Lithuanian fiber optic microphone

Fiber-optic cables can potentially be used to eavesdrop on conversations, raising concerns over physical-layer security risks in modern communications.

Discover how ordinary fiber optic cables are turned into covert microphones, posing significant privacy risks. Learn more about this cybersecurity threat.

In this study, we present a novel miniaturized Fabry-Perot fiber-optic microphone by combining a cleaved single-mode fiber with a capillary tube and a hydrogel diaphragm.

Researchers have demonstrated that standard fiber-optic internet cables can be covertly repurposed into highly sensitive listening devices.

Fiber optic microphones represent a significant leap in audio technology. They rely on fiber optics to convert sound waves into electrical signals using light. This method offers several advantages, ...

To address this problem, the team developed a fiber-based microphone that relies on the photoelastic effect. This phenomenon allows mechanical changes, such as tiny vibrations, to alter the ...

A fully automated fiber-optic acoustic sensing system is presented, enabling wideband acoustic measurements, automatic sensitivity adjustment, and long-term stable operation under varying ...

An ultra-high-sensitivity, miniaturized Fabry-Perot interferometric (FPI) fiber-optic microphone (FOM) has been developed, utilizing a silicon cantilever as an acoustic transducer. The volumes of the cavity ...

A covert acoustic eavesdropping attack that transforms standard FTTH telecom fiber cables into passive, undetectable listening devices invisible to RF scanners and immune to ultrasonic ...

Internet users worldwide rely on fibre-optic cables for blazing-fast, secure web connections can be turned into covert listening devices.

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