RIBCAGE MOUNTS
1X - 2X - 3X

Ribcage modified GoPro platforms produce industry leading immersive 360° video experiences/results. Especially when compared to using pre-bundled arrays that require between 6 and 16 cameras. Avoid pre-bundled major headaches – high cost, file management issues, battery/power limitations, size, weight, set-up time, extensive post processing and more.

Get amazing results from our lower cost immersive 360° video solution by using the right equipment for your application – buy only what you need. Create an almost complete sphere using a single Ribcage GoPro with **Entaniya's 280° Super Fisheye lens**. For a complete sphere, add another camera and shoot back-to-back with **220°** or **250°** lenses. Add a third camera and shoot in a triangle configuration – even better resolutions and frame rates. You choose!

Need a bigger array? Ribcage helps eliminate problems that come with bigger arrays. For example, our all-aluminum construction dissipates heat generated by cameras that do not have Ribcage installed. Reducing your worry of one camera in the array going down!

Build your own custom rig! The **EXOmini Mounting bracket** gives you 1/4" 20 mounting points on the top, bottom and sides. We offer 1x, 2x and 3x configurations. Our new Modulus components include a detached sensor with a 12" ribbon – attach those sensors back to back or on any configuration needed, 1x, 2x and 3x, resulting in industry leading lower parallax.

Your Ribcage modified GoPro's are not restricted to any array – use them in other applications with any lens you choose, in any way you choose! Work smart and Get the Shot!
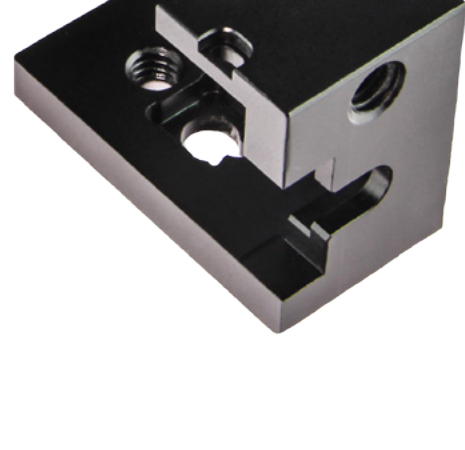
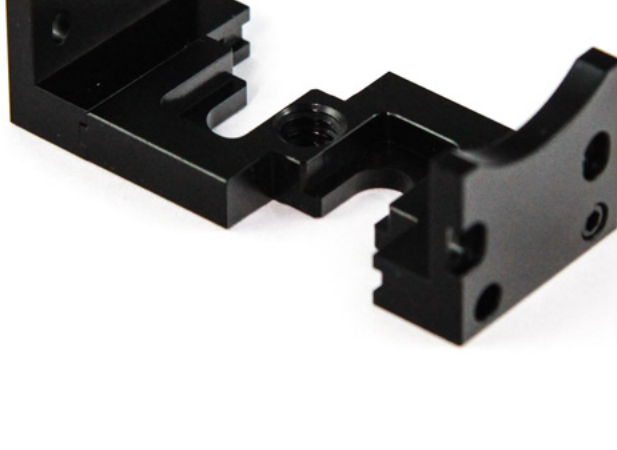

Ribcage 1x Mount   Ribcage 2x Mount   Ribcage 3x Mount

Features:
Compatible with Ribcage Hero4 Mods
Perfect for Entaniya lenses
1/4" – 20 and 3/8" – 16 tripod mount compatibility
Precision Machined Aluminum
Compatible with Modulus External Image Sensor Housing for Hero4 (*3x Mount*)
Channels to run USB power cables behind the cameras and out the bottom (*3x Mount*)

