# **NA-GH4 Housing**

Nauticam is pleased to announce support for the GH4 in two ways: First, for existing NA-GH3 customers, a simple upgrade kit costing \$20 allows for full functionality of the camera in the existing housing. Second, Nauticam today announced the imminent arrival of the NA-GH4, a refined housing specifically for the LUMIX DMC-GH4. Both options allow diving photographers and videographers to achieve incredible 4k video and 16MP stills at an affordable price.

## Nauticam NA-GH4

Nauticam's tagline is "Innovation Underwater", and the company is dedicated to continuing innovation in this industry, while helping to protect customer investments in existing Nauticam gear whenever possible. Case in point, Nauticam offers a user installable upgrade kit (p/n# 17753) to enable the existing NA-GH3 housing to enable the GH4 to work in that housing with full functionality. In addition, the new NA-GH4 housing can be used with either the GH3 or GH4 camera.

Relentless innovation demands that a new housing be designed for the GH4 and is able to incorporate new features that have debuted on more recent Nauticam housings, not to mention a couple of new features that are first seen in the new NA-GH4. One first is the unique placement of the ISO control. ISO is key for video exposure (think "gain" if you come from the video or cinema worlds), and this new control makes changing ISO very quick and easy, essentially re-routing this control back to the right thumb. The button is just in the right place, ideal for quick access but not easily bumped accidentally.

Another key concern for video - white balance - is achieved with another control that is re-routed for maximum ease of use. A push lever, accessible by the right thumb with no reach, engages the white balance button. From there, any of the white balance settings can be accessed, including any of the four custom white balance banks. To perform a custom white balance, the shooter would press the up arrow, point the camera to the white balance target, and press the OK button, all easily accomplished with an absolute minimum of reach. Nauticam has always featured the only over-molded rubberized handles in the industry... the NA-GH4 now not only includes the handles, but they are angled forward at just the right angle for shooting steady video. The handle placements are adjustable horizontally, and include a stabilizing bracket that steadies the rig with heavy lighting attached.

The two command dials (Aperture and Shutter Speed) are at the fingertips, and can be reversed to put aperture on the forward dial if that is the shooters preference. The GH4 features 5 programmable custom functions, and they are all placed for easy reach. The combination lever and button of the GH4's AFS/AFC/Manual + AF/AE Lock is separated to two separate controls, making the AF On function available for "Thumb Focus." The GH4 allows autofocus via this button even with the lever set to Manual Focus, meaning switching between thumb focus and half press focus style can be done instantly. The Video Record button is engaged via a button placed at the right thumb, and easily is distinguished from other pushbutton functions. One of the programmable functions (typically Fn5) is used to switch between the EVF and OLED panels. For shooters who decide they do not need to switch, Fn5 could be re-programmed for other functions, such as Photo Style, Video Recording Quality, VFR, Peaking, or any of dozens of other functions.

The housing gains a new-style port locking mechanism, which will be familiar to people who have seen Nauticam SLR housings. This locking lever made it's mirrorless debut with the Nauticam NA-EM1 housing, and is an iconic symbol of Nauticam innovation. The new locking lever makes port changes effortless, quick, and just as secure.

Tripod users will find 3 1/4-20 tripod holes, with extra space allotted for the width of standard tripod plates, meaning the housing can easily be opened with tripod plate attached.

The NA-GH4 comes standard with the Nauticam vacuum system electronics built in. By default, this serves as a audible and visual leak detector, but add a Nauticam M14 Vacuum Valve, (p/n# 25611) and it becomes a vacuum check system - confirming watertight integrity before, during and after the dive - which means peace of mind.

Milled from solid aluminum, the housing is rated to 100m/330ft depth, and is rugged and ready for use!

## **Lenses and Ports**

One of the strengths of the Micro Four Thirds system is the wide selection of excellent lenses from both Panasonic and Olympus, supporters of m4/3. GH4 ships body only, allowing the shooter choice.

#### The Panasonic

Panasonic Lumix G X Vario 12-35mm f/2.8 is an ideal "walk-around" lens for this camera, with a focal length range that suits many shots. Or for video shooters, the Panasonic Lumix G X Vario PZ 14-42mm covers a similar focal length but adds the power zoom functionality. These lens are also useful underwater as a fish portrait type of lens, or a shy shark lens.

For those wanting to further expand their range underwater, lenses like the Panasonic Lumix G Fisheye 8mm/F3.5, Olympus 9-18mm, Panasonic Lumix G Vario 7-14mm f/4.0, Panasonic Leica DG Macro-Elmarit 45mm f/2.8, and the Olympus M.ZUIKO DIGITAL ED 60mm f/2.8 Macro are all supported. These are really the "workhorse" lenses for m4/3 underwater, and would be highly recommended. Panasonic and Olympus also offer a number of "pancake" type fast prime lenses that are of excellent quality and minimal size. Lenses in this class to consider would include the Panasonic Lumix G 14mm f/2.5 and Olympus M.ZUIKO DIGITAL ED 12mm f/2.0.

One of the most versatile lenses available for any system is the Olympus M.ZUIKO DIGITAL ED 12-50mm F3.5-6.3 EZ Lens, which is a power zoom that features a built in macro mode.

Nauticam is the only housing manufacturer that fully support this multipurpose lens, and it is worth considering for someone interested in shooting macro and fish portraits on the same dive. Add Nauticam's pioneering SMC, the first accessory optic designed exclusively for in water use, for even higher magnification on the macro side.

