Understanding Police Traffic
RADAR & LIDAR
Instructor Certification
Course Objectives
(40 hours)

Upon completion of this training session, the student will be able to:

1. Explain the speed problem as it relates to public safety.
2. Explain how effective speed laws are established.
3. Explain various methods of speed enforcement including:
    a. pacing techniques
    b. time-distance techniques
    c. VASCAR
    d. RADAR
    e. LIDAR
4. Explain how to check the calibration of all the above speed measuring devices.
5. Describe the basic principles of radar including:
    a. radar frequencies
    b. the Doppler principle
    c. properties of the radar beam
    d. target identification
    e. the cosine effect
    f. Doppler audio
    g. other radar effects
6. Explain how to install, test and operate radar in both the stationary and moving mode.
7. Understand the basic operation of moving radar including:
    a. relative speed
    b. low Doppler
    c. high Doppler
8. Explain the features of modern police radar and the programs developed for there use.
9. Explain the laws regarding radar and lidar jammers and detectors, and how to identify these devices.
10. Explain the basic operation of photo radar and the laws regulating these devices.
11. Explain the basic principles of lidar (laser) speed measuring devices and the programs developed for their use.
12. Explain the health concerns associated with radar and lidar.
13. Acquire and demonstrate basic skills in preparing records and presenting courtroom testimony related to speed enforcement.
14. Identify the proper documents for a radar evidence kit.
15. Acquire and demonstrate basic skills in testing and operating radar, lidar, and stopwatch.
16. With radar and/or lidar, conduct an 85th percentile speed study of at least 100 vehicles.
17. Estimate the speeds and range of at least 10 vehicles while stationary daylight, 10 vehicles while stationary at night, 10 vehicles while moving daylight and 10 vehicles while moving at night, with an average accuracy of 5 m.p.h. for each test group. (Note: This objective may be completed during an officer's FTO program.)

All of the above objectives are incorporated in a written and a practical examination. Students are required to pass both the written and practical test with a minimum score of 80%. Police officers are required to have at least 3 years of experience operating radar to apply for instructor certification. Officers must also have the support and approval of their department. Instructors are required to complete all the above requirements, plus prepare and present a chapter of this manual to the class. Most Police Academies also require completion of an Instructor Development Course. Please check with your state training academy for any additional requirements. For more information on RADAR & LIDAR Instructor Certification please visit: **www.LawEnforcementServices.biz**