GNARBOX User Manual

Contents

Service and Support

Should you have any issues or problems using your GNARBOX, please do not hesitate to contact us. Many questions about the GNARBOX App can be answered by using the In-App Help function. For Mobile App tutorials, visit help.gnarbox.com.

How to Contact Us

When contacting us, please have your GNARBOX product serial number ready. For all inquiries please call us at (844) 462-7269 or email us at support@gnarbox.com. We are also available for live chat at help.gnarbox.com.

About The GNARBOX

The GNARBOX is a pocket-sized device that empowers you to backup, organize, edit & share HD videos and photos, laptop free. Your purchase of a GNARBOX includes a GNARBOX,

USB3 Type A to Micro B Cable and a Quick Reference Guide.

Features
The GNARBOX features:

- **Lightning fast mobile backup of your photos and videos -** Back up 128GB of footage at up to 4GB/min to the GNARBOX, then auto-organize your footage by time, type and camera.
- **Video and photo editing from your mobile phone or tablet -** Open the GNARBOX app to start editing instantly, including 4K videos and .RAW photos. Add color correction, cropping, and create highlight reels on the go.
- **Easy sharing of your media -** Upload your media and share it with the world from the convenience of your phone. GNARBOX lets you upload in full resolution directly to your social media networks, or cloud storage.
- **Ability to connect to a multiple devices –** (1) USB3 Type A, (1) USB3 Micro B, (1) USB2 Type A, microSD and SD ports allow you to connect any camera to quickly access and manage your content. Connect an external SSD/HDD for additional space.
- **Rugged Design -** Waterproof, Shockproof, Dustproof and ready for your adventure. Never lose your best moments again.
- **Long Lasting Battery -** GNARBOX has a 4000mAh battery, so you can use it for 4-6 hours on a single charge. Run out of juice? Recharge using microUSB.

Tech Specs
- Intel ® Quad Core, 1.92GHZ CPU
- 4 Core Intel ® HD Graphics GPU
- Dual band 300mbps 802.11 a/b/g/n Wi-Fi
- SD Card Slots and USB3.0 ports allow 100MB/sec backup speeds & 270MB/sec export speeds
- 1 AMP Out per USB
- Compatible with CF Card Readers
- 128GB FLASH Memory

File Types Supported
The GNARBOX supports these file types:

- .MP4
- .MOV
- .JPG
- .PNG
- .RAW files (*if you have issues with your .RAW file type, please contact support@gnarbox.com or help.gnarbox.com chat and be prepared to send us a file*)

Video Resolutions Supported
The GNARBOX supports video files shot with resolutions:

- <720p
- 720p

- 1080p
- 1440p
- 2.7k
- 4k

The GNARBOX supports videos shot with frame rates of:

- 12fps
- 15fps
- 24fps
- 25fps
- 30fps
- 48fps
- 60fps
- 80fps
- 90fps
- 120fps
- 240fps

Operating System Compatibility

You can connect your GNARBOX to computers running:

- Mac OS® 10 or higher, or
- Windows® XP or higher.

