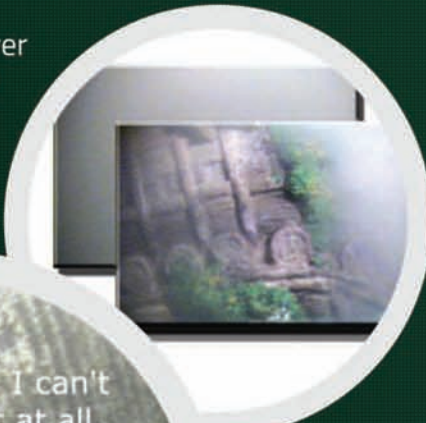


THE ZERO VISIBILITY TOOLS[™]


Developed and successfully demonstrated to the US Navy, commercial diving companies, and both Tempe and Phoenix fire depts. the Clearview System[™] **provides these key functions:**

- A fully integrated, turnkey system that permits and provides real-time visual underwater inspection in all zero visibility water conditions allowing both the Diver and Operator to see, inspect, record, and annotate in real-time; saves time, cost and results in better value for customer.
- 2 techniques for penetrating black water – 1) Blackwater's patented heavy turbidity displacing MudChaser[™]/Scrubber combo and 2) LYYN's light turbidity image/video enhancement
- With the Diver Display, both the Diver and the Operator will be able to analyze and inspect quickly and efficiently, ensuring high quality video imagery, speeding the inspection process, without guess-work.
- Event annotation using Blackwater's ScreenScribe[™] software, what you see is what you record.
- Extensive DVR recording capacity: (30+ hours storage on a 64GB SSD) and file management.
- Bi-directional, real-time digital communications and system control: voice, and data exchanges, diver system control, allowing text overlay info on the Diver's display, such as depth, compass heading, system functions, and much more.
- Compatible with both 2- or 4-wire helmet communications systems.
- Additional features such as, lighting control, video capture playback/review capability, auxiliary entertainment input, system configuration via software control, and much more.



"With my eye, I can't see the object at all. But, through the Display, I can see it pretty clearly."

-John Duffie, Tempe Fire Dept, 4/24/13



Zero visibility conditions displaced for clear visibility by the MC106 allowing inspection of the bridge piling

THE MUDCHASER[™]/SCRUBBER COMBO

At the heart of the Clearview System[™] is Blackwater Vision's patented turbid, black water displacement hand-held viewing device, the MudChaser[™]. With its integrated color camera and LED lighting, clear and vivid color imagery is transmitted back to the console operator and to the diver. Using a proprietary technique, the weightless MC106 efficiently displaces the turbid water conditions out to 18" (beyond arm's reach), allowing the diver to view and inspect the target area up close and personal!



THE VIDEO/COMM SYSTEM

The Video/Comm System is a complete, self-contained system that allows for hi-resolution, color video capture to a DVR and SSD (USB2.0), clear, full-duplex (bi-directional) digital audio communications, on-site lighting control, standard video format outputs, and on-screen text narration/overlay for complete event capture in mp4 format. It is the foundation upon which the MudChaser™, Scrubber, and Diver's Display are added allowing both the diver and the support team to communicate with, immediately see, and directly record what the diver is "shooting" with the MudChaser™.

SOFTWARE – SCREENSCRIBE™

The Windows-based ScreenScribe™ software application (runs on the User's computer), developed by Blackwater Vision, interfaces with the VCU to allow the annotation of the event and text overlay system information directly onto the video. The dive event information that is input or created via ScreenScribe™ is then displayed on the VCU monitor and captured by the DVR or external VTR. ScreenScribe™ will also support text overlay on the Diver's Display. Finally, when connected to the Internet, it will check and download the latest software and firmware and reprogram both the VCU and DCU.

DIVER DISPLAY

Controlled from the Diver Control Unit, the Helmet/Mask-Mounted Display is a ruggedized, high resolution monochrome display allowing the Diver to see what the MudChaser™ sees.

Currently, the display can be attached to either a helmet (Kirby Morgan 27/37/57) or the Interspiro/AGA full-face mask. The display bracket has 4 adjustments providing for a full range of viewing angles.



The ScreenScribe™ user application

