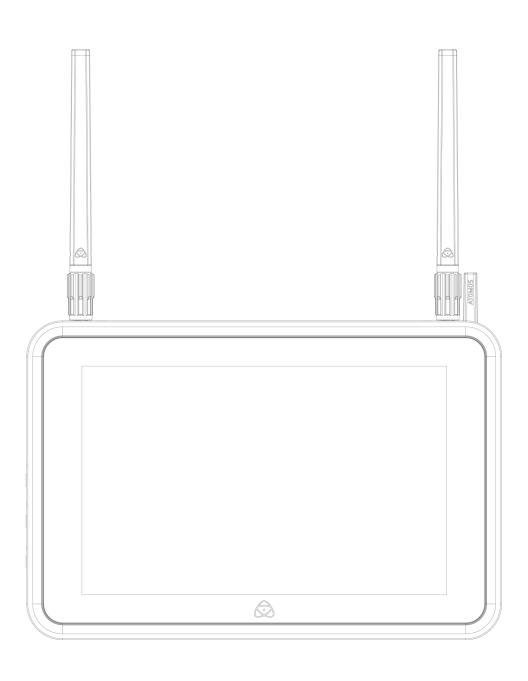


# SHOGUN CONNECT

**USER MANUAL** 



This user manual assumes you are using AtomOS firmware version 10.80 or later.

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## **Introduction**

Thank you for choosing the Atomos SHOGUN CONNECT 7 inch HDR Monitor-Recorder. With SHOGUN CONNECT you can record up to 8Kp30 and 4Kp120 in Apple ProRes RAW, and 4Kp60 and HDp120 video, and integrate these new formats seamlessly into the timeline of your existing ProRes RAW or ProRes projects. Rounding out the powerful codec arsenal is Apple ProRes, Avid DNx and H.265, which provides a highly efficient compressed codec option.

SHOGUN CONNECT also includes ATOMOS AirGlu™ wireless sync timecode technology for direct, long-range communication between devices, multiple power options to accommodate a variety of on-set scenarios, Wi-Fi 6 and Gigabit Ethernet. These features allow you to transform professional cinema, mirrorless, and DSLR cameras into fully connected devices that support a range of advanced cloud-based workflows. For more information on cloud-based workflows refer to the section.

Featuring a super high-resolution screen in a lightweight aluminium alloy chassis and an array of essential production tools including waveform monitoring, vectorscope, focus assist and the world's leading support for HDR monitoring; SHOGUN CONNECT will give you the creative and commercial advantage you've been looking for.

This user manual will get you up to speed with all the amazing features packed into the SHOGUN CONNECT that will assist you during a shoot and speed up your workflow on set and in post production.

Stay up-to-date with the latest information and software by registering your product today.

www.atomos.com/support

## **Safety Instructions**

The SHOGUN CONNECT is designed to a high standard but there are some things you should be aware of to prolong the life of the unit and for your own safety.

#### Using the SHOGUN CONNECT safely

Although the SHOGUN CONNECT is very lightweight compared to all the devices it replaces, it is still a solid object that could cause injury if misused.

- Always make sure that the SHOGUN CONNECT is mounted securely and is unable to fall onto anyone nearby. This is especially important when there are children present who might be tempted to pull on cables.
- Always ensure that cables that run to the SHOGUN CONNECT are clearly visible and do not present a trip hazard.
- Do not place on uneven or unstable surfaces.
- Do not insert anything but a Master Caddy II, Master Caddy III, AtomX SSDmini or CFast II adapter in the drive slot on the rear of your SHOGUN CONNECT.
- Do not touch the SHOGUN CONNECT screen with sharp, metallic or abrasive objects.
- Do not expose to strong electrical or magnetic fields.
- Do not expose to liquids, rain or moisture.
- Do not dispose of SHOGUN CONNECT in municipal waste and do not incinerate it, always follow local regulations for safe disposal.

#### Care of disk drives

Spinning disks and SSDs are very sensitive to damage from static electricity. Please observe all the usual electrostatic discharge (ESD) precautions when handling them.

#### **HDMI** cables

Please remember that almost all HDMI cables do not use locking connectors and will simply pull out if they are jerked or tripped over. Please ensure your cables make a secure connection and avoid flexing them excessively to maintain reliability.

## **Notifications**

Contains FCC ID: PD9AX210NG | AYV-AGLU02

**Contains IC ID**:1000M-AX210NG | 10427A-AGLU02

#### **USA**

WARNING: This product contains the chemical lead (Pb) which is known to the State of California to cause cancer. For more information, visit p65warnings.ca.gov

 CAUTION: Regulations of the FCC and FAA prohibit airborne operation of radio-frequency wireless devices because their signals could interfere with critical aircraft instruments.

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Image credit on SHOGUN CONNECT display and all other instances: <a href="https://unsplash.com/@freestocks">https://unsplash.com/@freestocks</a>

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REGISTRATION + WARRANTY UPGRADE Register within 12 months of purchase date to upgrade your standard 1 year warranty to a 3 year warranty. Visit: my.atomos.com.

Registered users receive updates of all AtomOS updates upon release.

## Registering your product

Register your SHOGUN CONNECT at <a href="my.atomos.com">my.atomos.com</a> within twelve months of purchase to upgrade to a 3 year warranty. Registering your product ensures you receive communication on all future updates.



#### my.atomos.com

Activate codecs/features for registered products, learn from tutorials and download user manuals and firmware updates.

my.atomos.com/account



#### **ATOMOS Support**

Download User Manual, technical specifications and firmware updates, calibrate devices, supported cameras and media

atomos.com/support



## **Register for Extended 3 Year Warranty**

Register your product and upload proof of purchase to extend your warranty from 1 to 3 years from the date of purchase.

my.atomos.com/register



## **ATOMOS Academy**

Discover how ATOMOS products enhance your filmmaking and content creation

atomos.com/academy

## **International Hardware Limited Warranty**

#### **International Hardware Limited Warranty**

ATOMOS warrants that:

- The main product, not including the IPS screen, or any external accessories, will be free from defects in materials and workmanship for a period of 1 year from the date of purchase; or 3 years upon completion of product registration within 1 year from the date of purchase at my.atomos.com
- The TFT/LCD, batteries, case and master caddies will be free from defects in materials and workmanship for a period of 1 year from the date of purchase regardless of registration. This warranty is exclusively for the benefit of the original purchaser and is not assignable or transferable.
- If during the warranty period the product is shown to be defective ATOMOS may at its option:
  - a. Replace the goods or supply equivalent ones,
  - b. Repair the goods,
  - c. Pay the cost of replacing the goods or of acquiring equivalent ones and
  - d. Paying the cost of having the goods repaired;

The customer must notify ATOMOS of any defect in the goods in writing prior to the expiry of the warranty periods set out above. The customer will be solely responsible for returning the goods to ATOMOS or its authorized distributor. Upon acceptance of a warranty claim by ATOMOS, where ATOMOS repairs or replaces the goods, it will be responsible for reasonable shipping costs incurred in sending the goods to the Customer, provided that customer is located in a country in which ATOMOS has an authorized distributor or repair center or agent.

#### **Warranty Exclusions**

This warranty applies only to defects in workmanship and does not cover defects caused by:

- Neglect;
- Improper or negligent acts or omissions;
- Repairs or attempted repairs;
- Tampering with or modification of the goods;

- Connection to incompatible equipment or power sources;
- Exposure to water or weather;
- Exposure to magnetic fields or corrosive liquids or substances;
- Physical damage

Except as stated in this warranty, ATOMOS, it's vendors, agents, resellers and distributors disclaim in their entirety all other warranties, express or implied, including without limitation all warranties of merchantability or fitness for a particular purpose. The remedies outlined in this warranty are the exclusive remedy a customer from defective goods, which are subject to the warranty.

ATOMOS does not warrant that the goods will operate in a manner that is error free, or uninterrupted. The goods are not intended to be the primary or only data storage device for data – customers are solely responsible for back up and protection of data.

REGISTRATION + WARRANTY UPGRADE Register within 12 months of purchase date to upgrade your standard 1 year warranty to a 3 year warranty. Visit: <a href="mailto:my.atomos.com">my.atomos.com</a>.

Registered users receive updates of all AtomOS updates upon release.

## **User Manual Conventions**

To keep things simple but clear, we've only adopted two conventions in this manual



A helpful tip, suggestion or something to note because it's not obvious at first

• An important note or warning

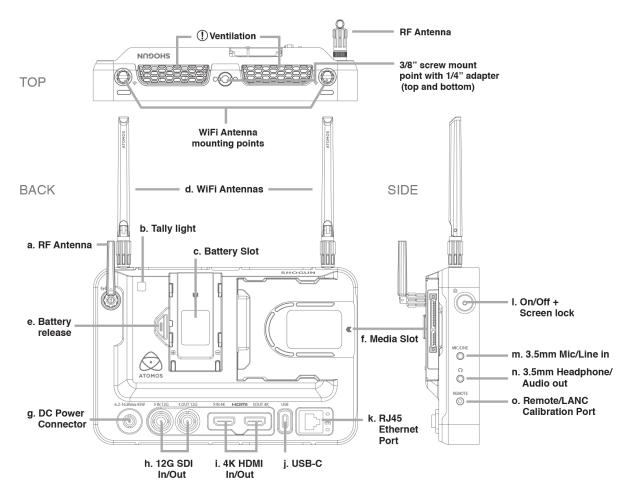
## What's included

Your SHOGUN CONNECT includes base accessories to get you started, such as a mains power supply and a media Master Caddy, Wi-Fi and RF antennas .

#### What's in the box:

- 1 x SHOGUN CONNECT
- 1 x International DC Power Supply
- 1 x AtomX SSDmini Handle
- 1 x MasterCaddy III with screws
- 1 x RF Antenna
- 2 x WiFi Antenna with black caps
- 5 x Antenna colored caps: White/Red/Yellow/Black/Green
- 3 x Antenna Mount Covers
- 1 x 3.5mm audio jack to jack cable
- 1 x Antenna Storage Pouch
- 1 x 7" Protective Pouch
- 1 x Quick Start Guide
- 1 x Screen Cloth

## **SHOGUN CONNECT Connections**



WARNING - When mounting and during use take care not to obstruct the device ventilation at the top of the SHOGUN CONNECT unit.

#### a. RF Antenna

①

Connect the supplied RF antenna for AirGlu™ wireless SYNC functionality.

#### b. Tally Light

Red Tally light on the rear of the unit indicates active recording.

#### c. Battery Slot

Attach NP-F / L-Series type batteries to supply power in the field.

#### d. Wi-Fi Antennas

Connect the supplied WiFi antennas in this position. Wi-Fi 6 provides high performance wireless connection and mobile hotspot support for connection.

#### e. Battery Release

Press and slide batteries away from the unit to remove them.

#### f. Media Slot

Compatible with Master Caddy II, III, AtomX SSDmini, AtomX CFast Adapter.

#### g. DC Power Connector

Connect the supplied DC power supply to the DC jack for mains power.

#### h. 12G SDI In/Out

The SDI connectors are 12G SDI compliant and backwards compatible. This allows you to monitor and record SDI video up to 4Kp60 from a range of professional cameras and video sources, as well as send video to any SDI device.

#### i. 4K HDMI In/Out

The 4K HDMI input provides for recording from HDMI sources. This connection also supports embedded audio and timecode if your camera or device sends these out over HDMI. The 4K HDMI Output allows for connection to an external monitor or other device with an HDMI input. It provides a live loop out of the incoming HDMI signal in record and standby mode, and a loop-through of the playback signal when in playback mode. Both connectors are HDMI 2.0a.

#### **Video Scale Convert**

Video out also has the option for a downscale to be applied allowing your 4K input to be converted to a 1080 HD output for use with existing HD equipment. DCI signals with a 17:9 aspect ratio have the option to be cropped to 16:9 to support a wider range of output displays.

#### **Embedded Audio**

Most mirrorless cameras and camcorders send 2 channels of audio over HDMI but SHOGUN CONNECT can record up to 8 channels of digital audio embedded in the HDMI signal if supported.

#### **3D LUT Output**

3D LUTs can be applied to the outputs of the SHOGUN CONNECT and LUTs can also be selected to be applied to the outputs and routed out to other equipment via the HDMI connections.

#### **HDR Output**

The SHOGUN CONNECT can read the incoming HDR information frame from compatible cameras that indicates if a signal is HLG or PQ. You can set the SHOGUN CONNECT to automatically detect this and loop this out. You can also convert between a Log input to HDR display standards or between HLG <> PQ, and Dolby. For more information refer to the Understanding HDR and Log section.

#### j. USB-C

For future expanded functionality.

#### k. RJ45 Ethernet Port

1Gbe Ethernet for a high-speed robust hardwired network connection.

#### I. On/Off + Screen Lock

Press to power the unit on. Hold the button for at least 4 seconds to power off. Tap to lock/unlock the screen.

#### m. Mic/Line In

3.5mm input Jack, used to connect Microphone or Line audio sources. Channel selection and volume for headphone monitoring is via the audio controls section, accessible by touching the audio meters in the top right side of the screen (monitoring mode) or in the bottom right of the screen (homescreen mode).

#### n. Headphone/Audio Out

3.5mm output jack, used for the connection of headphones. Can also be used for analogue audio out. Channel selection and volume for headphone monitoring is via the audio menu page on your SHOGUN CONNECT. To access this menu, tap the audio meters in the upper right side of the touchscreen (monitoring mode) or in the bottom right of the screen (homescreen mode). For more details refer to the <a href="Audio Menu">Audio Menu</a> section.



When monitoring any channels please ensure that the headphone selection is set to the stereo pair you'd like to monitor.

#### o. Remote Control/LANC and Calibration

Allows for remote camera control of supported cameras with the optional USB-C to serial cable (ATOMCAB018) and LANC control with a Y cable. The Calibrite ColorChecker Display Pro /Display Plus can also be connected for display calibration with the optional USB to serial adapter cable (ATOMCAB004). The latest version of ATOMOS Calibration software is available at <a href="https://www.atomos.com/support">www.atomos.com/support</a>



For optimal calibration it is recommended that your SHOGUN CONNECT is powered for 30 minutes prior to calibration.

For remote operations via this port, ATOMOS supports both LANC in Sony and Canon format. The SHOGUN CONNECT uses LANC Client so a LANC controller must first be attached to a camera and the output taken out via a Y cable to the SHOGUN CONNECT.

## **Best Practice**

Understanding the basic controls and 'housekeeping' functions will save you time in the future. Before you start enjoying your SHOGUN CONNECT it will help to set the date and time, the 'device name' and file naming conventions.

#### **Date & Time**

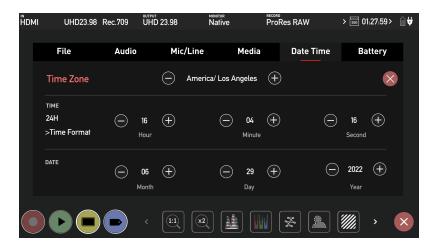
It is vital you set the correct date and time on your SHOGUN CONNECT to ensure that the metadata for your files is correct. To access the Date Time tab, tap the input indicator from the home screen Information bar.



Then swipe the menu tabs to the left to navigate to the Date Time tab. This is how you can access menu tabs quickly.



Swipe left to reveal more tabs that contain settings. If you cannot find the menu you are looking for, swipe left or right.



Use the -+ icons for each setting to set the time zone, time and date used on the SHOGUN CONNECT. For more information refer to the Date Time Menu.

#### **Format Media**

Make sure your drive is correctly inserted and all data from previous shoots has been securely backed-up. Touching the Storage Capacity Indicator on the home screen will take you to the Media Menu.



The Media menu provides information on the drive currently inserted. To format the drive tap the Format button (below).





When you first insert a drive you may be presented with 'Invalid media'. This means that the drive has not yet been formatted and you simply need to format your drive before using it.



If you do not see your hard drive information, there may be a problem with the connection or drive. Try removing the drive and reattaching the drive. Ensure correct alignment of your media.



The SHOGUN CONNECT uses the exFAT file system for broadest compatibility.

#### **Secure Erase Format**

For drives that carry the ATOMOS Logo such as the G-Technology 4K SSD, Angelbird 4KRAW, AtomX SSDmini by Angelbird and Sony, an option for Secure Erase is also presented. For more information refer to Secure Erase Format in the Media Menu.

#### **Unit Name**

You can also modify the unit name for your SHOGUN CONNECT. Creating a unique name for each SHOGUN CONNECT you are using can be very useful when using multiple devices or with multicam shoots. Practicing good file management during production will save you valuable time in post production.

The unit name serves two main purposes:

- Drive Naming: Giving the unit a unique name aids with identification. Once you
  have given it a name all drives subsequently formatted in the SHOGUN CONNECT
  will bear this name as a prefix.
- File Naming: The current unit name appears at the start of the recorded clip name: **SHGCNCT\_S001\_S001\_T001.MOV**

To access the unit name, navigate to the **FILE TAB** where you can change the unit name.



#### How to change the Unit Name:

- Using the < > icons at Unit Name, select the letter to update. The character you are updating will display in the Letter indicator.
- Tap the Letter + icons to change the character. When the correct letter is displayed, use the select control to move to the next character.
- Tap on the reset arrow to reset the unit name.
- Once you have finished making changes, tap on Apply.

#### File Naming

The File menu also allows you to adjust the Scene and Shot number that will form part of the recorded clip filename:

SHGCNCT\_S001\_S001\_T001.MOV

#### How to modify the File Name:

- Use the + icons at Scene and Shot, to increase or decrease the numerical values.
- Once you have finished making changes, tap on Apply.



When changing the drive please ensure that you take note of the last scene and take number so you can append this, as formatting a drive will reset the scene and take counter to 001,001,001.

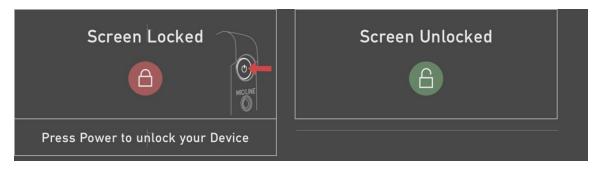
#### **Screen Lock**

#### **Lock the Display Screen**

You can lock the display of the SHOGUN CONNECT by tapping the power button. This will ensure no changes can be made by mistakenly touching the screen. Tap the power button again to unlock the unit.



Images on screen will indicate whether tapping the power button has locked or unlocked the screen.





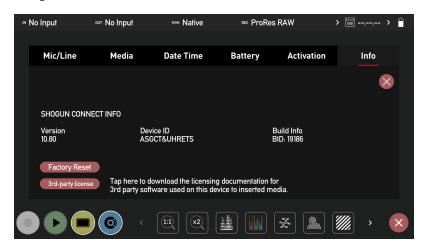
The lock screen can be combined with the Display Off function so that when the screen is locked, the display is turned off. The Tally light on the front of the unit will still display Rec (Red) or idle (green) status. The Display Off function can be found in the Monitor menu. For more information refer to Monitor tab.

#### **AtomOS Updates (Firmware)**

From time to time we will issue AtomOS (firmware) updates for your SHOGUN CONNECT. This is the software that runs inside your SHOGUN CONNECT and is available from our support page, along with the release notes for each AtomOS release.

#### **How to update AtomOS (Firmware)**

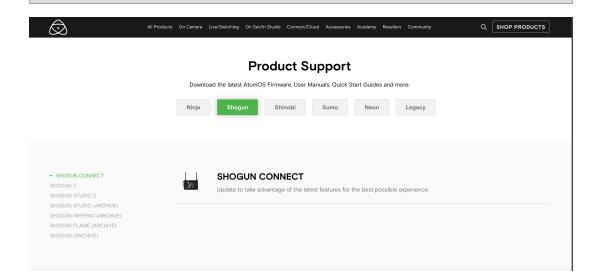
1. Tap the battery icon at the top right of the home screen on your SHOGUN CONNECT to open the Power menu screen, then select the Info tab. The Info menu page lists the AtomOS version and other important information about your SHOGUN CONNECT. Take note of the AtomOS version that is installed. In the image below the AtomOS version is 10.80.



Visit atomos.com/product-support and select SHOGUN as the product family, then SHOGUN CONNECT from the left side of the screen. check the current AtomOS version for SHOGUN CONNECT which will be listed at the top of the page. If the listed AtomOS version number is greater than the AtomOS version number displayed on the SHOGUN CONNECT, a firmware update is required. Click Download Firmware Update to download the update.



The firmware release notes will list the date of release for each firmware version.



3. Insert a <u>compatible</u>, formatted drive into your Docking Station and connect it to your computer.



Always format your drives in the SHOGUN CONNECT first. It formats the drive for optimal performance for video

4. Unzip the downloaded zip file and copy the **ATOMSGC.FW** file to the root of the drive in the docking station.



Ensure that the firmware update file is on the root of the drive, and not in a folder on the drive.



Make sure that the firmware file is not renamed when your computer unpacks the ZIP file. If you have other firmware in the same folder, the file may become renamed to**ATOMSGC-1.FW**when unzipping and the update will not work.

5. Eject the drive (according to operating system guidelines).

6. Insert the drive with the **ATOMSGC.FW** file into the SHOGUN CONNECT. Use a freshly charged battery or connect to mains power. It is very important that your SHOGUN CONNECT does not lose power during a firmware update.



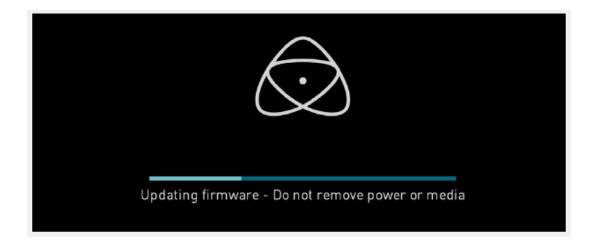
ATOMOS strongly recommends that your SHOGUN CONNECT is plugged into mains power before commencing the firmware update. If using batteries for power, ensure that they have plenty of charge and that you do not interrupt your SHOGUN CONNECT while its firmware is upgrading. You will see a progress bar to the lower half of the screen. When it is finished, the SHOGUN CONNECT will restart and you will be able to use the device as normal. This process can take up to 5 minutes.

7. Press the Power Button to power the SHOGUN CONNECT on. The AtomOS update process will begin automatically.



If you place the .FW file on the drive and insert it into the SHOGUN CONNECT whilst it is turned on, the device will recognize the firmware update and ask if you'd like to apply the update. If you select 'OK' the device will shut down and begin the update process. Once the update has completed, your SHOGUN CONNECT will delete the .FW file and power down.

- 8. If your SHOGUN CONNECT is already powered on, you will be prompted to perform the AtomOS update when a drive containing a new AtomOS version is inserted.
- 9. The ATOMOS logo will appear. After a few seconds the AtomOS update will start.
- 10. During the AtomOS update, an 'updating firmware' screen will appear. The update will take a few minutes.



- 11. When the AtomOS update is finished, the SHOGUN CONNECT will:
  - a. Delete the **ATOMSGC.FW** file from your drive.
  - b. Power itself down.
- 12. Power your SHOGUN CONNECT on and check that the AtomOS version is the version expected (menu>Info Menu tab).

For further information and troubleshooting on updating AtomOS, click <u>here</u>.

#### IMPORTANT: Problems when installing AtomOS

because of an incomplete or corrupted download. In the unlikely event of your SHOGUN CONNECT becoming unresponsive, there is a built-in recovery mechanism. All you have to do is press and hold the on/off button for 10 seconds. If you do this your SHOGUN CONNECT will revert to its factory condition, and you will be able to retry the firmware update later (taking due precautions to identify and remove possible reasons for

Very rarely, the firmware update process can go wrong. This might be

the failure of the previous attempt)

## Media

#### Which drives should you use?

There are quite a large number of drives available on the market, and newer models appear all the time. To avoid potential data loss and/or write/read errors, ATOMOS only recommends the use of AtomX SSDmini, approved SSD media and CFAST II media only. For the most up-to-date information on compatible drives, please visit: <a href="https://www.atomos.com/drives">www.atomos.com/drives</a>

#### **Solid State Drives (SSDs)**

Widely available 2.5" SSDs are the basic storage media for ATOMOS Monitor Recorders. We work closely with leading drive manufacturers to qualify as many options as possible. Before using these drives, they need to be mounted in the Master Caddy II or Master Caddy III. For more information refer to Mounting disks in the Master Caddy III.

To purchase Master Caddy II/III units, visit atomos.com/accessories



#### **AtomX SSDmini**

ATOMOS has teamed with the world's leading media manufacturers to design SSD media that is better suited to our ever evolving Monitor Recorders. The AtomX SSDmini is a little over 1/4 inch tall and 3" long. It is also 20% shorter than traditional SSDs, yet keeps the standard SATA III connector.

It fits directly into the SHOGUN CONNECT without the need for a Master Caddy II and is compatible with all ATOMOS recorders and docking stations. AtomX SSDmini is backward compatible with previous ATOMOS devices by adding a clever extension handle (SSDmini adapter). These tiny, slimline SSDs are a true innovation by our close drive partners Nextorage and Angelbird. 1 TB AtomX SSDmini by Angelbird pictured.

To purchase an AtomX SSDmini, visit the <u>Nextorage SSDmini</u> or <u>Angelbird SSDmini</u> pages on the ATOMOS website.

To purchase an SSDmini handle adapter, visit <u>atomos.com/accessories/ssdmini-handle</u>



#### **AtomX CFast Adapter**

The AtomX CFast adapter from Angelbird, utilizes the AtomX SSDmini form factor and allows you to use CFast 2.0 Type I cards for recording on ATOMOS SHOGUN CONNECT. When combined with the Angelbird AV PRO CF – CFast 2.0 memory card, you can capture RAW in high resolution and high frame rates. You can even utilize older CFast type 1 cards to upload and store 3D LUTs.

To purchase an AtomX CFast Adapter, visit <u>atomos.com/accessories/atomx-cfast-adapter</u>



#### **Secure Erase**

For drives that carry the ATOMOS Logo such as the G-Technology 4K SSD, Angelbird 4KRAW, AtomX SSDmini by Angelbird and Sony, an option for Secure Erase is presented. This allows for the entire drive including the drive cache to be formatted. This will erase ALL content on the drive meaning nothing can be recovered. It will wipe all data off the drive (which may also be useful as a additional security measure) and reset it back as close as possible to factory conditions. The benefit of this feature is that it helps to maintain maximum drive performance, and therefore should be used when available.

