HDR Settings for UHD 4K60FPS HDR Encoder

1. **Encoder settings：**

   1.1 Select H.265 & Main 10 Profile
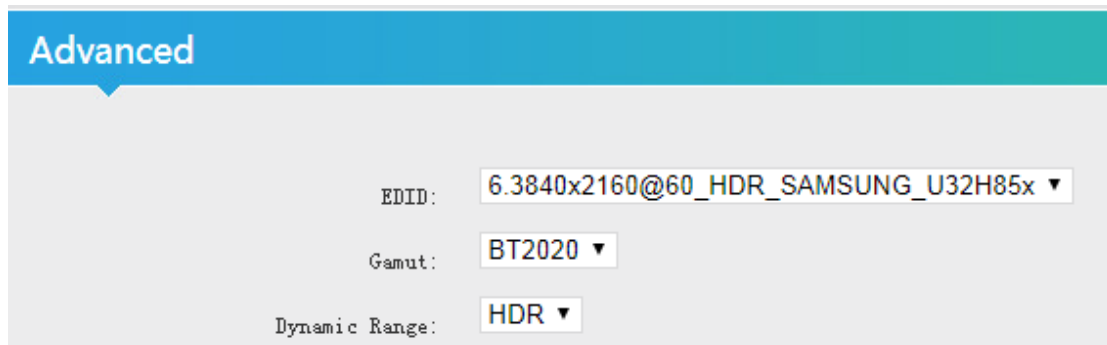

   1.2 System-Advanced
   a) Select the EDID with HDR.
   b) Gamut: BT2020
   c) Dynamic Range: HDR

   Note: Please select the BT709&SDR if input video not HDR.

2. **Input Video Settings：**

2.1 Select the HDR output and 10bit if you can.

    a)   For Apple TV
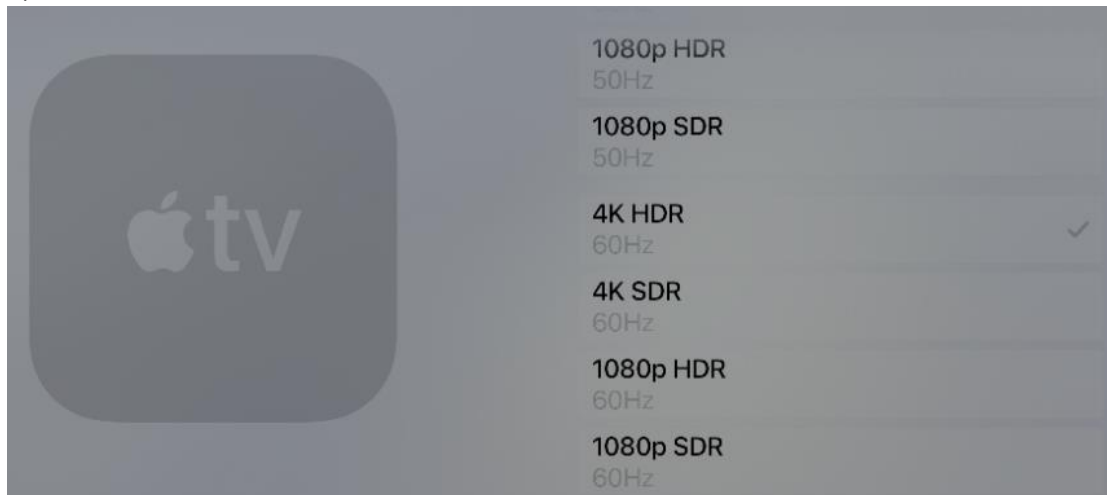
    b)   For PC, enable the HDR, read here,

https://support.microsoft.com/en-us/help/4040263/windows-10-hdr-advanced-color-settings

