Product: U-1400 firmware version 5.00

Release Date: December 18, 2007

Scope: This bulletin applies *only* to Model U-1400 detectors with firmware version 5.00.

There are two ways to determine the firmware version:

1. If power is applied, use the **FUNC** button to step to the Firmware Version and Revision screen on the LCD. The LCD will alternate between *U05* on one screen and *.00* on the other. The display will toggle between the two screens with a 50% duty cycle.

2. If power is not applied, remove the cover from the Model U-1400. The firmware version is on the PC board mounted processor labeled **U7**.

Issue: **Negative Boost (Option 5.-1 or 5.-2 selected) does not operate as intended for all installations.**

Symptom: When Negative Boost (Option 5.-1 or 5.-2) is selected, the output can remain deactivated after the vehicle has left the loop area. The problem may occur more often under specific conditions. These include a device other than the U-1400 performing the check loop function or the use of loops that are less than 20 feet in length and vehicles that are traveling greater than 10 mph when exiting the loop.

Root Cause: A firmware error in calculating the value at which the detector drops the detection of a vehicle was found. An average value was used in the calculation. If the actual value was greater than the average the detector would gain sensitivity; therefore, the faster the vehicle leaves the loop the more likely the detector will gain sensitivity. This can cause the detector to maintain or reenter the detect state after the vehicle has left the loop area.

Operational Issues: Selecting Option 5.-1 or 5.-2 makes the U-1400 more sensitive and prone to holding or reentering the detect state after the vehicle has cleared the loop area. The issue will not prevent the U-1400 detector from detecting a vehicle.

Corrective Action: Upgrade to firmware version 5.01. Contact Reno A&E for upgrade information.