#### Backing up and archiving

Remember that no storage media, including tape, optical disks, spinning disks and flash memory, is completely immune from failure. You should bear this in mind when deciding how to manage your recorded content. At the very least, you should consider the consequences for you and your business if your storage media were to suffer from a sudden failure, and you should back up your content accordingly.

## **Deleting files**

To ensure the integrity of data writes and to avoid situations such as fragmentation, the ATOMOS operating system on the SHOGUN CONNECT does not support the deletion of files. We also do not advise removing or deleting files randomly from the disk on your computer. Often files are left in the trash or garbage partition of the drive occupying drive cache and this can affect drive performance. It's advised that you archive your content and reformat the drive before each shoot. For more details refer to <a href="Message-Perceta">Best</a> Practice.

## **HDMI** cables

ATOMOS makes a range of professional HDMI cables which are ideal for connecting between your camera and SHOGUN CONNECT. For 4Kp50/60p and RAW recording we advise the use of ATOMOS HDMI 2.0 cables. For more information and to purchase ATOMOS HDMI cables, visit the HDMI Cables page on the ATOMOS website.

In terms of third party HDMI cables, they are not all created equal and there are a variety of different qualities available. Please make sure you test your cables prior to shooting. This is particularly important when recording 4Kp50/60 and RAW. Many cables will claim to be high speed but will lack the required shielding on both cable and connector to maintain a high quality signal. If the signal contains errors that affect your recording, your SHOGUN CONNECT may not lock to these inputs.

Take care to use HDMI cables of the appropriate grade and ensure that you protect them from damage. Signal issues can often result from damaged HDMI cables, or from using cables that are too long.



Check your connectivity at both the camera connector and the recorder / monitor connector to make sure you have a firm connection. This will help to avoid signal drop outs.



If the HDMI cable is removed whilst you are recording, the 'Skippy' icon will be displayed. Tap the Skippy icon and it will disappear, ready for the next notification.

## **SDI Cables**

SDI cables are robust physically and electrically; you should rarely have problems with signal transmission unless your cables are either damaged or too long. Please remember that SDI cables use locking connectors and will not simply pull out if they are jerked or tripped over.

Therefore they can be a significant trip hazard, and also a hazard to your equipment, which may be damaged if the cables are mishandled or of a low grade. Please ensure you test and check your SDI cables for 4K. For longer runs, cables of a Belden 1694A specification are recommended

## **Master Caddy Docking Station**

The Master Caddy Docking Station allows you to connect your media to your computer for editing directly from the drive or to copy the files to your own storage system. Both models support a single drive caddy at a time and efficiently offload the drive contents direct to your computer via integrated USB cables.

#### **ATOMOS Powered Docking Station models:**

#### ATOMOS USB-C 3.1 Powered Docking Station

The integrated USB cable features one USB-C 3.1 connector for use with computers with a USB-C connection.



When connecting the AtomX USB-C 3.1 Docking Station II with older computers a USB 3.0 Male to Type C Female adapter is required



#### ATOMOS Powered Docking Station with USB 3.1 Gen 1 & 2.0.

The integrated USB cable features one USB 3.0 and one USB 2.0 connector, with the latter provided for compatibility with older computers. Also provides support for an ATOMOS RAID Caddy power cable for connecting a RAID caddy.

To purchase the ATOMOS Powered Docking Station with USB 3.1 Gen 1 & 2.0, visit the Docking Station page on the ATOMOS website.



The Master Caddy Docking Station is a sophisticated device supporting two different data interfaces: USB 2 and USB 3. When using the Master Caddy Docking Station you may need to connect both USB connectors. This is because when it has to power a disk drive and its interface electronics, the Docking Station may consume more power than is available from a single USB port.



When connecting the Powered Docking Station with USB 3.1 Gen 1 & 2.0 to a computer, a USB Type-C to USB Type-A Adapter may be required.



## All SHOGUN CONNECT media can be connected to a docking station:

- AtomX SSDmini,
- Master Caddy II and Master Caddy III with SSD media installed,
- AtomX CFast adapter with CFAST II media inserted.

For the most up-to-date information on compatible drives, please visit: <a href="www.atom-os.com/drives">www.atom-os.com/drives</a>



Master Caddy 1 drives can connect to a Master Caddy Docking Station, but are NOT compatible with the SHOGUN CONNECT.

## Standard 1/4" or 3/8" Mount/Arm

Below are some examples of tripod and hot shoe mounts, available from most camera and video specialists. A secure mount will greatly enhance usability and security of HDMI, power, remote and audio connections.

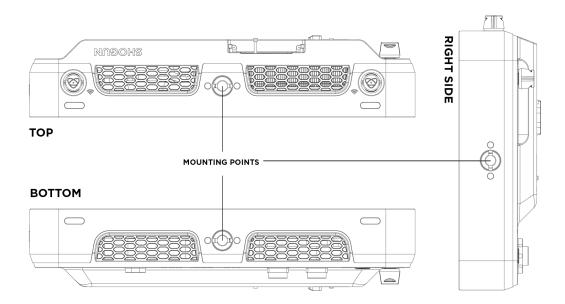


Your SHOGUN CONNECT has 3/8-16 connectors with 1/4-20 adapters and an ARRI style anti-rotational pin system on the top, bottom and right side of the unit. Select the mount type that best suits your input device, application and conditions. For more information on the mounting points on the SHOGUN CONNECT refer to <a href="Mounting options">Mounting options</a>

## **Mounting options**

The SHOGUN CONNECT is designed for versatility, and includes multiple mounting options. The unit has 3/8''-16 screw mounts on the top, bottom and right side, and comes with removable 1/4''-20 adapters installed in these locations. This allows you to have the option for a 3/8''-16 or 1/4''-20 screw mount at each of the mounting points on your SHOGUN CONNECT.

The 1/4" adapter is easily removed for mounting on 3/8" fixtures. To remove it, use a flat head screwdriver to gently loosen the adapter and store your adapter in a safe location.



The mounting points all feature ARRI style anti-rotational pins, which allows for secure mounting of your SHOGUN CONNECT to a wide range of arms, mounts, cages and gimbals. It is compatible with the latest mounting solutions from companies such as Shape, SmallRig and Wooden Camera.

Ensure you do not over tighten the screw mounts as this may cause damage. Do not insert a 1/4-20" or 3/8"-16 thread longer than 5mm or you will risk causing damage to the aluminum chassis.

1

## **Choosing your power source**

The SHOGUN CONNECT can be powered by the included DC Power Supply, or by using compatible NP-F / L-Series type batteries. If you are the owner of other ATOMOS devices, the batteries you have for these devices will be compatible with your SHOGUN CONNECT.

### **Using the International DC Power Supply**

Secure the DC connector from the included International DC Power Supply to the DC Power Jack on the rear of your SHOGUN CONNECT. The optional <u>ATOMOS coiled DC to D-Tap cable</u> (ATOMDTPCB2) can also be used to connect a D-Tap power source to this connector in the field.

#### **DC to D-Tap Coiled Cable**

The DC to D-Tap Coiled Cable is an optional ATOMOS accessory. It is designed to allow you to power your device from an external battery system with a D-Tap port. Simply connect the D-Tap connector to your power source.

To purchase a DC to D-Tap Coiled Cable, visit ATOMOS coiled DC to D-Tap cable.



Ensure that the output of the power source does not exceed 16.8V DC.



### **Using Batteries**

The SHOGUN CONNECT uses standard NP-F/L-Series compatible batteries. New batteries should be charged using a compatible battery charger before use.

To purchase ATOMOS NP-F type batteries, visit the <u>5200mAh (4 cell)</u> or <u>7800mAh (6 cell)</u> pages on the ATOMOS website.

To view the remaining battery life for attached batteries, tap the battery icon in the top right of your SHOGUN CONNECT screen.



## Choosing the right battery for your application

Size	Cells	Battery Life*
5200mAh	4	Up to 2 hrs
7800mAh	6	Up to 3 hrs
Battery Eliminator	-	Continuous AC
D-Tap	-	Source dependent

<sup>\*</sup> Battery life tested during Monitor/Record 4Kp60 operation.

Before any type of disposal the battery should be discharged completely. Tape the contacts with electrical tape and package so as to prevent contacts accidentally coming together at any time.

Incineration must be performed by an approved and permitted waste treatment facility that handles lithium ion batteries. If you are not sure if your waste facility can handle lithium ion batteries, contact them and verify if they are permitted or not.

#### **ATOMOS Fast Battery Charger (optional)**

The ATOMOS Fast Battery Charger has been designed to rapidly charge NP-F type batteries, yet be lightweight so that is easy to travel with. To purchase an ATOMOS Fast Battery Charger, visit atomos.com/accessories/fast-battery-charger-power-supply



Fast charging of the battery is possible up to 80% capacity and the remaining 20% will then charge at a slower rate to maintain optimal battery life.



In the unlikely event of a charge error the first and last red LEDs will flash quickly.

## **Attaching batteries**

#### How to attach a battery

To connect a compatible battery, place the battery in front of the retaining lug, align with the connectors and slide the battery into the slot until it clicks into place.



Once locked into position, SHOGUN CONNECT batteries and modular accessories are held in place tightly to ensure that they cannot work

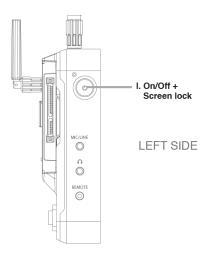


loose. You may have to be quite firm with the battery latches to remove batteries and accessories, so we suggest that you familiarize yourself with the force required so that you can do this quickly in the field.

#### How to remove a battery

To remove a battery, press the Battery Release and slide the battery away from the unit to remove it.

# **Powering On and Off**



The Power button is located on the top left hand side of the unit (as you look at the screen). With a power source connected, momentarily press the Power button. After a couple of seconds you will see the ATOMOS logo then the SHOGUN CONNECT Home Screen.

### **Turning OFF power to the SHOGUN CONNECT**

To turn the unit off, tap the battery icon on the top right of the home screen to open the Power menu screen.



On the Power menu screen press the green Power icon for 4 seconds. **Four seconds** can seem like a long time, but this is intentional to make sure that the SHOGUN CONNECT can't be turned off accidentally.

The icon will turn red when touched to indicate activation of the button. The unit will then power off. You can also do a forced power down by pressing the physical Power button on the side of your SHOGUN CONNECT for four seconds. For more information on the Power menu see the Power Menu.





Do not press and hold the power button in on the SHOGUN CONNECT while the unit is off. This will place the device in to a Firmware recovery mode. If you accidentally do this, simply turn the device off again or remove the power source.



Take note to respect the air flow and do not obstruct the cooling vents of the unit.

## **Inserting and Removing Media**

#### **Inserting Media**

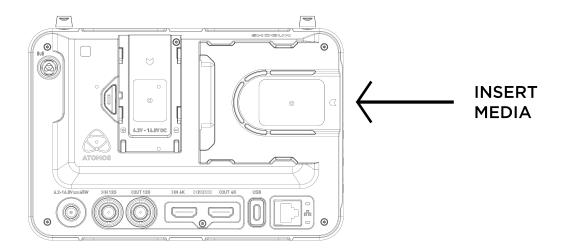
On the rear of the unit is a 2.5" slot designed for your media. To insert an AtomX SSDmini, Master Disk Caddy II/III or the AtomX CFast adapter, gently push the media into the slot until it stops at the end of the drive slot.

### **Removing Media**

The SSDmini, Master Caddy II/III and the AtomX CFast adapter are all hot-swappable, so you can remove the media at almost any time – even while the unit is turned on. But don't do it while recording or you will get a corrupted file that may be unplayable. To remove media, simply pull it out from the slot by holding the top and bottom tabs on the media itself.



The SHOGUN CONNECT disk slot does NOT have a release latch for media. It is a friction-fit system. Simply pull the SSDmini / Master Caddy II/III out using the top and bottom tabs on the caddy itself.





The included AtomX SSDmini Handle can be attached to your AtomX SSDmini. This allows it to be used with existing ATOMOS Master Caddy II devices, and also reduces handling and potential damage to the disk casing.



AtomX SSDmini is backwards compatible with previous ATOMOS recorders. The original Master Caddy 1 is NOT compatible with SHOGUN CONNECT as the keyways are on one side only.

## Mounting disks in the Master Caddy III

If you choose to use your own disks instead of a pre-built AtomX SSDmini, then follow this procedure to install it in the provided Master Caddy III. A Master Caddy III and screws is included in the box with your SHOGUN CONNECT. If you have used Master Caddy II before with other ATOMOS products, you will notice that Master Caddy III has a slimmer, lighter weight design to ensure compatibility with the CONNECT range of hardware products. For information on drives that are compatible with SHOGUN CONNECT, refer to the compatible drive page at <a href="https://www.atom-os.com/compatible-drives">https://www.atom-os.com/compatible-drives</a>



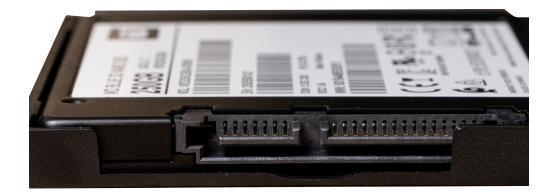
### How to mount a disk into Master Caddy III

When inserting the disk into the Master Caddy III, ensure that the SATA connectors of the drive line up with the gap in the plastic shell. If they do not line up with this gap, turn the drive over.

#### **Correct alignment**



**Incorrect alignment** 





It is important to properly align the drive correctly with this gap in the Master Caddy III, so that the drive can connect to the SATA connectors on SHOGUN CONNECT when inserted.

①

SSDs are very sensitive to damage from static electricity. Please observe all the usual precautions when handling them and NEVER touch the exposed SATA connector as static electricity may be harmful to your disk.

With the drive inside the Master Caddy III, use the four supplied screws to secure the drive in place. These screws should be tightened so the screw heads are flush with the casing of the caddy. The caddy is light and the disk just needs to be held securely.



Take care not to over-tighten the screws.

#### Inserting the Master Caddy III into the media slot

When inserting the Master Caddy III into the media slot on your SHOGUN CONNECT, ensure that the SATA connectors on the disk line up with the SATA connectors on your device. Gently push the Master Caddy III into place, but never force the disk just in case something isn't set up or aligned properly.

If you experience difficulty when inserting the Master Caddy III to your device, the drive may not be sitting correctly in the Master Caddy or the screw heads may not be flush with the casing of the caddy. A quick visual check will confirm this. Remove the drive and re-inserting it in the Master Caddy III. For information on attaching media to a Master Caddy Docking Station see Connecting media.



Master Caddy II drives are compatible with SHOGUN CONNECT.

# **AtomOS 10 Operating System**



With the AtomOS 10 Operating System, you get the ultimate touch interface for monitoring and recording and an operating system that has a clean, intuitive and elegant design. It's simple and straightforward, but at the same time it provides access to the complete range of features. No complicated sequences of buttons. No endless menus crowded with text. It's optimized for the AtomIC hardware platform. And it's extremely responsive with fast boot up times.

## The Main Screen - Home Screen

The ATOMOS 10 home screen is designed for unobstructed monitoring at all times. The clean and uncluttered design of ATOMOS 10 concentrates the attention on the image, not on the device's operation. From the muted main button controls through to flexible histogram size and positioning, all on-screen controls are non-obtrusive and incredibly intuitive to use. Monitoring tools are only one-touch away, and allow for a better view of your subject while adjusting monitor-assist functions such as focus peaking and false color, Record, Playback, Monitoring and Edit features are easier than ever to use.

### **Monitor Mode / Home**



**REC (Record)**: Press to begin recording. Jump to Record Home Screen.

**PLAY**: Jump to the most recently recorded clip on the Playback Home Screen.

**MON (Monitor)**: Press once to show Monitoring Features and Information Bar. See the following pages for activating Monitoring features. Press again to return to home.

**EDIT**: Press to show Editing Features and Information Bar. Press again to return.

**TIMECODE**: Shows the selected timecode such as embedded, time of day or rec run.

**LUMA WAVEFORM**: Luma Waveform is a constant on your home screen, to allow for greater control over monitoring without compromising the subject.

**AUDIO**: Audio Meters. Touching the Audio meter will open the Audio Menu.

**TIME REMAINING**: Time Remaining on Disk (at current record settings). Changing Recording Format will change Time Remaining.

**BATTERY**: Touch to access Power Menu. Battery Indicator shows power level and flashes red when power is running low.



**SETTINGS** (red): Touch to access all Recording settings, including input, output, file, media, gamma, gamut, and more.



Touch **MON** (Monitor) to reveal Monitoring Features and the Information Bar. When activated the Monitor button will have two surrounding rings. For more information refer to The Main Screen - Monitoring Features



At any time you can remove the overlays by touching the center of the screen. Touch again to bring them back.

## **The Main Screen - Information Bar**

At the top of the SHOGUN CONNECT screen is the area referred to as the **Information Bar**.



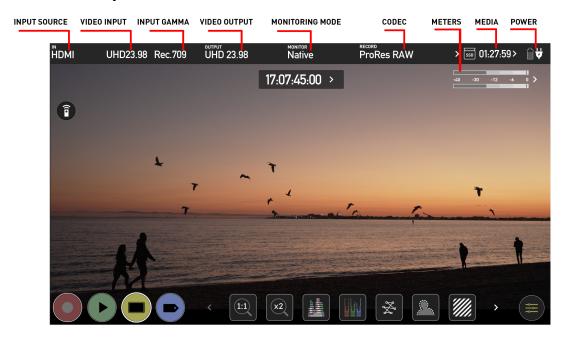
It displays the input source as SDI or HDMI, the settings of your input device/camera, current settings of your SHOGUN CONNECT, media, audio, disk capacity and more. Touching any of these areas will take you to the relevant menu and allow you to make changes to your setup.

Alternatively you can access these setting by tapping the Record Settings icon. Tapping the Settings button will open the Record Settings menu, from where you will be able to navigate to the required tab. Swipe left to see more tabs.



The content in the Information Bar is dependent on what mode you are in, for example Recording and Monitoring will display the Video Input type, but if you are in Play mode, Video Input will show the resolution and frame rate of the video clip currently cued or playing.

#### **Monitor Mode / Features**



In the image the SHOGUN CONNECT has an input and an output, and is ready to record the signal or play the last recorded file from disk.

VIDEO INPUT: (Rec & Mon mode) Input source - HDMI or SDI

VIDEO INPUT: (Rec & Mon mode) Resolution and frame rate from input device

**VIDEO INPUT: (Play & Edit mode)** Resolution and frame rate of current playback clip

**INPUT GAMMA**: Displays the current input gamma. Tap to open Input menu to ensure it matches the output coming from your camera or other input device. RAW inputs will automatically be set to match the camera output. For some cameras further options can be selected. During playback mode this setting will be determined by the metadata of the recorded content.

**VIDEO OUTPUT**: This menu displays the active video resolution and frame rate being output from the HDMI Out.

**MONITORING MODE**: Displays the monitoring display mode that has been selected. Native, Rec709, HLG, PQ or the name of the 3D LUT selected. Touch to change settings.

**CODEC (RECORDING FORMAT):** Shows the recording format. Touch to change settings.

**METERS:** (Audio Meters): Touching the audio meters will open the Audio Menu.

**MEDIA**: This shows the remaining recording time based on the chosen codec and remaining capacity of the drive.

**POWER**: Touch to access Power Menu. A Battery icon will be displayed when a battery is attached, with the current power level of the battery displayed visually. The icon flashes red when power is running low, and will have an X over the battery icon when no battery is attached. A Plug icon will be displayed when DC power is connected.



**SETTINGS** (yellow): Touch to access Monitoring Feature settings.



Touch MON again to return to previous screen.

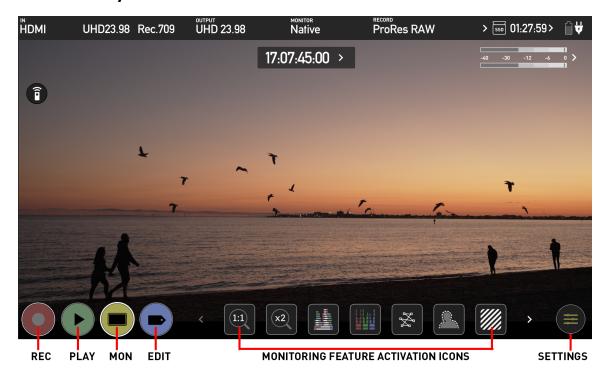


The EDIT button works in a similar fashion to the Mon button, as it is not possible to have Monitor and Edit active simultaneously.

## **The Main Screen - Monitoring Features**

At the bottom of the Monitoring screen are the Monitoring Features, accessible by toggling the MON icon. Monitoring Features do not affect your recorded file and can be turned on and off, or adjusted whilst recording (unless you choose to burn a LUT into your footage). Not all Monitoring features are available at first glance – to reveal all Monitoring features, swipe monitoring icons to the left. The icons will behave in a carousel like manner and you can swipe left and right to access any of the features. At the bottom right is the Settings button. Press the yellow Settings icon to adjust the settings and behaviors of the Monitoring Tools.

#### **Monitor Mode / Features**



#### **Main Controls**



REC (Record): Tap to begin recording / Return to Record Home Screen.



PLAY: Jump to the most recently recorded clip / Enter Playback Home Screen.



MON (Monitor): Whilst on the monitoring features screen press once to revert to home screen view. For Monitor settings press the Settings button. Any Monitoring functions you have enabled will remain active until deactivated.





Press again to return to home. Any Monitoring functions you have activated will remain active until they are turned off.



SETTINGS (yellow): Touch to access Monitoring Feature Settings. Set scope sizes, adjust transparency, LUTs, Focus Peaking and more.

## **Monitoring Feature Activation Icons**



















**Blue Only** 



Safe Area

Zoom x2









For more information on the monitoring tools, refer to the Monitoring Features section.

## Home screen and menu functions

### **REC (Record)**

This is the icon you touch to begin a recording. Touch it again to stop a recording. While recording the Rec icon changes to a Stop icon and a red frame is present around the screen.

#### Standby



#### Recording



#### No input / No media



The Rec icon is dimmed and disabled if there is no valid video input. It also appears in where there is no media, the disk is not formatted or the disk is full. The button is dimmed because you cannot record.

#### **PLAY**

Touch this icon to play previously recorded clips and touch it again to pause playback. When you press the green Play button the SHOGUN CONNECT will switch to playback mode and automatically play the last recorded clip.

#### **Playback Mode**



## **Playback Home screen**

Touching the folder icon will reveal the available playlist.



SHOGUN CONNECT uses a unit name, scene, shot and take convention to name the clips. Select the clip you want to play by touching the file name and this will start to playback. To exit the playlist simply touch close, or any other button. Touching close will take you to the previous window.





#### **Close Screen**

Tap to close the screen.



### Folder level up

Tap to navigate one level up in the folder structure.



## **Playlist Options**

Tap to enable Playlist options. For more information on using playlists, refer to Playlists

### No disk / disk not secure



The Play button will be dimmed and disabled if there is no disk, where there is a poor connection or the disk is not correctly formatted and during recording. See the <a href="Best Practice">Best Practice</a> section for more information.

## MON (Monitor)

Pressing MON reveals Monitor Assist icons as shown in <u>The Main Screen - Monitoring</u> <u>Features</u> section. These features are explained in detail in the Monitoring Features section.





### **EDIT**

You can use the edit tools during recording and playback. Pressing EDIT takes you into a number of options. For more information refer to the <a href="Edit Mode">Edit Mode</a> section.



# The SHOGUN CONNECT Menu system

Tap on the Input, Output, Codec, Media or Battery indications in the Information bar at the top of the home screen to open the menu related to that item.



Menu pages contain information as well as settings that can be adjusted.



Across the top of the menu page that opens are menu tabs that link to the other menu pages. Swipe the menu tabs to the left or right to see all of the menu tabs and tap on the one you wish to enter.



Swipe left to reveal more tabs that contain settings. If you cannot find the menu you are looking for, swipe left or right.

## **Source Menu**

The Source menu allows you to select your Input Source, depending on your signal connection and how you are using your SHOGUN CONNECT.



### **Select your Input Source**

Select your Input Source from the options below. Once you have made a selection, tap OK and your SHOGUN CONNECT will take a few seconds whilst it changes input source. Press cancel to return to the selection screen.

#### **HDMI**

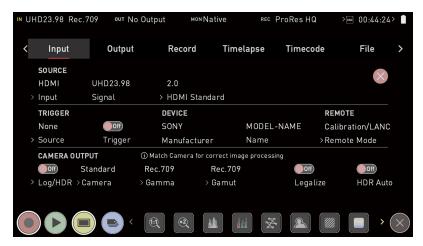
Selects the HDMI input on your SHOGUN CONNECT.

#### SDI

Selects the SDI input on your SHOGUN CONNECT

## **Input Source**

The source section allows you to select the input signal connection type, and related settings.



#### Input

Tap on Input to switch input source. The Source Menu tab will open, where you can select between HDMI and SDI inputs.

## **Signal**

The resolution and frame rate of the selected input source is displayed. No Input will be displayed when there is no input connected.

#### **HDMI Standard**

When connected to an HDMI source, tap on HDMI Standard to toggle between the following:

- HDMI 1.4,
- HDMI 2.0 and
- Compatibility Mode.

#### **Compatibility Mode (HDMI)**

This mode improves the signal locking process when working with HDMI signals from specific cameras. After selecting compatibility mode, remove and re-insert the HDMI cable to the camera.



Compatibility mode should be enabled when recording from a Z CAM E2 series camera via HDMI, for all frame rates and resolutions in ProRes, DNx and ProRes RAW. It should also be enabled when recording video from a Canon 1DX MIII via HDMI, in 4Kp50 and 4Kp60 modes in ProRes and DNx.



Compatibility mode for HDMI should not be used for any HDMI RAW signals except for Z CAM E2 series cameras and the Canon EOS R5.

## **Input via SDI**



The SDI IN connector on your SHOGUN CONNECT allows you to connect 12G SDI sources to your device. Tap on Input and the Source Menu tab will open, where you can select SDI as your input. You will then be prompted to reboot your SHOGUN CONNECT. Tap Confirm and wait for your device to reboot in SDI source mode. Once in this mode, the input menu will resemble the image shown above.



When RAW over SDI is enabled on a connected camera, your SHOGUN CONNECT will automatically detect the RAW signal and prompt you to select ProRes RAW as the recording codec.

#### Mode

When connected to an SDI source, Mode indicates the current mode:

• **Single Mode**: For single SDI sources, where a single SDI input is connected to the SDI In connector.

