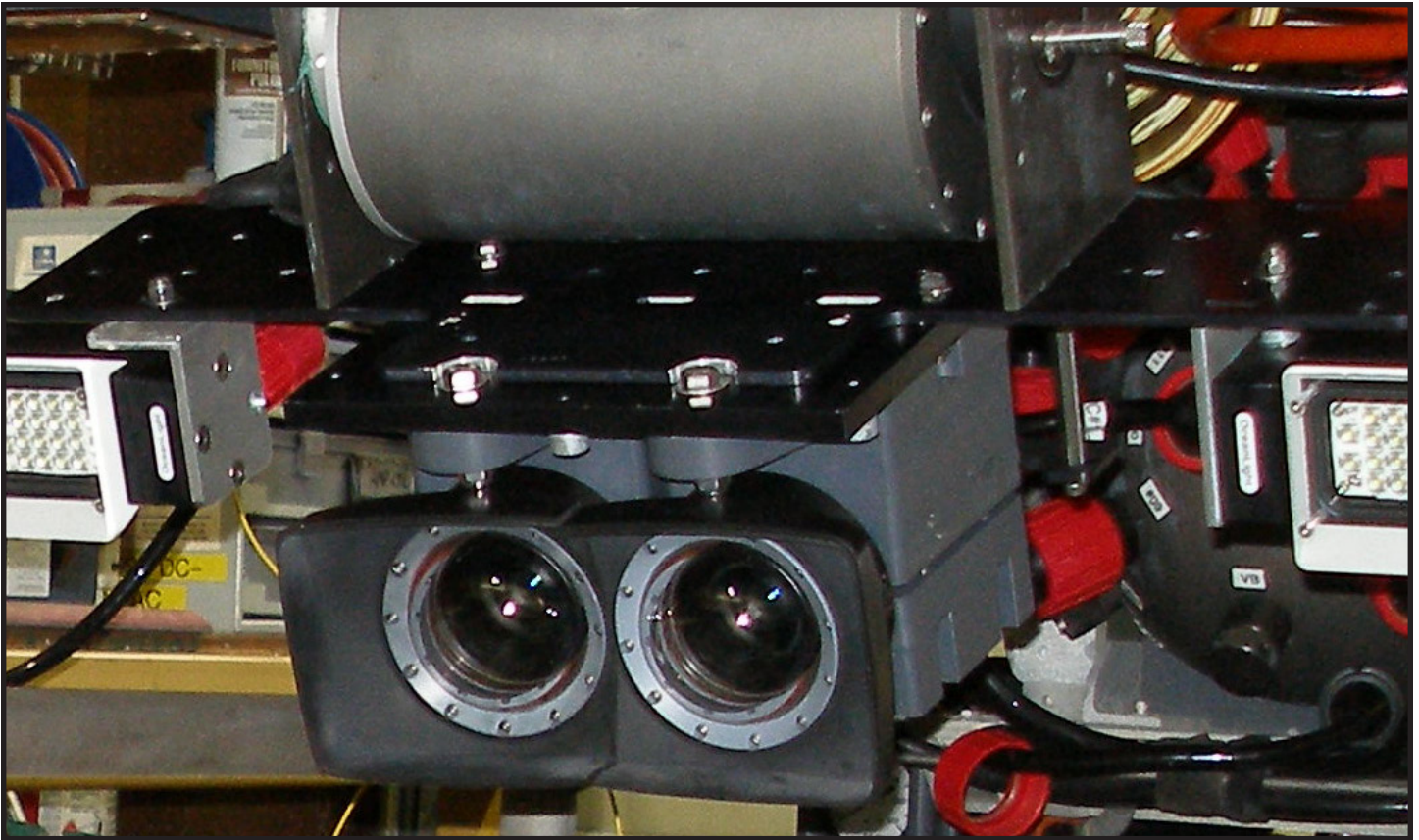


OCEAN ProHD

3D CAMERA SYSTEM



The Ocean ProHD-3D imaging system offers state of the art stereoscopic HDTV imaging for the ROV pilot and the end user from the ocean bottom to the desktop.

The 3D HDTV imaging system has proven valuable at greatly increasing manipulator skills of the operator, saving both time and improving task accuracy. It also adds a new level of operator situational awareness, never seen with standard definition TV imaging.

This 2nd generation system has been in development for several years and has now been fully tested at depth on Oceaneering work class ROVs. It has been used to do a wide range of detailed inspections, as well

as hundreds of manipulator tasks and tooling operations.

The stereoscopic 3D images are crystal clear 16:9 high definition images viewed through Xpol circular polarized glasses. The Ocean ProHD-3D displays have special features to help reduce viewer eye strain and stresses common with past 3D imaging systems.

Key Features:

- 4,000 Meters
- Stunning 3D HDTV
- 16:19 Aspect Ratio
- 1920 x 1080i
- Full Wide Zoom 105°



OCEAN ProHD SPECIFICATIONS



Specifications

Number of cameras:	Two (left & right)
Convergence mount:	24" near field to far field, user adj.
Camera resolution:	1920 x 1080i
Camera aspect ratio:	16:9
3D zoom range:	3.8X - inter-coupled
Full wide zoom:	105°
Full zoom:	28°
Focus:	24" to infinity
Glass dome:	Optical quality with diopter
Power:	24 VDC @ 2.5 amps
Control:	RS-232 @ 9600 baud full duplex
Depth rating:	4,000 meters standard

Fiber Optics WD Multiplexer and De-multiplexer "4 channel"

HD camera channels:	3 each (one left, one right, one spare)
Data channels:	1 each (1310 nm and 1550 nm - full duplex)
Optical loss budget:	6 dBm or less
Optical connectors:	CR-MSAJ-SMFO (PBOF)

3D Image Processor and Format Composer

Type of input:	HD-SDI SMPTE 292 format
Number of inputs:	one left, one right, unsynchronized
Special features:	3D image process, converge, align
Output formats:	3D side by side, 3D line overline, & others
Type of output:	3D HD-SDI, & HDMI
Number of outputs:	Six each HD-SDI and one HDMI
Special features:	Dual channel auto frame synchronizer

Specialized 24" 16:9 ROV Operator HDTV-3D Monitor & Glasses

Viewing size:	24" diagonally
Screen ratio:	16:9
Screen resolution:	1920 x 1080i
3D screen element:	X-pol polarizer
3D signal input:	HD-SDI
3D Input formats:	3D side by side, line over line, & others

