

NEON 17 - Technical specifications

Physical Specifications	
Weight (monitor only)	4.5kg / 9.92lb
Dimensions (Control Unit)	413 x 253 x 71.4mm
Mount Points	Full ARRI compatible, 3 Left, 3 Right, 7 Top, 7 Bottom. Rear 100 x 100 VESA Mount
Feet	2 x Feet with 1/4" 20 with anti rotation pins
Security leash point	Kensington lock on rear and lock down point on feet
Rack mount	Via 3rd party shell/d with Vesa mount
Construction	
Body	Aluminium alloy chassis with ABS Polycarbonate back plate
Cooling	Active
Tally light	Rear
Function Button	Power button to lock screen and pair remote control devices
Power	
Operating Power	19v 180Watts
DC in	Multi pin input on rear
Display	
Touchscreen	No
Size	16.5"
Resolution	FHD 1920x1080 - 16:9
Viewing Angle	180 degrees Horizontal & Vertical (+/- 10%)
PPI	142
Bit Depth	10-bit (8+2 FRC)
Backlight	Dynamic Full Array Local Dimming (FALD) 128 Zones
Brightness	1000nits Full Screen brightness * (+/- 10%)
Black Level	Onits
LED	Wide Color Calibrated D65
Contrast Ratio	Dynamic 1,000,000 : 1
Aspect Ratio	16:9
Color Gamut	DCI P3
Technology	
AtomHDR Technology	Yes
3D LUT Support	Display only
HDR Monitoring Technology	HLG, PQ, Camera LOG
HDR Output Conversion	Log/HDR to HLG/ PQ
Gamma	Sony SLog / SLog2 / SLog3, Canon CLog / CLog2 / Clog3, ARRI Log CEI160 / LogCEI200 / LogCEI250 LogCEI320 / LogCEI400 / LogCEI500 / LogCEI640 / LogCEI800 / LogCEI1000 / LogCEI1280 / LogCEI1600, Panasonic Vlog JVC JLog1, / Log3GI2, RED Log3GI0 / RED LogFilm, FujiFilm F-log, Nikon N-Log PQ (HDR10), HLG
Gamut	Sony SGamut / SGamut3 / SGamut3.cine, Canon Cinema / DCI P3 / DCI P3+ Panasonic V Gamut, Arri Alexa Wide Gamut, Rec709, Bt2020, DCI P3, DCI p3 65 JVC LS300, Red DragonColor / DragonColor2 / RedColor2 / RedColor3 / RedColor4 / RedWideGamut
Module System	
Master Control Unit (MCU)	Yes
AtomXpansion Slot	Yes, Support for SDI and future modules
Video Input	
HDMI	1 x HDMI (2.0) 4k p60
SDI	2 x 12G SDI via included AtomX SDI module
Signal (camera dependent)	Uncompressed true 10-bit or 8-bit 422
LTC (Record Mode Only)	Wireless RF SYNC - Future FW Release
Video Preview Monitoring - HDR	For accurate full 10bit baseband video monitoring a 3rd party PCIe or Thunderbolt video I/O device with HDMI or SDI is required
Video Output	
HDMI	1 x HDMI (2.0)
SDI	1 x 12G SDI on Loop out from SDI, 2 x 12G SDI on playback via included AtomX SDI module
Signal	Uncompressed true 10-bit or 8-bit 422 (playback file dependent)
Audio In/Out	
Audio Quality	24/48kHz
Audio Codec	Linear PCM
HDMI	8ch 24-bit, input dependent
SDI	12ch 24-bit, input dependent
Analogue Audio in	3.5mm 2ch.
Headphone out	3.5mm 2ch.
Audio Out	Selected embedded stereo pair via 3.5mm headphone jack
Supported Codecs & Frame Rates (Record & Playback)	
Supported resolution & FPS	4k DCI: 23.98/24/25/29.9/30/50/59.94/60p 4k UHD: 23.98/24/25/29.9/30/50/59.94/60p 2k DCI: 23.98/24/25/29.9/30/50/59.94/60p via SDI only 1080i: - 50/59.94i 720p: 50/59.94/60p
CDNG	-
Apple ProRes Raw	-
Apple ProRes	LT, 422, HQ
Avid DNx	DNxHR HQX, HQ, SQ, LB, DNxHD 220x, 220, 145, 36
Playback	
Loop	Yes - full video file only
Apple ProRes	Yes - Recorded on Device or Exported from NLE (in .MOV with inear PCM audio)
Avid DNx	Yes - Recorded on Device or Exported from NLE (in .MOV with inear PCM audio)
Recording functions & Media	
Pre-roll record	Yes (HD 8s, 4K 2s)
Supported media	2.5" SSD/HDD compatibility depends on recording format, resolution and frame rate. Visit atomos.com/ drives for list of tested and approved drives
Media support	Master Caddy II / SSDmini
File Naming	Scene / Shot / Take , RED / Arri Via SDI
Supported Editing applications	All application supporting Apple ProRes / Avid DNx in .MOV wrapper
On Screen Tools	
Waveform	Yes
RGB Parade	Yes
Vector Scope	Yes
1 x Zoom	Yes
2 x Zoom	Yes
Focus Peaking	Color selected / color / Mono / edges only
False Color	Yes
Zebra	Yes
Isolate Color Channe	Blue Only
Cine Frame Guides	2.4:1, 2.35:1, 1.9:1, 1.85:1, 4:3
Safe Areas	Yes
Anamorphic Desqueeze	1.33x , 1.5x , 2x
Timecode	
HDMI	Yes
SDI	Yes
Time Of Day	Yes
Wireless RF	Future FW Release
Onboard Processing	
Pulldown removal	24/25/30pSF > 24/25/30p (2:2 pulldown) 60i > 24p (3:2 pulldown)
Deinterlace mode	Yes
4K UHD downscale for HD on output	Yes
DCI crop on output	Yes
Remote control	
HDMI	Auto HDMI Trigger Supported Protocols - Canon, Sony, Atomos Open Standard
SDI	SDI trigger camera selectable
LANC 2.5mm Jack	LANC control - Calibration on MCU
LE Bluetooth	Apple iOS 12 and above
What's in the box	
Accessories included	NEON 17 Monitor, NEON Master Control Unit, 2 x Feet (inc. mount screws x 2), NEON Quick Start Guide 1 x Master Caddy II (inc. screws), 19V AC Power Adapter with mount cage, AtomX SDI Expansion Module Monitor Protective Sheath, MCU Protective Sheath, Hex Wrench.
Optional extras	Atomos NEON 17" Case, Xrite iDisplay, Atomos USB A to Serial Calibration cable, AtomX USB-C Caddy
Warranty	
Standard	1 year. Extended to 3 yrs on product registration