GNARBOX Mobile App Compatibility
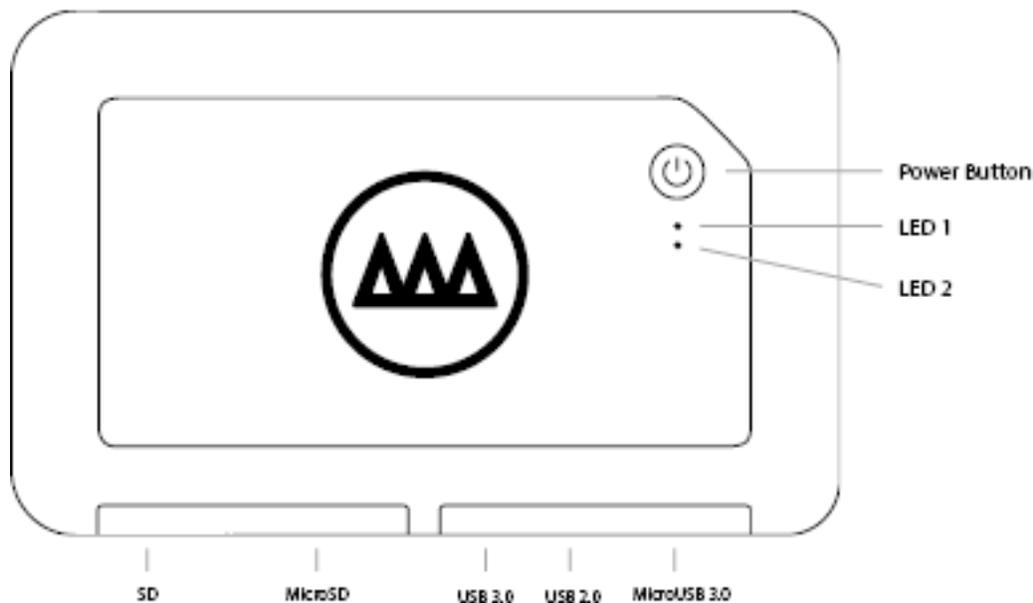
The GNARBOX App can be used on:

- iOS Devices with iOS 7.0 or higher, or
- Android Devices with Android 4.1 or higher

Physical Description

As shown in Figure 1 below, the GNARBOX has:

- A power button
- (2) LED Lights
- Behind the two doors there is:
    - An SD Port
    - A MicroSD Port
    - A USB3 Port
    - A USB2 Port
    - A Micro USB3 Port

Figure 1

LED Indicator Behaviors

The activity of the GNARBOX LED lights are as follows:

Warning/Performance of Task	LED Action
Booting (Power Up)	LED 1 will blink yellow and red
On	LED 1 will remain green
Charging	LED 2 will remain blue
Fully Charged	LED 2 will turn off
Powering Down (3 Sec)	LED 2 will blink green, then red, then turquoise
Connecting to New Wifi	LED 1 and 2 will blink white
Initial Power Up	LED 2 will turn turquoise
On and Charging	LED 1 will remain green and LED 2 will remain blue
On and Communicating With SD Card Ports	LED 1 will remain green and LED 2 blinks red

The GNARBOX Ports

SD Port

The GNARBOX can download files from SDHC and SDXC Cards. Simply insert the SD Card into the SD Card Port, then the GNARBOX Mobile App will automatically recognize the SD Card.

The SD Port is located behind the GNARBOX door. The SD Port is labeled on the box, but should you have any issues locating the port, please refer to Figure 1 for assistance in locating the SD Port.

MicroSD Port

The GNARBOX can download files from MicroSDHC and MicroSDXC Cards. Simply insert the MicroSD Card into the MicroSD Card Port, then the GNARBOX Mobile App will automatically recognize the MicroSD Card.

The MicroSD Port is located behind the GNARBOX door. The MicroSD Port is labeled on the GNARBOX, but should you have any issues locating the port, please refer to Figure 1 for assistance in locating the MicroSD Port.

USB3 Port

The GNARBOX can download files from devices attached to the USB 3 Port. Simply insert a USB3 cord into both your device and into the GNARBOX, then the GNARBOX Mobile App will automatically recognize the connected USB3 device.

The USB3 Port is located behind the GNARBOX door. The USB3 Port is labeled on the GNARBOX, but should you have any issues locating the port, please refer to Figure 1 for assistance in locating the USB3 Port.

The USB3 Port supports only USB3 cables.

USB2 Port

The GNARBOX can download files from devices attached to the USB2 Port. Simply insert a USB2 cord into both your device and into the GNARBOX, then the GNARBOX Mobile App will automatically recognize the connected USB2 device.

The USB2 Port is located behind the GNARBOX door. The USB2 Port is labeled on the GNARBOX, but should you have any issues locating the port, please refer to Figure 1 for assistance in locating the USB2 Port.

