

# LIGHTLOC<sup>®</sup>

## The Leader in Underground Pathway Protection

## Vehicle Denial Cable

### Vehicle Denial Cable Overview

Vehicle Denial Cable is a product in the LightLOC family designed to deny vehicle intrusion across a site perimeter and also protects itself from tampering. It is a unique metallic cable with detection sensing incorporated into the package with fiber, and at 1" in diameter and 80,000+ lbs breaking strength, it is quite robust. By monitoring its nerve fibers, the cable's integrity can be surveyed from miles away and security breaches detected quickly.

Vehicle Denial Cable is part of a vehicle denial system of enormous strength intended to resist intrusion by a wide range of vehicle types. The number of cables required for an application is based on the design basis threat. The cable(s) are installed with robust 10' tall, 12" x12" steel posts every 300' anchored in 6' of concrete. This spacing provides the cable stretch room required to absorb the energy of the moving vehicle. Line posts support the cable(s) in between the anchor points.

The fiber in Vehicle Denial Cable is monitored from up to 25km away with either a LightLOC Network or Express Monitoring System. When monitored by a Network System, alarm locations may be pinpointed, typically within 5 meters. As with all of the LightLOC products and monitoring system, Denial Cable is designed for a zero false alarm rate and does not alarm from handling or vibration. A significant force is required to damage the cable, and only severe damage results in an alarm.

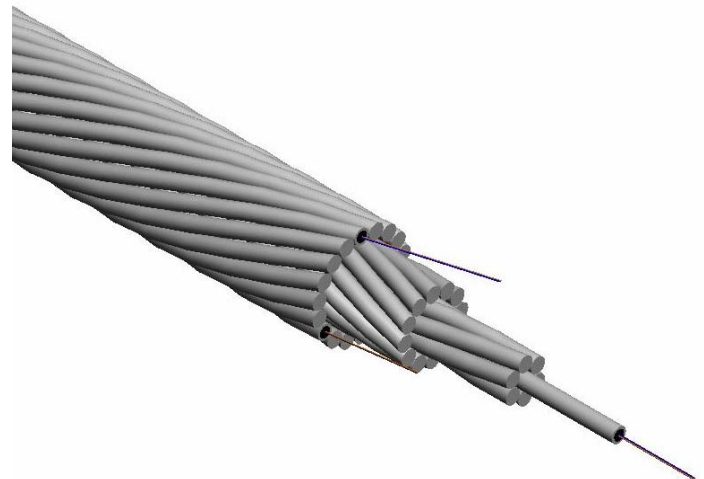
The system example on the following page represents a typical application for Vehicle Denial Cable: a critical asset surrounded by double fencing and an outer perimeter fence much further out. Denial Cable may be deployed at the outer perimeter to prevent unauthorized vehicle entry and provide detection of any attempts.

## Vehicle Denial Cable:

### Your Smart Perimeter Cable Solution

### Standard Features

- Metallic Vehicle Denial Cable with Optical Nerve Fibers for Continuous Surveillance
- Low False Alarm Rates
- Long-Range Monitoring to 25km Standard
- Power Not Required on Perimeter
- Comprised of Aluminum Alloy Wires and Three Outside Stainless Steel Tubes Containing Fiber
- 1" diameter, 80927 lbs Rated Breaking Strength
- Number of Cables Needed Calculated by the Vehicle Threat and Speed
- 40 Year Life
- -60C to 85C Operating Temperature Range
- Optimized for Use With LightLOC Network and Express Monitoring Systems
- 1550nm Laser for Operation with Standard Single Mode Fiber
- Robust Support Hardware:
  - 12"x12" Steel Post Every 300' Anchored 6' in the Ground in Concrete
  - Line Posts In-Between to Hold Cable in Position
  - Supports up to 6 Denial Cables
- Tamper Resistant Mounting Hardware
- Monitored Splice Enclosures Where Needed
- Designed with Monitored Gates at Access Points



For additional information on the LightLOC<sup>®</sup> system, please contact Doug Piper at 864.963-5131 or [dpiper@lightloc.com](mailto:dpiper@lightloc.com)

[www.LightLOC.com](http://www.LightLOC.com)

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## Typical System Example



## Technical Details

Monitoring Systems	LightLOC Network System LightLOC Express Processor LightLOC Multi-Port Express
Power Requirements	None in Field Monitoring System Powered As Specified
Cable Tube Material	Laser-Welded Stainless Steel
Cable Wire Material	Aluminum Alloy 6201
Cable Life	40 Years
Fiber Type	Single-mode
Monitored Wavelength	1550nm
Operating Temperature	-60C to 85C
Cable Diameter	23.8mm, 0.937in
Approximate Cable Weight	2108 kg/km, 7,477 lbs/mile
Calculated Breaking Load	36,709kg, 80,927lbs
Minimum Bend Radius	Static: 15in, Dynamic: 19in
Maximum Perimeter Length	25km, 12.4mi

## Ordering Information

Perimeter cable systems are custom designed for customer applications. Please contact us for a quote.

## LightLOC Overview

LightLOC is a patented, fiber-optic based security system providing the optimum in perimeter and access security. The system provides monitoring of remote access points and perimeters using a family of sensors and cables developed and made by LightLOC. Monitored items can include manholes, gates, doors, culverts, perimeter vehicle detection and vehicle denial cable systems, and custom applications. Monitoring is possible at distances of up to 25km without the need for electrical power at the monitored locations. The robustness of the system eliminates false alarms commonly seen with other fiber-based security systems, and LightLOC systems are inherently tamper resistant since altering or destroying optical components triggers alarms automatically.

For additional information on the LightLOC® system, please contact Doug Piper at 864.963-5131 or [dpiper@lightloc.com](mailto:dpiper@lightloc.com)

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