3.   Test the 4K HDR Video Streaming

    3.1 For VLC, default settings support the HDR playback.

3.2 For PotPlayer, see below settings or install the HDR plugin.

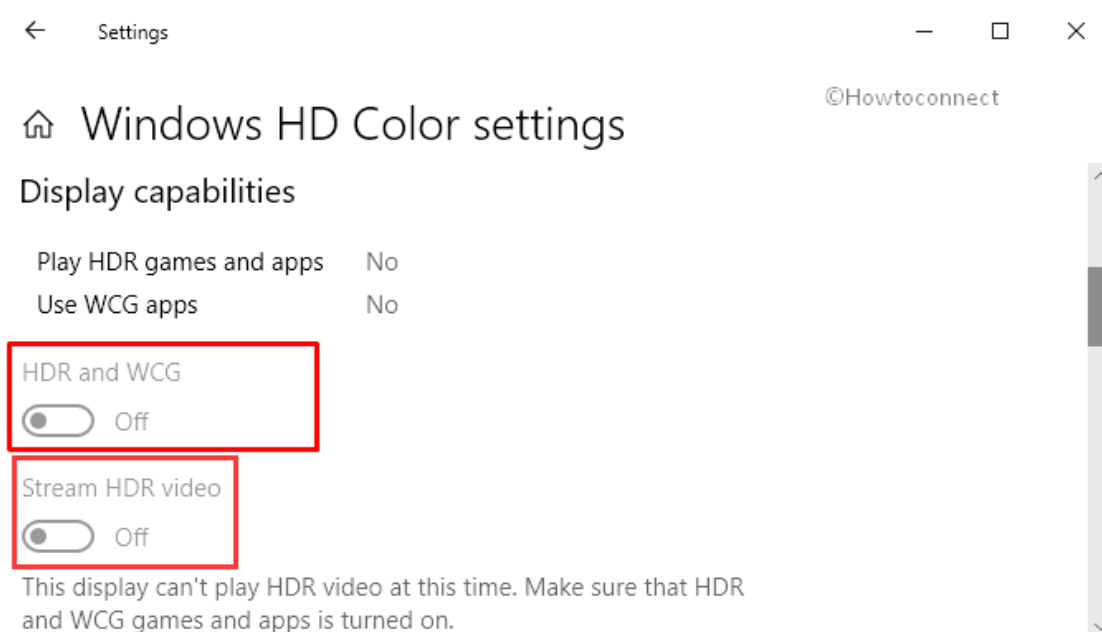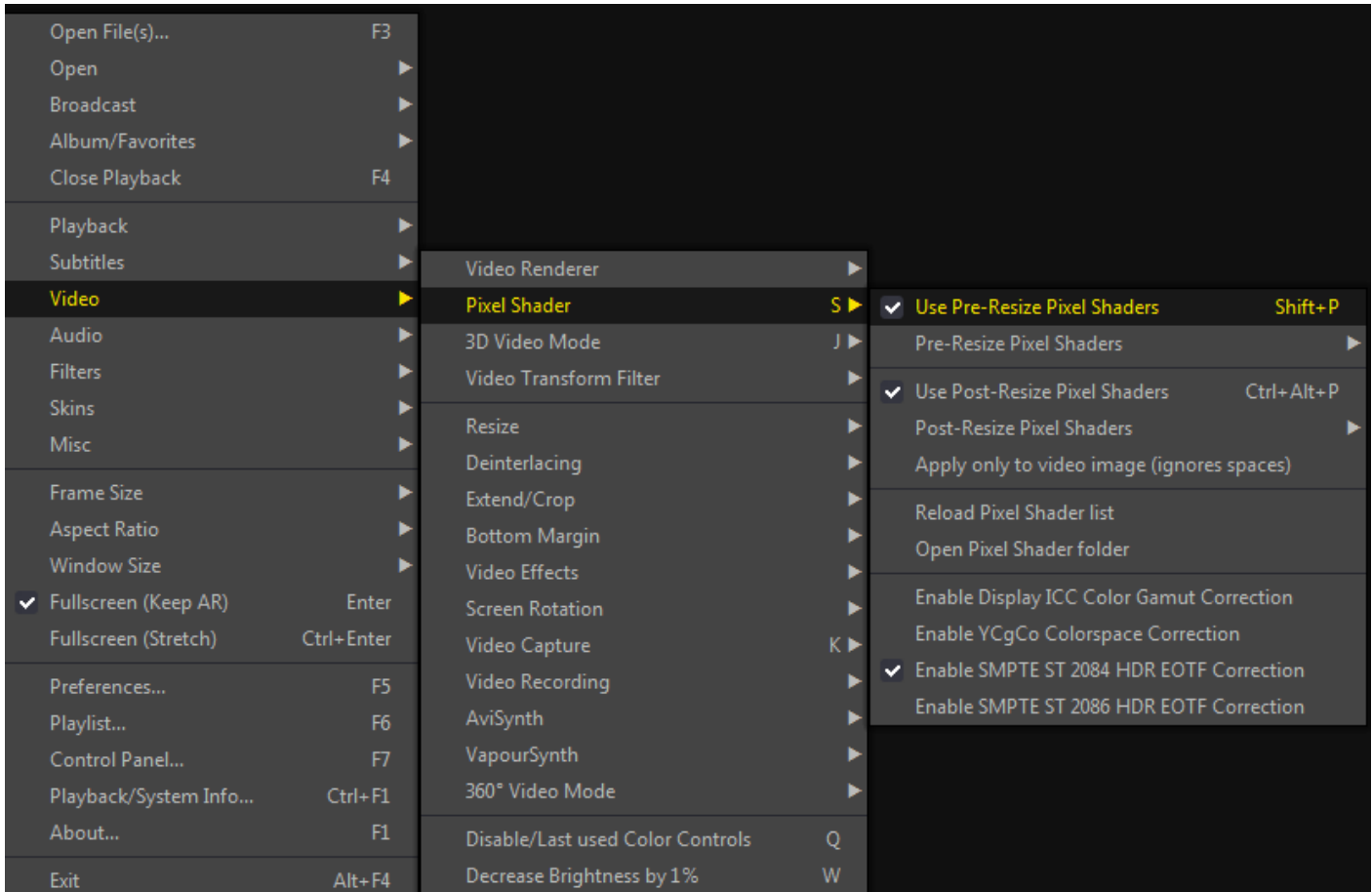| Open File(s)...	F3		
Open	▶		
Broadcast	▶		
Album/Favorites	▶		
Close Playback	F4		
Playback	▶		
Subtitles	▶	Video Renderer	▶
Video	▶	Pixel Shader	S ▶	✔ Use Pre-Resize Pixel Shaders	Shift+P
Audio	▶	3D Video Mode	J ▶	Pre-Resize Pixel Shaders	▶
Filters	▶	Video Transform Filter	▶	✔ Use Post-Resize Pixel Shaders	Ctrl+Alt+P
Skins	▶	Resize	▶	Post-Resize Pixel Shaders	▶
Misc	▶	Deinterlacing	▶	Apply only to video image (ignores spaces)
Frame Size	▶	Extend/Crop	▶	Reload Pixel Shader list
Aspect Ratio	▶	Bottom Margin	▶	Open Pixel Shader folder
Window Size	▶	Video Effects	▶	Enable Display ICC Color Gamut Correction
✔ Fullscreen (Keep AR)	Enter	Screen Rotation	▶	Enable YCgCo Colorspace Correction