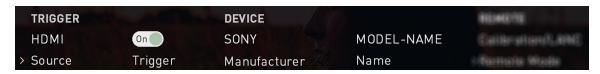
### **Channel Source / Link Status**

In Single Mode, a Channel Source indicator will appear and display the currently selected channel. Single link SDI connections will automatically be configured based on the signal input between 12G/6G/3G/HD.

## **Compatibility Mode (SDI)**

Where SDI has been selected as your input, a Compatibility Mode toggle switch will be visible under Source. This mode improves the signal locking process over SDI, when working with specific cameras that use a slightly different version of the 12G standard. For more information refer to <a href="mailto:atomos.com/support">atomos.com/support</a>

## **Trigger**



### **Source (Trigger Source)**

The SHOGUN CONNECT can be remotely triggered to record from your camera. For HDMI inputs, tap Source to cycle through the following trigger sources:

- **HDMI**: If HDMI timecode is selected, you have the choice to start and stop recording remotely from the source camera timecode.
- **None**: Select to disable the record trigger.
- **Timecode**: For older cameras or cameras that don't have Start/Stop flags for triggering recording, the rolling timecode trigger will trigger recording automatically on the SHOGUN CONNECT when it detects rolling timecode on the camera.
- **Camera Manufacturer**: When you have an SDI signal connected to your SHOGUN CONNECT, and have selected SDI at Input, you will be able to tap Source to cycle through camera manufacturers as well as Timecode or None as the source of a trigger.

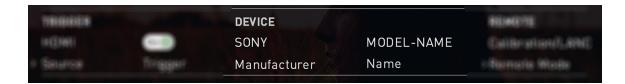
## Trigger (On/Off)

Where you have selected Timecode as the trigger source, you can enable or disable the trigger by tapping the ON/OFF switch.



Note that where you have selected a camera manufacturer, you cannot disable the trigger

## **Device**



- **Manufacturer**: Displays the camera or device manufacturer.
- Name: HDMI Devices will display an EDID Device name if the information is available from the HDMI device connected. Not all cameras carry an EDID device name. For cameras such as the Panasonic LUMIX GH5 this will display as 'Unknown'.

## Remote



#### **Remote Mode**

Tap to cycle through the options:

- **Camera Controls**: Allows you to control supported cameras via the screen of your SHOGUN CONNECT. Refer to the section below for ATOMOS Camera Menu Control for ZCAM Series cameras.
- Calibration: Every brand of monitor in the field and in the editing suite naturally drifts in color over time. ATOMOS have partnered with calibration leader Calibrite to open up professional monitor calibration to all filmmakers. For information on how to calibrate your SHOGUN CONNECT and to purchase a Calibrite i1 Display Pro, visit atomos.com/accessories/x-rite-i1-display-pro
- Lanc: For remote operations via the Remote/Calibration Port, ATOMOS supports both LANC in Sony and Canon format. The SHOGUN CONNECT uses LANC Client so a LANC controller must first be attached to a camera and the output connected via a Y cable to the SHOGUN CONNECT.



Calibration and LANC will appear in the same option as Calibration/LANC

#### ATOMOS Camera Menu Control for Z CAM Series cameras

When using your SHOGUN CONNECT with Z CAM E2 series cameras, you can control your camera via the screen of your SHOGUN CONNECT.

# How to enter camera control mode on SHOGUN CONNECT to control a Z CAM camera:

- 1. Use an HDMI cable that supports 4Kp60 to connect the output of the Z CAM to the HDMI input of your SHOGUN CONNECT.
- 2. Connect the 3.5mm end of an <u>ATOMOS USB-C to Serial LANC cable</u> to the Remote/Calibration Port on your SHOGUN CONNECT, and the USB-C end of the cable to the USB Type-C port on the Z CAM.
- 3. Power on your Z CAM and navigate to RAW over HDMI in the Record menu, to ensure that it is turned off.



RAW over HDMI must be disabled for camera menu control to work.

- 4. Power on your SHOGUN CONNECT and select Compatibility Mode in the Input menu at HDMI Standard. Remove the HDMI cable from the Z CAM and re-attach it to ensure that the signal is locked correctly.
- 5. Tap on Remote Mode on the Input page to select Camera Controls, then tap on the blue Camera icon on the bottom of the screen to enter camera control mode.









6. Your SHOGUN CONNECT will display the Z CAM camera settings and a camera battery status icon across the top of the screen, with audio meters and a Menu icon on the right hand side. The information that is normally displayed across the top of the screen like video input, media, timecode and battery status will now be displayed on the bottom of the screen.



# How to control a Z CAM camera with camera control mode on SHOGUN CONNECT:

Once you have entered the camera control mode, you can manually adjust the settings of your ZCAM from the display of your SHOGUN CONNECT.

Tap one of the settings across the top of the screen like aperture, shutter speed, ISO or WB to bring up the adjustment arrows below the selected setting. Tap on the left or right arrow to adjust the values for the setting.



#### **Auto ISO / Auto WB**

When you adjust the settings for ISO or WB, an additional Auto ISO or Auto WB icon will appear on the right side of the screen.



If you tap on this icon, it will enable the automatic ISO or automatic WB mode respectively. The icon will have a white border, and an 'A' will be displayed beneath ISO or WB when enabled. Tap the icon again to disable the automatic mode.

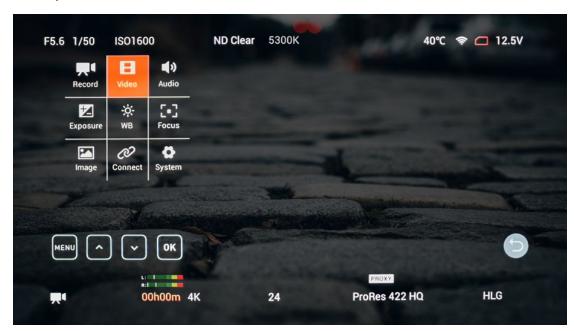


#### Access the Z CAM Menu from the display of SHOGUN CONNECT

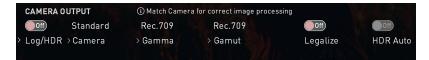
Tapping on the Menu icon on the right side of the screen will bring up some icons that replicate the physical buttons on the top of the ZCAM. The operation of these buttons are the same as the physical buttons.



Tap on the Menu icon in this view to bring up the Z CAM menu on your SHOGUN CONNECT screen. This is the same menu that appears on the screen of the Z CAM when you press the physical Menu button on the Z CAM. Tap on the icons to navigate through the ZCAM menu system and adjust settings, the same way you would when using the physical buttons on the ZCAM. Tap on the Menu icon again to hide the menu, and tap on the Return arrow icon on the right side of the screen to return to the previous screen.



# **Camera Output**



Choose to use Log/HDR, camera type, Gamma, Gamut or enable HDMI HDR auto if required. Your SHOGUN CONNECT will recognise most cameras when correctly attached via a compatible HDMI cable.



For the best image processing results it is essential to match the SHOGUN CONNECT settings to the camera/input settings.

## Log/HDR

Turn on to enable HDR image processing inside the SHOGUN CONNECT. Bring the control of post into your shoot - record, preview and review using HDR.

#### **Camera**

Tap to scroll through to the manufacturer of the camera providing the input. Sony, Fujifilm, Canon, Panasonic, ARRI, RED and JVC.

#### Gamma

For each manufacturer there may be a number of different Log curves available and you can scroll through to the correct selection by tapping the Gamma icon.

#### Gamut

Select the Color Gamut of the input. This is not applicable to all cameras but again ensure that this matches the input of the camera to ensure accurate monitoring.

## Legalize

The legalize function allows you to convert a full range video signal into a legal range signal to suit legal range NLE editing workflows. This setting is designed for use with inputs in SDR or REC.709 that are set to or are fixed in FULL range, but recording or monitoring is needed in 'legal range'. The terminology used by manufacturers when referring to levels can vary, but all refer to the range of values contained within an image file:

Terms	8-bit val- ues	10-bit values
Full / Data / Extended	0-255	0-1023
Legal / Video / Lim- ited	16-235	64-940

If you are working in SDR/Rec709 and have a full range video signal coming in, it is best practice to turn the Legalize function ON, on your SHOGUN CONNECT. For Log inputs, the conversion to LEGAL range should NOT be applied. Log outputs from the cameras utilize FULL range signals in order to gain the maximum level of data and preserve dynamic range. The majority of Log base workflows are derived from Cineon, Kodak's original Cineon Film DI system. E.g. Sony, Canon and Panasonic all use FULL range levels.

(!)

Do not apply the Legalize function to a LEGAL range signal as this will create an incorrect correct color pipeline. The result will create an image that is of lower contrast and look like Log but without the additional dynamic range of Log - as the camera output was already defined as a Rec. 709 / BT. 1886 gamma.



The legal range toggle is not available when using Atom HDR. Atom HDR is used for log workflows and when engaged the Legalize option will not appear.



The legalize option is not available for ProRes RAW video.

#### **HDR Auto**

HDR is detected when there is a compatible input signal. It is important that this is OFF if the camera is not outputting HLG or PQ. It should not be used for regular Log.

#### About Log/HDR

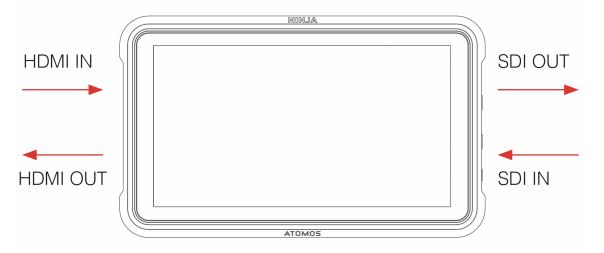
A better understanding of Log and HDR will enhance your workflow and ultimately allow you to capture maximum amount of detail during recording, and save you time in

post production. To understand more about the importance of this function please refer to the  $\underline{\text{Understanding HDR and Log}}$  section.

# **Cross Conversion**

Cross conversion allows you to cross convert signals between HDMI and SDI. This means that where HDMI sources are connected to the HDMI Input, an SDI signal can be output via the SDI Output connector. Where an SDI video signal is connected to the SDI Input, you can output an HDMI signal over the HDMI Out connector. Cross conversion happens automatically, and does not need to be enabled.

Whilst converting the signals listed above, you can use the Output Options in the Output menu to downscale and crop the signals. The HDR section provides options for outputting HDR versions of the signals after cross conversion. For more information refer to Output Menu .



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# **Output Menu**

This menu displays the active video format being output over HDMI, or SDI. A 4K to HD down conversion can be applied to the output, which allows you to send a 4K input signal to a HD device. When working in HDR a signal will be output with the HDR flag to activate the correct settings on a compatible HDR display. This can be useful if you wish to monitor log footage in the studio.



#### **Video Out**

This section displays the resolution of the Input. When processing options are applied below it will be adjusted accordingly.

#### **HDMI Output**

Displays the resolution and frame rate of the HDMI or SDI Output from your SHOGUN CONNECT. For more information on SDI Output refer to the Output via SDI section.

## **Output Options**

## 4K to 2K Output

Allows you to scale 4K or UHD inputs for output. This will scale 4K to 2K and UHD will be scaled to HD 1080p.

## **DCI Crop**

When enabled, this setting trims the 17:9 DCI input to 16:9 converting the signal to UHD. When 4K to 2K Output is On, the output will down scale to HD.

#### **HDMI** timecode

Allows for the embedded timecode or in unit generated timecode to be looped out. The option is present to allow you to turn the timecode as this can disrupt some consumer equipment that is not intended to receive embedded timecode. Tap to toggle between on/off.

### **SDI Compatibility Mode**

Some video devices use a slightly different version of the 12G standard, which can cause issues with their ability to detect a video signal that is output from an ATOMOS device. Enabling SDI Compatibility Mode will cause your SHOGUN CONNECT to send out a video signal in the format that these devices expect. Tap the switch to toggle between On and Off.

#### **HDR**

Here you are able to set a conversion from your LOG input to a HDR display standard such as HLG or PQ. You can also define the output color gamut from your camera's gamut to a display standard for BT2020, DCI-P3 or Rec709.

#### **HDR Out**

Enable or disable HDR on the output.

## **HDR Type**

Allows you to select the HDR type to output. Tap to cycle through PQ, HLG and Dolby Vision Tunnels.

#### Gamut

Allows you to select the Gamut of the signal that is output. Tap to cycle through Rec. 709, BT. 2020 and DCI-P3.

### **LUT Out**

Allows you to loop out LUTs that are applied to your image, so that they are also applied to the Output signal.

# **Output via SDI**



### **SDI Output**

In the VIDEO OUT section of the Output menu page, SHOGUN CONNECT will automatically detect the resolution and frame rate of the SDI input when connected.

## SDI 3G Type

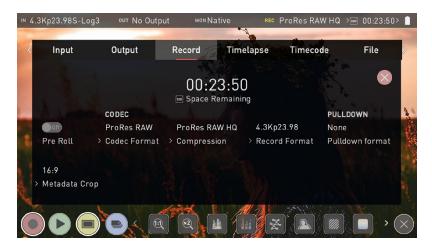
Allows you to specify the 'SDI 3G Type' for compatibility with equipment that expects a specific type of 3G-SDI video. Tap to cycle through the options:

- Level A,
- Level B or
- Auto.

## **SDI Compatibility Mode**

Some video devices use a slightly different version of the 12G standard, which can cause issues with their ability to detect a video signal that is output from an ATOMOS device. Enabling SDI Compatibility Mode will cause your SHOGUN CONNECT to send out a video signal in the format that these devices expect. Tap the switch to toggle between On and Off.

# **Record Menu**



#### **Space Remaining**

Indicates the expected recording time remaining on the inserted media at the current settings. Changing your recording settings may extend or decrease your available recording times.

## Pre-Roll (On/Off)

Whilst enabled, the input is constantly being recorded, with approximately the last 8 seconds in HD and 2-3 seconds in 4K being cached into memory. The frame rate and codec selected will determine the number of seconds being cached for Pre-Roll. Using a lower bit rate codec setting and shooting at a lower frame rate will increase the length of Pre-Roll.

When the record button is pressed or trigger is sent, the buffered Pre-Roll data in memory will be written out to the start of the recording. This means if you are a few seconds slow hitting the record button when something interesting happens you will still capture the shot.

With this option turned on you will see a red Pre-Roll icon flash in the top left hand corner of the display.



A white circular arrow will also appear around the record button.





With Pre-Roll mode activated the Recorder is constantly caching frames internally to the unit and as such any feature that can not be changed whilst recording is disabled. This includes audio channel select, 3D LUT record, codec, disk options etc.

## **CODEC (Recording Format)**

### **Codec Format**

To select a codec tap on the currently displayed codec to toggle between the options:

- Apple ProRes®,
- Apple ProRes RAW,
- Avid DNxHD® and
- H.265 (HEVC)

After selecting a codec, you will be prompted to tap Confirm to switch to that codec.



If you select an optional codec like Avid DNx, ProRes RAW or H.265, you will be prompted to activate the codec at <a href="my.atomos.com">my.atomos.com</a> as these codecs must be activated before use.

### Compression

Tapping on this setting allows you to toggle the compression for the currently selected codec.

#### **Apple ProRes**

Apple ProRes is built in to the SHOGUN CONNECT and offers three levels of compression (HQ, 422 & LT).

#### Avid DNx

Avid DNx requires free activation via <a href="mailto:my.atomos.com">my.atomos.com</a> and includes DNxHD with four levels of compression (220x, 220, 145, 36) and DNxHR for 4K/UHD inputs with four levels of compression (HQX, HQ, SQ and LB). DNxHD 220x/DNxHR HQX are 10-bit, whilst all others variants are 8-bit and DNxHD36 is a proxy codec.

### **Apple ProRes RAW**

Apple ProRes RAW also requires free activation via <a href="my.atomos.com">my.atomos.com</a> and includes two compression options: ProRes RAW and ProRes RAW HQ. Compression artifacts are very unlikely with ProRes RAW, and extremely unlikely with ProRes RAW HQ.

#### H.265 (HEVC)

H.265 (HEVC) is an optional codec that requires paidfree activation via <a href="my.atom-os.com">my.atom-os.com</a> and provides three compression options HQ, MQ and LQ (High Quality, Medium Quality and Low Quality). For more information on using H.265 (HEVC) refer to the H.265 (HEVC) section.

#### **Record Format**

Displays the resolution and frame rate that is being recorded to your media.

### **Record Bit Depth**

When the H.265 codec is selected, an additional Record Bit Depth setting will be available on the Record page. Tap to cycle through the options which include 8-bit 4:2:0, 8-bit 4:2:2 and 10-bit 4:2:2.

# **RAW over HDMI**

When connected to a supported camera via HDMI, you will be able to record RAW data over HDMI.

When RAW over HDMI is enabled on a connected camera, your SHOGUN CONNECT will automatically detect the RAW signal and prompt you to select ProRes RAW as the recording codec.



Refer to the documentation for your camera on how to enable RAW over HDMI from the camera.

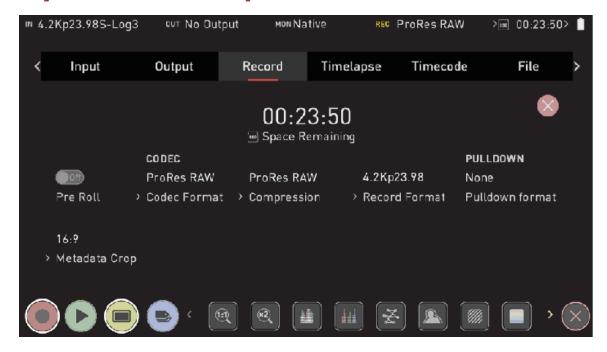
# **SDI RAW**

The SDI RAW feature is built into SHOGUN CONNECT and does not need to be activated via my.atomos.com. SDI RAW allows you to record RAW over SDI from compatible cameras.



When RAW over SDI is enabled on a connected camera, your SHOGUN CONNECT will automatically detect the RAW signal and prompt you to select ProRes RAW as the recording codec.

# **Sony Metadata Crop**

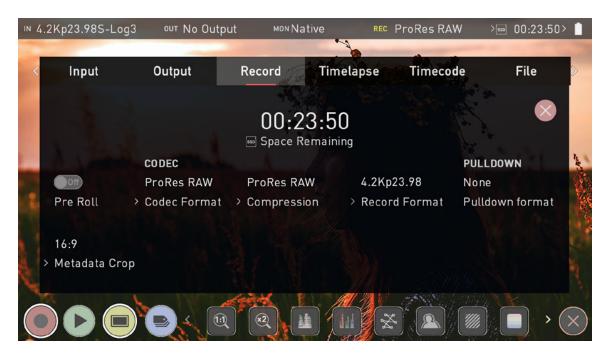


To help with your video editing workflow, you can crop the RAW video captured from certain cameras like the Sony Alpha A7sIII, Sony Alpha 1 and Sony FX3 when recording ProRes RAW.

So for example, when recording 4.2K ProRes RAW video on the A7sIII the resolution is  $4264 \times 2408$ . Using the metadata crop feature will allow you to record the signal as  $4240 \times 2385$ , which has an aspect ratio of 16:9. This means that you can use the 4.2K footage in a 16:9 timeline in your NLE without having to be concerned whether the scaling of the image is correct.

Sony Metadata Crop will appear in the Record menu, when you have an HDMI RAW video signal that supports this feature and ProRes RAW is selected as the recording codec.

# **Pulldown**



#### **Pulldown Format**

The record menu allows you to apply pulldown removal if recording from a source that applies pulldown to the output signal. Tap Pulldown Format to cycle between the options.





For 3:2 Pulldown removal, movement in the frame may be required to accurately lock signal, simply wave your hand in front of the camera to achieve lock.

#### What is Pulldown?

Many professional and consumer cameras available today do not send true 1080p24, 1080p23.98, 1080p25, 1080p29.97 or 1080p30 signals to their HDMI outputs. Instead

they send 1080i59.94 in NTSC regions (e.g. USA, Japan), and 1080i50 in PAL regions (e.g. Europe) In order to convert the signal from the internal recording format to 1080i5994 or 1080i50, they use a process called 3:2 or 2:2 pulldown.

Camera Set- ting	Pulldown	SHOGUN CONNECT Receives
1080p23.98	3:2	1080i59.94
1080p24	3:2	1080i60
1080p25	2:2	1080i50
1080p29.97	2:2	1080i59.94
1080p30	2:2	1080i60

You will of course want the SHOGUN CONNECT to record the actual frame rate such as 1080p23.98, not the 1080i59.94 to disk. In many cases, it is not possible for the SHOGUN CONNECT to detect when pulldown has been applied to the video, so you will have to set the correct mode of removal on the SHOGUN CONNECT to match the setup of your camera.

With some cameras, the SHOGUN CONNECT can detect and remove the pulldown automatically, in which case the mode you expect (e.g. 1080p23.98) will display on the SHOGUN CONNECT and you will not have to do anything further.

If there is no input detected, then toggle the input by pressing the screen until you see the input you wish to record.



ATOMOS is adding auto-detection support for more cameras, please check for firmware updates regularly at www.atomos.com

## 1080p23.98 or 1080p24

If you have set 1080p23.98 or 1080p24 in your camera and your SHOGUN CONNECT displays 1080i59.94 or 1080i60, then you can easily remove the pulldown by following these steps:

1. Select the Input Menu from the top Left and toggle the blue arrow underneath Record repeatedly until you see 1080p23.98 (or 1080p24) displayed. You may not get a green tick in this column immediately.

- 2. Your SHOGUN CONNECT needs to analyze the video for about 1 second, in order to detect the pulldown sequence and remove it.
- 3. If it is not automatically detected after 1 second, wave your hand from side to side in front of the lens, or wave the camera from side to side for a few seconds. The SHOGUN CONNECT will detect the pulldown cadence in the movement, and you will see a green tick along with the video displayed on the screen.



3:2 pulldown detection is difficult, it is not impossible to detect on completely still video. This is why you should wave your hand in front of the lens.



If you lose the input detection – for example you unplug the HDMI cable or go to Playback mode, you will need to wave your hand or the camera again, when the signal is restored to the SHOGUN CONNECT.



Some cameras use a variant of pulldown removal, for example Panasonic Advanced pulldown. The SHOGUN CONNECT does NOT support this format, and it will not be detected.



Standard Panasonic pulldown is supported, ensure in the Panasonic camera settings that pulldown is not set to Advanced.

## 1080p25, 1080p29.97 or 1080p30

For these modes, access the Record Menu tab and simply press the Record Format options repeatedly until your 1080p desired format is displayed. There is no need to wave your hand or the camera, as 2:2 pulldown removal does not require moving video.



Pulldown is only applicable to interlaced HD signals, not 4K

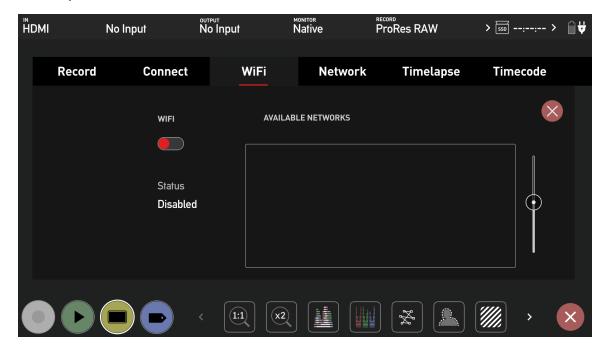
# **H.265 (HEVC)**

H.265 (HEVC) is a highly efficient compressed codec that combines excellent image quality with a small file size, which makes it ideal for streaming and for the sharing of files. It is also well suited to situations where there is no time or budget for color grading, as you can 'bake in' Rec. 709 or a custom LUT to the file so that you can share files immediately at the end of a shoot.

H.265 is also an excellent option for recording high quality proxy files in an ARRI or RED SDI workflow, where RAW is being recorded internally on the camera. Your H.265 proxy recordings can also use the same file names as the RAW files, so that you can start editing with the proxy files immediately and then use the RAW files for the final color grade. For information on using Red/Arri file names for your recordings, refer to the File Menu section.

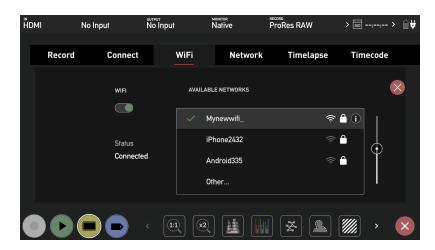
## Wi-Fi Menu

When SHOGUN CONNECT is in Connect Mode, you can access settings on the Wi-Fi menu tab. This menu provides settings for connecting your device to a Wi-Fi network, so that you can connect to Atomos Cloud Services. .

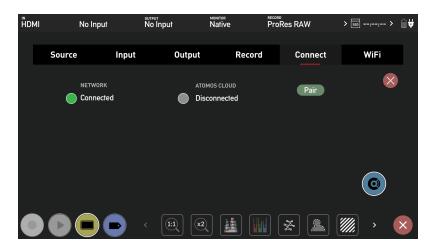


#### How to connect to a Wi-Fi network:

- 1. Navigate to the Wi-Fi Menu page on your SHOGUN CONNECT.
- 2. Tap the toggle switch at Wi-Fi to enable Wi-Fi.
- 3. The network name (SSID) of the available Wi-Fi networks will be displayed at Available Networks, along with the signal strength for each network and a padlock icon where a password is required to join the network. Tap and drag the list to scroll through the listed networks.
- 4. Tap on one of the network names to select it. A keyboard will appear so that you can enter the password for the selected network. Once the password has been entered, you will be connected to the chosen Wi-Fi network. A green tick will appear next to the network name.
- 5. Your SHOGUN will automatically reconnect to this Wi-Fi network when you enable Wi-Fi.



6. Now that you are connected to a network, the Connect Menu page will be updated with a green circle and the word 'Connected' at Network. For information on connecting to the Atomos Cloud, refer to Connect Menu





It may take up to 10 seconds for Wi-Fi connections to re-establish when switching between record and playback mode.



