Feature Spotlight

OPERATING MODES

Your Panel, Your Choice.

Switch between different Operating Modes to choose the aspects of visual performance that will deliver the best results for you.

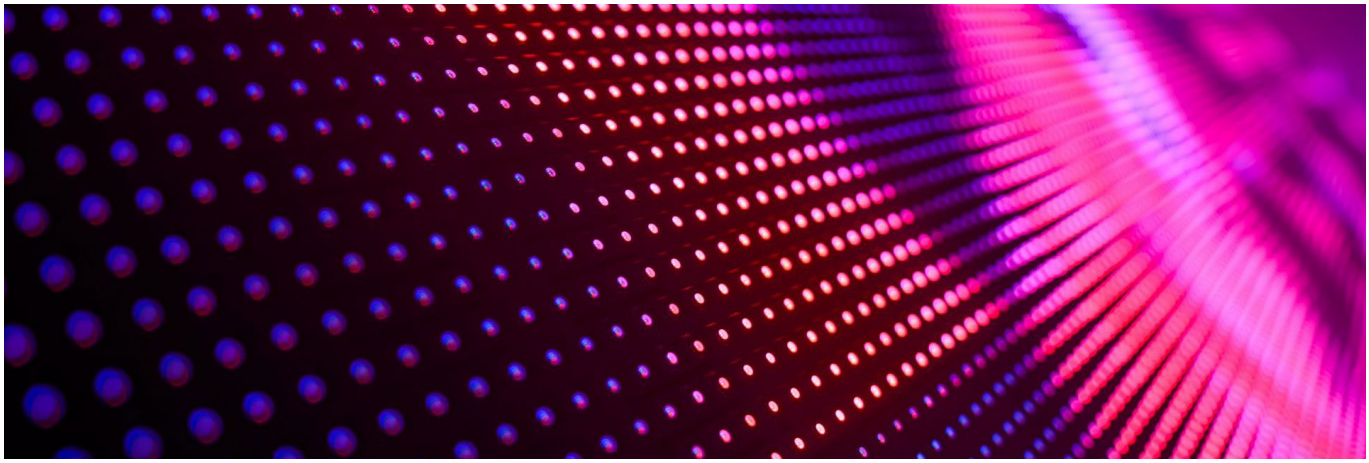
LED panel design is all about the trade-offs between the many aspects of visual performance. When you prioritise one feature it's often at the detriment of others. For example, increasing panel brightness could affect low-brightness performance, and a higher refresh rate could come at the expense of PWM bit depth.

Seeking to find a balance between the various parameters that affect visual performance, LED manufacturers produce a general purpose, one-size-fits-all configuration that is fixed for the life of the panel. But what if, in an application you have in mind, one aspect of visual performance is more important than others?

- ✓ Pushing for a faster refresh rate may mean reducing PWM bit depth. Increasing maximum brightness may compromise low brightness performance.
- ✓ Panel manufacturers seek to achieve a good balance, and that one-size-fits-all configuration is set for the life of the panel.

An indoor eSports event might require the LED panels to run at a high frame rate, whereas high screen brightness wouldn't be a priority in a darker indoor environment. An exhibition stand might require maximum PWM bit depth to provide the best possible HDR performance, whereas a high frame rate would be less important.

There is a solution that gives you the power to choose: Operating Modes from Brompton Technology, available from Tessera version 3.3 onwards.



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Choose The Mode, Choose The Result

With Operating Modes, LED panel manufacturers can, in addition to a general-purpose configuration, design several other configurations – each prioritising a different aspect of visual performance. For the end user, changing from one operating mode to another is as simple as selecting the relevant configuration from the Operating Modes drop-down menu.

As an example, one of the available modes on the menu is Studio Mode, a long-standing Tessera feature that has been available for some time with certain LED panel types. It allows users to sacrifice maximum brightness in order to increase bit depth at the low end for improved low-brightness performance.

Studio Mode is just one of several Operating Modes that together give you more control to tailor your results – from median to peak visual performance.

Made To Requirement

Operating Modes are created by our Field Application Engineers (FAEs) who work in conjunction with LED panel manufacturers as and when opportunities are identified to boost an aspect of performance.

The Operating Modes configurations go a long way in allowing manufacturers to design more versatile and flexible panels. Tessera users can also contact our support team to propose additional Operating Modes should they have other specific requirements.

Brompton Technology is the market leader in LED video processing for the most demanding applications across live events, virtual production, broadcast/XR, simulation/VR, fine-pitch installations and esports. The company has won multiple awards and become a globally respected brand, known for the quality and reliability of its products and exceptional technical support. For more information, visit www.bromptontech.com.

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