Micro USB3 Port

The GNARBOX can upload files to a host device attached to the Micro USB3 Port. Simply insert a Micro USB3 cord into both your host device and into the GNARBOX, and the host device should mount the drive in its file system.

The Micro USB3 Port is located behind the GNARBOX door. The Micro USB3 Port is labeled on the GNARBOX, but should you have any issues locating the port, please refer to Figure 1 for assistance in locating the Micro USB3 Port.

The Micro USB3 Port supports only Micro USB3 cables.

Safety and Handling

The GNARBOX is built tough and water resistant, but it is important you handle it with care. To ensure the longest life of your GNARBOX and protect your content:

1. Make sure to avoid dropping it from heights above 3 feet (1 meter);

2. Close all doors covering the ports when not in use to prevent dust and moisture from penetrating the sensitive electronics stored inside the GNARBOX whenever you are in

an outdoor environment;

3. Avoid inserting or plugging any wet or dirty SD Cards into the GNARBOX ports;

4. Only insert compatible SD cards or cables into the GNARBOX ports;

5. Only charge your GNARBOX by using the provided USB cord; and

6. Only have a GNARBOX authorized service provider perform services on your GNARBOX.

*****WARNING:* **Please be advised that damage to the GNARBOX or USB Cord could result in electrical shock. If the USB charging cable or the GNARBOX is damaged in any way, please cease using the affected component(s) immediately and contact our customer service to obtain a repair.*****

*****WARNING:* **The GNARBOX Battery is a lithium-ion battery. Impact or damage to the battery could result in fire and/or an explosion. Please DO NOT ship, mail or travel by airplane with a GNARBOX that might have suffered impact or damage to its' battery.*****

Using Your GNARBOX

Powering On/Off/Resetting your GNARBOX

- Power on your GNARBOX by holding the Power Button for 3 sec. LED 1 will remain a solid green.
- Power off your GNARBOX by holding the Power Button for 3 sec. LED 1 will show no color (off).
- Hard Reset your GNARBOX by holding down the Power Button for 30 seconds. A Hard Reset will turn off the power and then reboot the GNARBOX. Continue holding the power button for another 30-45 seconds. A turquoise LED will turn on and then off, indicating that the Hard Reset is complete.

Charging Your GNARBOX

You can charge your GNARBOX using the supplied USB cord. Plug the USB cord into a dedicated USB charging port, like the A/C adapter for your mobile phone, or a charging downstream port, which likely can be found on your computer. If your GNARBOX is powered on, you can tell the GNARBOX is charging when LED 2 remains a solid blue and LED 1 remains solid green. If your GNARBOX is powered off, you can tell the GNARBOX is charging when LED 2 remains solid blue. When your GNARBOX is fully charged, LED 2 will turn off.

Download/Install the GNARBOX App for your Mobile Device

You can download the GNARBOX Mobile App on the Apple App Store or the Google Play Store.

In-App Help

Within the GNARBOX Mobile App, there is an in-app help function to help you learn more about

all features and functions. You can access the in-app help by tapping ⑦ located in the upper tool bar.

Connecting to the GNARBOX with your Mobile Device

1. Open the GNARBOX App on your mobile device. To install app please see Download/Install the GNARBOX App for your Mobile Device above.
2. Power on your GNARBOX.
3. Follow all on screen prompts in the GNARBOX Mobile App. The prompts will direct you to connect to the GNARBOX Wi-Fi network.

Pro Tip: Connecting Multiple Mobile Devices
Up to four (4) people can connect to a single GNARBOX Wi-Fi network and work on the device simultaneously.

Collection View

The Collection View is your quick access to your entire GNARBOX Library. Along the bottom toolbar of the Collection View, you can find access to your Home Page, Recently Imported, Favorites and Reel.

