PureTone eliminates unsightly colour casts in your greyscale for balanced, neutral output.

LEDs and their driver chips are not perfectly linear – meaning that when asked to output a particular brightness they may not accurately achieve it.

It is common for the red, green and blue LEDs to have different behaviour, meaning that many panel types show a colour cast in darker greys or when using the panels at low brightness levels.
TRUE NEUTRALS

Most content has dark as well as light areas – so this non-linearity is a real problem that means you may not be getting accurate colours and true neutral greys.

It is also a common reason why different types of panels that appear to be matched when displaying full brightness test patterns are obviously unmatched when displaying real content with darker areas.

It has previously been difficult or even impossible to correct for this non-linear behaviour – but no longer!

**Simulated LED screen appearance with inherent cyan colour cast (left) which is corrected by PureTone (right) for accurate colours.**

ACCURACY AT ALL BRIGHTNESSES

*PureTone* builds on Brompton's new *Dynamic Calibration* technology to enable each panel type to be profiled to measure the panel's behaviour across a range of brightnesses. It can then compensate for the non-linearities ensuring true, clean, accurate colours and neutral greys at all brightnesses.

This is particularly important for film and broadcast work, where screens are often run at much lower brightness to match camera exposures, and maintaining neutral colour output is critical to looking good on camera.

*PureTone is exclusive to Brompton R2-based panels that have been calibrated with Dynamic Calibration.***

DARK MAGIC

*PureTone* depends on *Dark Magic* for additional effective bit depth in order to make very small fractional adjustments to the output drive levels.

It also works alongside *ThermaCal*, which compensates for colour and brightness variations due to panel thermal effects.

PROFILING SERVICE

Brompton Technology offers a profiling service for *R2-based* panels using *Dynamic Calibration*, with a technician going on site to calculate the panel's *ThermaCal* and *PureTone* profiles in a single visit.

Once profiling is completed, the profile data will be incorporated into the fixture library supplied with the Tessera software.