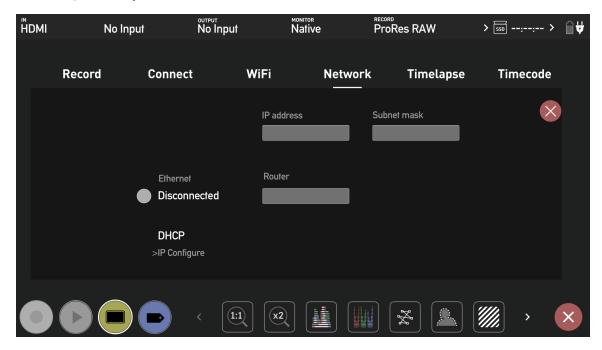
Previously connected Wi-Fi networks may not auto rejoin, and require you to manually reconnect via the Wi-Fi Menu.



Enabling Wi-Fi may require the system to reboot to show available SSIDs. Please follow the on screen prompts.

## **Network Menu**

When SHOGUN CONNECT is in Connect Mode, the Network menu tab will appear in the menu system. This menu provides settings for connecting your device to a network via Ethernet, so that you can connect to Atomos Cloud Services.

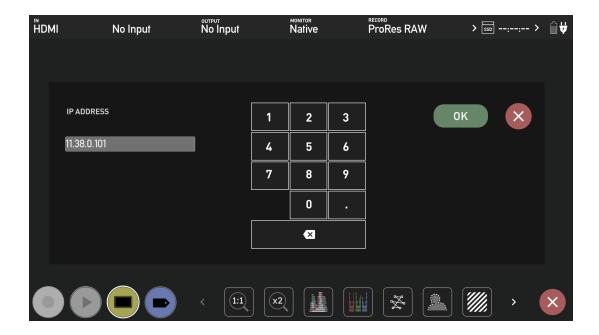


#### How to connect to an Ethernet network

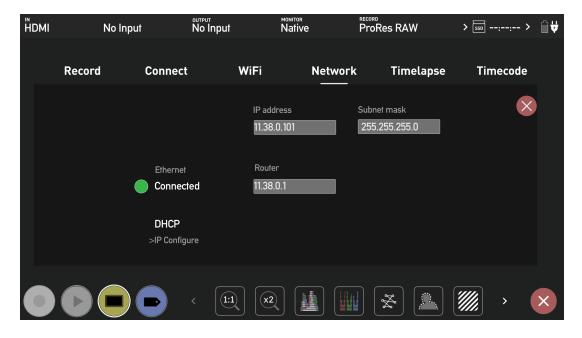
- 1. Plug an Ethernet cable from your network into the Ethernet connector on your SHOGUN CONNECT.
- 2. Navigate to the Network Menu page on your SHOGUN CONNECT.
- 3. Tap on IP Configure to cycle through DHCP and Static. Select DHCP to configure the network connection details automatically. Your router will then automatically populate the DNS, IP address and Subnet Mask fields.



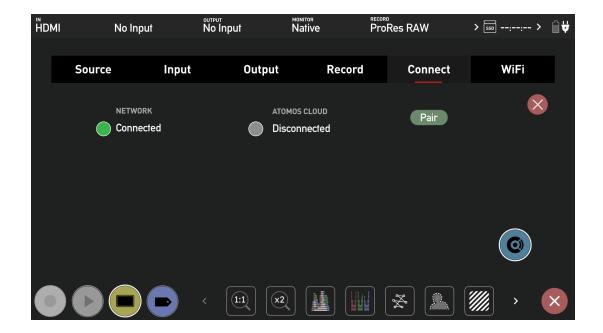
4. If you prefer to manually configure the network, select Static at IP Configure. Tap in one of the empty fields and a keyboard will appear so that you can enter the IP address, Subnet Mask and Router. Tap Confirm once you have finished entering these details.



5. Once you have connected to an Ethernet network, a green circle and the word Connected will be displayed at Ethernet.



6. The Connect Menu page will update with 'Connected' at Network and a green circle. For information on connecting to Atomos Cloud, refer to Connect Menu





It may take up to 10 seconds for Ethernet connections to re-establish when switching between record and playback mode.

# **Connect Menu**

The Connect Menu allows you to pair your SHOGUN CONNECT with Atomos Cloud Studio. It also displays the network connection status and the status of the connection to the Atomos Cloud.

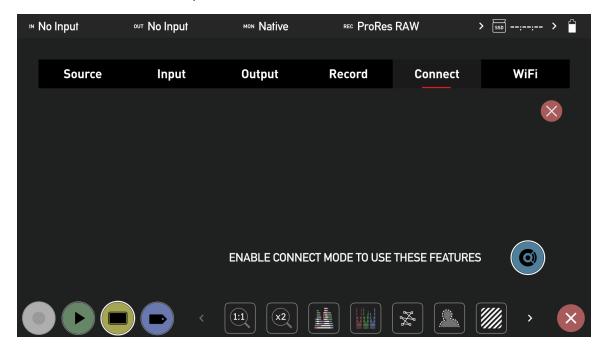


Networking and cloud features are only available when your SHOGUN CONNECT is in Connect Mode. Once in Connect mode, you can access settings for the WiFi, Network and Connect menu page tabs.

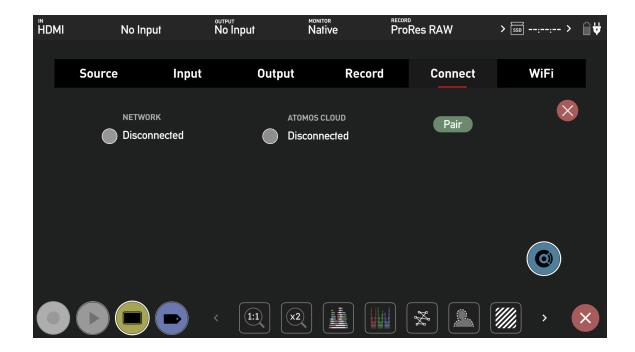
#### **CONNECT MODE**



The first time that you open the Connect Menu page, the blue Connect icon will appear on-screen. To use the network and cloud features of SHOGUN CONNECT, the Connect mode must be enabled. Tap the Connect mode icon to enter Connect mode.



Once you are in Connect mode, the settings and information are displayed on the Connect Menu page.





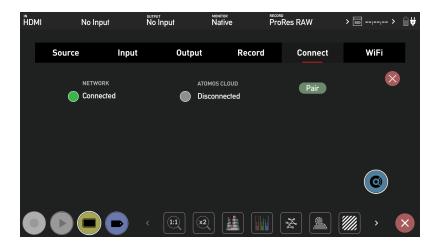
Whilst in Connect mode the connect button will allow you to manually turn the connection to Cloud Studio on or off.

## **Connecting to the Atomos Cloud**

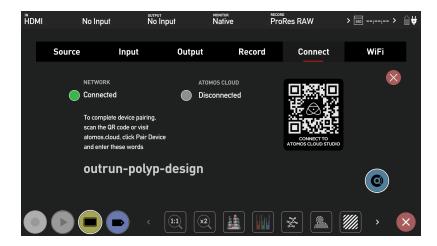
Before connecting to the Atomos Cloud, your device must first be connected to a network. Refer to the <u>Wi-Fi Menu</u> and <u>Network Menu</u> pages for further information on how to connect to a network. Once you have successfully connected to a network, you can follow the steps below to pair the device to the Atomos Cloud from the Connect Menu.

### How to Pair your device to the Atomos Cloud

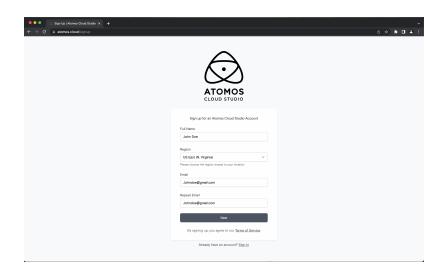
1. Confirm that your device is connected to a network. The network connection status is displayed under Network as either Connected or Disconnected, with a green or red circle to indicate the status visually.



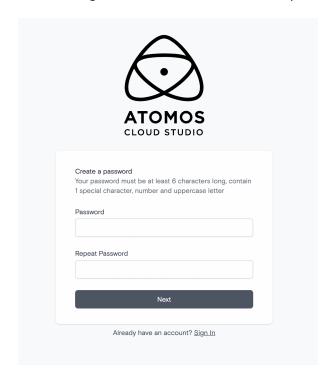
- 2. Tap on Pair.
- 3. The device communicates with Atomos Cloud Studio and is assigned a unique three-word combination, which is displayed on your SHOGUN CONNECT screen with a QR code.



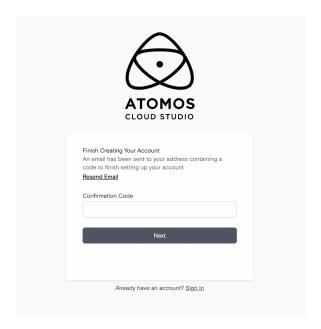
4. Scan the QR code to connect to Atomos Cloud Studio on your mobile device, or navigate to <a href="atomos.cloud">atomos.cloud</a> on a desktop browser. Enter your details and tap/click Next to sign up for an Atomos Cloud Studio Account. Tap/click on Sign In if you already have an Atomos Cloud Studio Account, and follow the prompts to sign in.



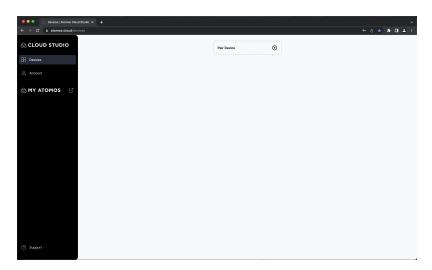
5. Follow the guidelines to create a suitable password.



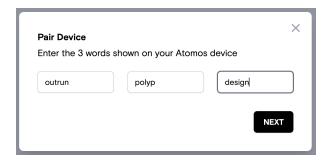
6. Check your email inbox for an email from Atomos with a six digit verification code. It will be sent to the email address used to create your Atomos Cloud Studio Account. Make sure you check your Junk-mail folders as well. Enter the verification code on screen when prompted and tap/click Next.



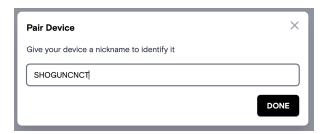
7. The main page will then open on the Devices tab. This screen displays the CONNECT devices that have been paired with your Atomos Cloud account. Tap/click on Pair Device in the center of the screen.



8. A window will appear with spaces to enter the three word code that was shown on your Atomos device. Enter the three words in the spaces provided and tap/click on Next.



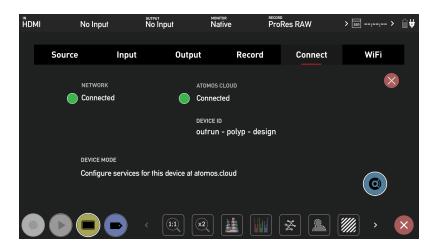
9. Give your device a nickname to help identify it.



10. The device has now been paired with your Atomos Cloud account. The Devices tab will update to show an image of the device you paired and it's details. The three word code is displayed on the image of the device and the device type appears at Device. When your device is connected to Atomos Cloud, a green circle will appear next to the device nickname at the top of the device box.



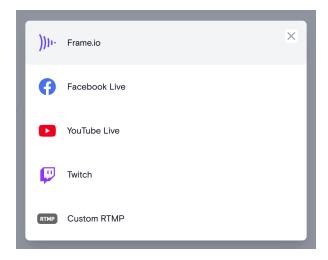
11. The Connect Menu page of your SHOGUN CONNECT will also update to display Connected at Atomos Cloud and have a green circle to indicate the status visually. The current mode will also be displayed at Device Mode, with the current destination settings.



12. Next you will need to configure the services for this device at atomos.cloud. Tap on the + symbol next to Add Destination in the device box to add a destination.

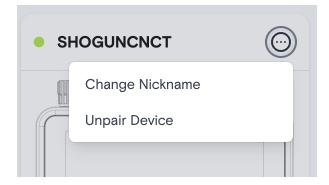


13. A new window opens displaying the destination options. Click to select a destination and you will be prompted to enter your credentials and other settings for that destination.



## Adjusting settings for paired devices

Tapping/clicking on the three dots in the upper right corner of the device image box displays options to change the nickname or unpair the device.



### Renaming your device

Select Change Nickname, and enter the new name in the box that appears.

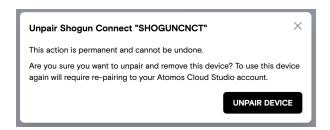


### **Unpairing your device from the Atomos Cloud**

If you decide that you would like to unpair a device from your Atomos Cloud Account, select Unpair Device from the drop-down menu. A dialog box will ask you to confirm your decision.

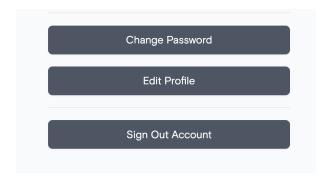


Unpairing a device will also disconnect any associated services that you may have connected to.



## **Adjusting Settings**

If you would like to make changes to your Atomos Cloud Account, tap/click on Account on the left side of the screen to open the Account tab. This page allows you to change your password, edit your profile details or sign out of the Atomos Cloud Studio Account.



# **Connect Menu - Atomos Cloud Studio**

ATOMOS Cloud Studio is a powerful collection of cloud-based video production services, including ATOMOS Capture to Cloud and ATOMOS Stream. This allows anyone with a compatible camera or device to make use of these tools to share media and collaborate in real-time.

### **ATOMOS Capture to Cloud**

Cloud-based workflows are rapidly growing in popularity and have proven their efficiencies on thousands of productions. Atomos Capture to Cloud adds new dimensions to these systems by allowing any HDMI or SDI equipped camera or device to be connected to online services.

This provides a powerful, flexible, and immediate way to share content from devices or clips from a camera to remote team members. By removing the need to manually offload cards and wait for rushes to be reviewed, this workflow will continue to break down the traditional divisions between production and post, to bring teams closer together wherever they are.

ATOMOS Capture to Cloud is coming soon and will be launching with Frame.io Camera to Cloud.

#### Frame.io Camera to Cloud (C2C)

Online review and collaboration platforms like Frame.io have become essential and have transformed the relationship between production and post by eliminating the delay between these stages.

Frame.io Camera to Cloud is an ecosystem of **C2C Connected Devices** that connect Frame.io to the production set, by instantly uploading video and audio from your camera on set to Frame.io between each take.

SHOGUN CONNECT can connect directly into the Frame.io C2C ecosystem as a **Frame.io C2C Connected Device**. This allows anyone with a compatible camera or device with HDMI or SDI to use Frame.io Camera to Cloud as well as the review and collaboration tools within Frame.io.

With Frame.io for Creative Cloud now included in the Creative Cloud subscription, even more filmmakers will have access to the powerful features of Frame.io like Camera to Cloud.



Selecting Frame.io as a destination for ATOMOS Capture to Cloud, is not currently available in Atomos Cloud Studio. This feature is coming soon.

#### **ATOMOS Stream**

Allows you to live stream to popular platforms like YouTube, Facebook Live, LinkedIn Live, Microsoft Stream, Twitch and more. The integrated system supports a wide range of cameras that sets a new benchmark for flexibility and points of entry. Customers can choose to work with high-end digital cinema cameras and mirrorless, DSLR, USB cameras or even iOS devices.

ATOMOS Stream is designed to make sharing live video to popular online platforms easier, by making the process of configuring the stream more straightforward and more secure.



Facebook Live is currently not available as a destination for streaming, and will be enabled in a future firmware update.

# **Connect Menu - Atomos Capture to Cloud**

ATOMOS Capture to Cloud provides a powerful, flexible, and immediate way to share clips from a camera to remote team members using services like Frame.io Camera to Cloud (C2C).

## Using Frame.io Camera to Cloud (C2C)

SHOGUN CONNECT can connect directly into the Frame.io Camera to Cloud ecosystem as a **Frame.io C2C Connected Device**. This ecosystem connects Frame.io to the production set, by instantly uploading video and audio from your camera on set to Frame.io between each take.

Selecting Frame.io as a destination in Atomos Cloud Studio allows you to use Frame.io Camera to Cloud to upload proxy files directly into your Frame.io project. Having the proxy files uploaded to Frame.io whilst you are recording them, means that an editor can access these files from anywhere in the world, and begin editing immediately. For more information on Frame.io Camera to Cloud, refer to <a href="https://frame.io/c2c/">https://frame.io/c2c/</a> or watch the Frame.io Training Series at <a href="https://frame.io/c2c-training/">https://frame.io/c2c-training/</a>



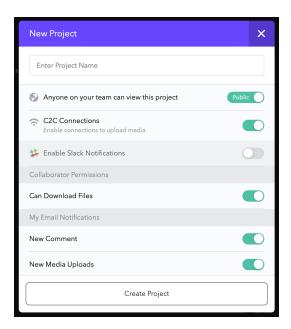
Selecting Frame.io Camera to Cloud as a destination for ATOMOS Capture to Cloud is not currently available in Atomos Cloud Studio. This feature is coming soon.

#### Setting up your Frame.io account

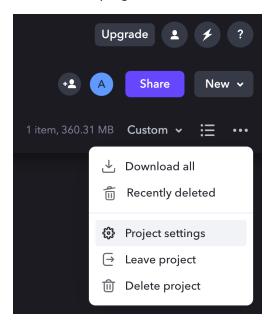
Before selecting Frame.io Camera to Cloud as a destination in Atomos Cloud Studio, you need to have a Frame.io account already set up. Visit <a href="https://frame.io/">https://frame.io/</a> and follow the prompts to create a Frame.io account.

You also need to have created a project that you can select as a media destination, and ensure that in the settings for the project you have enabled **C2C Connections**. This allows your SHOGUN CONNECT to connect directly into the Frame.io C2C ecosystem and upload proxy files directly into your Frame.io project.

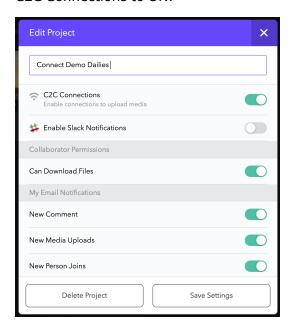
To enable C2C Connections, click the toggle switch at C2C Connections to ON when creating a new project from the web app, mobile web, or in the Frame.io iOS app.



You can also enable C2C Connections on an existing project by clicking on the three dots in the top right corner and selecting Project Settings.



An Edit Project dialog box will open, where you can click to toggle the switch at C2C Connections to ON.



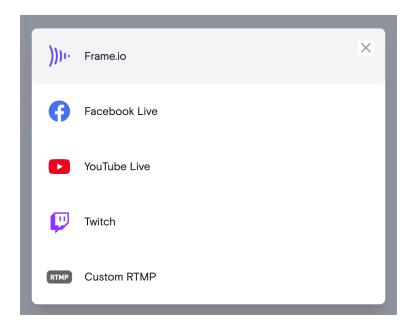
Once you have enabled C2C Connections for your project, you can follow the steps below to set Frame.io Camera to Cloud as a destination in your Atomos Cloud account.

Setting Frame.io Camera to Cloud as a destination in Atomos Cloud Studio

1. Follow the steps in <u>Connect Menu</u> to pair your device to the Atomos Cloud. Once paired, click on Add Destination in the device box.



2. Select Frame.io from the options.

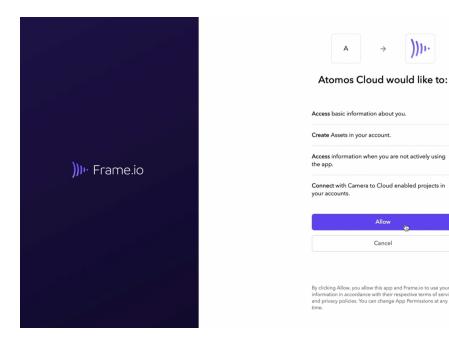


3. You will be prompted to log in to your Frame.io account.

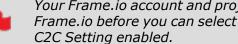


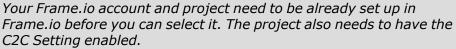


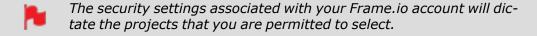
4. You will then be asked to allow your Atomos Cloud account to connect with Camera to Cloud enabled projects in your Frame.io account. Click on Allow to proceed.

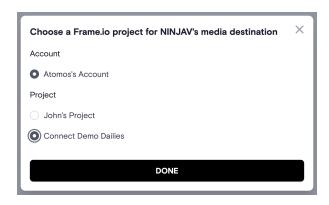


5. You will then be returned to the Devices tab whilst your Atomos Cloud Studio account pairs with Frame.io. Once paired, you will be able to select a Frame.io project to be used as a media destination for your device. Your personal Frame.io projects will be displayed, along with any projects that you have been invited to work on. Click on a project to select it as the media destination and then click on Done.

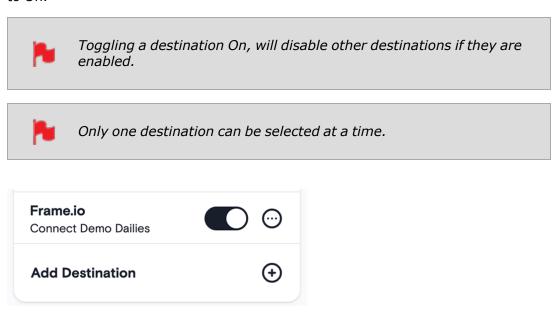






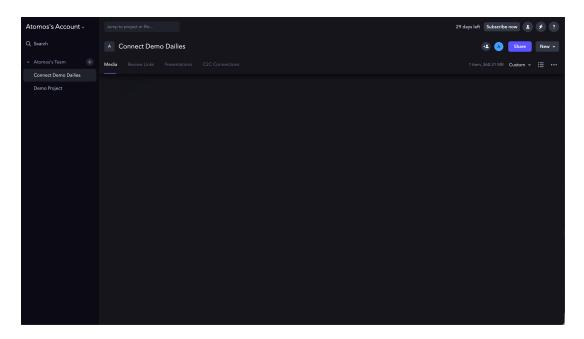


6. Frame.io will now appear at the bottom of the device box with a toggle switch to enable/disable the Frame.io destination for this device. Click to toggle the switch to On.

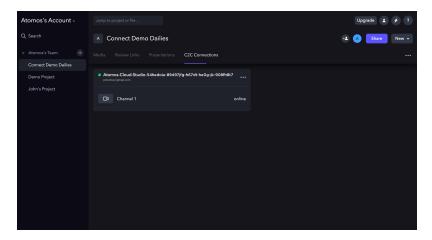


Log into your Frame.io acount in a new browser window and navigate to the Frame.io project that you selected to be used as a media destination for your

device.

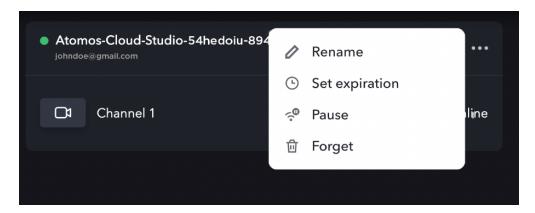


7. Click on the C2C Connections tab to view the Frame.io Camera to Cloud C2C Connections. These are hardware devices and apps that connect directly into the Frame.io C2C ecosystem. Atomos connected devices will appear here, and will have a green dot on a device when the device is currently connected to Frame.io.

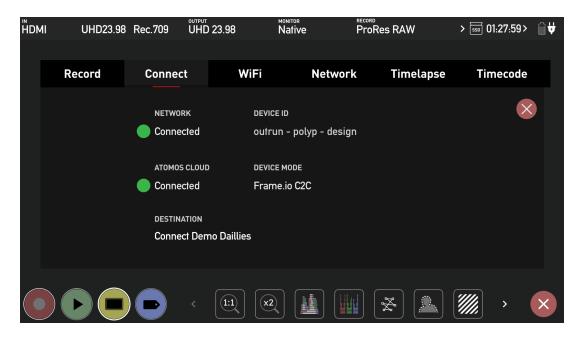


8. By default, the name of the device will be 'Atomos-Cloud' with an alpha numeric sequence. Clicking on the three dots on the right hand side of the connection box will display a menu that allows you to rename the connection. You may wish to use the same name that you used in Atomos Cloud Studio, so that the device has the same name on Frame.io. The other settings here allow you to pause, forget or

set an expiration for the connection.



9. The Connect Menu page on your SHOGUN CONNECT will update to indicate that the Device Mode is Frame.io C2C. The selected Frame.io project will also appear at Destination.

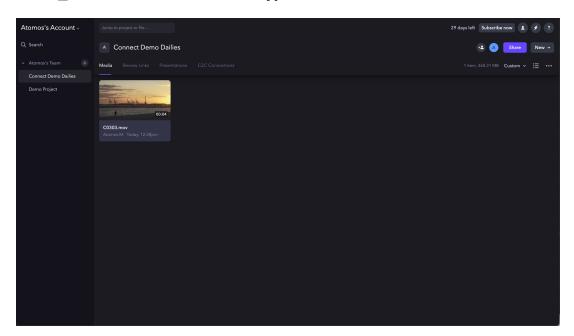


10. Now that you are connected to a Frame.io project, recording a clip on your SHOGUN CONNECT will generate a 1080p, H.265 (HEVC) proxy file that is automatically uploaded to the Frame.io project you selected. After recording is stopped, a green arrow on screen indicates that the file is being uploaded to Frame.io.

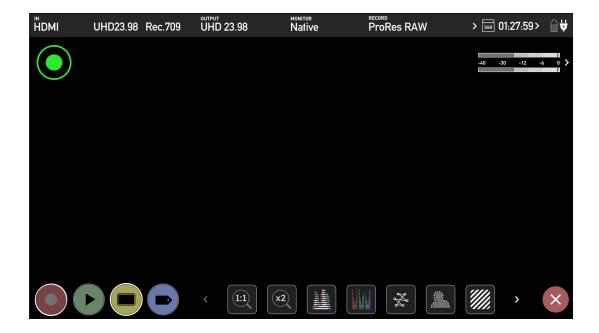


11. Uploaded clips will appear in a fixed folder structure organized by date in the media tab inside your Frame.io project. Within a folder called Cloud Devices, media that has been written on different dates will upload to the folder that corresponds with the date of upload. The folder structure is as follows:

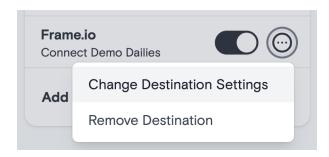
# Cloud\_Devices > Date > Device Type > Device



12. Once uploading has completed, your SHOGUN CONNECT will display a green circle icon to indicate that the connection is idle.



13. Clicking on the three dots next to the Frame.io destination for the device, allows you to change the settings for your Frame.io destination or to remove the Frame.io destination.