Settings Page

Tapping the ⚙ brings up your Settings Page. The Settings Page contains access to your:

- Updates for your GNARBOX and GNARBOX Mobile App
- Auto Import Settings (Coming soon)
- Wi-Fi Access Point
- USB 3 Mode to toggle between Normal and Mass Storage modes
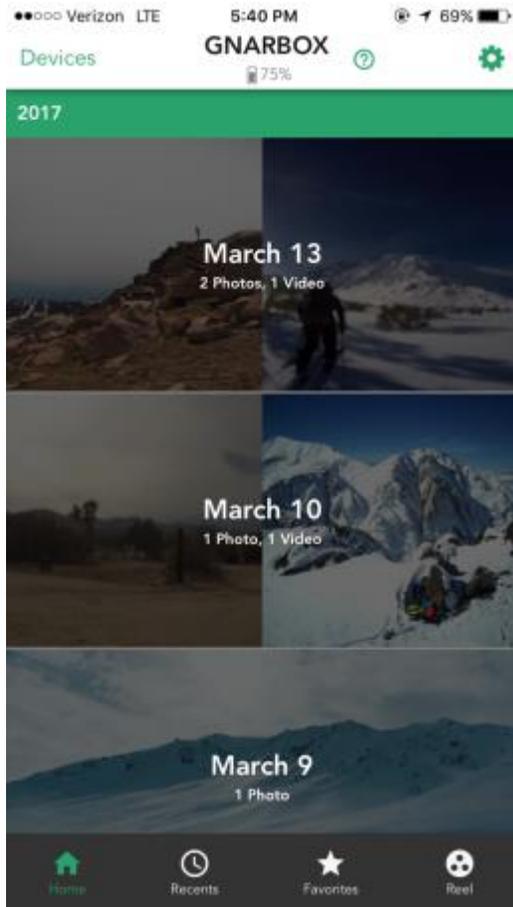- Tutorials
- FAQs
- Contact GNARBOX

Wi-Fi Access Point: GNARBOX Wi-Fi Settings
Wi-Fi Access Point is the GNARBOX's built in Wi-Fi. Tapping "Wi-Fi Access Point" opens the GNARBOX Connections settings. Here you can name/rename your GNARBOX Network Name and set/reset your GNARBOX Network Password.

****WARNING: Only share your GNARBOX Connection password with people you trust.****

Home Page

Tapping the 🏠 brings you to the Home Page of your entire GNARBOX photo and video collection. The collection view contains all files you have backed up and/or saved to your GNARBOX. The files are organized according to their chronological order.

Recently Imported

Tapping the 🕐 brings up the files you recently imported to the GNARBOX.

Favorites

Tapping the ⭐ brings up the files you marked as a favorite.

Accessing & Backing up Files on the GNARBOX

Files located on SD & MicroSD Card or on Devices inserted in the USB 2, 3 and Micro USB3 Ports

You can access any files located on any devices or cards plugged into the GNARBOX by:

1. Opening the GNARBOX Mobile App on your mobile device;
2. Going to the "Devices Page;"
3. Selecting the device from the list; and

4. Then select any file you want.

Backing Up Files to the GNARBOX and Other Connected Devices

You can backup single or multiple files directly onto either the GNARBOX hard drive, any other connected device or inserted card by:

1. Opening the GNARBOX Mobile App on your mobile device;
2. Going to the "Devices" page and selecting the device you want to access;
3. Pressing the "Select" button;
4. Either pressing "Select All" button or select each individual file you want to backup;
5. Pressing the "Copy Files" button; then
6. Select the device you want to back the file up to.

To view the files backed up on your GNARBOX, return the "Home Page." The files will be organized according to date.

To view the files backed up on a connected device, return to the "Devices" list, then select the device and find the photo.

Connecting Your GNARBOX to Your Computer

You can connect your GNARBOX to your computer by:

1. Opening the GNARBOX Mobile App on your mobile device;
2. Going to the "Settings" page
3. Pressing USB3 mode button
4. Selecting "Mass Storage Mode"
5. Plugging your GNARBOX into your computer using the supplied USB3 cable

To use the GNARBOX with the app and your phone again, simply go into "Settings" and switch the USB3 mode back to "Normal".

