



Project

Underwater communication just got a whole lot safer thanks to VCC's indicators

Application Characteristics

For commercial divers, hazards of the job extend well beyond the typical risks associated with spending long periods of time underwater. These divers face additional challenges in unpredictable environments, including poor visibility while working with machinery and power tools.

To help enhance the safety of these fearless divers, who are members of law enforcement, search and rescue teams or construction crews can use an intercom system incorporated into their full-face diving masks.

Unlike traditional SCUBA masks with a separate mouthpiece, full-face masks offer benefits, such as fog-free operation, increased comfort and the ability to use an intercom system while underwater.



These systems can vary in complexity, and use one- or two-way communication. But are well worth it thanks to the additional layer of safety and control they provide.

Application Requirements

Because divers are needed in a wide range of high-stakes assignments, a dead battery could literally be the difference between life and death. These intercom systems must be reliable in rough, wet conditions, 24/7.

A leading diver intercom manufacturer approached us to help specify the indicators that would meet the requirements:

- Rugged construction and watertight seal
- Reliable, long-lasting LED indicator
- 360-degree viewing angle
- Maximum visibility while exposed to direct sunlight

Through a series of color-coded individual indicators, the control panel uses a familiar color system to quickly communicate the status of the battery's life:

- **Green** - charged
- **Amber** - running low
- **Red** - nearing end of battery life

By using colors instead of text on a control panel to communicate battery status, reaction times can be greatly improved.

Solution / Approach

To maximize efficiency while addressing the client's needs, our team specified a standard product that would provide reliable indication of the intercom's battery status.



CMS 442 Series

The CMS 442 Series delivers a rugged and watertight solution for rugged reliability and protection from water and salt. The 5mm LEDs were specified in red, amber and green to create indicators that included:

- **High visibility** - Fresnel lens provides 360-degree viewing angle and high daytime visibility
- **Push-through design** - easy installation, simply push lens through 0.312" (7.92mm) dia. panel hole and slide lock washer onto lens barrel and twist on retaining ring
- **Watertight moisture rating** - rated NEMA 4 for extensive protection from moisture
- **Cost-effective production** - uses standard product vs. custom

Results & Benefits

VCC's in-stock indicator solution delivered the following benefits:

- Production efficiencies created in ordering a standard product
- Extended operating life due to LED technology
- Easy and watertight installation with push-through design and EPDM seal
- Enhanced safety for divers due to improved reliability of equipment
- Consistent indication any time of day or night — at every viewing angle



Value-Added Service

No matter the industry or application, VCC has the industry expertise to quickly find the ideal product for your design — whether you need a standard product or something that hasn't been created yet.

Contact our team today to enhance your design and meet or exceed your goals.

Are you ready for next level illuminated components?