

TRAX LOOP ACCUMULATOR Reference Guide



Volume 1.1 June 2002

The TRAX Accumulator is an automatic traffic counter designed and built by JAMAR Technologies, Inc. It is designed to collect volume totals without the need to download to a computer.

Loop Volume Collection

The Accumulator uses loop detectors in order to accurately collect volume information. These loops are made of wire and are installed in a location where traffic volume needs to be measured. An electric current running through the loop creates a static magnetic field that the Accumulator, when properly tuned, will monitor. A vehicle passing over the loop causes a disruption in the field which causes the Accumulator to increment by one. The Accumulator will not monitor for additional counts until the loop's magnetic field has returned to its static state. As a result, volumes are recorded on a vehicle by vehicle basis, with no regard to vehicle size or the number of axles. In other words, a passenger car is counted the same (one) as a tractor trailer (one).

Connecting to the Loop

The Accumulator is connected to the Loop using the loop cable (shown to the right) that was supplied with the counter. This cable contains wires for connecting one or two loops to the totalizer.

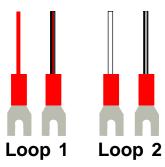
Generally, the wires from the loop cable are connected to the wires from the loop itself using a terminal block.



The following color code is used for the wires:

Loop 1: Red & Black with Red Stripe **Loop 2**: White & Black with White Stripe

The connections from the individual loops do not have to be in a specific order. For example, the red wire on the loop cable can be connected to either wire from Loop 1.



After screwing the black connector of the loop cable to the Accumulator, connect the wires of the loop cable to their corresponding loop, using the color code above. The Accumulator can then be turned on. Once on, the Accumulator will tune the loops, a process during which the Accumulator synchronizes itself with the loop's static magnetic field. This process takes approximately two minutes — the Totalizer will not begin recording counts until the tuning is complete.

To reset the count, press the DO key twice.

Battery Care and Power Saving Function

The Accumulator contains a power saving feature that will blank out the screen if it has not been disturbed for several minutes. To bring the display back up to view the current count, hit the TAB key.

The Accumulator is powered by a rechargeable lead gel battery. The battery will generally last for several months on a full charge before it needs to be recharged. We recommend keeping a record of when the battery was charged and charging it for a 12 hour period after three months of use. The battery should be recharged before it falls below 5.6 volts. Once the battery reaches 5.5 volts the Accumulator may double count or stop counting completely.

For Accumulator with external power, the loop cable will also contain a power jack. The battery charger supplied with the Accumulator should be plugged into this jack to supply power to the unit. To avoid damage to the Accumulator, only use the supplied battery charger.

When the Accumulator is turned off, the last count is stored in memory. It can be viewed when the unit is turned back on. Press the DO Key twice to clear the count to start a new one.