Magnetic Stripe Reader

USB/CDC Interface

Quickstart Manual

DEFAULT SETTINGS TABLE

The reader is shipped from the factory with the following default settings already programmed:

Magnetic Track Basic Data Format

Track 1: <SS1><T_1 Data><ES><CR>*
Track 2: <SS2><T_2 Data><ES><CR>*
Track 3: <SS3><T_3 Data><ES><CR>*

where: SS1(start sentinel track 1) = %
              SS2(start sentinel track 2) = ;
              SS3(start sentinel track 3) = ; for ISO, ! for CDL, % for AAMVA
              ES(end sentinel all tracks) = ?

Start or End Sentinel: Characters in encoding format which come before the first data character (start) and after the last data character (end), indicating the beginning and end, respectively, of data.

Track Separator: A designated character which separates data tracks.

Terminator: A designated character which comes at the end of the last track of data, to separate card reads.

LRC: Check character, following end sentinel.

CDL: Old California Drivers License format.

CR: Carriage Return.

Note: The <CR> characters (shown above) between tracks 1 & 2 and 2 & 3 denote the default character for this position, the Track Separator position. The <CR> characters shown for track 3 denotes the default character for this position, the Terminator position.

AGENCY APPROVED

Specifications for subpart B of part 15 of FCC rule for a Class A computing device.

LIMITED WARRANTY

The manufacturer warrants to the original purchaser for a period of 12 months from the date of invoice that this product is in good working order and free from defects in material and workmanship under normal use and service. The manufacturer's obligation under this warranty is limited to, at its option, replacing, repairing, or giving credit for any product which has, within the warranty period, been returned to the factory of origin, transportation charges and insurance prepaid, and which is, after examination, disclosed to be thus defective. The expense of removal and reinstallation of any item or items of equipment is not included in this warranty. No person, firm, or corporation is authorized to assume any other liabilities in connection with the sales of any product. In no event shall the manufacturer be liable for any special, incidental or consequential damages to Purchaser or any third party caused by any defective item of equipment, whether that defect is warranted against or not. Purchaser's sole and exclusive remedy for defective equipment, which does not conform to the requirements of sales, is to have such equipment replaced or repaired by the manufacturer. For limited warranty service during the warranty period, please contact the manufacturer to obtain instructions for returning the product.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. THERE ARE NO OTHER WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, OTHER THAN THOSE HEREIN STATED. THIS PRODUCT IS SOLD AS IS. IN NO EVENT SHALL ID TECH BE LIABLE FOR CLAIMS BASED UPON BREACH OF EXPRESS OR IMPLIED WARRANTY OF NEGLIGENCE OF ANY OTHER DAMAGES WHETHER DIRECT, IMMEDIATE, FORESEEABLE, CONSEQUENTIAL OR SPECIAL OR FOR ANY EXPENSE INCURRED BY REASON OF THE USE OR MISUSE, SALE OR FABRICATIONS OF PRODUCTS WHICH DO NOT CONFORM TO THE TERMS AND CONDITIONS OF THE CONTRACT.

RUNNING THE UTILITY

The reader is shipped from the factory with the "default configuration" programmed. The default configuration has the least restrictive settings, thus making it able to read all data of a standard encoded magnetic stripe card. See the default settings table for details.

The configuration software can be downloaded from the supplier's website. From the website, download the Configuration Utility ZIP file into a temporary file folder on your local hard drive. Double click the downloaded self extracting file and follow the screen prompts to expand the Zip file and run the SETUP.EXE application.

The install wizard creates two new folders on the C: Drive. A sub-folder "MagSwipe Configuration Utility" is created in the "Program Files" folder.

At the finish of the installation process, an "MagSwipe Configuration Utility" menu is installed in the programs folder of the Start menu. Connect the reader to the host computer and ensure it is getting power. Point to the "MagSwipe Configuration Utility" menu and click on the IDT icon.

The utility will start at the Home Page with a menu on the left border. Point and click on the menu items as needed. For information on using the utility, point and click the HELP menu selection.

