

# Ultra D-TEK

VEHICLE LOOP DETECTOR

## Applications

The Ultra D-TEK was designed to be plug-in compatible with Elite's OmniControl™ board operators such as the SL3000 and CSW200. The Ultra D-TEK is now compatible with the Viking Loop Detector Rack. The Ultra D-TEK is a cost effective, reliable and easy to set up vehicle detection solution that may be used in the Center, Safety and Exit slots on the operator control board. Sensitivity selection is simplified by the ULTRAMETER™ display that indicates the appropriate sensitivity setting to detect the vehicle positioned on the loop. The 10 sensitivity settings allow for finer adjustment of the detection level, while the 4 frequency settings provide greater flexibility in preventing crosstalk in multi-loop applications.



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## Indicators & Controls

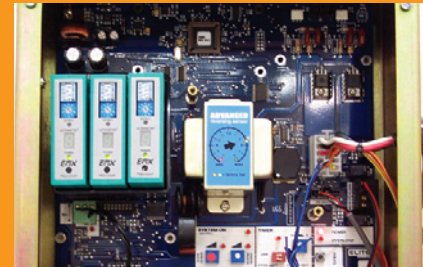
- **Dip Switch** 4 positions that control frequency, ASB (automatic sensitivity boost) and Filter (provides for reducing noise interference)
- **Sensitivity** Rotary switch is used to fine tune adjustment of loop detection height
- **Output LED** The Red LED indicates the detection output status
- **Ultrameter™** Visual indicator of optimum loop sensitivity setting
- **Power LED** During operation, the Green LED permanently ON indicates a normal operating condition; blinking indicates a loop failure condition.
- **Frequency Count Switch** Momentary push button to check operating frequency of the loop. (indicated by the Red LED blinking at 10 kHz per blink). May also be used to hard re-set the Ultra DTEK



The ULTRAMETER™ display makes installation, set-up and troubleshooting easy. Each time a vehicle is moved onto the loop, the display indicates the sensitivity necessary to detect vehicle. Simply set the sensitivity to the value displayed to detect the vehicle. Interference or crosstalk from adjacent loops or other sources are displayed as a constantly varying number on the ULTRAMETER™. This condition may be avoided by maintaining a minimum of 5 kHz separation in multi-loop applications.



PR-XX (light preformed loop with lighting protection)



## Technical Data

<b>Power Supply</b>	9-30 VDC (reverse polarity protected)
<b>Current Draw</b>	18 mA max.
<b>Dimensions</b>	L= 3.0in (76mm) W= 0.9in (22mm) H= 2.75in (70mm)
<b>Weight</b>	0.15 lbs. (68g)
<b>Loop Inductance</b>	20...2000µH (Q factor > 5)
<b>Environmental Tracking</b>	Automatic Compensation
<b>Operating Environment</b>	-40° C...82° C (-40°F...180° F) 0...95% relative humidity
<b>Housing Material</b>	PVC (Green)
<b>Connection</b>	10 Pin Female
<b>Loop Compensation</b>	Isolation transformer allows operation with poor quality loops
<b>Loop Frequency</b>	4 settings (low, med-low, med-hi, high)
<b>Surge Protection</b>	Loop circuitry protected by surge suppressors
<b>ULTRAMETER™ Display</b>	Indicates optimum sensitivity level, 0-9 Diagnostic aid
<b>Loop Output</b>	Low on Detect
<b>Power/Loop Fault Indicator</b>	Green LED
<b>Detect/Frequency Count Indicator</b>	Red LED
<b>External reset input</b>	Low to reset
<b>Filter</b>	Prevents detection from cross-traffic or RF interference (i.e. keying radio transmitter)
<b>Sensitivity</b>	10 levels 0-9
<b>ASB (Automatic Sensitivity Boost)</b>	Increases sensitivity after initial detection to prevent dropout due to high bed vehicles

## Ordering Information

- ULTRA D-TEK Plug-in compatible with the OmniControl™ and other Elite "A ELD" enabled controllers. \*\*
- PR-XX EMX Lite Preformed Loop XX =size
- LD-6P 6 position pluggable screw terminal adaptor for OmniControl™ loop connections.

WARRANTY EMX INC. the product described herein for a period of 2 years under normal use and service from the date of sale to our customer. The product will be free from defects in material and workmanship. This warranty does not cover ordinary wear and tear, abuse, misuse, overloading, altered products, or damage caused by the purchaser from incorrect connections, or lightning damage. There is no warranty of merchantability. There are no warranties expressed, implied or any affirmation of fact or representation which extend beyond the description set forth herein. EMX Inc. sole responsibility and liability, and purchaser's exclusive remedy shall be limited to the repair or replacement at EMX's option of a part or parts not so conforming to the warranty. In no event shall EMX Inc. be liable for damages of any nature, including incidental or consequential damages, including but, not limited to any damages resulting from non-conformity defect in material or workmanship.

Rev 2.2 08/18/2010