

**Laser Ally LIDAR System (US/MPH)
and
Laser Ally LIDAR System (Florida/MPH)**

**North Carolina Sheriffs' Association
"Technology Procurement Program"**

Bid Number 22-01-0303

Date: December 1, 2020

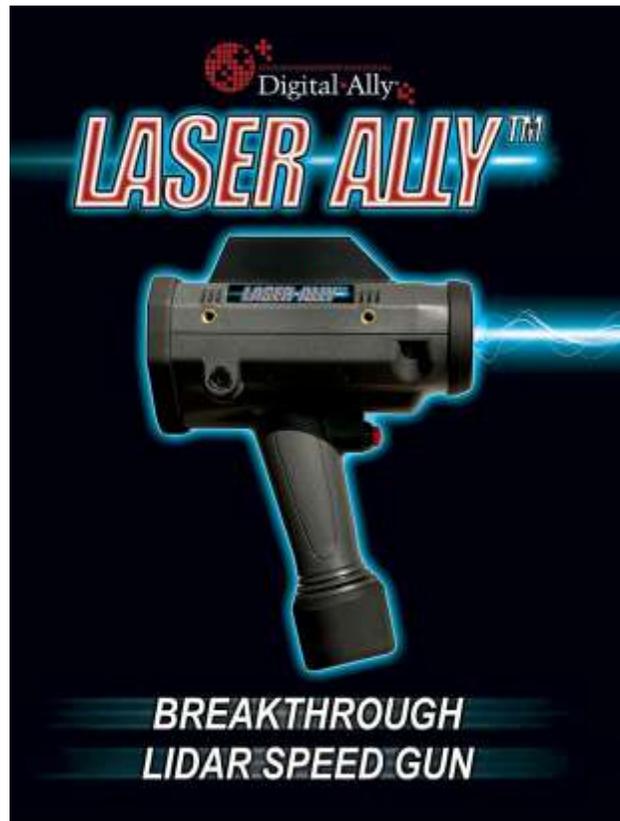
Submitted by:



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LaserAlly™ LIDAR Speed Gun from Digital Ally, Inc.

Digital Ally, Inc. is pleased to include the *LaserAlly™* (LIDAR) with this bid proposal at no additional cost. As the premiere Speed/Measurement LIDAR System in the market today, *LaserAlly™* is Digital Ally's all-new small, lightweight and well-balanced LIDAR system. The system's unique design offers several feature enhancements relative to currently available competitive products.



LaserAlly™ features the ability to pinpoint the speed and direction of a vehicle in single or multi-lane traffic, without regard to traffic congestion; a ruggedized enclosure for heavy use that is waterproof for harsh environmental conditions; anti-jamming technology to defeat detectors; a 6000-foot maximum acquisition range, 1/3-second acquisition time; obstruction and weather modes; easy-to-use menu; improved alignment stability and true continuous tracking; and the unit is upgradable in the field via a USB port.

The *LaserAlly™* Speed LIDAR is a high performance electro-optical product providing accurate speed and distance measurements custom designed for the law enforcement community. The LIDAR provides pinpoint target identification via its clear head-up display targeting system and fast target acquisition using sophisticated, robust data processing algorithms. The *LaserAlly™* Speed LIDAR was designed for light-weight operation and long battery life. It provides numerous useful settings and features including advanced ECCM (Electronic Counter Measures), weather/obstruction modes and a USB interface for easy data interface and upgrades.



Each Digital Ally *LaserAlly™* unit comes with two “C” cell batteries for up to 32-hours of operation, a rugged high impact waterproof carry case, operator manual, and a certificate of compliance. Optional rechargeable NiMH battery pack and shoulder stock are also available.

The *LaserAlly™* is a complete hand held LIDAR product providing accurate speed and distance measurements custom designed for law enforcement use.

Enclosure

Physical dimensions:

- Size – 4.5" x 6.75" x 9.75"
- Weight – 2.5 lbs. (including batteries)

The housing is composed of a polycarbonate ABS blend for strength and chemical resistance with padded bumpers on both the front and back of the unit:

- Ruggedized for heavy use
- Waterproof for harsh environmental conditions
- Critical alignment components are tied together by a second internal die cast metal structure to withstand a drop without requiring realignment



