HDR compatibility

The G27-X monitor HDR function is automatic by default and can be turned off optionally. The HDMI interface conforms to the HDMI 2.0 Vesa HDR10 standard, and the DP and USB-C interface support HDR function to the Vesa HDR10 standard. Windows 10 operating system support requires a graphics card and system version number 1803 onwards. The HDR function is activated by the player or game within the Windows settings and the monitor will automatically switch to HDR display mode. Depending on the device support, the macOS operating system can turn on the [High Dynamic Range Contrast] option in the system display settings to detect whether the HDR function is supported or not. Some Apple Mac series devices may not be able to turn on the HDR function.

Q1: When I manually turn on HDR in the Windows system settings, the screen is abnormal (in fact, turning on this switch does not work in a regular SDR screen).

The G27X's HDR mode of operation is automatic, so when the HDR switch is turned on manually in the system, no HDR content is displayed on the screen. This means that the system's HDR display format will be forcibly mapped to the regular SDR screen, at which point the screen PQ curve colour format and gamma will affect the current SDR content. In other words, the HDR function of the monitor will only be effective when displaying HDR content. We therefore recommend that the HDR function is left off by default in the system.

The correct way to use the HDR function on Windows, e.g., to watch an HDR movie, open the player to play it, the madVR decoder will recognise the HDR content format and the computer will communicate with the monitor to automatically enter HDR mode to play the current content when in full screen.

To play a game, and the game supports HDR, all you must do is to turn on HDR in the game settings. The above operations are all in automatic mode, there is no need to manually turn on the HDR setting in Windows settings, it is entirely up to the current displayed content to activate the HDR feature.

When watching online streaming media, most video sites will need to manually turn on the HDR switch in the system side display settings to recognise HDR content on the web's side. We recommend turning the HDR switch on when you want to watch HDR movies and manually turning it off when you are not watching.

Q2: Do I need to check the "High Dynamic Range" box in the display settings on macOS?

As above, Apple's MacOS recommends that the "High Dynamic Range" switch is not checked by default. You can check it if you need to display HDR content.

According to our understanding of the current HDR ecosystem, we found that the HDR specification has not yet reached a certain standard in both computer ecosystems, macOS and Windows, probably due to the inconsistency (lack of uniformity) between the content encoding and the end-user device decoding formats. Therefore, the current use of this feature is still in a rather confusing state. We also recommend that customers consult a search engine to find out more about how HDR works on computers and what common problems they may encounter. The same HDR feature is not as problematic on home gaming consoles, HD Blu-ray players and TV boxes as it is on PCs. If the display and content support HDR, it will automatically play or display HDR content, with no manual involvement required to set it up. The PC requires some experimentation for the user to use HDR functionality due to uniqueness and inconsistencies of PC environments.

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When the HDR function is turned on manually in the system settings, it is normal for the screen to appear different from what it does normally.
When the HDR function is switched on to display high dynamic content, the monitor backlight will activate to its maximum operational state.
The monitor will automatically switch back to the default setting after exiting the HDR content being played.