Editing Files On Your GNARBOX

You can perform a multitude of post-production edits to both your photos and video on GNARBOX.

Once you are satisfied with the changes you have applied to the file, you can save a new file to either your GNARBOX or your mobile devices camera roll by tapping "Export" in the upper right hand corner of the file preview window.

Editing Photos

To edit a photo, select the photo file you want to edit and tap "Edit" in the upper right hand corner. To the photo you can:

- Edit the Exposure
- Edit the Contrast
- Edit the Saturation
- Apply Highlights
- Adjust Shadows
- Adjust Punch
- Adjust Temperature
- Adjust Midpoint
- Adjust White Point
- Adjust Black Point
- Adjust Tint
- Adjust Intensity

Pro Tip: Tap to View Original Photo
You can review the difference between the original file and the edited file by tapping once on the image preview to review the original, then tapping it again to review the edits that have been applied.

Crop

You can crop a photo by tapping the .

You can either drag the cropping icon on the screen to custom crop the photo as you desire or apply pre-selected aspect ratios by tapping the .

Exposure
To adjust a photo's exposure, tap "Exposure." This will bring up a slider that allows you to adjust the exposure of the photo.

This control sets the overall image brightness. Exposure values are in increments equivalent to aperture values (f-stops) on your camera. An adjustment of +5.00 is similar to opening the aperture 1 stop. Similarly, an adjustment of –5.00 is similar to closing the aperture 1 stop.

It is a good idea to adjust a photo's exposure before changing any other tonal values.

Contrast
To adjust a photo's contrast, tap "Contrast." This will bring up a slider that allows you to adjust

the contrast of the photo.

This control allows you increase or decrease the photo's contrast by affecting the photo's mid-tones.

Highlights
To adjust a photo's highlights, tap "Highlights." This will bring up a slider that allows you to adjust the highlights of the photo.

This control allows you to adjust the bright image areas of the photo.

Shadows
To adjust a photo's shadow, tap "Shadows." This will bring up a slider that allows you to adjust the shadows of the photo.

This control allows you to adjust the dark image areas of the photo.

Punch
To adjust a photo's saturation, tap "Punch." This will bring up a slider that allows you to adjust the punch of the photo.

This control allows you adjust the contrast of the photo, but doesn't clip the black or white levels.

White Point
To adjust a photo's White Point, tap "White Point." This will bring up a slider that allows you to adjust the white point of the photo.

You can adjust the red, green and blue of a photo within the White Point tool. You can adjust all three colors at the same time by using the slider, or each color individually by tapping the RGB icon.

This control allows you to manipulate the richness of the whites in the photo.

Mid Point
To adjust a photo's gamma levels, tap "Mid Point." This will bring up a slider that allows you to adjust the midpoint of the photo.

You can adjust the red, green and blue of a photo with the mid point tool. You can adjust all three colors at the same time by using the slider, or each color individually by tapping the RGB icon.

This control allows you to manipulate the mid tones of the photo.

Black Point
To adjust a photo's black point, tap "Black Point." This will bring up a slider that allows you to adjust the black point of the photo.

You can adjust the red, green and blue of a photo within the Black Point tool. You can adjust all three colors at the same time by using the slider, or each color individually by tapping the RGB icon.

This control allows you to manipulate the richness of the blacks in the photo.

Saturation

To adjust a photo's saturation, tap "Saturation." This will bring up a slider that allows you to adjust the saturation of the photo.

This control allows you adjust the saturation of all the colors of the photo equally.

Temperature

To adjust a photo's temperature, tap "Temperature." This will bring up a slider that allows you to adjust the temperature of the photo.

This control allows you to fine tune the white balance using the Kelvin color temperature scale. Move slider to the left to make the photo appear cooler, and to the right to warm the photo colors.

Tint

To adjust a photo's tint, tap "Tint." This will bring up a slider that allows you to adjust the tint of the photo.

