



# SHOGUN STUDIO

WORLD'S FIRST ALL-IN-ONE 4K/HD, 2CH, DUAL 7" 3RU RACK  
RECORDER, MONITOR AND PLAYBACK DECK.



PRODUCT INFO SHEET - JUNE 2015



# REINVENT THE RACK



Harnessing the latest recorder, monitor and playback technology with class leading Atomos usability and affordability, the Shogun Studio has everything needed for Live Event, Studio, On-set and Broadcast professionals.

1. 4K, 1080p60 recording to popular professional codecs.
2. Utilize the 2 channels for dual codec, dual resolution recording
3. Scheduled playback and record via Ethernet, Serial & on-screen.
4. Class leading monitors & test measurement for perfect 4K viewing & set up.
5. Powerful & intuitive AtomOS offers one touch simplicity for any operator
6. Utilize the Atomos Master Caddy for reliable, affordable open standard media
7. Built-in HDMI and SDI down convert and down scaling from 4K to 2K/HD to match your infrastructure
8. Dual Redundant Power Supplies for mission critical reliability

## PRO AV

With play list functionality & control via RS422, Ethernet or on screen, the Shogun Studio is an affordable 4K & HD play out engine for video walls, signage and projection.

Additionally, with dual channel play out capability over HDMI or 1.5/3/6/12G SDI, Genlock and 4K to HD down scaling the Shogun Studio can be used to provide scheduled, synchronized 4K, 2K and HD simultaneous play out to high resolution projector, jumbotron or signage systems.

## MOBILE PRODUCTION

With rack space at a premium and resolution on the rise, Mobile Production professionals will welcome the ability to record, monitor, test, measure, convert and play out from a single 3RU device.

Dual codec, dual resolution recording maximises the flexibility in mobile situations. Combine the ability to record 4K resolution ISO feeds with a hardware down converted HD proxy version, record ProRes on one channel and DNxHR on the other or even playback and convert from one codec/resolution combination to another. Connecting to infrastructure is simple as well with built-in HDMI and SDI conversion that is bi-directional. Shogun Studio is ready for the 4K future, but 4K acquisition doesn't have to mean 4K delivery – when 4K can be achieved on a HD budget and you have the capability to downscale or record codec to suit you have the perfect product now and for the future in the tight space of Mobile production.

## EVENT

Shogun Studio solves many of the problems faced by multi camera events with long run times. Our Master Caddy delivers affordable & reliable media while features like time lapse, pre-roll cache & 4K/HD simultaneous recording make this the perfect choice for Event professionals.

Our open approach with media means you record up to 2.5 hours of 4K 30p or 5 hours of 1080p60 onto a single 1TB SSD, keeping media costs less than \$150 per hour you can also link the two channels to utilize continuous recording. The Shogun Studio has the ability to then monitor the input, view waveforms/scopes, setup complex time lapses and simultaneously record a proxy - under pinned with the safe guard of pre-roll cache recording (8 sec for HD / 2 sec for 4K) to ensure you never miss the action. You can even record presentations from PC, MAC and Mobile devices.

## SECURITY

In security applications a wide angle lens on a 4K camera can mean a single camera replaces the equivalent of 4 x HD cameras. The Studio Shogun, with its long record time, time lapse, record scheduling and monitor zoom capability makes it the perfect weapon for 4K security applications.

In ProRes LT at 25 FPS the Shogun Studio can record 6 hours of Ultra High Definition 4K per channel, this not only provides superior resolution but also an increase in the number of frames captured per second providing a more finite approach to high resolution security recording. In applications where the additional frames aren't important, the timelapse functionality can be set up to record specific frames at specific points over a specified duration. All of this can be reviewed on the dual 7.1" Full HD monitors and easily zoomed in for closer inspection of areas of interest.

## ON SET / DIT

Shogun Studio in the rack of a DIT cart arms the set with the fastest path from acquisition to editing by recording direct to 10-bit 422 ProRes, DNxHR and RAW. The 3RU chassis provides dual record channels and class leading monitoring with test measurement for the highest quality 4K/2K/HD viewing and setup.

For colour analysis, the RGB and Vector scopes provide real time feedback and can be overlaid in several positions on the colour accurate 7.1" 325ppi Full HD monitor. You can double check focus pulls with 2:1 zoom, focus peaking and edges only view and with 8 LUT slots on board and an infinite number on disk previewing the final result is easy. These decisions can be made with the confidence you are using a 100% sRGB factory calibrated monitor that can be calibrated over time using the optional Spyder unit. Outside of monitoring, DIT's can start the editing process on set with favourite and reject tagging to start the formation of a play list and XML.

