

UNDERWATER OPTICAL WIRELESS COMMUNICATION

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Problem

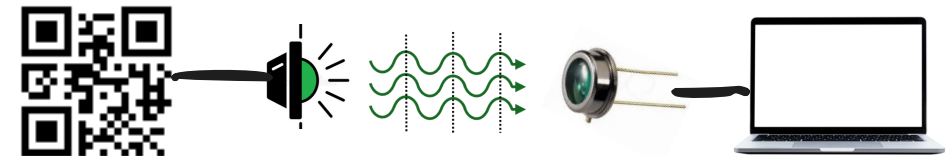
Communication between divers hasn't evolved in over 50 years. Divers are limited to hand signals, which makes it hard to speak with one another.

Our Solution

We propose the use light as a form of communication underwater to transmit any type of data a diver wants.

Send your text or image to our website!

Watch the transmission in real time !



Plans for the future:

- Emergency and rescue operations;
- Search and recovery missions;
- Underwater construction and maintenance.

Competitors :

- High latency;
- Easily attenuated;
- Heavy equipment.

VS

Our approach :

- Simple modulation schemes;
- Low power;
- High data rates at short ranges.

Software

- Error detection
- Compression
- Data is not lost

Results

Here we can see data being transmitted from one laptop to another through light.

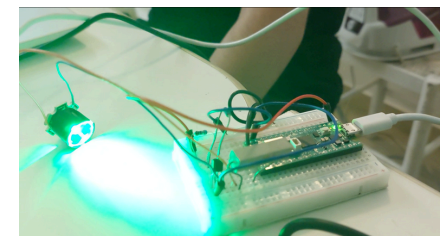
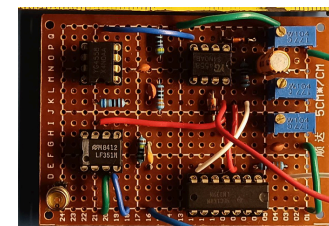


Receiver

- Tuned Photodiode
- Transimpedance Amplifier
- Filtering

Transmitter

- Raspberry PI Pico
- Green LED
- OOK Modulation



Partners