Technical

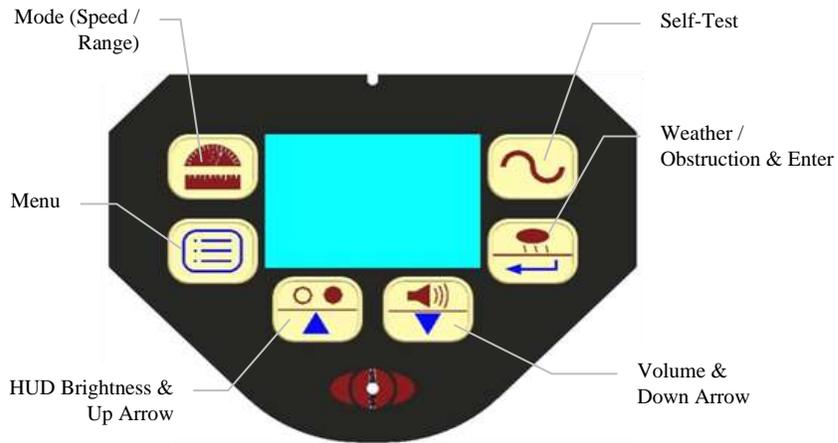
The *Laser Ally™* is classified as FDA Class One Eyesafe with the following technical specifications:

- Acquisition Time: 1/3 of second
- Speed Mode: True, full time, continuous tracking history
- Speed Accuracy: +/- MPH (+/- 2KPH)
- Speed Max/Min: +/- 5 to 200 MPH (+/- 8 to 320 KPH)
- Minimum Range:
 - Speed Mode: 50 ft (15 m)
 - Range Mode: 10 ft (3 m)
 - Weather Mode: 250 ft (760 m)
- Distance Accuracy: +/- 0.5 ft (=/- 15.0 cm) one sigma
- Distance Resolution: 0.1 ft (3.0 cm)
- Beam Divergence: 2.5 milliradian
- Laser Source: Diode, 905 +/- 10 nm
- Temperature Range: -22° F to +140° (-30° C to +60° C)
- Power Source: Two C-cell; high quality alkaline or NiMH rechargeable
- Battery Life: 25-32 hours of operation (Alkaline C-cell)

Controls and Indicators

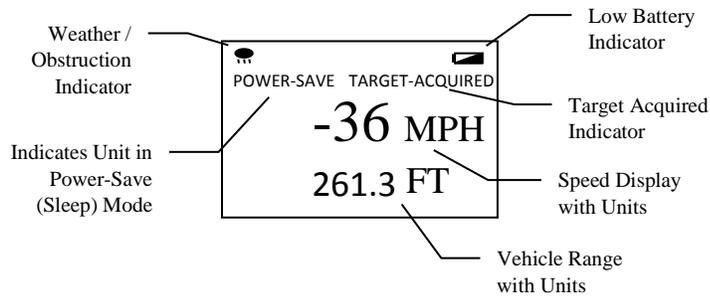
- Mode (Speed / Range)
- Menu Selection
- HUD Brightness & Up Arrow
- Self Test
- Weather / Obstruction & Enter
- Volume & Down Arrow





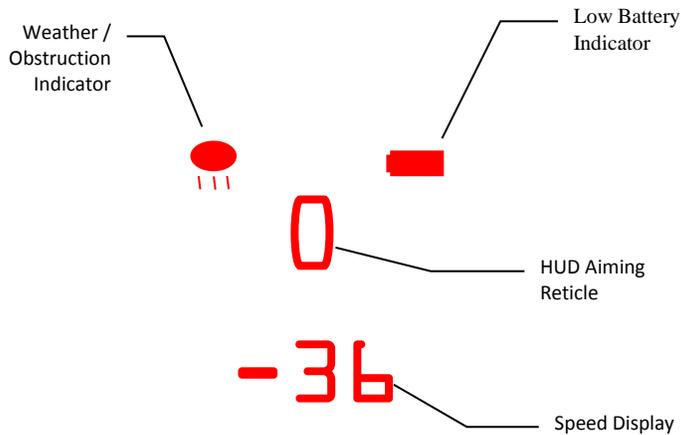
Rear Panel Display (LIDAR in Speed Mode)

- Weather / Obstruction
- Low Battery Indicator
- Target Acquired
- Speed Display (MPH / KPH)
- Vehicle Range (FT)
- Power-Safe (Sleep) Mode Indicator



Heads Up Display (LIDAR in Speed Mode)

- Weather / Obstruction
- Low Battery Indicator
- HUD Aiming Reticle
- Speed Display



Connectors

- An eight pin DIN style connector is located on the right side of the unit. This connector can be used to collect speed and range measurement data during operation using a special USB cable provided by Digital Ally.

Additional Features

- Timed Distance (Stopwatch Mode)
- Obstruction Mode
- Advanced anti-Jamming ECCM

Fast and Easy to Use

- Smaller, lighter, better balanced
- Easy targeting and menu functions
- Instant ON/OFF with Standby/Sleep Mode
- Reads targets through glass, rain, snow, fog, etc.
- Internal electronic tests and software verification
- True Color 1:1 Heads-Up Display (HUD)
- Rugged, Waterproof Design
- Software upgradeable

System Diagram

