

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, / 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 |
| 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 Codex & 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) |
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| 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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