14. Now that the files from your SHOGUN CONNECT have uploaded to Frame.io, they can be moved, copied, or shared like any other asset in your Frame.io project.

For more information on Frame.io Camera to Cloud, refer to <a href="https://frame.io/c2c/">https://frame.io/c2c/</a> or watch the Frame.io Training Series at <a href="https://frame.io/c2c-training/">https://frame.io/c2c/</a> or

# **Connect Menu - Atomos Stream**

ATOMOS Stream is designed to make live streaming to popular platforms like YouTube Live, Facebook Live and Twitch easier. You can choose to work with high-end digital cinema cameras, mirrorless cameras, DSLR, USB cameras or even iOS devices and stream content live to these popular online platforms through your Atomos Cloud Studio account.

In order to stream content from your Atomos Cloud Studio account to one of these platforms, first you will need what is called a Stream Key. This is a unique code generated by each platform, that provides information on where to send the video stream. The following provides guidance on generating a stream key and setting up for streaming on each of the platforms.



Live Streaming is not available if H.265 is selected as the record codec.



Streaming is only available when using standard YCC 422 video inputs.



Facebook Live is currently not available as a destination for streaming, and will be enabled in a future firmware update.



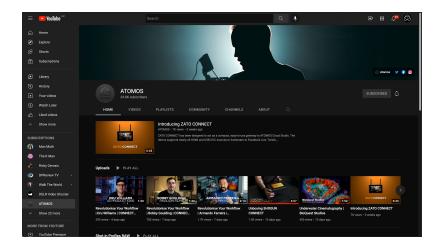
Changing resolutions and frame rate when Live Streaming mode is enabled may result in the stream stopping. Switching between Record and play back mode will allow the stream to restart. Press the LIVE button to stop stream before changing inputs, resolutions or frame rates.

# Streaming to YouTube Live

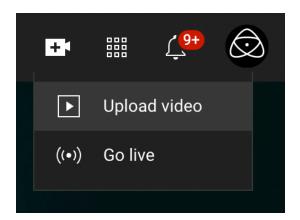
When using your SHOGUN CONNECT to stream to YouTube Live, your device is viewed as an encoder, and must be set up in YouTube as such.

## How to create a YouTube live stream

1. Navigate to <u>youtube.com</u> and sign in to your YouTube account. Create an account if you do not already have one.



2. Click on the Create icon in the top right corner and select Go Live from the drop-down to open the YouTube Live Control Room.

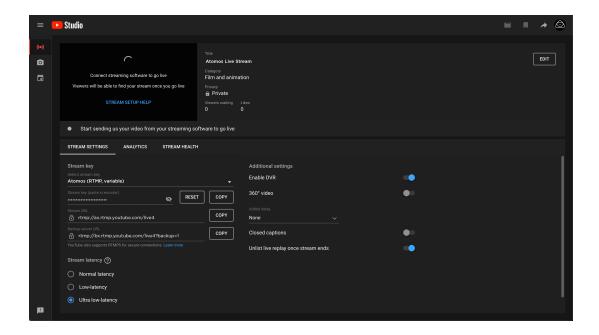


3. If you have not yet verified your YouTube channel, you will need to verify your channel before proceeding

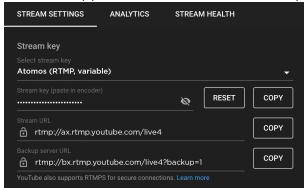


NOTE: Before being able to live stream to YouTube, you need to enable live streaming. YouTube requires that you have no live streaming restrictions in the past 90 days and that you verify your channel. Enabling a live stream for the first time may take up to 24 hours.

4. A pop-up may appear, asking you to choose when to go live. Options are Right Now and at a Later Date. Click the Start icon in one of the boxes to proceed. If you select Right Now, you will then need to select Streaming Software as the type of stream from the next pop-up screen. The YouTube studio will open.



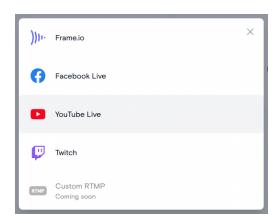
5. Click the Copy button next to the Stream Key to copy it.



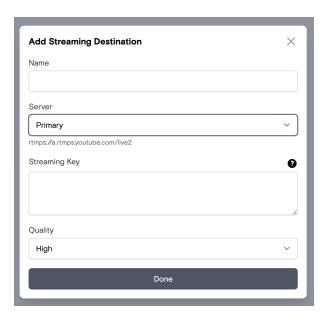
6. In your browser, log into atomos.cloud and click on the '+' symbol at Add Destination for the SHOGUN CONNECT device you want to stream from.



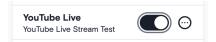
7. Select YouTube Live.



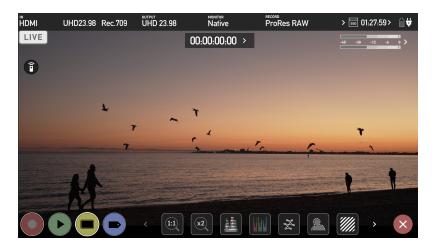
8. In the popup box that appears, add a description for the stream and click on the drop-down arrow at Server to select a server to use. Right click in the Streaming Key field and select Paste, to paste the YouTube Live streaming key that you copied. Click on Done to save the destination settings.



9. YouTube Live now appears as a destination in the bottom of the device box in Atomos Cloud. Toggle the switch at YouTube Live to On.



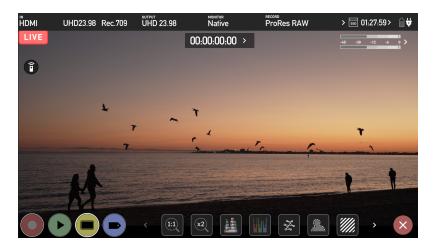
10. Tap on the LIVE icon on your SHOGUN CONNECT display.



11. The LIVE icon will turn yellow to indicate that your device has started streaming.



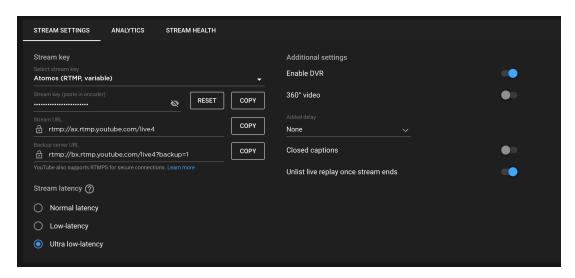
12. The LIVE icon will turn red once the stream has been acknowledged by the server. This indicates that you are currently live streaming.



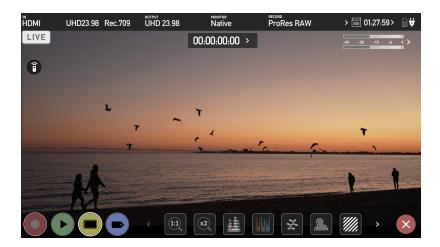
13. A preview screen at the top of the YouTube Studio settings page will display the image from your camera. The words LIVE and the elapsed time of the stream will be displayed whilst you are live streaming to YouTube.



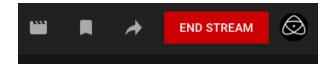
14. The Stream Settings tab below the preview screen allows you to adjust the stream latency and other settings for the stream.



15. Tap the LIVE icon on your SHOGUN CONNECT display when you want to stop live streaming, and it will turn white to indicate that you are no longer streaming.



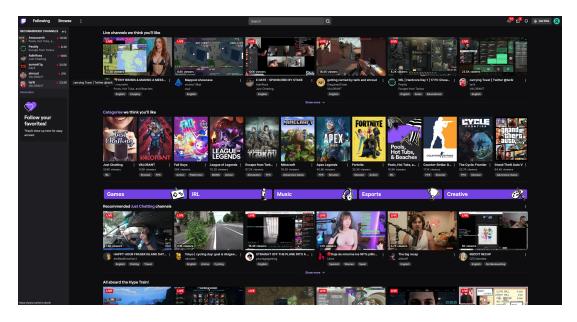
16. To end the live stream from within YouTube, click on End Stream in the top right hand corner of the screen.



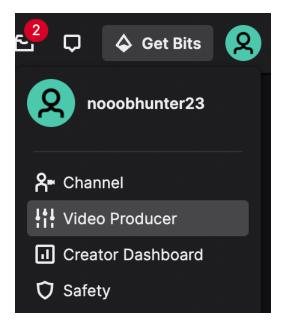
For more information and details on creating a YouTube live stream, refer to https://support.google.com/youtube/answer/2907883?hl=en

# **Streaming to Twitch**

1. Create a Twitch account at twitch.tv or log into your existing Twitch account.



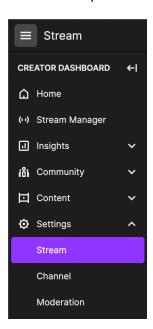
2. Click on your profile picture icon in the top right corner of the screen and select Video Producer.



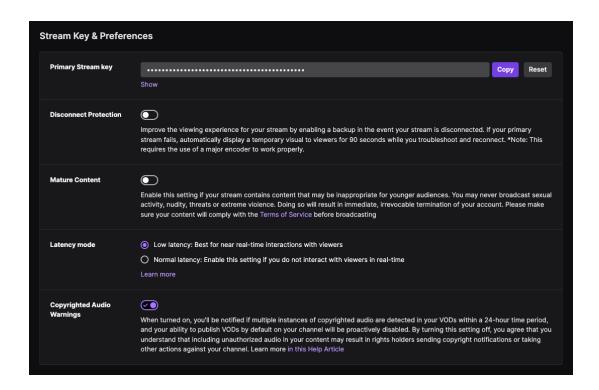
3. The Video Producer interface will open.



4. Click on Settings in the pane on the left side of the screen, then click on stream from the drop-down menu.



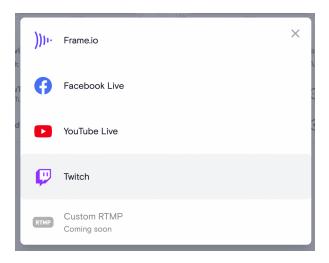
5. The Stream Key and Preferences window will open. Click on the copy button to copy the stream key. Note that this window provides latency and other settings for that can be adjusted.



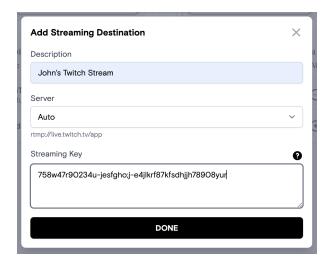
6. In your browser, log into atomos.cloud and click on the '+' symbol at Add Destination for the SHOGUN CONNECT device you want to stream from.



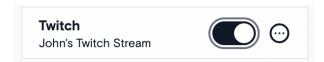
7. Select Twitch.



8. In the popup box that appears, add a description for the stream and click on the drop-down arrow at Server to select a server to use. Right click in the Streaming Key field and select Paste, to paste the Twitch streaming key that you copied. Click on Done to save the destination settings.



9. Twitch now appears as a destination in the bottom of the device box in Atomos Cloud. Toggle the switch for the Twitch destination to On.



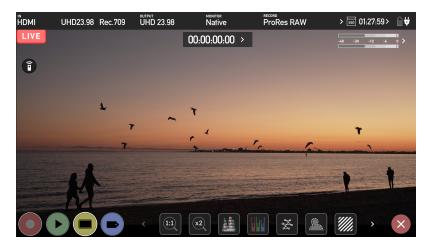
10. Tap on the LIVE icon in the top left corner of your SHOGUN CONNECT display.



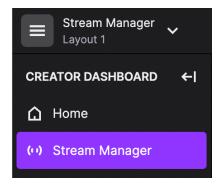
11. The LIVE icon will turn yellow to indicate that your device has started streaming.



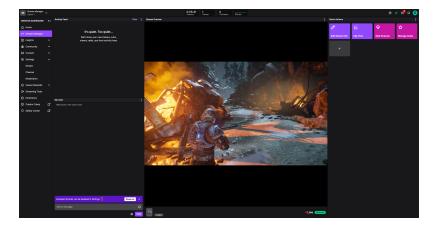
12. The LIVE icon will turn red once the stream has been acknowledged by the server. This indicates that you are currently live streaming.



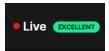
13. Click on Stream Manager in the side pane.



14. The Stream Manager page will open, and the image from your device will be shown on-screen.



15. Below the image, a red dot and the word LIVE will be displayed when you are live. The status/stability of the stream will also be indicated by a colored icon. The green box with the word 'Excellent' is an example of this.



16. Hovering over the image will bring up some additional settings that can be adjusted.



17. Tap the LIVE icon on your SHOGUN CONNECT display when you want to stop live streaming, and it will turn white to indicate that you are no longer streaming.



18. The word Offline will be displayed under the image in your browser when you are not live streaming.



For more information on streaming to Twitch, refer to help.twitch.tv/s/

# **Timelapse Menu**



This menu allows you to set up recording of a time-lapse sequence as a single video file in ProRes, DNx or ProRes RAW from an HDMI or SDI source.

Time-lapse sequences are used to create dynamic videos showing changes in light or movement in a scene over time. Images are captured at set intervals like 1 frame every 10 seconds and saved to the video file in sequential order, so when the time-lapse video is played back at a frame rate of 24 frames per second, time is compressed and the changes in the scene appear more pronounced. Examples of this are time-lapse recordings of a sunset or sunrise, or the construction of a building.

The options in this menu allow you to specify the settings for a time-lapse recording. An example of common time-lapse settings might be as follows: capture 1 frame every 10 seconds for 20 minutes.



Note that if you select multiple frames/seconds to be captured in the first setting in the example above, these frames/seconds will be captured sequentially. So if you select 15 frames here, it will capture 15 frames as a block every 10 seconds for a duration of 20 minutes.

# **Capture**

The capture setting allows you to specify the number of frames/seconds to capture at each interval.

Eg. Capture X frames/seconds.

# + / -:

Use these icons to adjust the numerical setting

#### **Units:**

Tap to cycle between the following options to be used as a unit:

- Frames
- Seconds



# **Every**

This setting allows you to specify the intervals at which the capture should occur.

Eg. Every X seconds / minutes / hours.

## + / -:

Use these icons to adjust the numerical setting.

# **Units:**

Tap to cycle between the following options to be used as a unit:

- Seconds
- Minutes
- Hours



## For

This setting allows you to specify the duration that the capture should continue for.

Eg. For X frames / seconds / minutes / hours

# + / -:

Use these icons to adjust the numerical setting

#### Units:

Tap to cycle between the following options to be used as a unit:

- Frames
- Seconds
- Minutes
- Hours



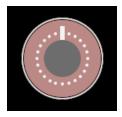
# **Enable/Disable (On/Off)**

When you are ready to begin your time-lapse recording, tap on the Enable/Disable toggle to select the On setting.



When time-lapse recording is enabled and you have an input connected and media inserted , the REC button will change to the time-lapse REC button. This allows you to see at a glance whether you are in the standard record mode or time-lapse record mode.

Tap on the time-lapse REC button to begin recording. Your SHOGUN CONNECT will record the time-lapse sequence as a single video file, using the codec and compression settings selected on the Record page.



The following icon will also appear in the top right corner of your screen to indicate that a time-lapse is being recorded.



During a time-lapse recording, the length of time that you have been recording will be displayed in the upper right corner of the screen. The timecode will display the actual number of frames captured.



# **Play Time**

As you adjust the time-lapse settings, the Play Time in the bottom right updates to let you know the duration of the final video based on the selected settings.



Note that the pre-roll feature is not supported when using time-lapse.



When you have finished using the time-lapse feature, make sure that you use the Enable/Disable toggle to disable the time-lapse recording feature to return to regular video capture mode.



If you want to stop the time-lapse recording before the set duration finishes, simply tap on the stop button.

# **Timecode Menu**



**Timecode Display**: Displays the current timecode. The position of the timecode display will depend on the screen mode you are using. In monitoring mode it appears in the center top, below the info bar. In home screen mode the timecode display sits on the bottom near the REC PLAY MON EDIT icons. Touching the Timecode display will take you to this Timecode menu screen.

00:00:15:00

The timecode modes that are supported:

- HDMI (Embedded)
- Record Run
- Time of Day
- Auto Restart
- AirGlu

Hour / Minute / Second / Frame

These settings will be enabled when using the Auto Restart mode, and allow you to define a timecode that will be used for all clips whenever you press record. Use the - and + icons above each unit to adjust the numerical values for the hour, minute and seconds sections. Refer to Auto Restart mode below for more information.

## Source

Tap to cycle through the timecode modes:

#### **HDMI**

### **HDMI/SDI** embedded Timecode:

With this setting, the HDMI/SDI input will use the Timecode embedded in the input signal. The controls to adjust Timecode values are disabled in this menu as you will need to adjust these on the camera. Note that not all HDMI/SDI sources embed Timecode.

# **Trigger from HDMI Timecode:**

If HDMI timecode is selected and the camera is in REC RUN mode, the user has the choice to start and stop recording remotely from the source camera timecode.

To enable rolling Timecode Start/Stop functions, simply set the HDMI Timecode switch to on. When enabled, pressing the camera Record Stop/ Start button will make the SHOGUN CONNECT start and stop recording simultaneously as the timecode starts and stops.



When using the camera in Free Run timecode, the rolling timecode trigger might not work as expected.



Note that whilst camera triggers are also looped out on HDMI not all wireless systems carry the trigger on to other devices so it's worth testing your system before a shoot if you pan to use it in this way to record proxies.

### **Record Run**

With this setting you set the starting timecode for the first clip. The following clips will start at the frame immediately after the out point of the preceding clip. This will continue for all clips that follow. This is also known as continuous Timecode.

# Time of Day

With this setting, each new clip that is created will contain embedded Timecode starting with the time of day when the recording is started. Please check that SHOGUN CONNECT clock has been set correctly. This can be set in the Date Time Menu



If recording is stopped and then restarted while in this mode, there will be a time gap between the last clip and the next one, equal to the length of time the SHOGUN CONNECT has been out of record.



In Time of Day mode, the controls on the Timecode Setup Screen for adjusting the start-point of the SHOGUN CONNECT's Timecode are not available, as the Timecode is set by the SHOGUN CONNECT's internal clock.

#### **Auto Restart**

With this setting, the Timecode will reset to the timecode you have defined whenever you press record. All your clips start with this same timecode. Use the - and + icons above each unit to adjust the numerical values for the hour, minute and seconds sections.

#### AirGlu

This setting uses the timecode being received wirelessly from another source. Refer to the Sync Config Menu section for more information.

# **Use Drop Frame**

Allows you to use drop frame timecode type.

# **HDMI Out Timecode**

Allows you to output the timecode chosen here on the HDMI Output of the SHOGUN CONNECT.

# **Wireless Timecode and Sync**



The ATOMOS AirGlu™ wireless sync technology built into SHOGUN CONNECT allows you to simplify your multi-camera productions. By adding professional wireless time-code and sync to any connected camera or source, you have the ability to integrate consumer cameras into multicam productions.

This allows for perfect wireless timecode synchronization with other Atomos devices, cameras, iOS devices, audio recorders and timecode systems on set. The ATOMOS UltraSync ONE and UltraSync Blue can also be used to bring multiple cameras and devices into perfect sync.

The result is that your footage and audio from multiple sources will be perfectly aligned when you bring it into your NLE timeline. You can sync and/or control any number of Atomos devices on the same network at ranges of up to 300m.

#### **Region Selection**

The first time you power on your SHOGUN CONNECT, you will be prompted to select a region. It is important to select the correct geographical region here as these accessories adhere to strict guidelines for each region.

## TC Offset

Allows you to set a timecode offset value to account for audio delay when using wireless timecode synchronization. Use the - and + icons to manually adjust the amount of frames to delay. Where the Calibrate function has been used, the frame delay will be displayed here.

# **Set Timecode**

When AirGlu is selected as the source, Press the Set Timecode button to open the Sync Network Timecode page. In this menu you can use the Set From setting to select the timecode to use as the clock for the Server unit.

#### Set From

Tap to cycle through the options:

**Time of Day**: Each new clip that is created will contain embedded Timecode starting with the time of day when the recording is started. Please check that SHOGUN CONNECT clock has been set correctly. This can be set in the <u>Date Time Menu</u>

**Manual**: With this setting, the Timecode will reset to the timecode you have defined whenever you press record. All your clips start with this same Timecode. Use the - and + icons above each unit to adjust the numerical values for the hour, minute and seconds sections. TBC

#### **Calibrate**

Before using the wireless timecode and SYNC features, it is important to use the calibration feature. HDMI cameras deliver their video and audio to your SHOGUN CONNECT with a small delay, so calibration is necessary to identify the amount of delay that your camera has and take that into account. This will ensure that your video, audio and timecode are in sync, especially if you plan to use multiple SHOGUN CONNECT's or other ATOMOS Connected devices on a multicamera shoot.

## How to sync your video, audio and timecode

Follow these steps to sync your video, audio and timecode - and repeat for each SHOGUN CONNECT

- 1. Navigate to the Timecode menu on your SHOGUN CONNECT.
- 2. Select AirGlu as the timecode source. The following screen will appear.



- 3. Using an HDMI cable, connect the HDMI output of your camera to the HDMI in connector on your SHOGUN CONNECT.
- 4. Using an AUX cable, connect the headphone Out of your SHOGUN CONNECT to the mic/line in connector on the camera and press Calibrate. Your SHOGUN CONNECT calculates frame delays & displays it as shown below.

Tap ACCEPT to select the calibrated frame delay. The frame delay will be listed at TC Offset on the Timecode menu page.





If you see 'No Audio Detected' on your SHOGUN CONNECT, check the audio settings on your camera and tap 'retry'.



It's important to recalibrate every time that you change camera type, frame rate or resolution.

# Sync Config Menu



## TIMECODE SYNC

This page allows you to define a network role for each SHOGUN CONNECT on the network as either Server or Client, so that Client units can connect to the timecode network created by the Server unit. It also allows you to add other devices like audio recorders to the network via Bluetooth. The settings that appear on this menu page will vary, depending on the network role of the SHOGUN CONNECT. Some settings will only appear when your SHOGUN CONNECT is set to Server mode, whilst others will only appear when it is set to Client mode. See Network role below for more information.



Bluetooth functionality is currently not enabled in SHOGUN CONNECT. This will be enabled in a future firmware update

#### **Network Role**

Tap to cycle between the options to set the network role for the SHOGUN CONNECT as either Server or Client. The 'Server' unit will then provide the timecode source for all 'Client' units on the network. For any other SHOGUN CONNECT that you want to sync with, 'Client' should be selected as the Network Role on it's Sync Config page. This allows the Client units to connect to the timecode network created by the Server unit.



AirGlu RF - SYNC network menu may not display connected AirGlu devices, but the client devices will receive Timecode and display a SYNC Network ID.

#### **Start Network**

Once you have finished setting up your Server unit, tap Start Network to toggle the Sync network on and off. Note that on Client units you will have a Join Network switch instead of Start Network.

#### Join Network

When this setting is 'on', the client unit will connect to the Sync Network created by the Server unit. Tap to toggle on and off.

#### **RF Channel**

Use the '-' and '+' to select an RF channel between 1-12. Changing the RF channel can help in situations where you are experiencing interference from other devices. Ensure that the RF channel on any Client units is set to the same RF channel as the Server unit.

#### **Record Control**

When this setting is enabled, tapping record on the Server Unit SHOGUN CONNECT will cause any other SHOGUN CONNECT or GoPro on the network to start recording as well.

#### **Network FPS**

On Client units, Network FPS will be displayed and the frame rate will match the frame rate of the server unit.

#### Signal

Provides information on the signal strength.

## **Network ID**

Provides information on the Network.

# Region

Tap to cycle through the options until you find your region and tap 'confirm' to accept the new region or 'cancel'.

#### **Set Timecode**

Press the Set Timecode button to open the Sync Network Timecode page.

# **Input**

Tap to cycle through 'Time of Day', 'Manual' and 'Input'. Select 'INPUT' and tap 'Set Timecode'. TBC

#### **Set Device Name**

Tap to change the name of your SHOGUN CONNECT unit. For more information refer to Unit Name in the Best Practice section.

## **BLUETOOTH**

You can pair with up to six Bluetooth devices, like an iPhone or a Zoom F6 audio recorder, so that they can connect to the timecode network. By connecting an ATOMOS Ultra Sync Blue to the timecode network, you can pair it with Bluetooth devices that are much further away from your SHOGUN CONNECT.



Bluetooth functionality is currently not enabled in SHOGUN CONNECT. This will be enabled in a future firmware update

#### Pair

Follow the manufacturers instructions for each device to set it up for Bluetooth pairing, then Tap Pair to connect to the device. Once paired, the device will be listed in the <a href="Sync Network Menu">Sync Network Menu</a> page, along with the other connected SHOGUN CONNECTs and other devices. For information on pairing with an iOS device or Mac computer for use with the AtomRemote app, refer to the Connecting to AtomRemote section.

## **Unpair All**

Tap to unpair all devices that are connected to the timecode network.

#### Free Pairs Available

The numerical figure indicates the number of Free Pairs that are available for Bluetooth pairing.



For connected Client units, the timecode source should be set to AirGlu on the Timecode page.



Multiple SHOGUN CONNECT units can be added to the timecode network. Simply repeat this process on each unit.

# **Sync Network Menu**



The Sync Network menu page displays all of the devices that you have added to the timecode network. The columns in the table will list the details for each connected device in the sync network.

iOS applications like <u>UltraSync Blue Slate</u>, <u>Apogee Metarecorder</u>, <u>Mavis Pro Camera</u> and <u>MovieSlate8Pro</u> that are running on a device that is paired via Bluetooth will also be listed here.



Bluetooth functionality is currently not enabled in SHOGUN CONNECT. This will be enabled in a future firmware update

With the use of sync products from Timecode Systems, you can also synchronize with a number of other devices like cameras and audio recorders. For more information, watch the <a href="AtomX SYNC module video">AtomX SYNC module video</a> on ATOMOS Academy. The functionality of the AtomX SYNC Module is built into SHOGUN CONNECT, so the information in the video is also applicable to this device.



AirGlu RF - SYNC network menu may not display connected AirGlu devices, but the client devices will receive Timecode and display a SYNC Network ID.

## File Menu



This menu allows you to change the unit name for your SHOGUN CONNECT. It also gives you the ability to dictate the scene and shot number that will be recorded.

### **Unit Name**

Creating a unique name for each SHOGUN CONNECT you are using can be very useful when using multiple devices or with multicam shoots.

