



Clifton Cameras Product Specification

ATOMOS Ninja V + Full Spec

Physical

Specifications

Dimensions (W x H x D mm)	151 x 91.5 x 31 mm
Weight	360 g / 12.7 oz
Mount points	Anti-rotational 3/8-16 screw mount points, 1/4-20 screw mount adaptor installed. 1x top and 1x bottom

Environmental

Ambient operating temperature	Up to 40 Degrees Celsius
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Construction and Control

Body	Aluminium alloy chassis with ABS Polycarbonate back plate
Cooling	Heat Sink and actively controlled fan with user selectable modes in menu
Tally light	Rear and front
Multi-function button	Power / lock Screen
AtomXpansion slot	Yes

Power

Input voltage	5.8 - 7.2V (Battery)
Operating power	10-22W
Compatible batteries	NP-F L series and supporting accessories
Built in battery	No
Battery Run time (Record)	5200mAh - up to 2hrs (monitor & record 4K 60p) 7800mAh - up to 3hrs (monitor & record 4K 60p)
Battery Run time (Monitor only)	5200mAh - up to 2hrs (monitor & record 4K 60p). 7800mAh - up to 3hrs (monitor & record 4K 60p)
Continuous power	Enabled by optional AtomX SYNC Expansion Module
DC in connector	Via DC Jack on Battery eliminator
Dtap	Via Battery Eliminator and optional D-Tap to DC cable

Display

Touchscreen	SuperAtom IPS panel (capacitive touch) calibration to Rec.709 with optional calibration unit
Size	5.2"
Resolution	1920 x 1080
PPI	423
Bit depth	10Bit (8+2 FRC)
Backlight Type	Edge lit
Brightness (cdm2 / nits)	1000 +/- 10%
Aspect ratio	16:9
De-interlace mode	I > P and PSF > P
Color Gamut	Rec.709



Calibration support	Atomos Calibrator with Calibrite ColorChecker Display Pro or ColorChecker Display Plus (Retail)
Color Pipeline	
Gamma	Sony SLog / SLog2 / SLog3, Canon CLog / CLog2 / Clog3, ARRI Log CEI160 / LogCEI200 / LogCEI250 / LogCEI320 / LogCEI400 / LogCEI500 / LogCEI640 / LogCEI800 / LogCEI1000 / LogCEI1280 / LogCEI1600, Nikon N-Log, Panasonic V-Log, JVC J-Log1, Olympus OM-Log400 / Flat, Lecia L-Log, Z Cam Z-Log2, RED LogFilm / RED Log3G10 / RED Log3G12, FujiFilm F-log, PQ (HDR10), HLG
Gamut	Sony SGamut / SGamut3 / SGamut3.cine, Canon Cinema, DCI P3 / DCI P3+, Nikon NLog, Panasonic V-Gamut, Arri Alexa Wide Gamut, Rec709, BT.2020, FujiFilm F-Gamut, JVC LS300, RED WideGamut / RED DragonColor / DragonColor2 / RED Color2 / RED Color3 / RED Color4 Sony SGamut / SGamut3 / SGamut3.cine / Canon Cinema / DCI P3 / DCI P3+ / BT2020 Panasonic V Gamut Arri Alexa Wide Gamut Rec709 JVC LS300 Red DragonColor / DragonColor2 / RedColor2 / RedColor3 / RedColor4 / RedWideGamut
3D LUT Display	.Cube Format
3D LUT Down Stream	Loop out
3DLUT 50/50	Yes
Monitoring Modes	Native / HLG / PQ / 3D LUT
HDR output Conversion	Log / HDR to HLG / PQ / Dolby Vision
Video Input	
HDMI	1 x HDMI (2.0) 4k p60
HDMI RAW	Apples ProRes RAW up to 8k
SDI	2 x 12G SDI Backward compatible via optional AtomX SDI module
SDI RAW	Optional with AtomX SDI module + SDI RAW activation
Bit Depth	8/10-Bit Video / RAW up to 12Bit
Video Chroma Subsampling	420 and 422
HDCP copy protection	Not supported
Metadata	
HDMI	RAW - white balance, exposure index, shutter speed/angle, iris F-stop, ISO, gamma, gamut
SDI	File name from Arri & RED via Optional AtomX SDI Module
Video Output	
HDMI	1 x HDMI (2.0) 4k p60
SDI loop out	Optional Via AtomX SDI module
SDI Play out	Optional Via AtomX SDI module
Video Chroma Subsampling	4:2:2
Bit Depth	10-bit Video / 12-bit RAW
Web Streaming	
USB UVC	Optional Via Connect 4k
Video Signal Conversion	
HDMI to SDI	Optional Via AtomX SDI module
SDI to HDMI	Optional Via AtomX SDI module



Audio In/Out

Audio Quality	24-bit 48kHz
Audio Codec	PCM
HDMI	8ch 24-bit, input dependent
SDI	12ch 24-bit, input dependent
Analogue Audio in	3.5mm 2ch.
Analogue Audio Out	3.5mm 2ch.
Headphone out	3.5mm 2ch.

