



# Clifton Cameras Product Specification

## Atomos Ninja Ultra

### Specifications

#### Physical Specifications

Dimensions (W x H x D mm):	151 x 91.5 x 31mm
Weight:	360g / 12.7oz
Rack height	
Mount points:	1 x anti-rotation 1/4-inch / 3/8-inch top and bottom
VESA Mount	
Rack mount	
Dual Display	
Dual Recorder	

#### Environmental

Ambient operating temperature:	Up to 40 degrees Celsius
Storage temperature	
Relative humidity	

#### Construction & Control

Body:	Aluminium with ABS plastic
Cooling:	Actively controlled fan and heat sink
Tally light:	Rear and front
Control Buttons	
Multi-function button:	Power / lock screen
AtomXpansion slot:	Yes
Master control unit (MCU)	

#### Power

Input voltage:	6.2V to 16.8V
Operating power:	5.8-7.2v (Battery) or min 30W via USB C PD cable



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Compatible batteries:	NPF L series
Built in battery:	No
Battery voltage	
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	
Continuous power	
DC in connector:	Via DC jack on battery eliminator
DTAP:	Via battery eliminator and optional DTap to DC cable
DC out	
<b>Display</b>	
Touchscreen:	SuperAtom IPS panel (capacitive touch)
Size:	5.2-inch
Resolution:	1920 x 1080
Viewing angle	
Screen coating	
PPI:	427
Bit depth:	10-bit (8+2 FRC)
Backlight Type:	Edge lit
Brightness (cdm2 / Nits):	1000
Black Level (cdm2 / Nits)	
Aspect ratio:	16/9
De-interlace mode	
Color Gamut:	Rec.709
Calibration support: ColorChecker Display Plus	Atomos Calibrator with Calibrite ColorChecker Display Pro &
<b>Color Pipeline</b>	
Gamma:	Sony SLog / SLog2 / SLog3, Canon CLog / CLog2 / Clog3, Arri Log CEI160 / LogCEI200 / LogCEI250 / LogCEI320 / LogCEI400 / LogCEI500 / LogCEI640 / LogCEI800 /



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	LogCEI1000 / LogCEI1280 / LogCEI1600, Panasonic Vlog, JVC JLog1, Red LogFilm / Log3G10 / Log3G12, FujiFilm Flog, PQ (HDR10), HLG, Nikon N-Log
Gamut:	Bt2020, DCI P3, PDCI p3 65  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 LU+A76T 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
<b>Video Input</b>	
HDMI:	1 x HDMI (2.0) 4Kp60
HDMI RAW:	Apples ProRes RAW up to 8Kp30 from compatible cameras
SDI:	Optional Via Atomos Connect module
SDI RAW:	Optional Via Atomos Connect module
RJ45 / Network	
Wi-Fi	
USB	
Bit Depth:	8/10-bit video / RAW up to 16-bit
Video Chroma Subsampling:	4:2:2
HDCP copy protection:	Not supported

**Metadata**



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HDMI:  
stop, ISO, gamma, gamut

RAW - white balance, exposure index, shutter speed/angle, Iris F

SDI:

File Naming from ARRI, RED, Sony and Canon cameras

External input

Closed captioning

### **Video Output**

HDMI:

1 x HDMI (2.0) 4Kp60

SDI loop out

SDI Play out

RJ45 / GigE:

Optional Via Atomos Connect module

Wi-Fi 6E:

Optional Via Atomos Connect module

Multiview

OS overlays

Video Chroma Subsampling:

4:2:2

Bit Depth:

10-bit video

Pattern Generator

### **Web Streaming**

USB UVC:

Optional Via Atomos Nexus 4K or AtomX Cast

RJ45 / GigE:

Optional Via Atomos Connect module

RTMP / S:

Optional Via Atomos Connect module

RTSP

SRT

### **Video Signal Conversion**

HDMI to SDI:

Optional Via Atomos Connect module

SDI to HDMI:

Optional Via Atomos Connect module

### **Audio In/Out**

Audio Quality:

24/48kHz

Audio Codec:

PCM

HDMI:

8ch 24-bit, input dependent

SDI:

12ch 24-bit, input dependent



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Analogue Audio in:	3.5mm 2ch.
Analogue Audio Out	
Speakers	
Headphone out:	3.5mm 2ch.
Audio input delay:	User definable from menu

#### **Timecode / Sync / Control**

Embedded:	HDMI and SDI
Time of day:	Yes, Time and Date
Reference input	
LTC:	Optional Via Atomos Connect module
Genlock:	Optional Via Atomos Connect module
Wireless AirGlu RF Server and Client:	Optional Via Atomos Connect module
Wireless AirGlu BT Server:	Optional Via Atomos Connect module