The unit name serves two main purposes:

- Drive Naming: Giving the unit a unique name aids with identification. Once you
  have given it a name all drives subsequently formatted in the SHOGUN CONNECT
  will bear this name as a prefix. By default, the unit will be named **SHGCNCT**
- File Naming: The current unit name appears at the start of the recorded clip name: SHGCNCT\_S001\_S001\_T001.MOV

### < >:

Use the arrow icons to select a letter in the current unit name. The selected letter will appear at the Letter setting.

### Letter

### -/+:

Use these icons to move forward or backwards through the letters of the alphabet. Doing so will update the letter you selected with the arrows in the Unit Name setting.

### Scene

Allows you to adjust the Scene number that will form part of the recorded clip filename: SHGCNCT **S001** S001 T001.MOV

-/+:

Use these icons to increase or decrease the numerical value for the Scene number up to 999. The value you select will be shown in the file name at the top of the screen during recording,

### Shot

Allows you to adjust the Shot number that will form part of the recorded clip filename: SHGCNCT S001 **S001** T001.MOV

-/+:

Use these icons to increase or decrease the numerical value for the Shot number.

### **Take**

Takes that form part of the filename are automated: SHGCNCT\_S001\_S001\_ **T001**.MOV

### **Format**

Tap to cycle through the file naming format options:

- **Scene/shot/take:** Allows you to accurately name planned shots as if you were using a conventional slate.
- **Rolling scene/shot/take:** Adds the ability to maintain continuous rolling file naming and take counts after re-formatting a drive.
- **Red/Arri:** Selecting this option will allow your recordings to use the same name as the files recorded in camera.



Red/ Arri file naming is only supported when the signal is connected via SDI.

# **Audio Menu**



In addition to selecting the Audio tab from the menu tabs across the top of the screen, you can also access the Audio menu by tapping the audio meters (shown below) on the record, monitor and playback home screens.

### **Audio Meters**

The audio meters the display the audio levels for all active audio channels. This allows you to monitor all channels visually

## **Headphone icons**



To monitor the audio, tap the headphone icon next to the channel you wish to monitor from the headphone output. Only one channel (stereo pair) may be monitored at any time using headphones connected to the 3.5 mm headphone jack on your SHOGUN CONNECT.



Selecting the Monitor icon does not mean that track is selected to be recorded. You need to select each channel using the record button. Tracks that are selected to be recorded have colored Audio Meters. See image above.

### **REC** icons

These icons allow you to select the channels of audio to record. Tap the record button for each channel that you want to record and it will turn red to indicate the fact that it is being recorded. You can record multiple channels of audio by tapping multiple REC buttons.

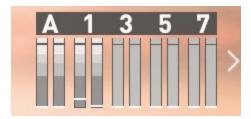
### Orientation

Allows you to select the orientation for audio meters on the SHOGUN CONNECT display. Tap to cycle through the options:

• **Horizontal:** Displays the 2 channels you are actively monitoring.



• **Vertical:** Displays 8 channels + 2 analog Channels.



### **Audio Embed**

Allows you to embed the analog audio channels into the digital signal, so that when you output the video signal over HDMI/SDI this audio is also output as part of the digital signal. The available options will depend on how many channels of audio are coming in. Tap to cycle through the options.

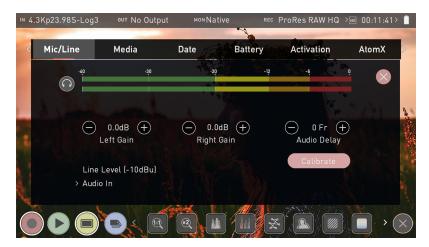


With SDI inputs, your SHOGUN CONNECT can record 12 embedded audio channels, instead of the usual 8 channels of audio when using HDMI.



If analog audio is recorded it will be placed as track 1-2 with embedded audio moving to 3-4. Note if analog channels are turned on but no audio is present, in many video players you will not hear silence as they often just play the first stereo pair. In an NLE you can easily access all the recorded tracks.

# Mic/Line Menu



This menu page provides settings for analog audio that is connected

## **Analog Audio Meters**

These meters display the audio levels for the left and right channels of analog audio.

## **Headphone icon**

Tap the headphone icon to monitor the analog audio from the 3.5 mm headphone output on your SHOGUN CONNECT. For more information on meters and monitoring, refer to Audio Menu

# Left Gain / Right Gain

-/+:

Use these icons to adjust the gain applied to the left and right analog audio channels. Once you have selected the input line level that matches your input at Audio In, analog gain can then be tuned by incremental increase or decrease of up to +/- 20dB individually for both left and right channels.

# **Audio Delay**

-/+:

Use these icons to adjust the audio delay by whole frames. This option allows you to delay the analog audio with respect to the digital audio so that it is in sync with your video source.

### **Audio In**

Tap on Audio In to select the input line level that matches your input type.

Options available are:

- **Mic Level (-40 dBu):** Sets the analog input channel to Mic Level via the 3.5 mm audio jack. Typically used when connecting microphones.
- Line Level (-10 dBu): Sets the analog input channel to Line Level via the 3.5
  mm audio jack. Typically used when connecting most other audio devices to your
  SHOGUN CONNECT.



It is not possible to vary the gain if the signal input is from the HDMI connection because this is digital and is embedded in the signal. You can usually adjust this from the camera, please see your camera manual for operational details.



SHOGUN CONNECT Mic input supports dynamic and powered microphones only. When using these, audio must be set as Mic Level

### **Calibrate**

Allows you to measure the HDMI video delay from a camera and delay the analog audio input to sync with the incoming video signal. For more information refer to the <u>Wireless Timecode and Sync</u> section.

# Media Menu



### **MEDIA INFO**

### **Brand**

Displays the brand and other information like model number for inserted media. Information about compatible media is available at: atomos.com/compatible-drives



If you do not see your media information, there may be a problem with the connection or drive. Try removing the drive and reattaching the drive. Ensure correct alignment of your media.

## **Capacity**

Displays the total capacity of inserted media.

### **Format**

Tap to format the media inserted in your SHOGUN CONNECT. A confirmation screen will ask you to confirm that you want to format the media, and gives you an option to cancel if you pressed the button by mistake. Make sure your drive is correctly inserted and all data from previous shoots has been securely backed-up.



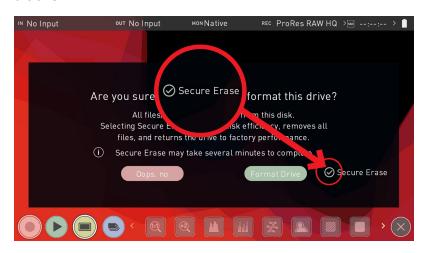
The SHOGUN CONNECT uses the exFAT file system for broadest compatibility across MacOS and Windows.



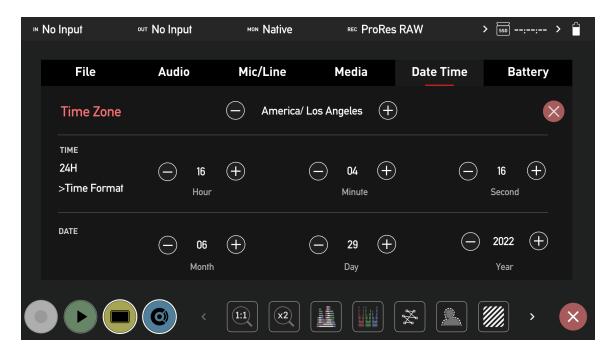
When you first insert a drive you may be presented with 'Invalid media'. This means that the drive has not yet been formatted and you simply need to format your drive before using it.

### **Secure Erase Format**

For drives that carry the ATOMOS Logo such as the G-Technology 4K SSD, Angelbird 4KRAW, AtomX SSDmini by Angelbird and Sony, an option for Secure Erase is presented. This allows for the entire drive including the drive cache to be formatted. This will erase ALL content on the drive meaning nothing can be recovered. The benefit of this is to optimize performance. It will wipe all data off the drive (which may also be useful as a additional security measure) and reset it back as close as possible to factory conditions.



# **Date Time Menu**



### **TIME ZONE**

-/+:

Use these icons to set your current Time Zone.

### **TIME**

### **Time Format**

Tap to cycle between 12H and 24H time formats.

### Hour/Minute/Second

-/+:

Use these icons for each setting to set the time used on the SHOGUN CONNECT. This will also change the time of day Timecode.

### **DATE**

# Month/Day/Year

## -/+:

Use these icons for each setting to set the date on the SHOGUN CONNECT.  $\label{eq:constraint}$ 

# **Power Menu**



### **Power Down**

On the left of the screen is a power icon. Tap and hold this button for 4 seconds to shut down the unit.

## Tap to Lock/Unlock

This image provides information on how to lock and unlock the display of your SHOGUN CONNECT.

### **Battery**

When a battery is attached to your SHOGUN CONNECT, the Battery icon on the Power menu screen indicates the remaining power in the attached battery. The numerical figure above the battery icon will indicate the remaining power in volts whilst the shading inside the battery icon provides a visual indication of the current power level.



SHOGUN CONNECT uses standard NP-F/L-Series compatible batteries.

### **DC Power**

The power plug icon represents DC power.

## **Power Priority Mode**

This setting allows you to select which power source to use when you have both DC power and a battery attached to your SHOGUN CONNECT. Tap Power Priority Mode to toggle between the following options:

- DC: When DC (Power plug icon) is selected, the plug icon will be white.
- Battery: When Battery is selected, shading inside the battery icon will be green.
- Manual: In Manual mode, you can manually select which power source to prioritize by tapping on either the battery or power plug icon.

# **Activation Menu**



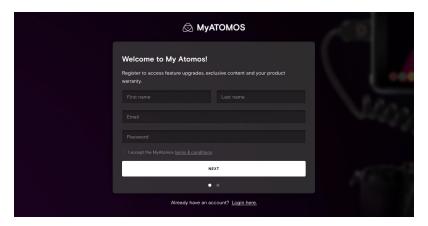
The Activation page allows you to activate the Apple ProRes RAW, Avid DNx and H.265 codecs, and other features on your SHOGUN CONNECT.



If you have previously activated these codecs, you do NOT need to activate these codecs again.

## **Activating Codecs and Features**

To activate codecs or features, use the camera on your smartphone to scan the QR code on the Activation page. Tap on the notification that appears, and you will be taken to <a href="mailto:my.atomos.com">my.atomos.com</a> in your browser.



You will be prompted to register as a new user, or login if you are an existing user to your <u>my.atomos.com</u> account. Once you have logged into your account, the 'Product Registration' page will open and the following fields will already be pre-filled:

- Product name
- Activation ID (AID)
- Device ID (DID)

Complete the following fields:

- Serial Number (located in the battery slot)
- Purchase Date
- Reseller

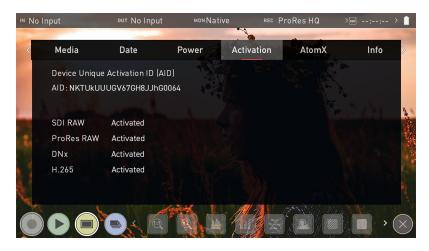
Then tap on Submit to open the 'My Products' page.

### **My Products Page**

The product page lists all of your registered ATOMOS products. Tap on the SHOGUN CONNECT image to open the product page, where you can view the information and upgrade options for your SHOGUN CONNECT. The Features tab displays the codecs and other features that can be activated for your SHOGUN CONNECT, as well as those that are already activated. The Firmware Updates, Warranty and Product manuals tabs provide additional support that is specific to your device. Click to activate your chosen codec/s or features on the Features tab and create an activation token. This can then be downloaded from the <a href="mailto:my.atomos.com">my.atomos.com</a> page and will also be emailed to your registered email address.

The token will download as a .zip folder, so you will need to unzip the folder to access the files inside. On a Mac, simply double click on the zip file to unzip it.

Place the activation.bin file on the ROOT of your media and insert the media into your SHOGUN CONNECT. The token file will be detected and automatically open the activation page, allowing you to install the codec/s.



This method allows you to activate both codecs and add other activation keys, which will unlock further features on your device.



A single activation token will support all functions unlocked on your device via my.atomos.com.



The activation token will remain in your account on <u>my.atomos.com</u> and also be emailed to your registered address.

Alternatively, you can manually register products and activate codecs at <a href="my.atom-os.com">my.atom-os.com</a>

You will be prompted to register as a new user, or login if you are an existing user to your <a href="mailto:my.atomos.com">my.atomos.com</a> account. Then select My Registered Products from the left hand navigation pane and click Register a Product.

Once the Register Your Product screen opens, select SHOGUN CONNECT from the drop-down menu under the Product Name field.

Complete the following fields:

- Serial Number (located in the battery slot)
- Device ID (DID) (located in the Info tab)
- Purchase Date
- Reseller

Navigate to the Activation menu page on your SHOGUN CONNECT and use the Activation ID (AID) on that page to complete the Activation field. Tap on Submit to open the 'My Registered Products' page.

Once on the 'My Registered Products' page, follow the steps listed previously in the QR code activation section from the 'My Registered Products' page section onwards, as the process is the same.

# **Info Menu**



### **SHOGUN CONNECT Info**

Shows the software (firmware) version and unique device ID (DID) of your SHOGUN CONNECT device. This will be required to activate additional codecs and features. For more information refer to <a href="Activation Menu">Activation Menu</a>. You can also check on the ATOMOS website to ensure you are running the latest firmware: <a href="https://www.atomos.com/support">www.atomos.com/support</a>

### **Factory Reset**

Allows you to revert your SHOGUN CONNECT to it's factory condition. All user settings will be lost.



Before performing a factory reset, unpair your device from the cloud

## **3rd-Party license**

Downloads third party licensing documents for software used on your SHOGUN CONNECT to the attached disk.

# **Setting up for recording**

As soon as you connect a supported signal to the SHOGUN CONNECT input and have inserted a formatted drive the following will happen:

- The REC icon will be illuminated (red)
- The input source & format will be shown in the top left corner of the information bar (in monitor mode)
- Audio input meters will be responding to the source.



Ready to Record (monitor mode/home)



Ready to Record (monitor mode/features)



No Input / No Disk / No Disk Formatted

# **SmartControl**

SmartControl is a versatile set of functions used to control the starting and stopping of recording by automatic or external means. This section outlines the different methods to start and stop recording.

SHOGUN CONNECT Start and Stop record control can be triggered by the following methods:

- 1. Home Page Touch Screen
- 2. HDMI Rolling Timecode trigger
- 3. HDMI Camera trigger
- 4. SDI Camera Trigger
- 5. Via LANC for Sony and Canon Cameras
- 6. Via LANC serial port



Some cameras perform optimally when triggering from the camera and not the recorder.

## **Home page Touch Screen**

SHOGUN CONNECT Start and Stop record control can be triggered by pressing REC (Record)



and STOP to end recording



### **HDMI Rolling Timecode Trigger Record**

If the camera is in Record Run mode, recording can be stopped or started by a moving Timecode via HDMI. When enabled the camera and the SHOGUN CONNECT will start and stop recording simultaneously.



Rolling Timecode trigger is for use in older cameras with TC only and no trigger. If your camera is set to FREE RUN this trigger will start recording immediately. Please be aware that not all cameras have Start/Stop flags for triggering record, especially older cameras. In such cases rolling trigger in REC RUN will need to be used to trigger recording automatically at the same time as the camera starts recording.

### **HDMI Camera Trigger Record**

The HDMI Camera trigger is available for supported cameras. There is a flag within the digital signal that lets the SHOGUN CONNECT know the start/stop record has been pressed on the camera; in turn this will trigger the SHOGUN CONNECT to start/stop recording at the same time as the camera.



## SDI Camera Trigger record

The SDI Camera trigger is manufacturer-specific, so you will need to select the appropriate manufacturer for your camera from the input menu. There is a flag within the digital signal that lets the SHOGUN CONNECT know that the start/stop record has been pressed on the camera; in turn this will trigger the SHOGUN CONNECT to start/stop recording at the same time as the camera.

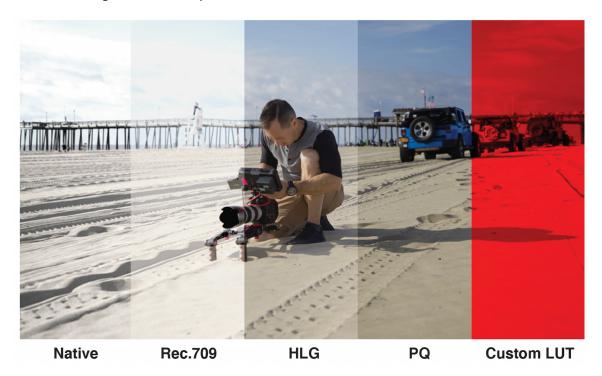
# **Understanding HDR and Log**

The first step in HDR is to recognize you have a HDR scene. Look for a good range of contrast across the brightest and darkest parts of your image and also across the color and tonal range as each color also contains its own brightness or luminance information.

Secondly ensure you are sending a Log signal into the SHOGUN CONNECT so that you are recording the HDR Log information. For more information refer to the <a href="Camera Out-put">Camera Out-put</a> section.



Now you are ready to capture Log and simultaneously use ATOMOS 10 image processing to preview the final HDR result in the field, rather than dealing with the washed out look of Log for critical exposure decisions.



The main impact of HDR is apparent in the specular highlights and bright areas. The areas that would have previously been 'blown out' will now contain visible detail and information to enhance your content. HDR provides more headroom allowing you to show more detail. Experimentation with increased exposures is encouraged.

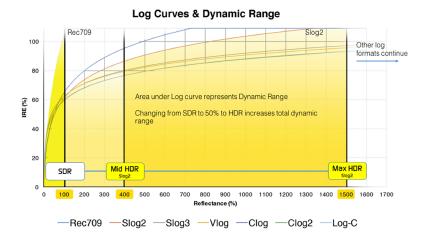
ATOMOS 10 HDR uses an in depth understanding of each Log curve and combines it with the control of the panel processing and backlight in order to apply an increased brightness to the highlight areas of the scene.



Alongside the physical light in the scene, the faster your lens the greater the level of brightness you'll have to play with. Choosing a Cine-style lens or those with a de-clicked manual aperture can provide increased flexibility over photo lenses that use an electronic control aperture.

The AtomOS 10 monitoring mode allows the processing engine of the SHOGUN CONNECT to display the High Dynamic Range capabilities of a Log gamma input. HDR monitoring in ATOMOS 10 is the result of the research and development by ATOMOS that allows control of all aspects of the monitor through image processing to deliver the unclipped beauty of specular highlights through natural, vibrant colors with a result that allows you to simply shoot what you see. When the scene in front of you and the picture displayed on the SHOGUN CONNECT look similar, your exposure should be correct but use in conjunction with the waveform monitor to verify.

One of the key elements to understand is that if your camera can shoot in Log then it can already capture more dynamic range than you can display in SDR. Log preserves the highlight information by applying a Logarithmic curve to compress the additional stops of dynamic range to fit in to the Rec.709 standard. The image appears washed out and desaturated as each pixel contains more brightness information than SDR can display, if it were to do this it would be brighter than 100% Rec709 and so be clipped. This is illustrated below:





# **File Recovery**

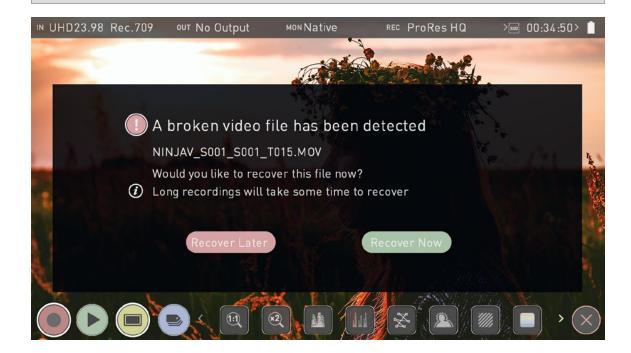
The SHOGUN CONNECT continuously writes to disk while in recording mode. If the power fails or the drive is removed accidentally all but the last few seconds of the clip can be recovered.

In the event of an interrupted recording, when you restart the SHOGUN CONNECT, or enter playback mode, you will be presented with a menu that gives you the option to recover immediately, or recover it later.

If you select recover later, every time you put the disk in, or start up the SHOGUN CONNECT, the same menu will appear to prompt you to recover the file that did not close properly.



If the drive is broken, or has become corrupted, then we will not be able to recover the file and we recommend that you try third-party hard disk recovery software.



# **Monitoring Features**

ATOMOS 10 features a new and improved layout of monitoring tools that are displayed at the bottom of the Monitoring screen. Tapping the yellow MON icon will display or hide the monitoring tools. To reveal all Monitoring features, swipe the monitoring icons to the left. They will behave in a carousel like manner, where you can swipe left and right to access any of the features.

Some of the monitoring tools help you to assess the exposure and focus of your image. Other tools include frame guides, safe areas, anamorphic de-squeeze, frame grab and onion skin.

Tapping on the icons will enable/disable the feature, and in some cases will cycle through the options. Many of the tools can be used simultaneously to assist with focus, exposure, framing and more.



Monitoring Features do not affect your recorded file and can be turned on and off, or adjusted whilst recording.

## **Monitor Mode / Features**



## **Monitoring Features Activation Icons**



### Luma Waveform:

A great way to visualize the dynamic range of your image.



### RGB Parade:

Monitor the level of red, green and blue from an input source.



#### Vectorscope

This is useful for checking if an image is under orover saturated.



### Focus Peaking:

Ensure your recordings are always in focus.



### Zebra Pattern:

Use Zebra to check exposure and set exposure levels.



### False Color:

A visualization exposure across theimage



### Blue Only Exposure:

Obeserve the noise content of a video image



### om 1:1:

Punch in and check critical focus



#### Zoom 2:1

Toggle 2:1 to magnify the screen



### Frame Guides

Cine, TV and Social frame guides



### 9 Grid

Overlays a 9 grid over the image to assist with composition according to the rule of thirds.



### Safe Areas

Action area and title safe areas displayed.



### Anamorphic Desqueeze

Allows you to see a correctly squeezed image when using anamorphic lenses



### Frame Grab

Allows you to capture lossless PNG frame grabs during recording and playback.



### Onion Skin

Allows you to layer frame grabs and other images on top of the video feed whilst in the Record and Playback modes.



### Settings

Press to access settings for monitoring tools



The Monitor Features will only be illuminated and available if there is an input signal detected.

# Zoom

Zoom mode enables you to punch in and check critical focus







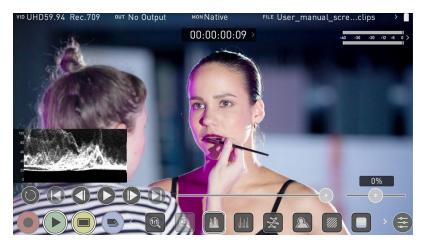
- 1:1 Toggle to display 1:1 pixel mapping. The indicator box shows the location of the screen you are viewing. 4K 1:1 shows 1/4 of the 4K UHD image.
- 2:1 Toggle to magnify the screen. The indicator box shows the location of the screen you are viewing, and you can move the zoomed location by dragging across the screen or selecting a portion of the indicator box. 4K 2:1 shows 1/16 of the 4K UHD image.

# Waveform (WFM) and Vectorscope

These traditional scopes provide a visual representation of your image. You can customize the settings for Waveform Monitoring in the <u>Waveform tab</u> of the settings menu.

### **Luma Waveform**

The Luma or Luminance Waveform is a great way to visualize the dynamic range of your image, allowing you to protect exposure of both your highlights and shadow detail. It's particularly useful when shooting with a low contrast LOG curve and works in perfect partnership with HDR to illustrate and highlight the clipping point to allow you to correctly expose you image.





The WFM monitor tool is not currently available for 8Kp30 and 6Kp60 RAW inputs.

### **RGB Waveform**

RGB Waveform will monitor the level of Red, Green and Blue from an input source. The RGB channels are displayed side by side and each channel color is shown under the corresponding waveform. This can be used to check the white balance. Just point the camera at something white and the Red, Green and Blue levels should match if white balance is setup correctly on the camera.





The Waveform Monitor will remain on screen when hiding the overlays ensuring the focus remains on calibrating your image. If the MON button is pressed the WFM will move in to the bottom icon line up.

## **Vectorscope**

The Vectorscope display shows color information of hue (shown as a phase vector), and saturation (measured by outward distance from the center). This is useful for checking if an image is under or over saturated and for calibrating multiple cameras to ensure greater consistency between shots.

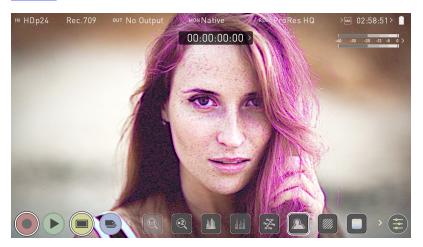


# Focus Peaking, Zebra and False Color

ATOMOS 10 features monitoring tools that help with making your shot picture perfect. Easily access Focus Peaking, Zebra, False Color and Blue Only Exposure to check image is in focus, noise free and correctly exposed. Options for safe area/ title area markers along with aspect ratio markers and anamorphic de-squeeze functions are also available.

## **Focus Peaking**

The focus peaking feature provides you with visual guides that enhance the areas in your shot that are in focus. The parts of the image that are in focus are highlighted by the selected color. You can customize the settings for focus peaking in the <a href="Focus Peaking tab">Focus Peaking tab</a> of the settings menu.



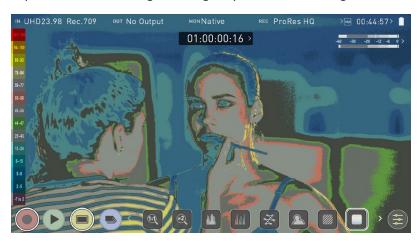
### Zebra

The Zebra feature overlays a diagonal pattern over the parts of the image that are exposed +-5% of the target level set. This allows you to see at a glance, where parts of the image have reached a certain exposure level. You can customize the settings for the zebra function in the  $\underline{\text{Zebra tab}}$  of the settings menu.



### **False Color**

The False Color feature allows you to quickly expose your image by seeing an overall representation of brightness grouped into meaningful colors.



### **False Color Scale**

The False Color Scale on the left-hand side of the screen is a legend that correlates brightness values in the image with specific colors. The numbers in this scale represent the IRE %. As an example, mid grey is present between 44-47 IRE (green), underexposed footage is -7 to 2 IRE (purple), and overexposed footage is from 96-109 IRE (bright orange).