## SHOGUN STUDIO SPECIFICATIONS

<b>Construction</b>	
Tally light	Yes, front
Dimensions (w x h x d)	19"x 5.2" x 8", 482 x 132 x 202mm
Rack Height	3RU
Rack ears	Yes (detachable)
Weight	130 oz / 3.7kg
Operating Temperature	-30 to 40C
Cooling	Advanced Heatpipe and Ultra Quiet Fans
Construction	3RU Steel chassis w/ detachable rack ears
<b>Screen</b>	
Screen size	Dual capacitive touch 7.1"
Screen Resolution	1920 x 1200
Screen Type & Touch Control	LCD IPS Calibratable
PPI (Pixels per square inch)	323
Viewing Angle (degrees)	179
Screen Colour Gamut	100% sRGB calibrated to Rec 709 with infinite 3D LUT conversion including BT-2020, DCI-P3 & other LUT's
Screen Colour Depth	8-bit
Brightness (Nits)	400
Contrast Ratio	800:1
Colour accuracy on Viewing Angle	100% sRGB accurate through 179 degrees
<b>Drive</b>	
Drive Type	Qualified 2.5" drives in supplied Master Caddy (SSD, HDD or CFast)
Drive slots	2 x 1 per channel
Hot Swappable drives	Yes (between channels)
Drive File System	EXFAT, FAT 32 compatible
Drive connections	SATA
<b>Control</b>	
Control type	Intuitive AtomOS Capacitive Multi Touch with super fast custom touch controller
Front panel buttons	Power and screen lock per monitor
Jog Shuttle	On Screen
RS422 Remote	Yes
Ethernet Remote	Yes (AMP)
Scheduling	Yes - Rec/Play
Gang Control	Yes
<b>Monitoring</b>	
LUT Support	3D LUT in .CUBE format up to 8 custom LUT's loaded internally infinite loaded from the disk.
LUT on Output	On screen, on output and available to burn in to recorded clip
Image zoom	1:1, 2:1 zoom, touch navigation in zoom
Focus peaking	Focus peaking (5 colours), Black & White with colour peaking, Focal Plane edge outline.
Zebra	Yes
Enhanced Edges	Yes

False colour	Yes
Safe Area / Grid Lines	Yes
Blue Only	Yes
LUMA Parade	Yes
Vectorscope / Vectorscope Zoom	Yes / Yes
RGB Parade	Yes
On Screen Audio Meters	Yes
<b>Video IO</b>	
HDMI in/out	1.4b up to 12-bit 422
HDMI bit depth	Up to 12-bit (8-bit recorded as 10-bit and true 10-bit from 10-bit sources)
HDMI & SDI Loop Out	Yes
Loop Out Processing	Down Convert, 3D LUT
HDMI <-> SDI Conversion	Yes - always on
SDI in/out	1 x 1.5/3/6/12G
Timecode	LTC input and loop through, SDI, HDMI, Internal Rec Run, Time of Day and Auto-Restart
Genlock input	Genlock input for playback Black Burst & Tri Sync
USB Port	USB for Ethernet Controller update
<b>Record Options</b>	
Time Lapse	Yes, up to 10 sequences with scheduling
4K to HD down scale	Loop out and Playback
Trigger & Timecode for Record	LTC input and looptrough, SDI, HDMI, LANC, Timecode, Custom SDI
Meta data tagging	Yes
Pre Roll	Up to 8 secs (HD), 2 secs for (4K)
Record Simultaneous	4K ProRes & 2K/HD ProRes 4K DNxHR & 2K/HD DNxHD 4K RAW & 2K/HD RAW 2 x 4K/2K/HD ProRes, DNxHR/HD & RAW RAW to ProRes/DNxHR
Convert or Duplicate Files	4K Avid to 4K ProRes 2K/HD Avid to 2K/HD ProRes 4K ProRes to 2K/ProRes 4K ProRes to 2K/HD Avid 4K Avid to 2K ProRes
<b>Power</b>	
Dual Redundant Power Supplies	IEC c14 PSU FCC, CE, CCC UL, PSE (external Adaptor)



## SHOGUN STUDIO SPECIFICATIONS

Audio IO	
Maximum No. Audio Tracks	14 Channels
Max Audio Quality	24-bit, 48kHz
Embedded Audio	12 channels embedded audio
Analogue Audio Input	2 x XLRs on rear (per record channel) Line mic 48V Phantom
Analogue Audio Output	2 x XLRs on rear (per record channel)
Audio control	Touch screen, channel selection, adjust and headphone solo
Audio level monitoring	All channel PPM screen over lay or PPM bottom corner or just stereo PPM
Headphones	3.5mm jack
Video	
Max colour resolution	4:2:2
Max bit depth	10-bit
Resolutions*	720p 50/60, 1080i 50/60, 1080p 24/25/30/50/60/120, 4K-UHD 24/25/30p, 4K-DCI 24, 25/30p
Codecs	ProRes HQ, 422, LT DNxHR - HQX, HQ, SQ, LB DNxHD - 220,145,36 HD Uncompressed V210 DNG Files
File type / wrapper	.MOV, DNG
Pull Down	24/25/30pSF > 24/25/30p (2:2 pull-down) 60i > 24p (3:2 pulldown)
Resolutions from RAW	120 (4K, UHD, HD), 60 (4K, UHD, HD)
RAW Formats	FREE: C500, Sony FS, AJA, Arri to ProRes, DNxHR, DNG, Uncompressed
Playback Options	
Additional Playback Options	Loop with in and out markers
Essemble Edit	via tags for playlist
Playlist Run Down	Yes (Favorites, select or both)
Image analysis on playback e.g. scopes	Yes
I&O point marking	Yes
Customer tagging and Logging	Yes
Clip Selection tagging	Yes
3rd Party Playback from NLE's or other devices	Yes - ProRes / DNxHR / DNxHD only
Accessories	
In the box	Shogun Studio, AC IEC C14 Cable, 5 x Master Caddy, Docking Station, Detachable rack ears
Optional Accessories	CFast to SATA adapter, Spyder calibration unit
Support	
Warranty	1 year standard 3 years if registered