Please note: Specifications are subject to change without notice.
All information correct at time of publishing.

*In ambient temperatures of < 25° C

NEON 24 - Technical specifications

Physical Specifications	
Weight (monitor only)	8.6kg / 18.95lb
Dimensions (Control Unit)	594 x 339.7 x 72.5mm
Mount Points	Full ARRI compatible, 3 Left, 3 Right, 7 Top, 7 Bottom. Rear 100 x 100 VESA Mount.
Feet	2 x Feet with 1/4" 20 with anti rotation pins
Security leash point	Kensington lock on rear and lock down point on feet
Construction	
Body	Aluminium alloy chassis with ABS Polycarbonate back plate
Cooling	Active
Tally light	Rear
Function Button	Power button to lock screen and pair remote control devices
Power	
Operating Power	19v260Watts
DC in	Multi pin input on rear
Display	
Touchscreen	No
Size	24"
Resolution	4K DCI 4096 x 2160 - 17:9
Viewing Angle	180 degrees Horizontal & Vertical (+/- 10%)
PPI	192
Bit Depth	True 10-bit
Backlight	Dynamic Full Array Local Dimming (FALD) 512 Zones
Brightness	1000nits Full Screen brightness * (+/- 10%)
Black Level	Onits
LED	Wide Color Calibrated D65
Contrast Ratio	Dynamic 1,000,000 : 1
Aspect Ratio	17:9
Color Gamut	DCI P3
Technology	
AtomHDR Technology	Yes, Dynamic
3D LUT Support	Display only
HDR Monitoring Technology	HLG, PQ, Camera LOG
HDR Output Conversion	Log/HDR to HLG/ PQ
Gamma	Sony SLog / SLog2 / SLog3, Canon CLog / CLog2 / CLog3 ARRI Log CEI160 / LogCEI200 / LogCEI250 LogCEI320 / LogCEI400 / LogCEI500 / LogCEI640 / LogCEI800 / LogCEI1000 / LogCEI1280 / LogCEI1600, Panasonic Vlog, JVC JLog1, / Log3G12, RED Log3G10 / RED LogFilm, FujiFilm F-log, Nikon N-Log PQ (HDR10), HLG
Gamut	Sony SGamut / SGamut3 / SGamut3.cine, Canon Cinema / DCI P3 / DCI P3+, Panasonic V Gamut, Arri Alexa Wide Gamut, Rec709 Bt2020, DCI P3, DCI p3 65, JVC LS300, Red DragonColor / DragonColor2 / RedColor2 / RedColor3 / RedColor4 / RedWideGamut
Module System	
Master Control Unit (MCU)	Yes
AtomXpansion Slot	Yes, Support for SDI and future modules
Video Input	
HDMI	1 x HDMI (2.0) 4k p60
SDI	2 x 12G SDI via included AtomX SDI module
Signal (camera dependent)	Uncompressed true 10-bit or 8-bit 422
Video Preview Monitoring - HDR	For accurate full 10bit baseband video monitoring a 3rd party PCIe or Thunderbolt video I/O device with HDMI or SDI is required
Video Output	
HDMI	1 x HDMI (2.0) 4k p60
SDI	1 x 12G SDI on Loop out from SDI, 2 x 12G SDI on playback via included AtomX SDI module
Signal	Uncompressed true 10-bit or 8-bit 422 (playback file dependent)
Audio In/Out	
Audio Quality	24/48kHz
Audio Codec	Linear PCM
HDMI	8ch 24-bit, input dependent
SDI	12ch 24-bit, input dependent
Analogue Audio in	3.5mm 2ch.
Headphone out	3.5mm 2ch.
Audio Out	Selected embedded stereo pair via 3.5mm headphone jack