This control allows you to apply an overall color cast to an image.

Intensity

To adjust a photo's intensity, tap "Intensity." This will bring up a slider that allows you to adjust the intensity of the photo.

This control allows you to adjust the vividness of the overall photo.

Editing Video Files
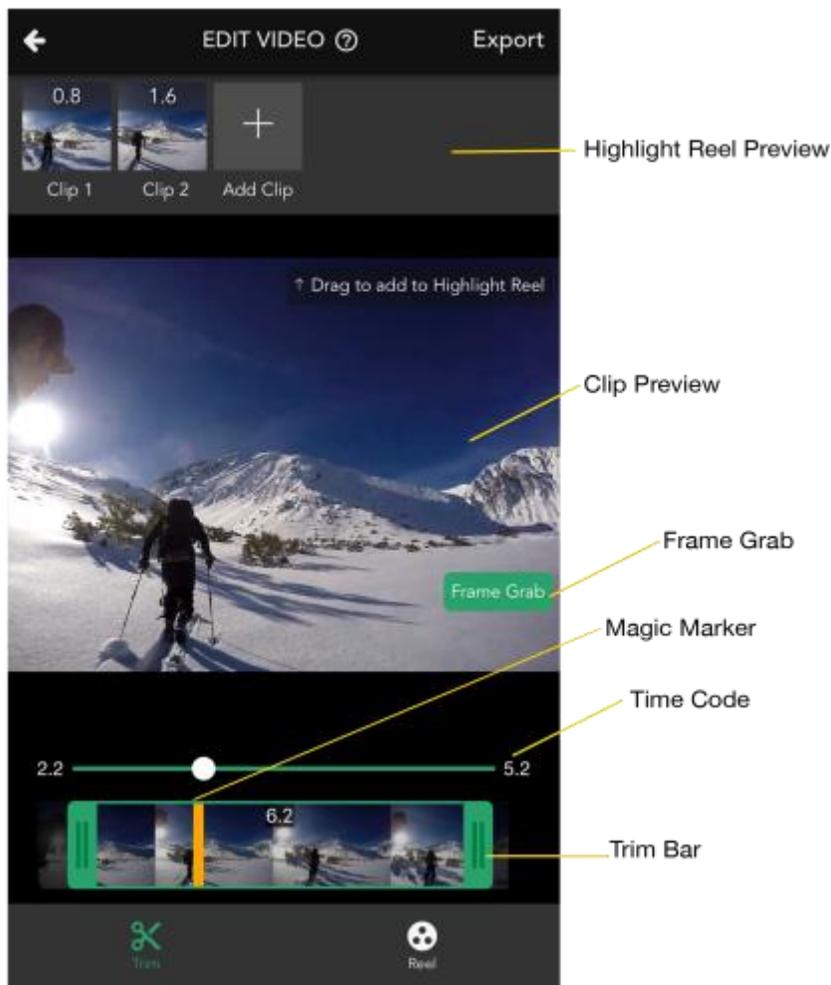
To edit a video, select the video file you want to edit and tap "Edit" in the upper right hand corner of any video file. In the Video Editing Screen, you can:

- Trim the clip
- Export Frames
- Add clips to your Highlight Reel
- View your Highlight Reel

Trim

You can trim the length of a clip by tapping *.*

To trim you can drag the markers at the end of the Timeline to set the length.

Pro Tip: Magic Marker
While watching a video, you can swipe down on the Clip Preview to place a Magic Marker on the timeline of the clip. When you apply a trim or slow motion, the tool will jump to the magic marker. You can use the Magic Marker to set an in point and then an out point.

Frame Grab
You can export a frame of a clip to an image by tapping the 'Frame Grab' button. Select the frame you want to export, then tap "Done"

The Highlight Reel
You can create an edit by assembling clips of videos into a highlight reel. You can view your Highlight Reel by tapping .

Adding Files to the Highlight Reel
Once you have finished editing a clip, you can add that file to the Highlight Reel by swiping upwards on the Video Preview in the Trim tool.

