Specifications
for Spectrum Black

device family	Spectrum Black	
model(s)	ES07E91 (matte)	EAN 4897118180566
	ES07EFE (cover glass)	EAN 4897118180610

Display

Size

monitor size	31.5" (diagonal)
display area	699×395mm
aspect ratio	16 : 9

Image quality

native resolution	3840×2160 pixels 4K Ultra-HD
pixel pitch	0.1814mm
pixel density	140ppi
sub-pixel layout	RGWB
brightness	275cd/m² typical 450cd/m² peak 1000cd/m² peak (HDR, 3% of screen)
HDR	HDR10 Media Profile VESA DisplayHDR True Black 400 certified
displayable colors	1.07 billion
color gamut	98.5% DCI-P3 100% sRGB 94% Adobe RGB
color depth	10-bit
color accuracy	Individual factory calibration D65 white point, average ΔE <1 (typical)
contrast ratio	1 500 000 : 1 typical
viewing angles	178° horizontal 178° vertical
surface treatment	Low-haze anti-glare matte coating (model ES07E91) Corning Gorilla Glass 3 with DXC anti-reflective treatment (model ES07EFE)

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Speed

response time	0.03ms (gray-to-gray) typical
frequency range	48 – 240Hz 48 – 480Hz in High speed Dual-mode
adaptive sync	48 – 240Hz 48 – 480Hz in High speed Dual-mode VESA Adaptive-Sync certified NVIDIA G-SYNC Compatible certified AMD FreeSync Premium Pro certified

Technology

panel technology	3rd gen White organic light emitting diode (W-OLED) with Micro Lens Array+ (MLA+)
backlight technology	N/A
backlight dimming	N/A
curved panel	No
touch-enabled	No
pen-enabled	No

Ports

Video input

HDMI (2×)	HDMI 2.1a video input with support for: - source-based tone mapping (SBTM); - display stream compression (DSC) 1.2; - enhanced display data channel (E-DDC); - HDR10 media profile; - variable refresh rate (VRR); - auto low latency mode (ALLM); - quick frame transport (QFT); - quick media switching (QMS); and - high-bandwidth digital content protection (HDCP) 2.2
DisplayPort (1×)	DisplayPort 1.4 video input with support for: - high bit rate 3 (HBR3) transmission mode; - display stream compression (DSC) 1.2; - enhanced display data channel (E-DDC); - HDR10 media profile; - variable refresh rate (VRR); and - high-bandwidth digital content protection (HDCP) 2.2

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USB

| USB Type-C (1×) | SuperSpeed USB 5Gbps (USB 3.1 Gen 1, up to 5Gbps) upstream connection for firmware updates only
Power output up to 5V ⎓ 1A (5W) |

Audio

| 3.5mm audio output (1×) | Analog audio output from video input source |

Features

Black frame insertion (BFI) reduces eye-tracking motion blur and increases the clarity of objects that move quickly across the screen. (Available between 48 and 120Hz, at 50% duty cycle.)

The **Black equalizer** adjusts dark areas of the screen so you can always find your foes.

A **Crosshair overlay** assists your aim and gives a competitive advantage.

A **Frame counter overlay** shows you how well your system performs and helps pick the right settings for any game.

Pixel-perfect upscaling, using integer-ratio pixel duplication for low-resolution input signals, maintains the iconic look of pixel art and keeps retro games looking crisp.

Dual-mode allows even smoother fast-paced action by operating the monitor at up to 480Hz in Full-HD.

User-adjustable **Quick actions** give you quick access to the setting you use most.

Dual-screen lets you keep an eye on everything at once. Split-screen mode places the screens from two computers side-by-side, Picture-in-picture mode puts the image from a secondary computer in the corner.

User-upgradable firmware allows development to continue based on customer feedback, to tweak existing features and unlock new ones.

monitor mount support	Yes, VESA Mounting Interface Standard 100×100mm
security cable support	No
built-in speakers	No

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Adjustment

controls	1× Power button 1× Shortcut button 1× 5-Way joystick Controls are centered on the underside of the monitor
status light	1× Power indicator light, integrated into the power button White, user-adjustable behavior (Default: solid when on, pulsing in standby)
OSD languages	English, Chinese, Dutch, French, German, Italian, Japanese, Spanish

Stand

material	Cast aluminum alloy
vertical tilt	7° down, 23° up
horizontal swivel	No
pivot / landscape rotation	90° left, 90° right
height adjust	122mm
removable	Yes, with quick-release button

NOTE: The Dough Spectrum Stand (ES07E93) is sold separately.

In the box

Dough Spectrum Black

Power adapter

Power cable

Color calibration report