Timecode / Sync

Embedded	HDMI and SDI
Time of day	Yes, Time and Date
LTC	via 3.5mm audio Jack input (Requires post processing)
Wireless SYNC	Via Optional AtomX SYNC Module

Resolution and Frame Rates (Record, Monitor & Playback)

8k	RAW Only up to 30p via HDMI
6k	RAW Only up to 30p via HDMI and SDI (Camera dependent 5.9k HDMI and 5.7k SDI)
5k	RAW Only up to 30p via HDMI
4k DCI	23.98/24/25/29.9/30/50/59.94/60p - HFR 100/120 via RAW over HDMI & SDI on selected cameras
4k UHD	23.98/24/25/29.9/30/50/59.94/60p
2K DCI 2046 x 1080	Optional via AtomX SDI module
Anamorphic	3.5k: RAW up to 60p (from supported cameras only)
FHD 1920 x 1080 Progressive	23.98/24/25/29.9/30/50/59.94/60/100/120p
FHD 1920 x 1080 PsF	converted to P and looped out PsF
FHD 1920 x 1080 Interlaced	23.98/24/25/29.9/30/50/59.94/60i
1280 x 720p	50/59.94/60p

Recording CODEC

Apple ProRes RAW	ProRes RAW, ProRes RAW HQ (Free activation via my.Atomos.com)
Apple ProRes	LT, 422, 422HQ
Avid DNxHD	DNxHD 220x,220,145,36 (Free activation via my.Atomos.com)
Avid DNxHR	LB, SQ, HQ, HQX (Free activation via my.Atomos.com)
H.265	LQ, MQ, HQ in 8/10Bit, 422 and 420 (Free activation via my.Atomos.com)

Playback

Playlist	Yes, Create custom play lists from full or sub clips
Loop	Yes, with user customisable in / out markers
Apple ProRes Raw	Yes, recorded clips
Apple ProRes	Yes, with Linear PCM audio
Avid DNx	Yes, with Linear PCM audio
H.265	Yes, recorded clips with Linear PCM audio

Recording



functions

Pre-roll record	Yes (HD 8s, 4K 2s) - Not available in RAW
Timelapse	Yes

Multi Input / Switching

SDI A/B toggle	Via optional AtomX SDI module
Multiple HDMI input	Via optional AtomX CAST module

Supported media

Master Caddy I	Not compatible
SSDmini	Native Size and Fit
CFAST II	Supported cards via optional SSDmini CFAST II Adaptor
File Naming	Unit Name - Scene/Shot/Take
File System	ExFAT

On screen tools

Waveform	Yes, 3 size / Position
RGB parade	Yes, 3 size / Position
Vector scope	Yes, 2 size / Position
1 x Zoom	Yes. 1:1 Pixel mapping for 4k
2 x Zoom	Yes
Focus peaking	Color selected / threshold setting / color / mono / edges only
False colour	Yes, with Scale
Zebra	Yes, Adjustable
Isolate color channel	Blue Only
Cine Frame Guides	2.4:1, 2.35:1, 1.9:1, 1.85:1, 4:3
Social Frame guides	9:16, 1:1, 1.91:1, 4:5
Safe areas	Action and Graphic
Grid markers	9 grid
Anamorphic desqueeze	1.25x 1.33x , 1.5x ,1.8x ,2x
Display Flip	Vertical Only

Onboard Signal

Processing

Pulldown Removal	24/25/30pSF > 24/25/30p (2:2 pulldown), 60i > 24p (3:2 pulldown)
4K UHD Downscale for HD	Loop out - 4K UHD to FHD
DCI Crop	Loop out - 17:9 to 16:9 Crop

Remote control

HDMI	Auto HDMI Trigger, Supported Protocols - Canon, Sony, Atomos Open Standard
SDI	SDI trigger camera selectable
Serial 2.5mm Jack	LANC control and calibration via optional USB to serial cable
Bluetooth LE	Via AtomRemote app (requires AtomX SYNC module)
Wireless RF	Via optional AtomX SYNC module

External Device Control

Serial 2.5mm Jack	Camera control for supported cameras via Optional USB to Serial Cable
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Bluetooth LE Via optional AtomX SYNC module to compatible devices

Wireless RF Via optional AtomX SYNC module to compatible devices

Supported Applications

XML Cut tag EDL in FCPX XML

Apple ProRes RAW Apple FCP, Adobe Premier, After Effects, Avid Media Composer, GrassValley Edius, Assimilate Scratch, Baselight Film Light.

Video Codecs All Applications with support for Apple ProRes, H.265 and Avid DNX in .MOV wrapper

What's in the box

Accessories included Ninja V +, EVA Carry case, 5" Protective Monitor sleeve, Battery eliminator, international DC power supply, 1x MasterCaddy II and QuickStart Guide

Optional extras Sunhood, DC to D-Tap, Power Kit, HDMI Cables, USB to Serial cable, AtomX SYNC, AtomX SDI, AtomX CAST modules, UltraSync ONE, UltraSync Blue

Warranty

Standard 1 year. Extended to 3 years on product registration