## **Blue Only Exposure**

Blue only displays a greyscale image based on the blue channel of the input signal. This is useful to observe the noise content of a video image as sensor noise is most visible in this channel.



# Frame Guides, Safe Areas & Anamorphic De-Squeeze

ATOMOS 10 has advanced frame guides and safe areas. You can select from common cine, social or TV frame guides or set a custom frame guide. The aspect ratio markers are very useful with the Anamorphic De-Squeeze tool to preview crops that could be made in post.

### **Cine and Social Frame Guides**



Tap the Frame Guides icon to enable or disable the currently selected frame guide. You can select the frame guide to be used or enter a custom frame guide in the <a href="Frame">Frame</a> Guide tab of the settings menu.



### Safe Area Guides



Action safe area and title safe areas are proportional to the selected frame guide based on SMPTE standards. To turn on the safe area markers tap the Safe area icon once for the Action area and again for the title safe area.





The Safe Area/Grid Lines will still be visible when tapping the center of the screen to hide the overlays.

## **Anamorphic De-Squeeze**



Allows you to de-squeeze images when monitoring content filmed with anamorphic lenses. Tap the de-squeeze icon to cycle through the options to select the amount of de-squeeze required, so that the image on your SHOGUN CONNECT is not distorted.

The options include:

- 2x (4:3),
- 2x,

- 1.8x,
- 1.5,
- 1.33x,
- 1.25x



Scopes are not available when anamorphic de-squeeze is activated.



## Frame Grab and Onion Skin

### **Frame Grab**



This feature allows you to capture lossless PNG frame grabs in the SHOGUN CONNECT's native display resolution (1920  $\times$  1080 pixels) during recording and playback.

### To capture a frame grab:

- 1. Whilst in recording or playback mode, tap the Frame Grab icon in the Monitoring Feature activation icons section at the bottom of the screen.
- 2. A tick will appear briefly inside the Frame Grab icon to indicate that a frame grab has been captured.



3. The captured PNG file will be saved to a Frame Grab folder on your recording media, which is automatically created when you capture your first frame grab.

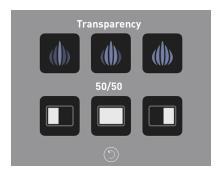
### **Onion Skin**



This feature allows you to layer frame grabs or other images on top of your video feed, whilst in the Record and Playback modes.

### To load a frame grab or image as an onion skin:

- 1. Tap the Onion Skin icon in the Monitoring Feature activation icons section at the bottom of the screen.
- 2. The Onion Skin tab in the settings menu will open so that you can select the frame grab/image to be used. For more information on selecting the frame grab/image, refer to the Onion Skin tab section.
- 3. The frame grab/image will appear on screen with position and transparency options. Tap on the screen to view the onion skin overlay without the icon box, and tap again to bring the icons back. Tap the arrow at the bottom of the icons to return to the Monitoring screen.



### Onion Skin position and transparency options

Tap the following icons to customize the position and transparency of the loaded frame grab/image:



### **High Transparency**

The loaded image will be highly transparent. The video feed from your source will be highly visible.



### **Medium Transparency**

A level of transparency that provides a balance between the low and high options.



### **Low Transparency**

The loaded image will be less transparent. The video feed from your source will be less visible.



### 50/50: Left

Displays only the left half of the loaded frame grab/image over the top of the video feed from your source.



#### Full

Positions the full width of the frame grab/image over the top of the video feed from your source.



### 50/50: Right

Displays only the right half of the loaded frame grab/image over the top of the video feed from your source.



#### Return

Return to the Monitoring screen.

### **Onion Skin Ready**

When a frame grab/image is loaded, the Onion Skin icon in the Monitoring Feature icon section will change to the icon below. Tap this icon to return to the onion skin view, which will display the last frame grab/image you used. Tap the arrow to return to the Monitoring screen.



To load a different frame grab/image, navigate to the Onion Skin tab in the settings menu and follow the same process as outlined above.

# **Settings Menu**

This menu allows you to adjust the settings and behaviors of the Monitoring Tools that will be used when each monitoring tool is enabled. It also provides settings for LUTs, the display and monitor modes.

To access these settings, tap on MON in the Information Bar across the top of the screen. Alternatively, tap on the yellow settings icon in monitoring mode and then select the desired tab across the bottom of the page.



## Waveform tab

To access Waveform Monitoring settings simply tap on the Settings icon and select the Waveform Tab.



To change the size of the waveform, press on the corner icon, lower screen icon or full Screen icon. The display will update immediately.





The size settings for the Vectorscope are limited to corner and full Screen.



To toggle between Waveform Monitor sizes of 1/4, 1/3 and Full Screen during monitoring, recording and playback, tap on the bottom left corner of the screen. You can also adjust the brightness and opacity of the waveform display whilst recording, monitoring or during playback.

The Brightness slider directly controls the intensity of the waveform while the opacity slider adjusts the transparency values of the waveform display on screen. Experiment with these controls to achieve your desired monitoring setup.



# **Focus Peaking tab**

To access the focus peaking settings, simply tap the Settings icon and select the Focus Peaking Tab. These settings allow you to customize how peaking is displayed. There are multiple display modes and you can select the color and width of peaking indicators.

#### Mode

Tap on these icons to switch between the focus peaking modes:





### **Focus Peaking Color**

This option overlays the focus peaking indicators on top of the color video image.





### **Focus Peaking Mono**

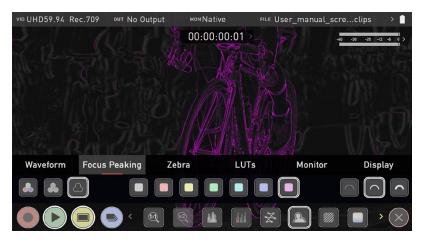
This option overlays the focus peaking indicators on top of a gray-scale image.





### **Focus Assist Outline**

This option overlays the focus peaking indicators on top of an outline of the image.



### **Outline Color**

Adjusts the color used for peaking. It can be helpful to adjust this color so that areas in focus stand out from the color of the background.



### **Outline Width**

Adjusts the width used focus peaking indicators on screen. Tap to select the desired width.

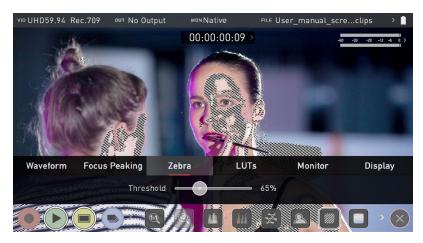


## Zebra tab

To access the Zebra settings, tap the Settings icon and select the Zebra Tab.

### **Zebra Threshold**

These settings allow you to select an exposure level in your image where you want the Zebra indicators to appear. A setting of 95-100% is commonly used to indicate areas of the image that are close to overexposure or that are overexposed. The Zebra threshold value can be adjusted by moving the slider left or right.



## LUTs tab



To access the LUT settings, simply tap the Settings icon and select the LUTs Tab.



A LUT or Look Up Table is a table that transforms the color response and as such adjusts the 'Look' of the input. 3D LUTs have a combination of three inputs defining the combination of R, G, and B values allowing for adjustment of not only color but also gamma and gamut. LUTs can also be used to monitor the input in a specific color space or more creatively to create a specific 'look' such as film stock emulation or to match cameras.

It's worth nothing that not all LUTs are equal and the majority of LUTs are designed to work with in the boundaries of REC.709. This means that whilst they may apply the color adjustments you are looking for they may also effect the luminance of the image and in which case these LUTs should only be used for delivery of content designed to be viewed in REC.709 or SDR.

If you are working with 3D LUTs you can use color correction applications, as well as applications like Davinci Resolve, Photoshop or dedicated applications like LUTCalc. To create you own custom Looks that can then be imported to your ATOMOS device. They can provide a great base or primary grade that allow you to apply an instant look to your footage.

ATOMOS support 3D LUTs in the industry standard .CUBE format and provides 8 LUT memory slots for your load your LUTs into .1D LUTs are not supported and will need to be converted via 3rd party software to be imported.

## **How to import LUTs to your SHOGUN CONNECT:**

- 1. Copy the .CUBE files onto your media using a computer and compatible dock.
- 2. Tap on MON in the Information Bar across the top of the screen to access the monitoring tools settings and select the LUTs tab.
- 3. Tap on one of the numbered slots to select it. Slots that already have a LUT loaded will have a curve next to the slot number whilst empty slots will not.



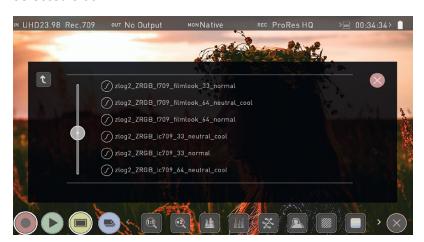
4. Tap on the folder icon to access your media.



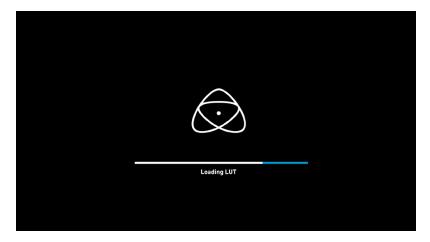


If you select a slot that already has a LUT loaded, you will be asked to confirm the fact that you want to overwrite the loaded LUT when you tap on the folder.

5. Navigate through the disk file system to the LUT file to be uploaded, and tap on the name of a LUT to select it. A second tap on the name will import the LUT to the selected slot.



6. A progress bar will appear on screen whilst the LUT loads.



- 7. The LUT has now been loaded and will be selected by default.
- 8. Repeat the process to store up to 8 LUTs on your SHOGUN CONNECT.



Once a LUT is loaded into your SHOGUN CONNECT, it cannot be deleted. Loading LUTs into a slot that already has a LUT loaded, will overwrite the loaded LUT.

## How to apply a LUT to your image:

- 1. Tap on MON in the Information Bar across the top of the screen to access the Monitor Mode menu and select the LUTs tab.
- 2. Tap on one of the eight slot numbers to select a LUT to be applied to the display. Tapping on slots that have LUTs loaded will preview the name of the selected LUT (above the Menu bar).



Slots that have a LUT loaded will have a curve next to the slot number whilst empty slots will not.



- 3. Tap on the Monitor tab to open the the Monitor Mode menu.
- 4. Tap on the LUT icon to apply the selected LUT to your image. The name of the currently selected 3D LUT will be displayed next to the LUT icon.



The selected LUT file name will display at MON in the Information bar when applied to the image.

## **LUT Processing**

In the LUTs tab, the settings allow you to choose how the LUT will be applied:

- During recording
- During Output
- Compare



### **During Record**

If this option is selected, your SHOGUN CONNECT will bake the LUT look into the recording. When enabled, a CUSTOM LOOK icon will flash in the top corner of the mon-

itor and the LUT cannot be activated during recording to avoid any potential issues with the recorded content.



Baking a LUT into your recording cannot be undone in post-production, so we advise that you consider your workflow before the use of this option.



Baking the LUT into your recording is not supported when recording with the ProRes RAW codec.

### **During Output**

OUTPUT LOOK – With this option, the selected LOOK is also applied to the HDMI loop out of the SHOGUN CONNECT. This will allow for instant preview on a larger monitor or to be used with a wireless sender. This function can also be combined with the down convert option that can be found in the input menu.

### Compare

During color management it's likely that you may want to review a number of LOOKs and even compare them to the Native Video Source. Tapping the Compare option will apply a 50/50 vertical screen split that will show both the Natural Source Video and the selected LOOK of the LUT.





Please note that activating the 50/50 preview will also be applied to the Loop out and is not available when LUT is set to record.



Remember that you can remove all overlays by simply tapping in the center of the screen. Tap again to reveal the overlays.

## **Monitor tab**

To enter this menu, tap on MON in the Information Bar across the top of the screen. The Monitor Mode menu will open on the bottom of the page. Alternatively, tap the yellow Settings icon and select the Monitor Tab.



Before entering into the operation of HDR monitoring, it is important to understand the background of HDR. We advise that you read the ATOMOS HDR Guide to familiarize yourself with the key terms and differences between the existing Rec. 709 standard dynamic range (SDR) and the way we view images in High Dynamic Range (HDR).



## Using Standards - Native / Rec.709 / HLG / PQ

ATOMOS 10 uses predefined settings to display your video when viewing in HDR. On the left side of the screen are buttons that correspond with Native, Rec.709 (SDR), HLG and PQ (HDR) levels. For information on the LUT icon and using LUTs, refer to the LUTs tab section.

Activating these buttons will display your video according to the levels indicated below, allowing you to adjust your exposure accordingly and take the guess work out of exposing correctly for HDR.



### **Native Video Source**

This option will display the video source without any processing and the SHOGUN CONNECT will behave as expected for a standard broadcast monitor. When connected to a camera this means the image you are viewing is the untouched camera output e.g.. a standard Rec.709 image or a Log image etc. A standard Rec.709 image will look correct and a Log image will look flat.



### Rec.709

With this mode selected the SHOGUN CONNECT will map from the camera gamma/gamut so that 100% linear IRE maps the panel's white (1000nits). Everything above is clipped.



### **HLG (Hybrid Log Gamma)**

With this mode selected the SHOGUN CONNECT will map from the camera gamma/gamut so that 1200% linear IRE maps the panel's white (1000nits). Highlights are slightly compressed.



### PQ

With PQ mode selected the SHOGUN CONNECT will map from the camera gamma/gamut so that 2000% linear IRE maps the panel's white (1000nits). Highlights have more compression and look similar to HLG, but closer inspection will reveal more detail is visible in specular highlights.



Your camera's dynamic range will determine how much more detail is visible between HLG and PQ modes.

### **Monitor Options**

On the right side of the screen, the monitor tab provides options for the SHOGUN CONNECT



### **Display Off**

The Display off function allows for the screen to be turned off without affecting the operation of the unit. When enabled, the screen will turn off whenever you lock the display screen by tapping the power on/off button on the side of the unit. For more information refer to the Best Practice section.



## Tally

The Tally light on the rear of the unit will still display red for record and the idle (green) status will be displayed on the front screen LED.



### Flip Screen

The Flip screen option allows you to invert the screen to meet your needs of operation.



Whilst the screen is inverted, take note to respect the air flow and not to obstruct the cooling vents of the unit.

# **Display tab**

To enter this menu, tap on MON in the Information Bar across the top of the screen or tap on the yellow settings icon in monitoring mode. Then select the Display tab on the bottom of the page.



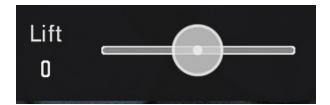
This menu gives you the option to change the screen brightness by adjusting the slider when in Native, Rec709 and LUT mode. As you slide to the right the brightness will increase and when at 100% the image will be using the full 1000nits of the display. As with any electronic screen device increasing the brightness will increase the power draw and battery life will be effected accordingly.

Adjustments can also be made to the Lift, Gamma and Gain of the display. To make an adjustment, tap and drag the slider left and right.



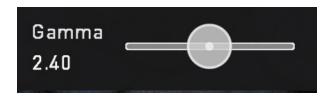
### **Backlight**

Adjust the strength of the backlight. Disabled during HDR monitoring



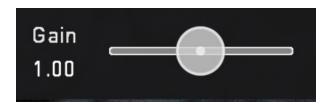
Lift

Increasing lift will brighten the image and lessen the shadows



### Gamma

Gamma control allows you to create darker and richer shadows. This may be useful when monitoring in bright daylight conditions.



#### Gain

Gain will boost the image brightness and affect the highlights



### Reset

Quickly return all values to default (Apart from the Backlight setting)

## **Frame Guide tab**

To access the frame guide settings, tap the Settings icon and select the Frame Guide tab. Tap on one of the displayed icons to select a frame guide.

Cine frame guides include:

- 16:9
- 2.4:1
- 2.35:1
- 1.9:1
- 1.85:1
- 4:3

Social frame guides include:

- 9:16
- 1:1
- 1.91:1
- 4:5

You can also select Custom, which allows you to enter your own aspect ratio.



## **Setting a Custom aspect ratio:**

- 1. Tap on Custom Ratio.
- 2. Use the on-screen keypad to enter your desired aspect ratio, then tap Save.
- 3. Tap on the Custom icon to select it as a frame guide, and close the settings menu.
- 4. The Frame Guides icon in the monitoring tools carousel will now display the word Custom. Tap this icon to enable or disable the custom frame guide you entered.



Invalid Ratio will be displayed where the entered ratio is not supported.

## **Onion Skin tab**

The settings in this tab allow you to select frame grabs or other images, for use as an onion skin layer on top of your source video feed.

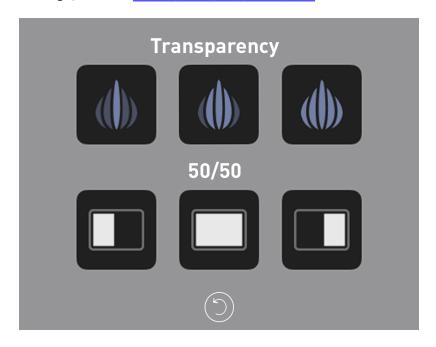
### To load a frame grab or image as an onion skin:

1. Tap on Last Grab to use the last frame grab taken, or Last Used to load the last frame grab that you loaded. You can also tap on the folder icon to load an individual frame grab or image via the file browser. With the browser open, tap on an image to select it and tap again to load it.



Besides using frame grabs captured with the SHOGUN CONNECT, you can also load custom 24-Bit PNG images (Alpha Transparency supported) in  $1920 \times 1080$  resolution via the Onion Skin tool.

2. The frame grab/image will appear on screen with position and transparency options. Tap on the screen to view the onion skin overlay without the icon box, and tap again to bring the icons back. Tap the arrow at the bottom of the icons to return to the Monitoring screen. For information on the transparency and position settings, refer to Frame Grab and Onion Skin



# Playback mode

Pressing the Play button switches the device into playback mode and the last clip recorded on to the drive will instantly begin to playback. Playback allows you to instantly analyze the content. This is key for establishing if takes are correctly focused, lighting has changed, or previewing recorded content with LUTs applied.



The first time the Play button is pressed after recording a clip, the last clip recorded will playback. If you switch back to REC mode after doing this and press the Play button again, the file at the top of the file list will playback.

Once within Play mode the complete Monitoring and Edit tool sets are available by tapping the buttons. Switch from Monitor to Edit tools by toggling the MON and EDIT buttons. Clips/Playlist can be selected by tapping the folder icon in the lower right of the screen, or skip to the next or previous clip via the on screen controls. Additional controls allow you to scrub through clips, set the playback speed and direction, as well as the ability to set the play mode to Loop.

All these functions can also be used in 'Playout' mode, and your footage can be viewed on a larger screen or monitor for review and appraisal. You can even apply Log curves and LUTs to your clips as they are played back.

## Playback Mode / Home



## **Main Controls**



## **REC** (Record):

Jump to Record Home Screen



### **PLAY:**

Play and pause the current clip



## MON (Monitor):

Reveal/hide monitoring tools. Toggle on/off



### **EDIT:**

Reveal/hide edit tools. Toggle on/off



### **Settings**

Touch to access Playback settings and tools.



#### **Recorded Files**

Browse recorded files

## **Playback Controls**

These controls become available during playback.



### Scrub bar

Scrub forward and back through the clip.



### **Speed/direction control**

The percentage slider allows for you to set the playback direction and speed. This is perfect for previewing high frame rate at half or quarter speed such as 60p at 30p in either forward or reverse directions.



## 2x/4x

Playback at 2x or 4x speeds both forward and in reverse.



### **Next/Previous**

Jump to next or previous take.



### **Advance**

Whilst a clip is Paused these buttons have the ability to step the clip by 1 frame either forward or reverse to give you chance to analyze the clip in more detail, this is especially useful when combined with the 2:1 zoom function.



### Loop

Tapping this icon, you can put the clip into loop playback. In and out markers for loop can be placed and cleared using the edit tools. For more information, refer to the Edit section.

## Playback

One of the key elements of the SHOGUN CONNECT is the ability to utilize the monitor recorder as a playback and playout device for the content that has been recorded whilst maintaining the same visually lossless high quality images. SHOGUN CONNECT's playout capability also allows you to send the live and recorded footage out to a larger HDMI monitor or switcher.



#### **Recorded Files**

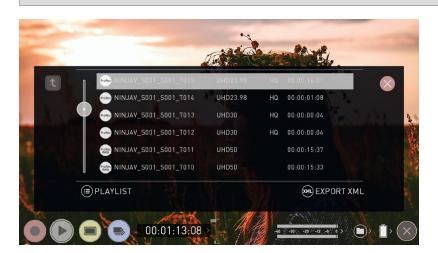
Pressing the filename or folder button will bring up a list of clips available on the drive. This will show clip name (with Scene shot Take numbers) as well as resolution, codec and duration Tap to highlight a clip, this will show a preview of the first frame in the background. To play the selected clip touch the file name again. To play specific files you can also create a playlist. For information on creating a playlist refer to the <a href="Playlists">Playlists</a> section.



When the playback content list menu is open, playback will automatically stop.



The codec for each clip is displayed in the white circle to the left of each clip's filename



# **Playlists**

To increase the functionality and flexibility of the playback mode there is also the ability to create a Playlist.

## How to create a Playlist

To build a Playlist, open the Recorded Files folder, then press the Playlist button which will turn green and reveal the options available. To return to normal playback of all recorded materials, press the Playlist icon again to deactivate the playlist.





All clips in the Playlist must have the same codec, resolution and frame rate.



The codec for each clip is displayed in the white circle to the left of each clip's filename



## **Playlist Options**





#### Order

This icon lets you adjust the order in which clips playback. By default the order of recorded clips is based on their file names, with the last clip recorded at the top of the list. Tap Order to toggle the order that clips will be played back in.



### **Tags**

Tap this icon to cycle through the following options to select what will be included in the playlist:

### All

Plays all clips on the disk.

### **Selected**

Plays only those clips selected

#### **Favorites**

Plays only the clips that are tagged as favorites.

#### **Combined**

Plays only the clips that are tagged with favorite and the selected clips



The duration of each clip in the playlist is combined together and are shown on the scrub bar in playback controls. A white vertical line indicates the start and end points and clips will seamlessly playback across those selected to be in the playlist.

### **Codec Playlist**

You can select which clips are played back by toggling the available codecs. Only clips of the same resolution, frame rate and codec are supported. The resolution and frame rate is indicated in the bottom right corner of the screen.



## **Favorite Playlist**

The cut tag edit points can be combined with the favorites Playlist allowing the in and out points that have been created within the clip using the favorites flag to be used as sub clips within a Playlist. This means that if in and out points have been marked on a clip only those sections of the clip will play when used in a favorites or combined Playlist. Close attention should be paid to the order icon as this also relates to the sub clips as the run down order will play the last sub clip first in the Playlist.



Whilst a Playlist is in operation further metadata tags can not be applied to these clips.

More information about using the In and Out points, tagging and XML Export is available in the <u>Using Edit tools during recording</u>, playback and monitoring section.



## Video Format menu

This menu appears when you tap on VID in the Information bar across the top of the screen. It contains information about the settings used in recording the clip.



### Format:

Displays the resolution and frame rate used in recording the selected clip.

### Codec:

Displays the codec of the current clip.

## **Compression:**

Displays compression settings for selected codec.

## Length:

Displays the total length of the clip.

### **CAMERA OUTPUT**

### Log/HDR (On/Off)

Tap to enable/disable HDR image processing inside the SHOGUN CONNECT.

#### Camera

Tap to scroll through to the manufacturer of the camera providing the input. Options include: Sony, Fujifilm, Canon, Panasonic, ARRI, RED, JVC, Leica, Nikon, ZCAM, Olympus, OMSYSTEM and Rec.2100.

#### Gamma

For each manufacturer there may be a number of different Log curves available and you can scroll through to the correct selection by tapping the Gamma icon.

### Gamut

Select the Color Gamut of the input. Ensure that this matches the input of the camera to ensure accurate monitoring.



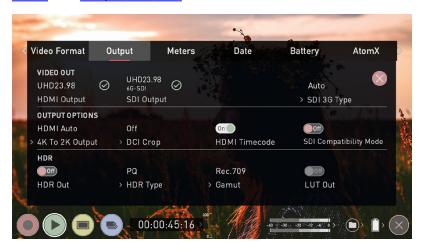
Gamut options are not applicable to all cameras

## Playback Auto HDR (On/Off)

Engage this switch if you are feeding HDR images to the SHOGUN CONNECT from a camera or games console that supports HLG or PQ HDR output directly, using the appropriate metadata flags. If you are feeding Log video to the unit be sure that this setting is off. Tap to enable or disable the setting.

## Playback - Output Menu

This menu provides information and settings for the signal that is being output from your SHOGUN CONNECT over HDMI and SDI. The Output menu that appears whilst in Playback mode is identical to the Output menu that appears whilst in the Recording and Monitoring modes. For more information on these settings refer to the Output Menu and Output via SDI sections.



## Playback - Audio menu

The Audio menu that appears whilst in Playback mode is almost identical to the one that appears whilst in the Recording and Monitoring modes. For more information on these settings refer to <u>Audio Menu</u> section.



Some of the settings that are present in the Audio menu whilst in Recording and Monitoring modes, will not appear in the Audio menu whilst in Playback mode.

#### **Edit Mode**

The edit mode allows you to tag your clips during recording and playback, as well as the ability to add in and out-points to recorded clips.

By the pressing the Favorite and Reject icons you can assign a 'good clip' or 'bad clip'. This information can then be imported into a non-linear editing system to speed up the edit process. You can easily see which parts of your recording you have marked to keep or reject.

Favorite clips can easily be built into a Playlist in playback mode and these tagged sub clips can then be played out, back to back. For more information refer to the <u>Playlists</u> section. ATOMOS 10 has also introduced extended tags to allow you to apply more specific tags that can help facilitate the edit. For more information refer to the <u>Using Extended Tags</u> section.



SmartLog is compatible with FCP XML (.fcpxml).