Deleting Files from the Highlight Reel
You can delete clips by 1) swiping down on the clip in the Trim tool Highlight Reel Preview Pane, or 2) swiping down on the clip in the Highlight Reel Preview.

Rearrange Clip Order in the Highlight Reel
You can rearrange clips the by 1) dragging and dropping the clip in the Trim tool Highlight Reel preview pane, or 2) dragging and dropping the clip in the Highlight Reel Preview.

Add Music to the Highlight Reel

You can add music to the Highlight Reel by tapping 🎵. We use hit points to sync music with your video. To start, set the hit point (most exciting part) of your Highlight Reel. Find your hit point by scrolling on the timeline and dropping the marker on the timeline, then tap "Next."

Next, select one of the songs you've loaded onto your GNARBOX. After choosing your song, select the hit point of the song by scrolling through the songs timeline and dropping your marker on the timeline. Then tap "Done."

You will then be returned to the Highlight Reel. You can still edit and arrange the clips of your Highlight Reel.

Saving & Sharing Your Highlight Reel

You can save and share your Highlight Reel by tapping ⬆️. Choose where you want to save the Highlight Reel to or where to share it using the options available.

Saving Edited Files
You can save an edited file by tapping "Export." This will give you the option to save your edited file to either your GNARBOX or to your phone's Camera Roll. Files saved to your GNARBOX can be found in your Home Page according to the date that file was saved.

Default Settings for Photo Export
When you save a photo, it is automatically exported as a high resolution 4K .JPEG file, or if the photo is less than 4K, the photo is exported at the maximum resolution possible for the photo.

Default Settings for Video Export
When you save a video, it is automatically exported as the same format as the original file with the same specifications.

Default Settings for Highlight Reel Export
When you export a highlight reel, you are given the option to export as a 720p, 1080p, 2.7k or 4k MP4 file.

GNARDROP: Sharing/Backing up from Your GNARBOX:
You can share files saved to your GNARBOX or to other devices. To share your saved files:

1. Go to your GNARBOX Home Screen

2. Tap "Select" and select the files you want to share
3. Tap ⬆️ 'Share' button to access the GNARDROP Menu
4. Select the device you want to export to.

Video Bitrate Configuration

Video bitrate can easily be changed in the Settings menu, then select "Video Bit Rate". You will be given 4 different bitrate options, which will change the quality and size of your video export. Note: bitrate configuration only applies to exported trimmed clips and Highlight Reels. Unedited clips will retain their original settings.

The chart below shows the maximum Highlight Reel length at the 4 different bitrates.

Bitrate	Highlight Reel Length
Highest (65Mbps)	8 mins
High (45Mbps)	11 mins
Mid (30Mbps)	16 mins
Low (10Mbps)	44 mins

Task Manager

You can view what tasks the GNARBOX is performing by tapping on the 🔄 when it appears in the GNARBOX Mobile App.

The task manager provides information on:

● The status of copied or deleted files
● Whether the copying of files has failed

TASK MANAGER
96% battery

Active

Extracting RAW image for DSC01112.ARW

Queue

Generating DJI_0028.MP4 Video Stream

Completed

Copying 4 files from to GNARBOX
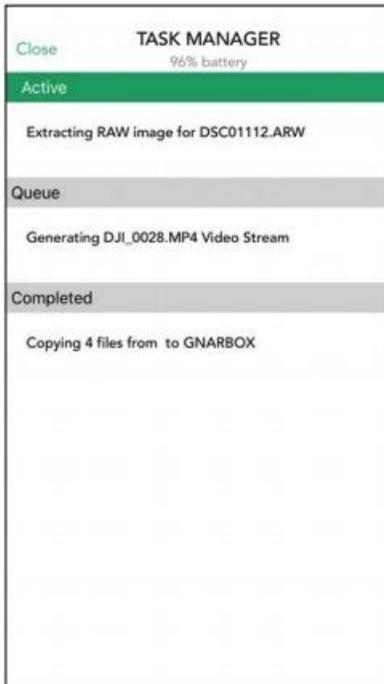
Regulatory Compliance

FCC & Industry Canada (IC) Class B Information

This device complies with FCC Part 15 and Industry Canada license exempt RSS standard(s). These limits are designed to provide reasonable protection against harmful interference in a residential installation. This unit generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help. Any changes or modifications not expressly approved by WD could void the user's authority to operate this equipment.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAN ICES-3(B)/NMB-3(B):
This device complies with Canadian ICES-3(B).