MAGSWIPE™ CONFIGURATION UTILITY

The magnetically encoded data on the magnetic stripe can be decoded (read) by magnetic card readers. The stripe data has a fixed format defined by the ISO standards. The ISO fixed format is not always convenient or useful for card reading applications. The solution is for the card reader to decode the stripe data and then arrange the data into useful format and content. The reader-formatted data is transmitted from an intelligent communication interface.

The intelligent magnetic stripe reader provides extensive formatting capability. In addition, characters can be added to the formatted data. To support the formatting capability, an easy to use Configuration Utility software application is available. New file saving capabilities allow configurations to be saved and used again without having to repeat the full configuration process with each reader.

The utility supports all reader interfaces. The operating systems supported are Windows 2000 and Windows XP.

SPECIFICATIONS

Power Requirements:	Power supplied by the host computer via the USB port.
Operating Current:	40 mA maximum for decoded magnetic stripe (3 tracks) with USB/CDC interface.
Operating Temperature:	32° F to 131° F (0° C to 55° C).
Storage Temperature:	-22° F to 158° F (-30° C to 70° C).
Relative Humidity:	Maximum 95% non-condensing.
Magnetic Head Life:	1,000,000 passes minimum.
Rail and Cover Life:	1,000,000 passes minimum.
Magnetic Stripe Recording Method:	Two-frequency coherent phase (F2F) compatible with ISO 7811, ANSI, AAMVA, and California DMV.
Maximum Number of Tracks:	3 tracks.
Swipe Speed:	3 to 60 inches per second, bidirectional.
Card Thickness:	.015 to .045 inches.
Slot Width:	.050 inches.
Dimensions:	Length: 3.54 inches (90mm). Width: 1.34 inches (35mm). Height: 1.10 inches (28mm).
Weight:	4.6 oz.
Cable Length:	6-foot straight cable.

DESCRIPTION

The compact magnetic stripe reader can read 1, 2, or 3 tracks of magnetic stripe information. In addition, it has full data editing capabilities.

The reader is connected to a host computer USB communications port. The cable has a standard USB plug for connection to the host and is attached to the reader. The reader can be configured for compatiblity with the host's software. See the Configuration Utility section. Decoded magstripe data is sent to the host through a USB Virtual COM port and is USB Version 2.0 compatible.

This unit is fully programmable with a configuration utility. The data can be formatted with preamble/postamble and terminator characters to match the format expected by the host.

Power is obtained from the host. No separate power supply is required.

HOST CONNECTIONS & DRIVERS

The MiniMag reader is connected to the host computer via a USB input port. Since USB devices are designed to be "plug and play," the computer will search for the Microsoft Standard CDC driver when the reader is first connected. If one cannot be found, the computer will prompt you to make a selection. The Windows software CD may be needed to complete the installation.

The magnetic stripe data is trasmitted and is available to the host application in the same format as an RS232 COM connection. The CDC driver will automatically adjust the data flow to correspond with the COM Port software application requirements. The CDC operation requires a driver when the reader is first operated with a Windows operating system. A driver is typically supplied with the operation system Win2K or WinXP. Additionally, the file mm2usb232.inf must be available for the host system. The .inf file is provided by the reader supplier. The USB Specification and other information can be downloaded free from the USB organization website (www.usb.org).

If the host computer's application software is expecting the magstripe data in a particular order and format, the reader's output can be configured to output the data stream by re-arranging data blocks, adding terminating characters, and special preamble and/or postamble character strings to the decoded card data.

OPERATION

The compact magnetic stripe reader is easy to operate. Just follow these simple steps:

1. Make sure the reader is properly connected and is receiving sufficient power.

2. To read a card, slide the card, in either direction, through the reader slot, with the magnetic stripe facing the magnetic head.

3. While swiping the card through the reader, the LED will go off.

4. Once the entire magnetic stripe has been read, the LED indicator will light up as green to signal a "good read." If a good read is not obtained, the LED indicator will light up as red for about 1/2 second.

5. A beep will also sound to indicate a good read on each track. If all three tracks have been read successfully, the reader will beep three times.