

# **MSR 112 SERIES**

## **Port Powered Magnetic Card Reader**

### **RS232 Interface**

Thank you for purchasing the MSR112 series products.

The MSR112 RS232 Magnetic Card Reader series is ideal for retail systems, time keeping systems, security systems and other card reader related systems. The MSR112 series are designed to offer the user a card reader solution that will complement many applications.

Triple track of MSR112 is uniquely designed to read both credit cards and Driver Licenses (AAMVA and California standard).

#### **FEATURES**

- Compact size - can be mounted on keyboard or any flat surface
- Software and hardware modification not required
- Single, dual and triple track decoding
- Bi-directional card swipe and read capability
- LED indications: LED Off: swiping card & sending card data; Green: stand-by.
- Data rate: 9600 baud rate, none parity, 8-bit, 1 stop bit
- No extra power supply is needed.

#### **CONFIGURATION**

- MSR112-12 Dual track 1&2
- MSR112-23 Dual track 2&3
- MSR112 -33 Triple track 1&2&3

Note: Optional configuration is available.

#### **AGENCY APPROVAL**

- Specifications for subpart B of part 15 of FCC rules for a class A computing device.
- Specifications for CE mark class A.

#### **WARRANTY**

This product is served under one-year warranty to the original purchaser. Within the warranty period, merchandise found to defective will be repaired or replaced. This warranty applies to the products only under the normal use of the original purchaser, and in no circumstances covers incidental or consequential damages though consumers' misuse or modification of the products.

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#### **SETUP**

1. Power off your PC system.
2. Connect the 5-foot card reader cable to the RS232 male socket for your system.
3. Power on your PC system.

## SPECIFICATIONS

Recording Method	Two-frequency coherent phase (F2F), compatible with ISO 7811 and AAMVA.
Swipe Speed	5 to 50 in/sec (worst case with +/- 12% jitter card)
Power Requirements	3.3VDC/4.9mA in idle mode; 5.9mA in operating mode
Operating Temp	-10°C to +50°C, storage temp: -30°C to +70°C
Operating Humidity	10% to 85% relative humidity
Magnetic Head Life	500K swipes minimum. 500K, 1M option.
Dimensions	3.94 in L x 1.34 in W x 1.10 in H
Weight	0.46 Lb.
Cable length	5 ft
Connector	9 pin D-sub female

## OUTPUT DATA FORMAT

Single track	<STX><SS>< TRACK 1or 2or 3 DATA><ES><ETX>
Dual track	<STX><SS>< TRACK 1 or TRACK 2 DATA><ES><DLE>
	<SS><TRACK 2 or TRACK 3 DATA><ES><ETX>
Triple track	<STX><SS><TRACK 1 DATA><ES><DLE><SS><TRACK 2 DATA><ES><DLE>
	<SS><TRACK 3 DATA><ES><ETX>

Remarks:

SS = START SENTINEL

TRACK1= “%” (ISO, DMV & AAMVA)

TRACK2= “;” (ISO, DMV & AAMVA)

TRACK3= “;” (ISO) “%” (AAMVA) “!” (CA old DMV)

Note: TK3 SS can be replaced to + for ISO, # for AAMVA, and ! for CA old DMV while SS is enable.

ES = END SENTINEL

TRACK1, 2 & 3= “?” (ISO, CA old DMV & AAMVA)

Note: 1. If read error, the default output data format is <STX><SS>E<ES><ETX> and it can be replaced as either <STX><SS>F<ES><ETX> or output nothing.

2. If no data is read, then display <STX><SS>N<ES><ETX> as default and it can be replaced as output nothing.

3. <STX>, <ETX>, <DLE>, SS (start sentinel), ES (end sentinel) and LRC are optional.

The <DLE> is programmable by command setting.

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