Fullscreen (Stretch)	Ctrl+Enter	Video Capture	K ▶	✔ Enable SMPTE ST 2084 HDR EOTF Correction
Preferences...	F5	Video Recording	▶	Enable SMPTE ST 2086 HDR EOTF Correction
Playlist...	F6	AviSynth	▶	
Control Panel...	F7	VapourSynth	▶	
Playback/System Info...	Ctrl+F1	360° Video Mode	▶	
About...	F1	Disable/Last used Color Controls	Q	
Exit	Alt+F4	Decrease Brightness by 1%	W	

3.3 Check the play back video codec,

- Video # 1
  - ID : 481 (0x1E1)
  - Menu ID : 1 (0x1)
  - Format : HEVC
  - Format/Info : High Efficiency Video Coding
  - Commercial name : HDR10
  - Format profile : Main 10@L4.1@Main
  - Codec ID : 36
  - Duration : 10 s 133 ms
  - Width : 1 920 pixels
  - Height : 1 080 pixels
  - Display aspect ratio : 16:9
  - Frame rate : 60.000 FPS
  - Color space : YUV
  - Chroma subsampling : 4:2:0
  - Bit depth : 10 bits
  - Color range : Limited
  - Color primaries : BT.2020
  - Transfer characteristics : PQ
  - Matrix coefficients : BT.2020 non-constant
  - Mastering display color primaries : BT.2020