Cet appareil est conforme à la norme ICES -3 (B).

FCC & IC RF Exposure Statements
The product complies with the FCC and IC portable RF exposure limit set forth for an uncontrolled environment and is safe for intended operation as described in the user manual for this product. Further RF Exposure reduction can be achieved if the product can be kept as far as possible from the user's body or if the device is set to lower output power if such a function is available.

Le produit est conforme à la limite d'exposition RF portable FCC et IC établies pour un environnement non contrôlé et est sans danger pour le fonctionnement prévu, comme décrit dans le manuel d'utilisation de ce produit . Une réduction supplémentaire de l'exposition RF peut être réalisé que si le produit peut être maintenu aussi loin que possible du corps de l' utilisateur ou si l' appareil est configuré pour réduire la puissance de sortie si cette fonction est disponible.

CE Compliance for Europe
Marking by the CE symbol indicates compliance of this system to the applicable Council Directives of the European Union, including the EMC Directive (2004/108/EC), R&TTE Directive (1995/5/EC), RoHS 2 Directive (2011/65/EU), LVD Directive (2006/95/EC). A "Declaration of Conformity" in accordance with the applicable directives can be viewed at www.gnarbox.com/eucompliance.

European Union -Disposal Information

The symbol above means that according to local laws and regulations your product and/or its battery shall be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. The separate collection and recycling of your product and/or its battery at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

For Australian Customers
Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to major

failure.

Legal

GNU General Public License ("GPL")

Software incorporated into this product may include third party copyrighted software licensed under the GPL or Lesser General Public License ("LGPL") (collectively, "GPL Software") and not GNARBOX's Hardware End User License Agreement or App End User License. In accordance with the GPL, if applicable: 1) the source code for the GPL Software may be provided by contacting Customer Service with a request within three years of the date of your purchase; 2) you may re-use, re-distribute, and modify the GPL Software; 3) with respect solely to the GPL Software, no warranty is provided, to the extent permitted by applicable law; and 4) a copy of the GPL is included herewith, may be obtained at *http://www.gnu.org*. Modification of or tampering with the Software, including but not limited to any Open Source Software, is solely at your own risk. MyGnar is not responsible for any such modification or tampering. MyGnar will not support any product in which you have or have attempted to modify the Software supplied by MyGnar.

Notices

Information furnished by MyGnar is believed to be accurate and reliable; however, no responsibility is assumed by MyGnar for its use nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of MyGnar.

Purchase and use of the product is subject to additional terms and conditions which can be found by visiting www.gnarbox.com/hardwareeula; and by using the product you assent to these additional terms and conditions. This product is covered by a limited warranty, the acceptance of which is a condition of sale and can be found here www.gnarbox.com/warranty. Warranty valid only when purchased from a GNARBOX authorized reseller. Total accessible storage capacity and read and write speeds vary depending on operating environment. Product specifications subject to change without notice. Pictures shown may vary from actual product. Information is subject to change without notice. All rights reserved. © 2016 MyGnar, Inc. GNARBOX is a registered trademark of MyGnar, Inc. in the U.S. and other countries.

Apple and the Apple logo are trademarks of Apple Inc., registered in the U.S. and other countries.

Android is a trademark of Google Inc. Microsoft is a registered trademark of Microsoft Corporation in the U.S. and other countries.

IOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.

Other brand names mentioned herein are for identification purposes only and may be trademarks of their respective holder(s).