USER MANUAL

MiniMag Duo™
Dual headed Swipe Reader

FCC WARNING STATEMENT
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his expense.

FCC COMPLIANCE STATEMENT
This device complies with Part 15 of the FCC Rules. Operation of this device is subject to the following conditions: this device may not cause harmful interference and this device must accept any interference received, including interference that may cause undesired operation.

CANADIAN DOC STATEMENT
This digital apparatus does not exceed the Class A limits for radio noise for digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.
Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de las classe A prescrites dans le Réglement sur le brouillage radioélectrique édicté par les ministère des Communications du Canada.

CE STANDARDS
Testing for compliance to CE requirements was performed by an independent laboratory. The unit under test was found compliant to Class A.

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1.0 Introduction

MiniMag Duo is a peripheral device for reading magnetic stripe card data. The MagStripe cards must meet the ISO 7811 standards for an ID1 card (typical credit card). Cards are manually swiped through the slot to perform a reading and/or writing operation. Data can be written and read verified with one swipe. The MiniMag Duo supports magnetic stripe track formats defined by a user. The MagSwipe Application is a companion software product, which provides reader configuration support in a Windows environment.

The MiniMag Duo™ compact magnetic stripe reader can read 1, 2, or 3 tracks of magnetic stripe information. In addition, it has full data editing capabilities. The data can be formatted with preamble/ postamble and terminator characters to match the format expected by the host.

The MiniMag can be connected to a host computer via an RS-232 input port. When the reader is connected as an RS-232 device, a separate power module must be used.

Features:

- Dual-head design enhances usability and adds flexibility
- USB HID or USB Keyboard interface
- Reads up to 3 tracks of information, bi-directionally
- Compact size allows use in many applications
- User-friendly configuration software utility
- Signifies successful reads with a beeper and LED indicator
- Reliable for a minimum of 1 million cycles
- Two-year warranty
- Programmable for easy integration with existing environments

General Information:

- USB-Keyboard, USB-HID Interfaces
- Dimensions: 90mm x 34mm x 28mm
- Tri-color LED and beeper
- Operating Temp: 0 - 55 C/32 - 131 F
- Humidity: Max 95 % non-condensing, dry storage
- Media Thickness: 0.015 inches (0.127mm)to 0.038 inches (1.14mm)
- ISO 7811, AAMVA, and other F2F formats
- Slot width: 0.040 inches (1.37mm)
- Tri-colored LED and beeper
- 6-foot side exit cable (bottom exit is an option)

2.0   Installation

Connection to the Host is through the USB interface cable. The interface is either USB KB (Keyboard emulation) or USB HID (Application specific). The final presentation of the card date is in an ASCII data format. The reader's output can be formatted with terminating characters and special preamble and/or postamble character strings to match the data format expected by the terminal.

The terminal must be configured to accept the data and to perform the appropriate processing. Care must be taken to ensure the USB KB data is directed to the appropriate Application so that the data does not appear in an open test editor such as Notepad. USB KB will appear on the screen as if it were entered manually from the keyboard.

3.0   Configuration

The MiniMag reader can be used with the default settings or can be configured to your application's special requirements. These settings are programmed into the reader using the MagSwipe Configuration Utility Program. Download and open the utility for a full explanation of the features and operation. Once programmed, these configuration settings are stored in the reader's non-volatile memory (so they will not be affected by the cycling of power).

4.0   USB HID Technical Reference Manual
The reference manual provides complete application information on the MiniMag Duo USB HID data format. The manual is available on our website.

5.0   Specifications

5.1   Electrical
Power: +5 VDC from the USB Port
Operating Current: 40mA typical

5.2   Environmental
Operating Temperature: 32F° to 131°F (0°C to 55°C)
Storage Temperature: -22°F to 158°F (-30°C to 70° C)
Humidity: Maximum 95% non-condensing

5.3   Reliability
Magnetic Head Life: 1,000,000 passes minimum
Rail and Cover Life: 1,000,000 passes minimum
                              (For operation in a benign environment)
Read Reliability: Less than one error in 500K bits
                              (ISO 7811 1-5 conforming cards, no errors induced by operator)

5.4   Mechanical

Magnetic Stripe Formats: ISO 7811 and AAMVA
Swipe Speed: 3 to 60 inches per second, bi-directional
Card Thickness: 0.015 to 0.038 inches (0.4 to 1 mm)
Interfaces: USB-keyboard & USB-HID
Dimensions (L, W, H):   3.54in (90mm), 1.34in (34mm), 1.1in (28mm)
Weight: Approximately 4.6 oz. (with cable)
Cable Length: 6-foot straight cable
Connector: USB-A
Indicators: Read verification Tri-color LED and audio beeper
Mounting Options: Rubber feet, Velcro, or fasteners into #6 threaded inserts