

SECTION 1. FEATURES AND SPECIFICATIONS

The Port Powered Swipe Reader is a compact magnetic stripe card reader which conforms to ISO/ANSI standards. The Reader is compatible with the PC series of personal computers or any device with a serial RS-232 interface. A card is read by sliding it, stripe down and facing the LED side, through the slot either forward or backward.

A green/red LED (Light Emitting Diode) indicator on the Reader panel provides the operator with continuous status of the Reader operations.

When power is applied, the Reader transmits a sign-on ID message. About 150 to 330 milliseconds after DTR is applied, the Reader sends the part number of the firmware in the following form: 210888xxAnn<CR>. The first 8 characters indicate the firmware number; the letter is the revision, which is followed by a revision sublevel of 01 to 99. The <CR> indicates carriage return (0x0D). The sign-on messages for part numbers are listed in Section 3. Timing is also shown in Section 3.

Note

Additional features have been incorporated into the new version of the Port Powered Swipe Reader (generally available after March 2006). In the new version, the firmware part number will be reported as 21088838. The enhancements included in this new version are identified within this document with the word “new”.

Since the input voltage is supplied by a relatively low source of power, the Reader depends on its input capacitor to maintain proper charge during all operations. In the **old** model, in order to reduce the drain on this internal power source during data transmission, the output data is transmitted in 5 to 6 millisecond bursts with a 10-millisecond gap between bursts to allow the capacitor to recharge. The PC software should be able to tolerate this 10-millisecond space between characters. The Timing is shown in Section 3, Figure 3-1. In the **new** version, with its lower current draw, the data is transmitted continuously since there is no need to transmit in bursts. Configurations, including part numbers, firmware, tracks, and unit configuration, are listed in Section 3, Table 3-2.

MAGTEK DEVICE DRIVERS FOR WINDOWS

The MagTek Device Drivers for Windows may be used with the Port Powered Swipe Reader. They are available on a CD (Part Number 30037385) or from the MagTek web site (Part Number 99510013). When these drivers are used, refer to *MagTek Device Driver for Windows, Programming Reference Manual*, Part Number 99875125.

FEATURES

Major features of the Swipe Reader are as follows:

- Powered through the RS-232 serial port – no external power supply required
- Hardware Compatible with PC or any computer or terminal with an RS-232 interface
- Software Compatible with the MagTek MTD Windows Device Drivers or any RS-232 communications program
- Bidirectional card reading
- Reads encoded data that meets ANSI/ISO/AAMVA standards
- Green/Red LED for status

CONFIGURATION

The Reader, LED Indicator, pin numbers for the 9-pin connector and the 25-pin adapter are shown in Figure 1-2.

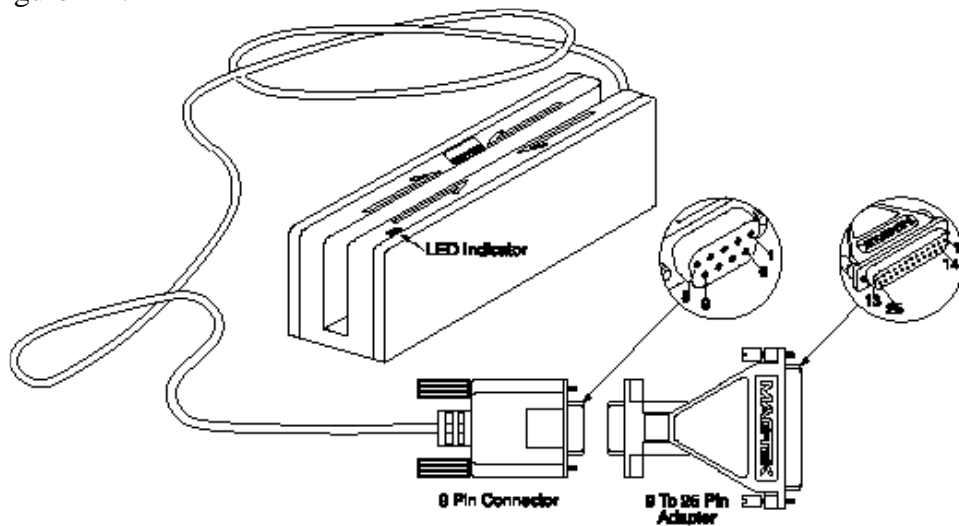


Figure 1-2. Reader Cable and Optional Adapter

Pin numbers and signal descriptions for the 9-pin (DE9) cable and 25-pin (DB25) adapter shown in the illustration are listed in Table 1-1.

Table 1-1. 9-Pin Connectors and 25-Pin Adapter

25-pin Adapter	DE9-pin Connector	Signal
-	1	NC*
3	2	RXD (to PC)
2	3	TXD** (from PC)
20	4	DTR (from PC)
7	5	GND
-	6-9	NC*

* No Connection

** Pin must be connected to TXD (or DTR if TXD not available).

SPECIFICATIONS

Table 1-2 lists the specifications for the Port Powered Swipe Reader. Figure 1-3 shows the dimensions for the standard product. Other sizes are available by special order.

Table 1-2. Specifications

OPERATING		
Reference Standards	ISO/ANSI/AAMVA*	
Power Input	From RS-232 interface	
Recording Method	Two-frequency coherent phase (F2F)	
Message Format	ASCII	
Card Speed	3 to 60 in/s (7.6 to 152.4 cm/s) – forward or reverse	
Head Life	1,000,000 passes	
ELECTRICAL		
	Old Version	New Version
DTR Voltage	5 to 15 VDC	4 to 15 VDC (+/-24 VDC absolute max)
Current		
Quiescent	1 to 2 mA typical (continuous)	7 mA maximum (continuous)
Transmit/Read	8 to 9 mA typical (5 ms duration)	11 mA maximum
Peak at Power On	12 mA	Limited by source (~50 µF load)
RS-232 Communication	9600 bps 8N1	Adjustable (default 9600 bps 8N1)
MECHANICAL (STANDARD PRODUCT)		
Dimensions	Length: 3.94" (100.0 mm) Width: 1.28" (32.5 mm) Height: 1.23" (31.3 mm)	
Weight	Reader 5.8 oz. (165 gr.)	
Cable length	See Table 3-2	
Connector	9 pin D female	
ENVIRONMENTAL		
	Old Version	New Version
Temperature		
Operating	32°F to 131°F (0°C to 55°C)	32°F to 158°F (0°C to 70°C)
Storage	-22°F to 158°F (-30°C to 70°C)	-22°F to 158°F (-30°C to 70°C)
Humidity		
Operating	10% to 90% noncondensing	10% to 90% noncondensing
Storage	10% to 90% noncondensing	10% to 90% noncondensing

* ISO (International Standards Organization), ANSI (American National Standards Institute), and AAMVA (American Association of Motor Vehicle Administrators).