



Colorado Springs Police Department

Standard Operating Procedure

DL-1501-05 RADAR/LIDAR Unit Use

Section 1500 – Police Equipment

Effective Date: 3/8/2022

Supersedes Date: 11/8/2021

.01 Purpose

The purpose of this directive is to specify procedures for use and maintenance of RADAR/LIDAR units.

.02 Cross-Reference

[GO 1300 Traffic Law Enforcement](#)

.03 Definitions

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.04 Procedure

The traffic RADAR/LIDAR unit (speed gun) is designed to provide officers with proficiency in speed measurement of traveling vehicles. Traffic RADAR/LIDAR units are devices to verify officers' visual observations and estimates of traffic violators.

Training & Certification Requirements

Personnel utilizing any department RADAR/LIDAR units will be appropriately trained and certified in accordance with CSPD Training Academy requirements.

Technical Specifications

CSPD will only use traffic RADAR/LIDAR units that meet or exceed the National Highway Traffic Safety Administration model standards for speed measuring devices.

Unit Availability

Unit Checkout Process

Officers may check out and operate a traffic RADAR/LIDAR unit in accordance with the following:

- A supervisor or designee will check out a divisional RADAR/LIDAR unit to the requesting officer utilizing the Quarter Master system
- Each RADAR unit will be accompanied by a minimum of two tuning forks

Unit Return Process

- A supervisor or designee from the officer's substation will ensure the traffic RADAR/LIDAR unit and tuning forks are returned to the proper location
- The sergeant or designee will complete the Quarter Master system check-in process

Long-Term Unit Assignments

The shift lieutenant may assign one or more traffic RADAR/LIDAR units to a particular officer. The assigned officer(s) is responsible for having the unit available for required inspections. Failure to do so will result in the prohibition of any long-term assignment of the unit(s) to the officer.

Calibration Verification Procedure

RADAR

Officers will verify the calibration of units immediately upon checkout, after each citation is issued, and at the termination of field use or the conclusion of the tour of duty.

Officers will utilize the two included tuning forks of like or different speeds to verify the calibration of the unit. On units equipped with internal calibration devices, officers will use the internal calibration device in addition to the two tuning forks.

LIDAR

Any CSPD officer who utilizes a LIDAR device for traffic enforcement must verify the calibration of the device before and after every shift to ensure proper functionality and accuracy for citation issuance, as recommended by the City Attorney's Office and manufacturer. The required verification tests will include the following:

- SELF TEST – (REDACTED)
- THE DISPLAY TEST - (REDACTED)

- THE SCOPE ALIGNMENT TEST - (REDACTED)
- THE DISTANCE TEST- (REDACTED)

Proper Use of Unit

Locking of Target Speed

When a target vehicle is clocked and the appropriateness of the citation is determined, officers will lock the target speed into the device.

Upon request of the violator, officers may show the locked-in speed.

Officers operating units in pairs are not required to maintain the locked-in speed should a second target vehicle be observed.

Unit Demonstrations

Officers will not demonstrate the use of the unit to a violator or to the public except in the presence and with the consent of a supervisor.

Officers are prohibited from conducting speedometer checks for violators or the public.

Care & Inspections

Field Care of Units

Officers will exercise due care in the handling and operation of traffic RADAR/LIDAR units.

A storage case will be furnished with each traffic RADAR unit. Officers are expected to make use of the case in order to limit damage to the unit. The unit should be placed in the case at all times when the officer is not currently involved in RADAR enforcement activity.

Inspection of Units

All traffic RADAR/LIDAR units operated by department personnel will be inspected yearly, in the first quarter of the year, by the assigned sergeant or designee. All units, regardless of assignment, will be inspected annually.

The following items will be included in each annual inspection:

- Power cord - will be inspected for damage, any fraying, exposed wires, with particular attention to the connections areas

- Casing - will be inspected for damage, wear, abuse, looseness, and the presence of mounting bolts
- Readout window (Display) and LED lamps - the readout window will be inspected for breakage and looseness; the LED readout lamps will be inspected for proper function
- Power and function switches - all switches and controls will be inspected for damage and proper function
- Trigger and hold function - will be inspected for function and holding capability
- Internal calibration - (if so equipped) will be inspected and a note made of the resulting readout
- RADAR external calibrate - will be inspected through the use of two tuning forks, and the resulting readouts will be noted
- Additional notes: include unusual aspects of particular units, (e.g., short rate, unusual damage, etc.)
- The inspecting sergeant or designee will complete a traffic RADAR/LIDAR annual inspection report for each unit during the first quarter of each year and promptly place a copy of the report in each unit's history file.
- If the inspecting sergeant or designee determines any unit to be inoperable, that unit will be taken out of service, a repair order will be completed following the procedure below and a copy placed in the unit's history file.

Recordkeeping & Storage of Units

Properly documenting unit history, inspections, repairs, certifications, and other requirements documents is required; this documentation is subject to audit to ensure each division's compliance with this directive.

All unit history files for the RADAR/LIDAR units will be stored digitally in the appropriate drive under the RADAR/LIDAR folder (e.g. patrol drive, central drive).

The assigned sergeant or designee will be responsible for maintaining all documentation pertaining to units, tuning forks (RADAR), and will ensure such documentation is filed in the corresponding unit history file. Documentation pertaining to maintenance and repair will be kept in the history file as long as the particular unit remains in operation.

Each file must include the following information:

- *Individual Unit History* - contains information about the unit, i.e., make, model, serial number, frequency, etc.
- *Certifications* - all certificates of calibration must be kept, not just the most current. All certifications for the forks assigned to the unit must be kept as well.
- *Inspection* - all inspection reports must be kept in the unit history files. The sergeant or designee in charge shall be responsible for all inspections.
- *Maintenance* - all forms and documents that pertain to the repairs and upkeep must be retained.

Malfunctions & Repairs

An officer operating a traffic RADAR/LIDAR unit who determines the unit is malfunctioning will follow these procedures.

Repair Shipping Process

When a RADAR/LIDAR unit malfunctions or is damaged:

- The officer who discovers the problem will complete a repair order that details the problem and place the unit in the supply room. The officer will notify the division supply sergeant.
- The division supply sergeant will pack the unit for shipping and enclose a copy of the repair order in the shipping box.
- Every time a unit is repaired it will be marked, "DUE FOR RECERTIFICATION"
- A copy of the repair order must be placed in the unit history file (the repair facility will not return the form)
- The division supply sergeant will notify the RADAR/LIDAR instructors, who are responsible for shipping the units for repair. Only the designated instructors are authorized to ship units for repair.
- Both RADAR and LIDAR units will be shipped to:

(REDACTED)

Repair Return

- When a RADAR/LIDAR unit is returned from the repair shop, it will be sent to central receiving (Supply). Units cannot be shipped directly to the area command. Supply will then forward the unit to the appropriate division.
- When a unit is returned from repair, the division supply sergeant or designee will document the return by recording the date of return, what was done to the unit, and place the documentation in the unit's history file. The unit will then be returned to service.
- When the unit returns, instructors will complete a new certificate of calibration and an invoice of the repairs completed will be included. The instructor will promptly save these documents in the unit history files.