

## MSR240 SERIES

### Port Powered Manual Insert Magnetic Card Reader

### RS232 Interface

Thank you for purchasing the MSR240 series products.

The MSR240 RS232 Port Powered Manual Insert Magnetic Card Reader series is ideal for retail systems, time keeping systems, security systems and other card reader related systems. The MSR240 series are designed to offer the user a card reader solution that will complement many applications.

#### FEATURES

- Light weight: Approx. 50g
- Compact size: 78L\*60W\*21H (mm)
- Low power consumption.
- No extra power supply is needed.

#### CONFIGURATION

- MSR240-02 track 2 only
- MSR240-12 track 1&2
- MSR240-23 track 2&3

Note: Optional configuration is available.

#### AGENCY APPROVAL

- Specification for FCC Class B
- Specification for CE Class B
- Specification for BSMI Class B

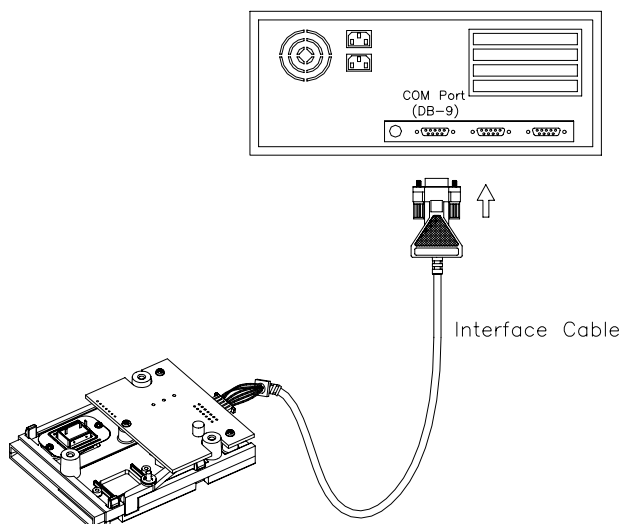
#### WARRANTY

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. Turn OFF power to your computer.
2. Connect MSR240 DB9 of interface cable to a free serial port of the computer.
3. Turn ON power to the computer.



## SPECIFICATIONS

Electrical	
Power Requirements	+3.0VDC
Interface	DB9 female connector
Agency Approval	FCC/CE Class B; BSMI Class B
Mechanical	
Body Material	ABS+10%GF
Dimensions	78 <sub>L</sub> × 60 <sub>W</sub> × 21 <sub>H</sub> mm
Weight	Approx. 50g
Card Handling Method	Manual insert
Environment	
Operation	Temperature: -10°C ~ 50°C
	Humidity: 15% to 90% (non condensing)
Storage	Temperature: -30°C ~ 70°C
	Humidity: 10% to 90% (non condensing)
Performance	
Card Type	Magnetic card as per ISO7811
Swipe Speed	Standard card    Jitter±15%    Amp.60%
	4 ~ 40 ips        5 ~ 35 ips        5 ~ 35 ips
Card Media	Read 300 ~ 4000 oe magnetic stripe
Magnetic Head Life	500K Min.

## PIN ASSIGNMENT

DB9	SIGNAL	DIRECTION	PCB-J1	SIGNAL
4	DTR	→ Data Terminal Ready	1	Power input 1
6	DSR	(Reserved)	2	No connection
8	CTS	(Reserved)	3	No connection
3	TxD	→ Serial data from host	4	RxD
7	RTS	→ Request to Send	5	Power input 2
2	RxD	← Serial data to host	6	TxD
	SHIELD		7	SHIELD
5	GND		8	GND

## OUTPUT DATA FORMAT

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

Remarks:

SS = START SENTINEL

TRACK1= “%” TRACK2= “;” TRACK3= “;”

ES = END SENTINEL

TRACK1, 2 & 3= “?”

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.
4. The SS, ES or LRC are optional for each track.