Supported Codecs & Frame Rates (Record & Playback)	
Supported resolution & FPS	4k DCI: 23.98/24/25/29.9/30/50/59.94/60p 4k UHD: 23.98/24/25/29.9/30/50/59.94/60p 2k DCI: 23.98/24/25/29.9/30/50/59.94/60p via SDI only 1080p: 23.98/24/25/29.9/30/50/59.94/60/100/120p 1080i: - 50/59.94i 720p: 50/59.94/60p
CDNG	-
ProRes Raw	-
Apple ProRes	LT, 422, HQ
Avid DNx	DNxHR HQX, HQ, SQ, LB, DNxHD 220x, 220, 145, 36
Playback	
Loop	Yes - full video file only
Apple ProRes	Yes - Recorded on Device or Exported from NLE (in .MOV with inear PCM audio)
Avid DNx	Yes - Recorded on Device or Exported from NLE (in .MOV with inear PCM audio)
Recording functions & Media	
Pre-roll record	Yes (HD 8s, 4K 2s)
Supported media	2.5" SSD/HDD compatibility depends on recording format, resolution and frame rate. Visit atomos.com/ drives for list of tested and approved drives
Media support	Master Caddy II / SSDmini
File Naming	Scene / Shot / Take , RED / Arri Via SDI
Supported Editing applications	All application supporting Apple ProRes / Avid DNx
On Screen Tools	
Waveform	Yes
RGB Parade	Yes
Vector Scope	Yes
1 x Zoom	-
2 x Zoom	Yes
Focus Peaking	Color selected / color / Mono / edges only
False Color	Yes
Zebra	Yes
Isolate Color Channel	Blue Only
Cine Frame Guides	2.4:1, 2.35:1, 1.9:1, 1.85:1, 4:3
Safe areas	Yes
Anamorphic Desqueeze	1.33x , 1.5x ,2x
Timecode	
HDMI	Yes
SDI	Yes
Time Of Day	Yes
Wireless RF	Future FW Release
Onboard Processing	
Pulldown removal	24/25/30pSF > 24/25/30p (2:2 pulldown) 60i > 24p (3:2 pulldown)
Deinterlace mode	Yes
HD to 4k input to display	Yes
4K UHD downscale for HD on output	Yes
DCI crop on output	Yes
Remote control	
HDMI	Auto HDMI Trigger, Supported Protocols - Canon, Sony, Atomos Open Standard
SDI	SDI trigger camera selectable
LANC 2.5mm jack	LANC control - Calibration on MCU
LE Bluetooth	REQUIRES Apple iOS device running version 12 and above
What's in the box	
Accessories included	NEON 24 Monitor, NEON Master Control Unit, 2 x Feet (inc. mount screws x 2), NEON Quick Start Guide, 1 x Master Caddy II (inc. screws), 19V AC Power Adapter with mount cage, AtomX SDI Expansion Module, Monitor Protective Sheath, MCU Protective Sheath, Hex Wrench.
Optional extras	Atomos NEON 24" Case, Xrite iDisplay, Atomos USB A to Serial Calibration cable, AtomX USB-C Caddy
Warranty	
Standard	1 year. Extended to 3 yrs on product registration

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