



THE BASIS OF COLOUR ACCURATE MONITORS:

Monitors are made up of red, green, and blue pixels.

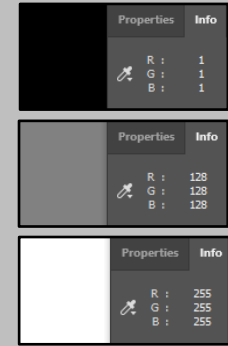
When you mix RGB together in equal parts, you get a greyscale gradient.



There are 255 tones, each of red, green and blue from brightest to darkest. To the right, see the RGB numbers for the white (255;255;255), middle grey (128;128;128), and black (1;1;1) patches.

Perfect RGB colour mixing is the holy grail of monitors and very hard to do. Particularly in a uniform way all over the monitor panel.

Perfect RGB mixing properties on a wide gamut monitor = a perfect display of your image file.

EIZO excel in this area because of our own EIZO medical grade ASIC - the logic chip that really knows how to mix RGB for the most accurate colour tones.






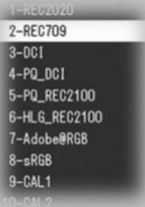


FEATURES	WHY IS THIS IMPORTANT ?	EIZO CS	EIZO CG & CGX	OTHER GFX MONITORS	EIZO FLEXSCAN	OFFICE MONITORS	
Digital Uniformity Equalisation (DUE) on ALL tones (not just middle grey)	<p>For accurate hue/saturation/brightness of tones from corner to corner. So for example, blue RGB tone 42;82;110 may display incorrectly too cyan, in one part of the monitor.</p> <p>See example here - the clouds are too cyan, on the RHS. Is this colour fault in the file? or is it just the filter of an incorrect monitor over the file? This is why ALL TONES must be uniform, not just middle grey.</p>	 <p>CORRECT IMAGE</p>  <p>INCORRECT IMAGE: Sky too cyan on the right hand side</p>	4 STAR (Similar to CG without as many levels)	5 STAR (Best of the best, unique uniformity warranty)	3.5 STAR (middle grey only, some better than others)	3 STAR (Basic middle grey uniformity correction)	2 STAR (little or no correction)



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Tonal range / gamma	Looking at a gradient from black to white, does the ramp remain the same colour temperature from black to white (e.g. 6500k all the way through), or does it go a bit pinkish in an area, or a bit blueish. If that happens, the tones in your image will display incorrectly.		5 STAR	5 STAR	4 STAR	4 STAR	3 STAR
Ambient Temperature Sensor	Temperature has a direct effect on the colour that is displayed. If the inside of the monitor cabinet heats up, the colour can change by up to dE 2.5 - but you don't realize it because it's gradual. Not ideal for creative work.		NO	YES	NO	NO	NO
Ability to set precise contrast	To achieve a realistic "print look" you must be able to precisely set your monitor's black point (emulating blackest of ink) and white point (emulating the paper white)		YES	YES	STRUGGLES WITH BLACKPOINT	NO	NO
Hardware calibration	To calibrate the monitor itself, not just the software. Hardware calibrations ensures accurate colours by adjusting the electronics in the monitor, rather than just on the graphics card or OS. Hardware calibration means less frequent calibrations required, higher bit look-up tables to avoid losing colour tones and the ability to colour manage directly in the monitor for correct colour regardless of what is plugged into your monitor		<b>ColorNavigator 7 by EIZO</b> Free updates Simple install Highly customisable colour Designed with and for ColorEdge	<b>ColorNavigator 7 by EIZO</b> Free updates Simple install Hardware calibrated custom profiles Designed with and for ColorEdge	<b>3rd party software</b>  Does not work with all sensors Less functionality & accuracy	NO  Did you know? - you can "semi hardware calibrate" with the linear RGB manual adjustment feature, in conjunction with the software bundled with your Xrite or DataColor sensor	N/A  Cannot calibrate the monitor - can only calibrate the computer GFX card.



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CMYK Profile and iPad/iPhone emulation function	Make your monitor display exactly how your iPad, or Android, or iMac would display. Can emulate any CMYK printer profile and any screen device		NO	VIA DEVICE MEASUREMENT  FOR 3DLUT CG/CGX: CG3146, CG319X, CG279X, CG247X	NO	NO	NO
Size of colour palette LUT (Look Up Table)	Higher LUT means more image detail will be seen in the shadows, highlights and brightest saturated colours.		16 BIT	CGX - 16BIT / 24 BIT 3D CG - 16 BIT	14 BIT 3D	10-12 BIT	USUALLY 8 BIT SOMETIMES 6 BIT
Built-in Calibration Sensor	For screen calibration.		NO	YES CGX - reads RGB (accurate for print / pantone)  CG - reads greyscale only	NO	NO	NO
Monitor Hood			NO	YES	SOME	NO	NO
Warranty	For all EIZO monitors: Pixel perfect warranty, 5 year base warranty, free pickup/delivery of warranty unit and a free temporary monitor whilst we investigate your confirmed warranty claim.		5 YEAR HOTSWAP	5 YEAR HOTSWAP	3 YEAR REPAIR	5 YEAR REPAIR	1-3 YEAR REPAIR
True deep blacks from all angles	For working in a dark room, Work with the best - True black is important more-so for those working with digital output mediums, where true black can be displayed. Off angle deep black required for video pros.		NO	YES	NO	NO	NO
HDR Video Signal Display	for HDR Video content editing & previewing		NO  CS2740 - can add via ColorNavigator	YES  CGX models only (CG models - can add via ColorNavigator)	SOME  Apple and Asus sell HDR monitors, only good for viewing HDR not creating HDR content)	NO	NO
Support	Years of experience working with medical and creative customers. We see brands come and go. We are here to stay and support our customers.						