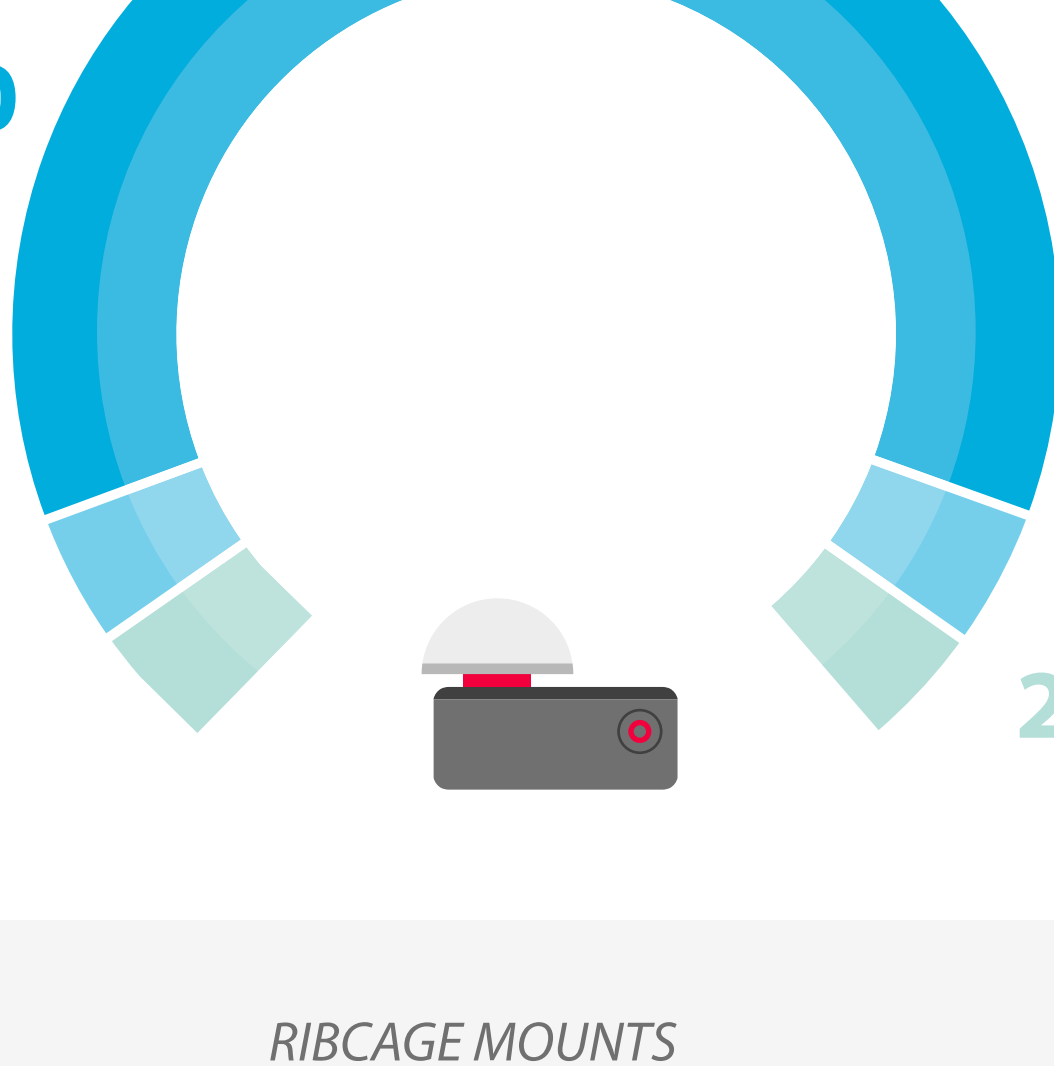Ribcage 1x Mount   Ribcage 2x Mount   Ribcage 3x Mount

For more information on Entaniya fisheye lenses

Extreme wide angle fisheye delivers H 220° x V 195° when mounted on a Ribcage Modified GoPro camera.

Extreme wide angle fisheye delivers H 250° x V 195° when mounted on a Ribcage Modified GoPro camera.
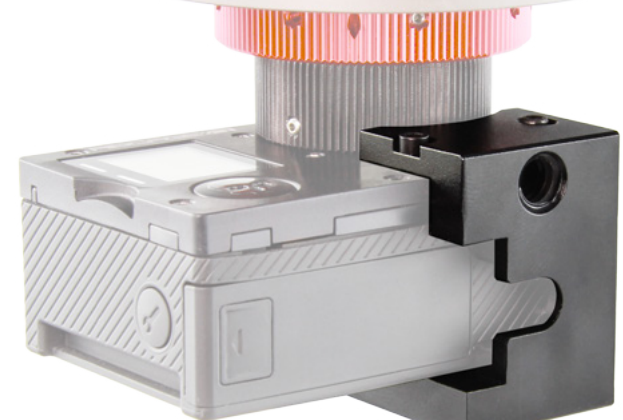
220 **250** **280**

Unique in the world! Capture almost complete spherical 360 degree videos and stills with just one lens and one camera. No more stitching error, no more multicam setups, minimal post processing.