#### Playback Mode / Edit tools



#### **Main Controls**



#### REC (Record):

Press record to start recording



#### **PLAY:**

Play and pause the current clip



#### MON (Monitor):

Reveal/hide monitoring tools. Toggle on/off



#### **EDIT:**

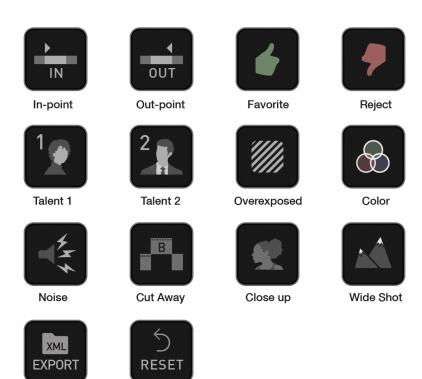
Reveal/hide edit tools. Toggle on/off



#### **Settings**

There are no user accessible settings available for Edit functions in the current ATOMOS firmware.

This may change with future firmware updates.



Reset

Export

## Markers and Tagging Icons (SmartLog)

Using Markers and Tags you can quickly start the editing and review process right here on your SHOGUN CONNECT, avoiding delays incurred when importing inferior and unwanted footage. You can review and tag immediately on-set with your client or director, or work through your takes without having to dump the recorded files to another workstation/NLE.



#### **In-Point**

Set the in-point by touching the button at desired point. Simply touch on to indicate inpoint. Press a second time to reset in-point



#### **Out-Point**

Out-point can be set by simply tapping at desired out-point. To remove, tap again



#### **Favorite**

Mark the entire take as a favorite, or you can mark the parts of the take you wish to use. Apply multiple markers within one take if required



#### Reject

Mark the take/section as a reject



#### Talent 1

Tag talent or assign another meaning



#### Talent 2

Tag talent number 2, or assign another meaning, event etc.



#### **Over Exposed**

Tag clip as over exposed or out of focus



#### **Color Correction**

Tag clip as 'color'. Use tag to indicate a problematic image or even use for another purpose



#### Noise

Tag clip as containing background noise or interference



#### **Cut Away**

Tag clip as a cut away scene



#### **Close Up**

Tag clip as close up for use in edit and post



#### **Wide Shot**

Tag clip as wide shot



#### **Export XML**

Once your clips have been tagged you can capture all the information and utilize the XML data to speed up edit and post production time.



SmartLog is compatible with FCP XML (.fcpxml).



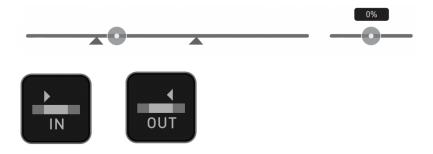
#### **RESET**

Pressing the reset button will remove all tags and XML data from a clip. This is useful when dealing with multiple takes or if a clip is tagged incorrectly. Reset will not remove or change in-point and out-point settings. To remove markers you will need to reset the in and out-points

# Using Edit tools during recording, playback and monitoring

To access edit tools simply tap the Edit icon during recording, monitoring or playback.





#### In and Out points

Set in and out points easily during playback. Use the scrub control to accurately find the correct moment while the footage is paused. Once markers are set, the footage will be clipped and only the enclosed footage will play. Reset markers to resume normal playback.







#### Favorite/Reject

Press Play and when you see the section of the footage you would like to mark as good or bad, press Favorite or Reject and then press again to stop marking that section. Multiple tags can be applied to your clips to provide Timecode accurate meta tags that can be exported to Apple FCP XML.





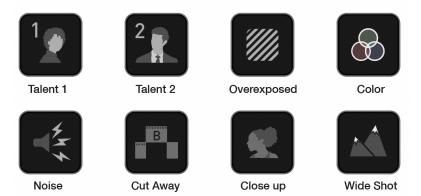
A green or red line will appear in the timeline scrubbing bar so you can identify the region that has been selected.



#### Reset

Tapping the reset button will remove all tags and XML data from a clip. This is useful when dealing with multiple takes or if a clip is tagged incorrectly. Reset will not remove or affect in-point and out-point settings. To remove markers you will need to reset the in and out-points

### **Using Extended Tags**



Aside from Favorite and Reject tagging options, ATOMOS 10 includes extended tags that will greatly assist your edit and workflow processes. Careful consideration and use of tags during monitoring and review can be highly beneficial when you are ready to begin post production.

Tags are useful during playback and allow you to create playlists featuring only selected recordings from your disk. More information about playlists can be found in the Playback & Playout section.



#### Reset

Tapping the reset button will remove all tags and XML data from a clip. This is useful when dealing with multiple takes or if a clip is tagged incorrectly. Reset will not remove or affect in-point and out-point settings. To remove markers you will need to reset the in and out-points.

## **Exporting Tags**



#### **Exporting Tags**

- 1. Tap the Export icon to export the tags you have created to an FCP XML file.
- 2. 'Please wait' will be displayed on screen whilst an XML file is been created on your inserted media. The length of time required to create the FCP XML file will vary depending on your recording time and the amount of flags applied.
- 3. Once the XML file has been saved to your media you will be returned to the previous screen.

#### **Importing Tags**

The FCP XML file can be instantly accessed by Final Cut Pro when the media is connected to a computer using a compatible dock. The tags will be available upon import of the XML file and can be used to filter and display different parts of your recordings, depending on how you have used the tags to mark and edit the footage. More information about using tags and XML import can be found in the Connecting & Editing section.



SmartLog is compatible with FCP XML (.fcpxml).

## **Connecting media**

The Master Caddy Docking Station allows you to connect your media to your computer. For information on using the Master Caddy Docking Station and the different models available, refer to the Master Caddy Docking Station section.

#### **Attaching Media to a Master Caddy Docking Station:**

- 1. Eject the media from your SHOGUN CONNECT.
- 2. Align your AtomX SSDmini, Master Caddy II or AtomX CFast adapter so that the SATA III connector lines up with the SATA II connector on the Docking Station. Media can't be inserted the wrong way round.
- 3. Gently slide your media all the way into the Docking Station until it stops at the end of the drive slot. Ensure that the media is properly attached.



Never force the media into the docking station, just in case something isn't set up or aligned properly





The SHOGUN CONNECT disk slot does NOT have a release latch for media. It is a friction-fit system. To remove simply pull the media out using the top and bottom tabs on the media itself.

#### **Connecting the Master Caddy Docking Station to your computer:**

- 1. Connect the Master Caddy Docking Station to a Mac® or Windows® editing workstation via USB 2.0, USB 3.0 or USB-C 3.1.
- 2. After a short wait, your disk will be recognized by your operating system and the recorded video will be accessible by the target computer via a standard disk (exFAT) file system.

Once your disk is recognized by your operating system, you can edit directly from the drive or copy the files to your own storage.

#### Transferring files

To copy files to your computer or other storage location:

#### Windows:

Open the disk in My Computer > Select all the files or just the ones you wish to transfer, copy and paste them to your desired location. (ctrl+c copy, ctrl+v paste).

#### Mac OS:

Your SHOGUN CONNECT disk will show in Finder. Select the files you wish to transfer, drag the files to your desired location or use the copy and paste commands. (COMMAND + C to copy, COMMAND + V to paste).

#### **ExFAT** compatibility

The SHOGUN CONNECT formats your media as exFAT. We have chosen this file system to overcome the 4GB file limitation of FAT32 and allow for compatibility on both Windows and MAC OS.

The Operating Systems that support exFAT are:

- Windows 10+
- Snow Leopard 10.6.5 or higher
- Lion 10.7
- Mountain Lion 10.8
- Mavericks 10.9 and above

## **Importing clips**

#### **Video Codecs - Supported Applications**

We have chosen the Apple ProRes®, Avid DNxHD® and Avid DNxHR+ codecs as our main video codecs since they are visually lossless, as well as being edit-ready formats. The H.265 (HEVC) codec is also available as an optional upgrade, and provides a highly efficient compressed codec option. For more information refer to the  $\underline{\text{H.265}}$  (HEVC) section.

Generally speaking, all major non linear editing applications support Apple ProRes and Avid DNxHD/DNxHR, and most have support H.265 (HEVC). Applications need to support these codecs inside a .MOV wrapper.

Please refer to the support documentation for your software for compatibility, especially with 10 Bit 4:2:2 H.265.

- Final Cut Pro (version 7)
- Final Cut Pro
- Davinci Resolve 8.0 +
- Adobe CS5 (with 5.51 update or later)
- EDIUS 6
- Sony Vegas 10
- Lightworks
- Avid Media Composer 6 (version 8.3 or later for DNxHR)
- Autodesk Smoke

#### **ProRes RAW - Supported Applications**

- Apple Final Cut Pro
- Adobe Premiere Pro,
- Adobe After Effects,
- Avid Media Composer,
- GrassValley Edius,

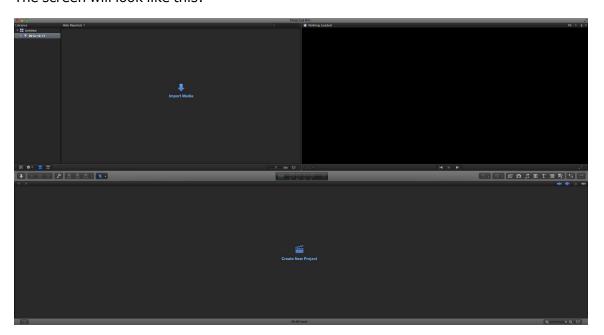
- Assimilate Scratch,
- Baselight Film Light.

#### **Importing SHOGUN CONNECT footage into Final Cut Pro**

You can import SHOGUN CONNECT footage into Final Cut Pro (FCP) in just a few simple steps.

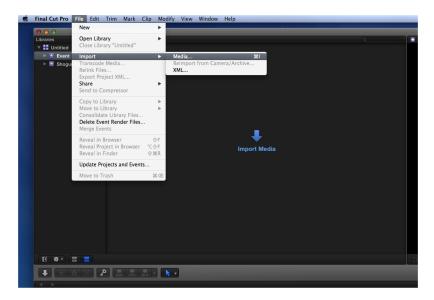
- 1. Connect the Docking Station to your Mac. For information on connecting the Docking Station refer to the Connecting media section.
- 2. Insert the media with your footage into the Docking Station and you will see the drive appear in your Finder window.
- 3. Start Final Cut Pro and open your project (or start a new one).

The screen will look like this:

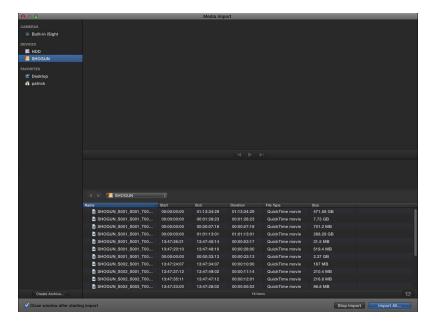


Go to the File menu and select Import > Media

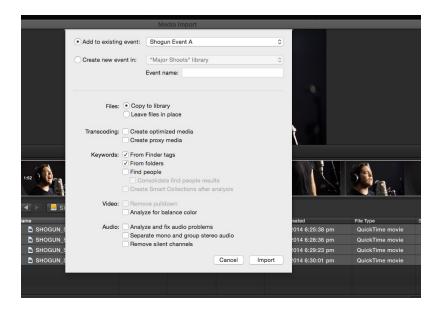
Final Cut Pro will show you a 'browse' window. Look for the SHOGUN CONNECT drive, and click on it.



You'll see the folders in the SHOGUN CONNECT drive. Select the folder containing the footage you want to import. Click on Import All or Import Selected. Individual clips can also be selected.



Choose the Event you wish to import the footage into, or create a new event. Click on Import.



Your Scene, Shot and Take files now appear in the project window, ready for use in your FCP project.



## **SmartLog with Final Cut Pro**

#### **Prior to importing the XML files into Final Cut Pro, ensure that:**

- You have exported XML file whilst the drive is in your SHOGUN CONNECT
- You have connected your Master Caddy Docking Station and inserted your media into the Dock
- You are using an operating system that supports ExFAT
- Your QuickTime version is up to date
- Final Cut Pro has been updated to the latest version

#### There are 2 ways to import the XML file:

- Directly from the docked hard drive
- Manually into Final Cut Pro

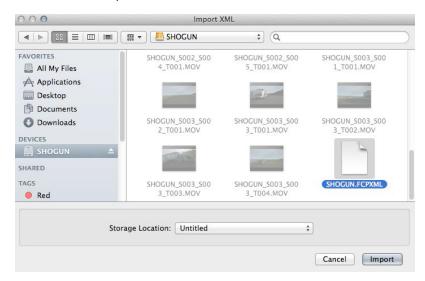
#### **Automatic Import**

- 1. Open the Finder
- 2. Select the drive (in this example it is EXCVIDEO)
- 3. Double-click the unitname.FCPXML file
- 4. This will open Final Cut Pro and import the .xml file
- 5. Final Cut Pro will make an event of the disk, name and reference all the footage in that event.

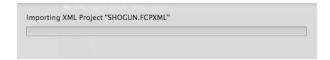
You will notice that on the clips you have added Smart Tags too, with Green and Red indicating Favorite and Reject. You can sort these by using the pull-down menu to show favorites. This will show all the individual favorites as separate clips in the Event Viewer.

#### **Manual**

- 1. Open Final Cut Pro
- 2. Create a New Project (or you can use an existing project). In this example it is called XML Import
- 3. Select File> Import> XML



- 4. Select the SHOGUN CONNECT drive under Devices
- 5. Choose the unitname.FCPXML, select Import
- 6. The XML will import

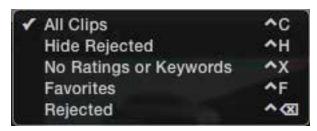


#### Viewing tags in Final Cut Pro

Once you have imported the XML you can expand the clip to see the Favorite, Reject and other various tags.



You can also filter the view to only see specific tags e.g.. favorite, etc.

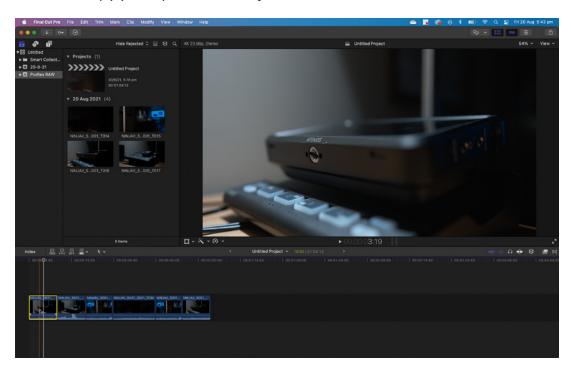


# **Adjusting ProRes RAW settings in Final Cut Pro**

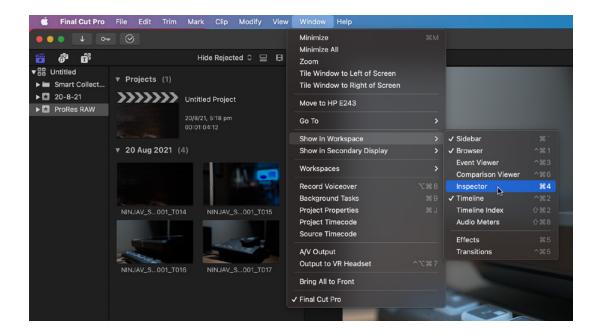
Final Cut Pro allows you to view and adjust the camera settings of ProRes RAW files, like ISO, exposure offset and color temperature in the Inspector tab. The settings that can be adjusted will depend on the camera used with your SHOGUN CONNECT to record ProRes RAW clips. For information on the cameras that record ProRes RAW and the settings that can be adjusted, refer to the 'ProRes RAW video cameras and devices' section in the Apple Support Article.

#### How to adjust ProRes RAW camera settings in Final Cut Pro

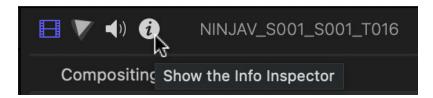
- 1. Import your Apple ProRes RAW clips into Final Cut Pro. For more information on importing refer to the <u>Importing clips</u> section.
- 2. Select the clip(s) that you want to adjust in the browser or in the timeline.



3. Open the Inspector by clicking on Window>Show in Workspace>Inspector



4. Click on the Info button in the Inspector to show the Info Inspector



5. Click on the word Basic at the bottom of the Info Inspector tab to open the Metadata View pop-up menu, and select Settings.



6. The Info Inspector will now display the camera settings of the ProRes RAW clip(s).

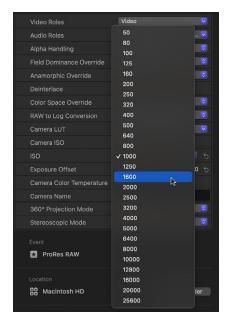


#### **Camera ISO**

Displays the ISO setting selected in camera during the recording of the selected ProRes RAW clip(s). This is for information purposes only and is not adjustable.

#### **ISO**

This drop-down menu allows you to adjust the ISO setting for the selected clip(s).



#### **Exposure Offset**

Adjusts the ISO setting up or down by as much as one stop.

#### **Camera Color Temperature:**

Displays the color temperature setting selected in camera during the recording of the selected ProRes RAW clip(s). This is for information purposes only and is not adjustable.

#### **Temperature**

Adjusts the color temperature setting for the selected clip(s). This slider only appears where the camera used to record the ProRes RAW clip(s) supports color temperature adjustments.

For more information on the cameras supported and the settings that can be adjusted, refer to the 'Adjust ProRes RAW camera settings in Final Cut Pro' Apple Support Article.

# **Technical Specifications**

Physical Specif	ications	
Without bat- teries & media	730g / 1.6lb (excluding batteries)	
Dimensions (W x H x D mm)	198mm x 133mm x 40mm / 7.8" x 5.2" x 1.57"	
Mounting points	Top: $1 \times 1/4^{\prime\prime}20$ or $3/8^{\prime\prime}$ with anti rotational points, Bottom: $1 \times 1/4^{\prime\prime}20$ or $3/8^{\prime\prime}$ with anti rotational points, Right: $1 \times 1/4^{\prime\prime}20$ or $3/8^{\prime\prime}$ with anti rotational points	
Environmental		
Ambient oper- ating tem- perature	Up to 40 Degrees Celsius	
Construction a	Construction and Control	
Body	Aluminium alloy chassis with ABS Polycarbonate back plate	
Cooling	Actively controlled fan and heat sink	
Tally light	Rear and front (Red border on the display indicates record)	
Multi-function button	Power / lock screen	
Power		
Input voltage	6.2V to 16.8V	
Battery Voltage	7.2V	
Compatible bat- teries	NPF /L series	
Battery time (based on 7.4V)	5200mAh - up to 2hrs (monitor & record 4Kp60), 7800mAh - up to 3hrs (monitor & record 4Kp60)	
DC In Con- nector	Locking DC Jack (5.5mm OD & 2.1mm ID)	
D-Tap	Via optional D-Tap to DC cable	
Display	Display	

Touchscreen	SuperAtom IPS panel (capacitive touch)
Size	7"
Resolution	1920 x 1200 px
PPI	325
Bit Depth	10-bit (8+2 FRC)
Backlight Type	Edge lit
Brightness (cd/m² / nits)	2000nits +/- 10%
Aspect ratio	16:9 Image Display
De-interlace mode	I > P and PSF > P
Color Gamut	Rec. 709
Color Pipeline	
AtomHDR	Yes
Gamma	Sony SLog / SLog2 / SLog3, Canon CLog / CLog2 / Clog3, ARRI Log CEI160 / LogCEI200 / LogCEI250 / LogCEI320 / LogCEI400 / LogCEI500 / LogCEI400 / LogCEI400 / LogCEI1000 / LogCEI1280 / LogCEI1600, Panasonic Vlog, JVC JLog1, RED LogFilm / RED Log3G10 / RED Log3G12, FujiFilm Flog, PQ (HDR10), HLG, Nikon N-Log, Z CAM Z-Log2, Olympus OM-Log400 / Flat, Leica L-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 LUT Display	.Cube Format
3D LUT Down Stream	Loop out
3DLUT 50/50	Yes
Monitoring Modes	Native / Rec.709 / HLG / PQ / 3D LUT
HDR output Conversion	HLG / PQ

Color Management	
Calibration	ATOMOS Calibrator with Calibrite ColorChecker Display Pro or ColorChecker Display Plus
Display con- trols	Backlight, Lift, Gamma, Gain
AtomHDR	Built in Technical Log to HDR EOTF
3D luts	Display, monitor and output, Record, Load via SSD
Legalize	Input
Video Input	
HDMI	1 x HDMI (2.0a) 4Kp60
HDMI RAW	Apples ProRes RAW up to 8Kp30 / 4Kp120
SDI	1 x 12G SDI
SDI RAW	Apple ProRes RAW up to 6Kp60 and 4Kp120p
Bit Depth	8/10-bit Video / RAW up to 12-bit
Video Chroma Subsampling	YCbCr 420 & 422
HDCP copy pro- tection	Not supported
HDR	Yes with Auto detection
Metadata	
HDMI	RAW - white balance, exposure index, shutter speed/angle, iris F stop, ISO, gamma, gamut
SDI	File name from Arri, RED. RAW - white balance, Exposure index, Shutter speed/angle, Iris F stop, ISO, Gamma, gamut
Video Output (	Playout)
HDMI	1 x HDMI (2.0) 4Kp60
SDI Loop Out	1 x 12G SDI
SDI Play Out	1 x 12G SDI
Video Chroma Subsampling	YCbCr 420 & 422
Signal	Uncompressed true 10-bit or 8-bit 422 (playback file dependent)

HDR	Yes with Auto detection
Web Streaming	1
RTMP	Yes
RTMP/S	Yes
Video Signal Co	onversion
HDMI to SDI	Yes
SDI to HDMI	Yes
Audio In/Out	
Audio Quality	24-Bit / 48kHz
Audio Codec	PCM
HDMI	8ch 24-bit, input dependent
SDI	12ch 24-bit, input dependent
Analog Audio in	3.5 mm 2ch - 5v power
Analog Audio out	3.5 mm jack
Headphone out	3.5 mm jack
Timecode / Syr	nc
Embedded	HDMI and SDI
Time of day	Yes, Time and Date
LTC	No BNC input
Wireless SYNC	AirGlu™ SYNC Time code Network Server or Client
RF Network range	300m
RF Frequency	Region dependant
Number of Channels	12 RF Channels per Region
Number of RF clients	Region dependant
Bluetooth Net- work Range	10-15m (line of sight)

Network	
Ethernet	1GbE RJ45
Wi-Fi	Wi-Fi 6
Wireless RF	AirGlu™ SYNC Time code Network
Cellular	Connect to Hot Spot over Wi-Fi
Resolution and	Frame Rates (Record, Monitor & Playback)
8K RAW	up to 8Kp30 Via HDMI
6K RAW	up to 6Kp60 Via HDMI & 6Kp30 SDI
4K RAW	up to 4Kp120 via HDMI / SDI
3.5K Ana- morphic RAW	up to 3.5Kp60 via HDMI
2K RAW	up to 2Kp240 via SDI
4K DCI	up to 4Kp60
4K UHD	up to 4Kp60
2K DCI 2046 x 1080	up to 2Kp60
FHD 1920 x 1080 Pro- gressive	up to 1080p120
FHD 1920 x 1080 PsF	Pull down
FHD 1920 x 1080 Inter- laced	1080i50 / 1080i60
1280 x 720p	60p
Recording Codec	
Apple ProRes RAW, ProRes RAW HQ	up to 12bit 8Kp30 / 4Kp120 (activation required)
Apple ProRes HQ / 422 / LT	Up to 4Kp60
Avid DNxHD (220x, 220,	up to 1080p60 (activation required)

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Avid DNxHR (LB, SQ, HQ, HQX)	up to 4Kp60 (activation required)
H.265	LQ, MQ, HQ in 8/10 Bit, 4 2 2 and 4 2 0
Pre Roll	Yes (HD 8s, 4K 2s) - Not available in RAW
Timelapse	Yes
Gang control	SYNC record control
Playback	
Playlist	Yes, Selected, Favorites or Combined
Loop playback	Yes, with custom in and out points
Apple ProRes RAW	Yes, with linear PCM audio
ProRes HQ / 422 / LT	Yes, with Linear PCM audio
Avid DNx HD/HR	Yes, with Linear PCM audio
H.265 (HEVC)	Yes, recorded clips
Monitoring	
SDR	Native, 709, LUT
HDR	HLG, PQ Rec2020
De-Interlace	Selectable mode
Supported med	ia
Interface	SATA 3
Master Caddy I	Not Compatible
Master Caddy II	For 2.5" Drives in MasterCaddy II
Master Caddy III	For 2.5" Drives in MasterCaddy III
SSDmini	Yes
CFast II	Supported cards via optional AtomX CFast Adapter

File System	ExFAT	
File Naming		
Standard	Unit name - Scene, Shot, Take.	
Via SDI	File name for Arri and RED	
On Screen Tool	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 color	Yes, with false color scale	
Zebra	Yes, adjustable	
Isolate color channel	Blue Only	
Cine Frame Guides	16:9, 2.4:1, 2.35:1, 1.9:1, 1.91:1, 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, 2x 4:3	
Display Flip	180 degree rotation	
Onboard Signal Processing Options		
Pulldown Removal	24/25/30pSF > 24/25/30p (2:2 pulldown) 60i > 24p (3:2 pulldown)	
4K UHD Down- scale 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	
External Device	e Control	
Serial 2.5mm Jack	Camera control for supported cameras via Optional USB to Serial Cable	
Wireless RF	To compatible devices	
Supported App	Supported Applications	
XML	Cut tag EDL in Final Cut Pro XML	
Apple ProRes RAW	Apple Final Cut Pro, Adobe Premiere, After Effects, Avid Media Composer, GrassValley Edius, Assimilate Scratch, Baselight Film Light.	
Video Codecs	All NLE applications that support Apple ProRes, Avid DNx and H.265 in .MOV wrapper	
What's in the b	What's in the box	
Accessories included	SHOGUN CONNECT unit, International Power Supply, 7" Protective Pouch, AtomX SSDmini Handle, MasterCaddy III with screws, WiFi Antenna with black caps, RF Antenna, Antenna Storage Pouch, 3.5mm audio jack to jack cable, Antenna coloured caps (5 pairs - White/Red/Yellow/Black/Green), Antenna Mount Covers, Screen Cloth, QuickStart Guide.	
Optional extras	AtomX Monitor Mount, AtomX Magic arm 10" / 13", USB-C Dock, PowerKit, HDMI cables, SDI Cables	
Warranty		
Standard	1 year. Extended to 3 years on product registration	

Construction note: Your SHOGUN CONNECT is designed to operate in ambient temperatures up to 40°C/104°F. If you wish to extend the temperature of operation in high temperature conditions, you can use the cooling options. For more information, refer to the Power Menu section.

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