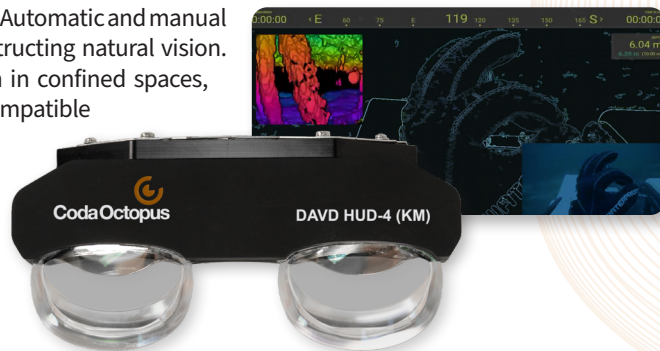


# Head-Up Display (HUD) - GEN\_4

## Underwater Augmented Reality

**Waterproof, Augmented-Reality Optical System Engineered for Installation in both Dive Helmets and Full Face Masks.**

The Head-Up Display (HUD) is a waterproof augmented-reality optical system that serves as the diver's visual interface with the **DAVDflex** platform. Its fully transparent lenses and hydrophobic coating maintain clear visibility of the real-world environment while presenting high-resolution data directly within the diver's field of view. Automatic and manual brightness controls ensure crisp, readable information without obstructing natural vision. The compact, lightweight HUD Gen\_4 is engineered for installation in confined spaces, making it suitable for both dive helmets and full-face masks. It is compatible with equipment from Kirby Morgan, Interspiro, Dräger, and Ocean Technology Systems. Each unit is supplied pre-mounted to a face port or visor, which can be quickly replaced in the field if the outer surface becomes scratched or damaged. The HUD Gen\_4 features a custom HDMI/USB, thus providing 1080p resolution through its Dual Optical Engine display, allowing for high definition imagery. With added Edge Detection, users can view highlighted edges of objects and surfaces, providing greater underwater awareness in all water conditions, including zero visibility, up to 100m in depth. When paired with an Echoscope PIPE® sonar, users can also view the live sonar data in the corner of the HUD, along with the Edge Detection.



**As a core component of the **DAVDflex** solution, the HUD GEN\_4 provides real-time access to:**

### Live Feeds from Low-Light Cameras



HUD GEN\_4 supports a live feed from low-light cameras, enabling the diver to maintain clear visual awareness even in dim or near-dark underwater environments. This feature ensures critical visual information remains accessible when natural visibility is limited.

### 3D Sonar Imagery



HUD GEN\_4 also delivers 3D sonar imagery directly within the display, allowing divers to interpret their surroundings beyond visual range. This enhances spatial awareness and provides a clearer understanding of objects, terrain, and structures in low or zero visibility conditions.

### Charts, Schematics and Technical Drawings



Charts, schematics, and technical drawings can be displayed within the HUD, giving divers immediate access to essential reference materials during operations. This allows for more accurate navigation, inspection, and task execution without needing to surface or consult external devices.

### Photo and Video Reference Material



HUD GEN\_4 can present photo and video reference material in real time, supporting identification, verification, and comparison tasks underwater. This capability improves efficiency by allowing divers to quickly match visual targets with preloaded references.

### Task Instructions and Mission Data



Task instructions and mission data are displayed directly in the diver's field of view, providing clear, step-by-step guidance throughout the operation. This reduces reliance on verbal communication and helps maintain focus and accuracy during complex tasks.

### Current Depth and Other Critical Dive Information



Current depth and other critical dive information are continuously monitored and displayed, ensuring the diver always has access to essential safety and operational data. This real-time feedback supports informed decision-making and enhances overall dive safety.

The Head-Up Display (HUD) Unit is widely compatible and supports a range of helmets and full-face masks, including:

## Helmets

Kirby Morgan® SL17K

Kirby Morgan® SL27

Kirby Morgan® KM37

Kirby Morgan® KM37SS

Kirby Morgan® KM47

Kirby Morgan® KM57

Kirby Morgan® KM77SS

Kirby Morgan® KM97SS

Kirby Morgan® Diamond®



Kirby Morgan® KM97



Kirby Morgan® KM37 Superlite



Dräger Panorama Nova®



Interspiro Divator MKII

## Full Face Masks

Dräger Panorama Nova®

Interspiro Divator MKII

Ocean Technology Systems Guardian

Diveways FFM

Kirby Morgan® MOD-48

Kirby Morgan® KM Bandmask®

\*Please note that helmets and masks are not supplied with the DAVD Flex. Installation Guides are provided for installation of the HUD into your existing equipment. We continue to expand the range of compatible dive equipment, so please contact us if your preferred equipment is not shown on the list.



OTS Guardian



Diveways FFM

|                        |                                                                     |
|------------------------|---------------------------------------------------------------------|
| Power Input            | 5VDC                                                                |
| Connectors             | Glenair® Aquamouse 19-pin Marsh Marine 4-Pin (For Audio)            |
| Display                | Dual Optical Engines (R + L Eye)                                    |
| Interface              | Custom HDMI/USB                                                     |
| Resolution             | 1080p (1920 x 1080)                                                 |
| Depth Rating           | 100 m                                                               |
| Dimensions (h x w x d) | 114 mm x 60.5 mm x 24 mm approx.<br>(4.48" x 2.38" x 0.94" approx.) |
| Weight                 | 0.105 kg approx.<br>(0.23 lbs approx.)                              |