RIBCAGE MOUNTS

1X MOUNT

Designed for use with Entaniya 280° and other super-wide angle fisheye lenses, this mount replaces the original tripod mount on your Ribcage Modified Hero4 camera. It allows you mount the camera either vertically or horizontally with either of two standard 1/4" – 20 tripod mounts centered directly behind and below the image sensor. You can also insert a square 3/8" nut (1/8" thick) on either the back or bottom for connecting to extruded aluminum rails systems. The battery door is easily accessible without needing to remove the bracket.
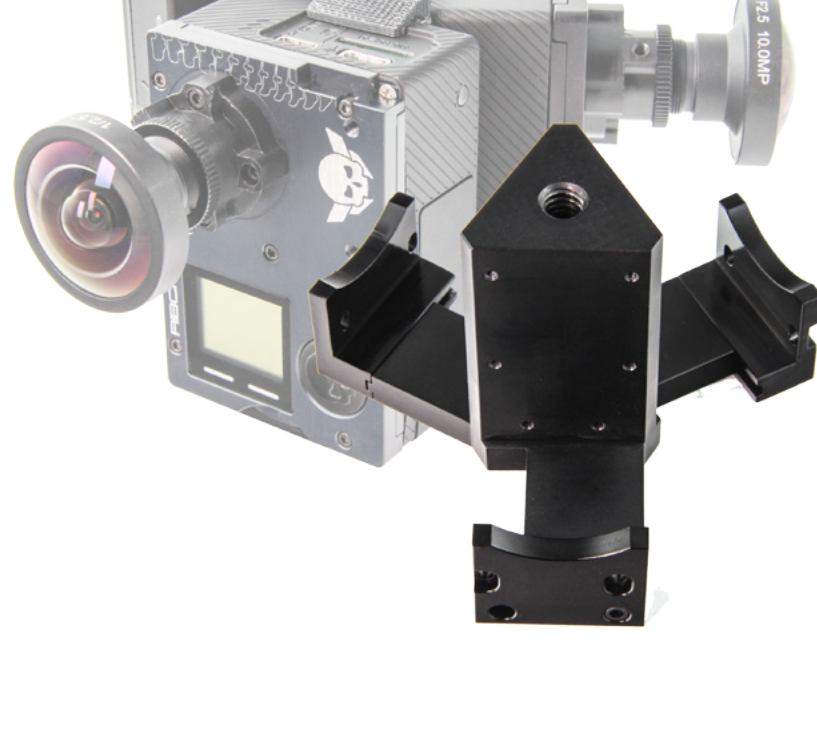
2X MOUNT

Designed for maximum flexibility; our back-to-back rig for Ribcage Hero4 Modified Cameras is composed of three precision machined aluminum parts. The front bracket acts as an individual tripod mount for each camera plus they can both be fastened together with a central bridge. For custom rigs there's room for two 3/8" square nuts (1/8" thick) for optional mounting on extruded aluminum rails or other structures. The bracket and bridge perfectly aligns the image sensors of two Ribcage Modified Hero4 Cameras which makes it perfect for 360° video applications. Attach the rig to your favorite tripod with the centered 1/4"- 20 mount. Camera batteries remain easily accessible for quick changes.

