MSR112A
Magnetic Stripe Card Reader
-RS232 Interface-

The **MSR112A Series** Magnetic Card Reader is ideal for retail systems, time keeping systems, security systems and other card reader related systems. The model is designed to offer user a card reader solution that will complement many applications.
Triple track of **MSR112A** 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
  Data rate: 9600 baud rate, none parity, 8-bit, 1 stop bit
  No extra power supply is needed

- ## AGENCY APPROVED

  Specification for FCC Class B
  Specification for CE Class B
  Specification for UL/cUL
  Certificate by Taiwan BSMI

  NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  —Reorient or relocate the receiving antenna.
  —Increase the separation between the equipment and receiver.
  —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  —Consult the dealer or an experienced radio / TV technician for help.

  You are cautioned that any change or modifications to the equipment not expressly approve by the party responsible for compliance could void your authority to operate such equipment.

- ## CONFIGURATION

  The brief configuration of MSR112A part number are shown as below:
  MSR112A-12 Dual track 1&2
  MSR112A-23 Dual track 2&3
  MSR112A-33 Triple track 1&2&3

  Note:
  Optional configuration is available.

- ## SETUP

  1. Power off your PC system
  2. Connect the DB9 cable to a free serial port
  3. Power on your PC system

- **WARRANTY**

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

- **SPECIFICATIONS**

Swipe Speed	5 to 55 in/sec (worst case with +/- 15% jitter card)
Power Requirements	3.3VDC/5.5mA in idle mode; 6.5mA in operating mode
Environment	Temperature: -10°C ~ 55°C; Humidity: 15% to 90% (non condensing)
Magnetic Head Life	500K swipes min.
Dimensions	100L*34W*28H (mm)
Cable length	1.5M
Connector	DB9 male connector

- **OUTPUT DATA FORMAT**

Single Track	<SS (optional)><SINGLE TRACK DATA><ES (optional)><LRC (optional)>
Dual Track	<SS (optional)><FIRST TRACK DATA><ES (optional)><LRC (optional)> <SS (optional)><SECOND TRACK DATA><ES (optional)><LRC (optional)>
Triple Track	<SS (optional)><TRACK 1 DATA><ES (optional)><LRC (optional)> <SS (optional)><TRACK 2 DATA><ES (optional)><LRC (optional)> <SS (optional)><TRACK 3 DATA><ES (optional)><LRC (optional)>

  Remarks:
  SS = START SENTINEL (optional)
  TRACK1=   "%"   (ISO, DMV & AAMVA)
  TRACK2=   ";"   (ISO, DMV & AAMVA)
  TRACK3=   ";"   (ISO)   "%" (AAMVA)   "!" (CA old DMV)
  ES = END SENTINEL (optional)
  TRACK1, 2 & 3=   "?"   (ISO, CA old DMV & AAMVA)
  LRC = CHECKSUM (optional)

- **OUTLINE DIMENSION**