#### **Resolution & Frame Rates (Record, Monitor & Playback)**

##### Supported base resolution & FPS

8K:	RAW Only up to 30p via HDMI
6K:	RAW Only up to 60p via HDMI
5K	
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 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

SD PAL / NTSC

#### **Recording CODEC**

CDNG



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Apple ProRes Raw:	ProRes RAW, HQ
Apple ProRes:	LT, 422, 422HQ
Avid DNxHD:	DNxHD 220x,220,145,36
Avid DNxHR:	LB, SQ, HQ, HQX.
H.265:	LQ,MQ,HQ,XQ in 8/10Bit, 4 2 2 and 4 2 0
H.264	

### **Playback**

Playlist:	Yes, Create customer play lists from full or sub clips
Loop:	Yes, with user customisable in / out markers
CDNG	
Apple ProRes Raw:	Yes, recorded clips
Apple ProRes:	Yes, with Linear PCM audio
Avid DNx:	Yes, with Linear PCM audio
H.265:	Yes
H.264	

### **Recording functions**

Pre-roll record:	Yes (HD 8s, 4K 2s) - Not available in RAW
ISO Record	
Switched Program Record	
Timelapse:	Yes
RAW to Video Record	
Simultaneous proxy record:	Yes
4k to HD	

### **Multi Input / Switching**

SDI A/B toggle	
Dual Input display	
Multiple SDI input	
Multiple HDMI input:	Optional via AtomX Cast
Multiview Display:	Optional via AtomX Cast



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Multiview Output: Optional via AtomX Cast

Picture in Picture (PIP): Optional via AtomX Cast

Picture and Picture (PAP)

Graphic overlays: Optional via AtomX Cast

Media pool storage

Input transitions: Optional via AtomX Cast

Input Resolution Processing

Input Image processing

Keyer

### Supported media

Master Caddy I: Not compatible

Master Caddy II: For 2.5-inch hard drives in MasterCaddy II

Master Caddy III: For 2.5-inch hard drives in MasterCaddy III (needed for Atomos Connect)

SSDmini: Native size and fit

CFAST II: With supported cards via optional SSDmini CFAST II Adaptor

SD

USB

Network

File Naming: Unit Name - Scene/Shot/Take

File System: ExFAT

### On screen tools

MultiScope Analysis View

Waveform: Yes, 3 size / Position

Histogram

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

4 x Zoom



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Focus peaking:	Colour selected / threshold setting / colour / Mono / edges only
Atomos False color:	Yes, with Scale
ARRI False color	Yes
EL Zone:	Yes
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, 191:1, 4:5
Onion Skin:	Yes
Safe areas:	Action and Graphic
Grid markers:	9 grid
Anamorphic desqueeze:	1.25x, 1.33x, 1.5x, 1.6x, 1.65x, 1.79x, 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 with Atomos Connect
Serial 2.5mm Jack:	LANC control and calibration via optional USB to serial cable
AirGlu BT:	Optional Via Atomos Connect module
AirGlu RF:	Optional Via Atomos Connect module
USB	
RJ45	





RS422

**External Device Control**

Serial 2.5mm Jack: Camera control for supported cameras via Optional USB to Serial  
Cable

Bluetooth LE: Optional Via Atomos Connect module

Wireless RF: Optional Via Atomos Connect module

USB

RJ45

**Supported Applications**

XML: Cut tag EDL in FCPX XML

Apple ProRes Raw: Apple FCPX, Adobe Premiere, After Effects, Avid Media  
Composer, GrassValley Edius, Assimilate Scratch, Baselight Film Light.

Video Codecs: All Applications with support for Apple ProRes and Avid DNx in  
.MOV wrapper

**What's in the box**

Accessories included: Ninja Ultra, 1 x battery eliminator, 1 x USB C PD to 2.1mm DC  
power lead and QuickStart Guide

Software included

Optional extras: Accessory Kit 5-inch Vers II, Sunhood, DC to DTap, Power kit,  
HDMI cables, USB to serial cable,

**Compatible with**

List product

**Warranty**

Standard: 1 year. Extended to 2 years on product registration. Atomos  
Care360 available as subscription

**Target use / User**

Mirrorless cameras: Y

Compact Cinema: Y

Cinema: Y

Director monitor: Y

Games Capture: Y

Streaming: Y

Mixer / switcher / ProAV: Y



Rack / OB

DIT / Video Village

Pro Video: Y

Gimbal / Crane: Y

Editor / Colourist

Hobbyist: Y

Wedding: Y