3X MOUNT

Designed with maximum flexibility in mind, our new aluminum Ribcage 3x mount will give you lots of options for your 360° spherical videos at a much lower cost. Ribcage Modified Hero4 cameras can be mounted in either vertical or horizontal orientation. When in vertical configuration (cameras on their sides) you can take advantage of all the shooting modes the camera have to offer to achieve near 6K/30 or full 4K/60*. In addition, when in vertical configuration the battery compartment and all the buttons are easily accessible including the side button. The Ribcage 3x mounting bracket also supports our Modulus Sensor Housing which can be connected directly. The camera mounting plates can be connected to put the cameras in horizontal configuration, or they can be turned over so the camera bodies hang underneath when Modulus Sensor Housings are connected via our extended jumper. Stock (unmodified) GoPro Hero4 cameras can also be used** (vertical configuration only). The mount is compatible with both 1/4" – 20 and 3/8" – 16 tripod mounts.
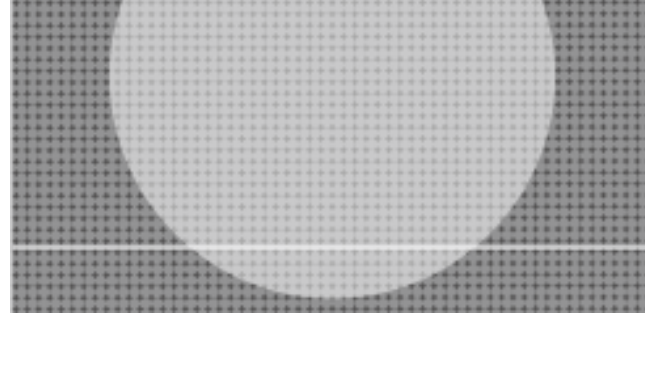
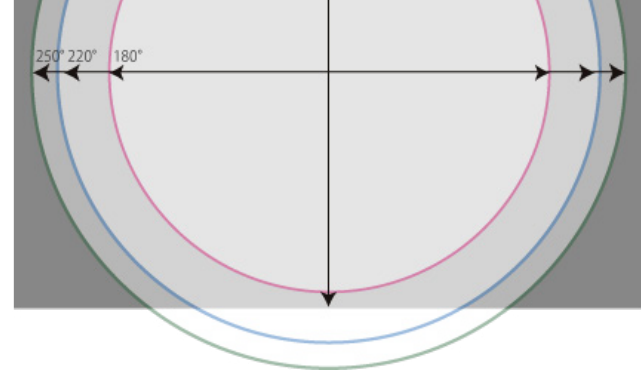| Shooting Resolution	Aspect Ratio	Stitched Output*	Max Frame Rate
4K	16:9	5800 X 2900	30
2.7K	16:9	4200 X 2100	60
1440	4:3	2835 X 1425	80
1080	16:9	2920 X 1460	120

This chart represents the resolutions and frame rates that can be achieved. To use 16:9 shooting modes the cameras must be in the vertical (sideways) configuration.

* Average stitched output resolution based on 180° and 220° lenses

** Circular fisheye on a 90° WFOV minimum required to replace original GoPro lens

4:3 16:9
Entaniya 280° lens

Entaniya Fisheye 250
Entaniya Fisheye 220
Entaniya 220° & 250° lens

Modulus Sensor Housing on an AR Mount   Modulus Sensor Housing parts

Designed for developers with special applications, our Modulus Sensor Housing provides protection and infinite lens mounting options for the GoPro Hero4 image sensor when removed from the camera. The included 12" sensor extension ribbon to place the image sensor away from the camera body. The sensor housing can be mounted on any standard 1/4"- 20 mounting point using the included mounting bracket. Two back plates are provided for maximum flexibility – with two sensor housings you can use alternate back plates to mount them directly back-to-back for the smallest amount of parallax possible. Sensors can also be mounted back-to-back with an offset of 90°; one sensor in landscape and the other in portrait orientation. This allows high frame rate shooting in 16:9 modes without losing the ability to stitch a full 4K resolution* 360° video with only two cameras. The module can be configured so that the ribbon connector comes out the back, top, bottom or right/left side. Bundle this housing with a Ribcage Mod Kit for maximum usability!

Ribcage 2x VR Mount

This footage was shot in 2.7K/60 which produces a stitched output greater than 4K. Shooting on 4K/30 will produce a stitched output of about 5800x2900. In this case the video was output at 4096 x 2048 @ 60fps.

We would love to see what you have done with your Ribcage and how Ribcage is used in your technical creations.

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