification HDMI 2.0a and support color sampling 4:4:4 at 4K at 60Hz with High Dynamic Range (HDR).

\* In many cases if adapter is not operational or expressing image degradation please unplug the adapter-s from your computer and TV\Monitor and restart your computer. Plug in the adapter-s and connected your TV/Monitors this will allow the OS to reinitiate the adapter and sync with adapter processor.

\* If your TV has marking 4K at 60Hz at the HDMI port, you will need to change the color scheme to 4:2:0 in your NVidia or AMD drives settings then change the refresh rate to 60Hz.

\* Often TV's have 4 or more HDMI ports, but only 1 is suited for "2.0" standard.

\* Please disable all TV enhancements like up-converting picture enhancements because in many cases this settings will add lag.

\* On many TV's you need to turn on "**HDMI UHD Color**" manually in the settings of your TV under "Picture Options" for the HDMI port to which your pc/mac is connected and **Make HDMI CEC is Disabled.**

\* Please make sure "Input Type" is set to "PC" or "Game Mode".

\* Please make sure your device Mini DisplayPort or DisplayPort are version 1.2 or 1.3.

\* By default some monitors have their Mini DisplayPort and DisplayPort pre-configured for DP 1.1 and you need to change manually to 1.2.

\* Also it could help when connecting 2 screens, to set the screen connected thru the Adapter as second/secondary screen.

\* Use an HDMI cable rated for the bandwidth of 4K@60Hz and HDR, 18 Gbps" many cables are rated for 4K but not many for 4K 60HZ with HDR. UHD 4K@60Hz requires almost double the bandwidth of 4K.

\* **HDR** – Our Rev.2 DisplayPort and Mini DisplayPort adapters support High Dynamic Range (HDR). Please consult your TV/Monitor manual for supported HDR standards.

\* In many cases it will help creating custom resolution In Graphics Drivers settings and create 3840x2160 or 4096x2160 and use Timing: CVT-Reduced Blanking (RB)

\* **AMD Graphics Cards:** There have been many bugs and issues with latest releases form AMD if all above is not helping to get 60Hz try to roll back to 16.11.1 or 16.8.2.

\* **Microsoft Surface Pro 2:** Their max resolution depends on which CPU they have: H-Processors: 3840 x 2160@60Hz and U-Processors: 3200 x 2000@60 Hz, 3840x2160@30Hz

\* **Seiki TVs:** Change HDMI EDID from 1.4 to 2.0.

\* **Apple MacBook Pro and Mac Pro** – For now Apple El Capitan doesn't support 4K at 60Hz out of the box. To be able to enjoy 4K at 60Hz on OSX you need to install SwitchResX to force the 60Hz by creating custom resolution. You can download SwitchResX from [madrau.com](http://madrau.com)

1. First I downloaded (and purchased) SwitchResX, but you can download a trial that works for 10 days.
2. In El Capitan there is a new security feature called SIP "System Integrity Protection". Unfortunately this prevents SwitchResX from modifying the system files that contain resolution information. But you can temporarily disable "System Integrity Protection" to make changes. Once the resolution has been created and activated, you can turn SIP on again.
3. Disabling SIP requires booting into the recovery partition. You boot in recovery mode by pressing CMD + R when starting up your Mac.
4. Then open a Terminal window. Utilities->Terminal and type the command below: **csrutil disable**
5. To re-enable SIP once the changes have been made; boot back into the recovery partition and set state to enabled: **csrutil enable**
6. Now boot to El Capitan and open SwitchResX. Select the TV from the pane on the left. Then select "Custom Resolution". I entered 3840 x 2160 and made sure that the Scan Rate for Vertical was set to 60 hz. Scaling is also possible.
7. Save the changes (by hitting apply, and rebooting your mac.. it will ask you to save). After the reboot you will see the custom resolution added within SwitchResX under "Current Resolutions" for your TV.

Regards.

UPTab