The Nauticam Super Macro converter is an ideal add on for macro enthusiasts, providing reproduction much greater than life size with minimal distortion and aberration, and works well with the Olympus 60mm macro lens. Generally, autofocus is used underwater with wide angle zoom lenses. For cases where manual focus is required, however, Nauticam provides a solution for the Panasonic 7-14mm and 12-35mm lenses. The 6" Wide Angle port with Focus Knob (p/n#36164) along with #36043 P714-F focus gear (for 7-14mm lens) and (p/n#36042) P1235-F focus gear (for 12-35mm lens) provide this functionality.

Nauticam supports more lenses for m4/3, and has more m4/3 lens experience than any other underwater housing manufacturer.

#### **MAGNIFYING OPTICAL VIEWFINDERS**

Nauticam produces a "straight" 180° magnifying viewfinder (p/n#32201) and a 45° angled viewfinder (p/n#32202) that provide a bright, corner to corner view of the GH4's excellent EVF. A patented external dioptric adjustment allows personal adjustment to a sharp-as-a-tack standard underwater and viewfinder changes can be executed in less than 30 seconds without using tools. Exceptional composition and focus accuracy have never been more accessible. An optional LCD window (p/n # 17751), containing the viewfinder mounting ring, is required to attach these finders. For owners of NA-GH3, this is the same window used for that housing.

#### **MONITORING OR RECORDING**

Video shooters will want to consider an external monitor or recorder. The monitor makes shooting considerably easier in some scenarios, allowing the user to position the monitor for better viewing when the housing is in a tight spot or at a difficult viewing angle.

Nauticam produces a housing for the SmallHD DP4, a high contrast, easy to use HDMI monitor. This camera + monitor combinations offers several options for how shooting data is displayed on the monitor, LCD or viewfinder, including an option to show enlarged shooting data only on the LCD, or dim the LCD and display everything on the monitor. The camera is also noticeably faster than typical SLR's in syncing with the DP4.

For recording, Nauticam produces a housing for the Atomos Ninja 2, allowing for 220 Mb/sec HD ProRes recording and monitoring. The GH4 is also capable of producing 4K 4:2:2 10bit output via HDMI 1.4. Future plans include a possible housing for additional Atomos products, including the upcoming Atomos Shogun, which will allow for 4K 4:2:2 10bit capture.

## **KEY NA-GH4 FEATURES:**

<u>Signature Nauticam Port Locking System:</u> The iconic red locking lever is right at home on the NA-GH4, making lens/port changes quick, easy and secure. <u>Vacuum System:</u> The integrated vacuum check and leak detection system adds extra assurance of watertight integrity. Use it without an optional vacuum valve and it serves as a audible/visual water ingress detector. Add the vacuum valve, and get watertight integrity indication via a color-coded LED light.

Locking Rotary Latch: The locking latch, proven in use with thousands of housings, is secure and easy to use.

<u>Fingertip Control:</u> Fingertip control for all key shooting controls, including shutter release, focus lock, both command dials, and video start/stop. All of the controls are easy to operate, even with gloves on.

<u>LCD or EVF - Your Choice:</u> Use either the LCD or EVF or instantly switch between them - underwater!

<u>EVF Viewfinder Options</u>: For shooters wanting to take the ultimate advantage of the exceptional EVF in the GH4, the renowned Nauticam 180° Enhanced Viewfinder or the excellent 45° Enhanced Viewfinder are available. It is easy to change these viewfinders and no tools are required.

<u>Two Accessory Bulkheads:</u> For optional vacuum valve, HDMI bulkhead, or electrical sync cable bulkheads. Two bulkhead port mean two of these can be utilized simultaneously, or even a third using the offset style vacuum valve.

#### LIGHTING AND MOUNTING OPTIONS

Reliable automatic flash exposure is available with the NA-GH4 and a variety of optically fired flashes.

The Inon Z-240, D-2000, S-2000, Sea & Sea YS-01 and YS-D1 strobes provide automated lighting, precisely reproducing the camera's onboard flash at a proportionally greater intensity.

This system yields accurate automatic TTL flash performance – even in manual mode - with no electrical sync cables to flood! The NA-GH4 comes fiber optic ready and accepts standard Sea & Sea style bushing connections. Nauticam Fiber Optic cables, available for both Inon and Sea&Sea strobes, provide the best light transmission and therefore more accurate TTL of any fiber optic cable on the market.

Nauticam is also announcing the release of the Flash Trigger for Panasonic (p/n #26305), which is compatible with the NA-GH4 housing.

The Flash Trigger allows for rapid fire manual flash firing via fiber optic, with no camera battery drain.

Video lights or strobes can easily be attached to the 1" ball mounts that come standard with the housing. Additional mount points include an M10 mount point on the housing (use p/n#25221 M10 Strobe Mounting Ball for Housing), 2 M5 mount points (use p/n#25228 M5 strobe mounting ball), a cold shoe mount, plus a newly introduced feature - 1/4-20 accessory mounts arranged in a multi-purpose "cheese-plate" fashion on top of the housing. In addition, Nauticam utility clamps can turn a single ball mount into 2, easily extending the mounting point choices.

**NAUTICAM BUILD QUALITY** Only the finest materials and cutting edge manufacturing processes are used to make Nauticam housings. The housing body is machined from solid aircraft grade aluminum, then hard anodized making it impervious to saltwater and provides an impressive 100 meter depth rating. The large acrylic LCD window is treated with an anti-reflective, scratch resistant coating.