

# **ULTRALOOP - ULT-MVP**

MULTI-VOLTAGE VEHICLE LOOP DETECTOR

#### **Applications**

The ULTRALOOP™ multi-voltage vehicle loop detector combines small size with a 9VDC to 240VAC input range.

- ULTRAMETER™ sensitivity display easy set-up and installation by selecting the correct sensitivity
- Crosstalk and RFI interference display easy identification of interference problems
- Small size fits into small operator housings, saving space (73 x 38 x 78mm)
- 10 sensitivity settings gives the user the ability to select the best sensitivity level
- Low current draw green product
- **NEW....DETECT-ON-STOPTM** or (DOS®) feature will allow detection only when a vehicle has come to a complete stop on the loop. This is a worldwide unique feature to EMX detectors. Major advantage if you want to ignore cross traffic in tight spaces.

The ULT-MVP provides relay contact outputs indicating vehicle presence, and a second set of contacts that may be used for loop fault or pulse on entry /pulse on exit, or the new EMX feature, Detect-On-Stop $^{\text{TM}}$  (DOS $^{\text{II}}$ ). The ULT-MVP features automatic sensitivity boost (ASB), delay, fail-safe/fail-secure and infinite or normal (5 min.) presence.

The detector is easily installed and has user-friendly features that simplify setup, operation and troubleshooting. Sensitivity selection is simplified by the ULTRAMETER™ display that indicates the appropriate sensitivity setting with the vehicle positioned on the loop. The 10 sensitivity settings allow for finer adjustment of the detection level, while the 4 frequency selections provide greater flexibility in preventing crosstalk in multi-loop applications.







#### Model Table

FEATURE	ULT-MVP
Presence output	•
Output B	•
Pulse entry/exit	•
Detect-On-Stop	•
ABS	•
Delay	•
Normal/infinite presence	•
Loop fault output	•

### Connections European Wiring US Wiring

DESCRIPTION	ULT-MVP-E	ULT-MVP-U
Loop	7	7
Loop	8	8
Ground	9	4
Power	1	1
Power	2	2
Presence - Relay 1 NC contact	10	10
Presence - Relay 1 common contact	6	5
Presence - Relay 1 NO contact	5	6
Relay 2 NO contact	3	3
Relay 2 common contact	4	9
Relay 2 NC contact	11	11



PR-XX (lite preformed loop with lightning protection)



HAR-11



LD-11



**ULT-MVP** 

#### **Technical Data**

Sensitivity
ULTRAMETER™ Display
Loop frequency
Loop inductance
Grounded loop
Automatic tuning
Environmental tracking
Surge protection
Presence relay
Output B relay
Contact rating (resistive load)
Power / loop fault indicator
Detect / frequency count indicator

Power
Operating current
Operating temperature
Dimensions (L x W x H)
Weight

ASB (Automatic Sensitivity Boost)

Housing Connections 10 levels, 0-9

Indicates optimum sensitivity level, 0-9 Diagnostic aid

4 settings (low, med-low, med-hi, high)

 $20...2000\mu H (Q factor > 5)$ 

Isolation transformer allows operation with poor quality loops

Detector tunes to loop on power-up and following frequency count function

Automatic compensation

Loop circuitry protected by surge suppressors

SPDT relay contacts (form C)

SPDT relay contacts (form C)

2A @ 30VDC, 0.5A @ 125VAC

Green LED

Red LED

Requires vehicle to stop for a minimum of 1 second (1-2s typical)

Increases sensitivity after initial detection to prevent dropout due to high-bed vehicles

9...60 VDC (Max. 0.8 VA) 12...240 VAC (48...62Hz) (Max. 1.4 VA)

20mA standby / 50mA detect

-40°C...82°C (-40°F...180°F) 0...95% relative humidity

73mm (2.9") x 38mm (1.2") x 78mm (3.1")

0.25 lbs. (113 g) ABS plastic, IP30

Socket mount - 11 pin male (JEDEC B11-88)

## **Ordering Information**

- ULT-MVP-E Ultra MVP Multi-Voltage Vehicle Loop Detector, dual output AC/DC, EU wiring
- ULT-MVP-U Ultra MVP Multi-Voltage Vehicle Loop Detector, dual output AC/DC, US wiring
- HAR-11 3 foot 11 pin harness
- LD-11 11 pin socket base DIN rail mount
- PR-XX EMX Lite Preformed Loop (XX- specify size)

CE

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 1.6 09/16/14

