

ROV Systems

Ive been told I need a fiber optic tether. is that true?

Fiber optic data transmission is an amazing technology the way all long distance data in cables is now transmitted. It has many advantages for ROV transmission it carries much more data, it is lighter than copper, and it is not affected by electromagnetic interference. It is used in deep work-class ROV tethers.

However, there are significant downsides to the use of fiber optic tether in a small, portable device such as a mini ROV. It is more fragile than copper it will break more easily if tether is repeatedly stepped on, bent sharply, or otherwise stressed. Connectors are more expensive and problematic. It is difficult to diagnose a problem with fiber optic tether in the field “ you cant just test it with a simple continuity tester. And, if repairs are needed, they require specialized parts, tools, and training.

The bottom line is that, unless needed for extremely long data transmission, or extremely high bandwidth data, it is a net liability. For the missions that VideoRays are designed for, and the entire range of accessories they support, we use superior technology twisted pair copper for our tethers.

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