

# ROADCHECK™

Short Range Vehicle-to-Roadside Communications Equipment for Intelligent Transportation Systems Applications

## mGATE™

*Delivers Mobile Commerce in a Tiny Package!*

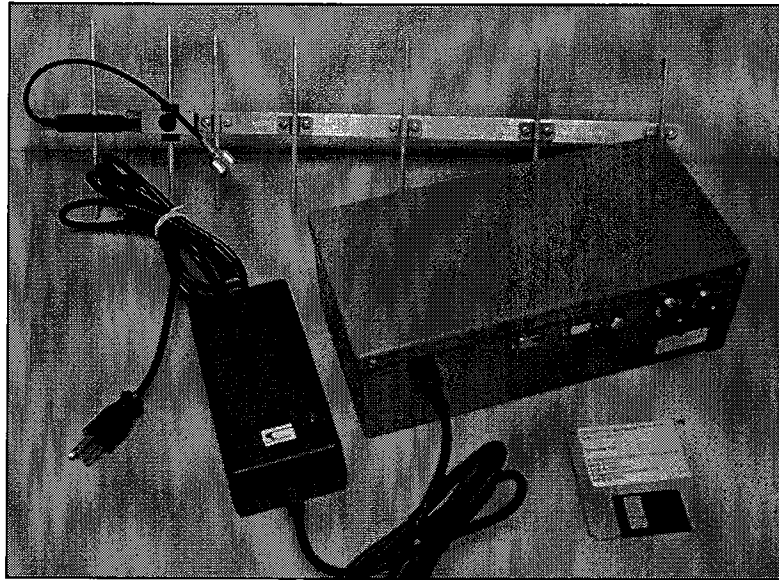
**N**ew for 2001 is this great little Reader, called *mGATE*. Made exclusively by Mark IV IVHS, we have designed this to be the smallest and lowest cost way of reading FPT and LPT transponders. *mGATE* lets you perform Mobile Commerce applications and gate control functions like never before!

### *New ITS Applications*

Perfect for parking lot access control, drive-thru payment applications and anywhere you need to perform a simple tag read at low vehicle speeds. *mGATE* comes ready to perform simple tag reads in single lane applications. It is also capable of handling 2 lane-based antennas per controller. *mGATE* runs under the control of our exclusive *mGATE* application software (WIN95/98 and PC not included).

### *Easy Installation*

Intended for installation in a protected environment, *mGATE* is very small and easy to set up. Just follow



*mGATE Reader shown with power supply, Yagi antenna and software*

these few steps to begin capturing Mobile Commerce transactions!

Install the application software on your PC by following the simple installation instructions shown in the user manual and connect your PC to the *mGATE* using an RS-232C serial data cable (not included).

In future, up to 4 *mGATE* Readers can be controlled from one PC. Each reader can be configured for up to 2 antennas, for a total capacity of 8 lanes worth of monitoring capability!

For AC power, connect the external UL/CSA power supply to the reader and plug it into a 115V, 60Hz outlet. Power consumption is minimal. UPS backup and supplementary line conditioning is highly recommended for all mobile commerce installations.

Antennas are connected to the reader in typical fashion using an appropriate RF cable with N-Type connectors. For cable runs up to 150 feet, Mark IV normally recommends the use of Ultralink™ made by Crushcraft Signals. By pre-

**MARK IV**

arranged appointment, our factory trained field technicians will tune your antennas in minutes for high performance reading of Mark IV FPT and LPT transponders.

### *m-Commerce Software*

There are 2 ways to use *mGATE* application software. Value added resellers and systems integrators can make use the Microsoft Windows® Dynamic Data Exchange (DDE) feature. This allows third parties to develop their own applications and

user interfaces, to manage tag reads as they occur.

Alternatively, make use of Mark IV's Mobile Commerce Cash Register application that comes with *mGATE*. The user interface shows the operating status of connected readers. It permits the user to turn RF on and off as desired and to configure timing parameters, so that applications are fine-tuned for your particular site. As tags appear in the capture zone, their unique identities are displayed to the operator. To associate and record a dol-

lar value transaction with the tag information, the attendant simply types in the dollar value when the tag is shown to be in the capture zone and then "Accepts" the transaction. This information is appended to a transaction file for off-line batch processing. Any abandoned transactions are also recorded for a comprehensive audit trail.

The system is designed to read all 256 bit Mark IV transponders

This device shall cause no harm at a distance greater than 1m away from the antenna. The antenna has a gain of 6dB.

## SPECIFICATIONS

|   |  |
|---|--|
| <b>Sizes:</b> Reader (excluding cables)   | 4.4" H x 11.5" L x 6.5" D (112mm x 292mm x 165 mm)   |
| Power Supply (excl. cable)                | 2.25" H x 6.5" L x 2.25" D (57mm x 156mm x 83 mm)  |
| Yagi Antenna                              | 6.75" H x 23.25" L x 2" D (172mm x 591mm x 51mm)   |
| <b>Weights:</b> Reader (excluding cables) | 6.1 lbs. (2.8 kg)  |
| Power Supply (excl. cable)                | 1.6 lbs. (0.7 kg)  |
| Yagi Antenna                              | 0.9 lbs. (0.4 kg)  |
| <b>Reader Operating Environment:</b>      | 0°C to +40°C (Prototype Units),<br>20% to 85% R.H, non condensing                            |
| <b>Reader Storage Environment:</b>        | -40°C to +70°C,<br>20% to 85% R.H, non condensing  |
| <b>Reader Power Requirements:</b>         | Universal AC Input 50-60Hz , 115V/1.5A or 230V/0.8A  |
| <b>Operating Frequencies:</b>             | 909.75-921.75 MHz  |
| <b>FCC Information:</b>                   | Each reader includes one FCC Certified RF Module, FCC ID JQU800495. Permit required.         |
| <b>Transponder Compatibility:</b>         | Reads Mark IV 256 bit transponders, including:<br>ROADCHECK® FPT, LPT, RMT, LCD, and FUSION® |

**MARK IV Industries Ltd., IVHS Division**  
6020 Ambler Drive, Mississauga, Ontario Canada L4W 2P1  
Tel: (905) 624-3025 Fax: (905) 624-4572

**MARK IV IVHS, Inc.**  
212 Durham Ave.  
Metuchen, NJ 08840  
Tel: (732) 494-7720 Fax: (732) 494-8005

DISTRIBUTED BY:

*MARK IV IVHS is committed to the continuous improvement of its products and therefore reserves the right to vary from the specifications contained on this sheet without notice.*

PRINTED IN CANADA. ALL RIGHTS RESERVED  
© 2001 Mark IV Industries, Ltd. REV05-01