# **MSR 120 SERIES**

## **Magnetic Stripe Card Reader**

## Universal Serial Bus (USB) Interface

Thank you for purchasing the MSR120 series products. The MSR120 Series USB Interface Magnetic Card Reader is ideal for retail systems, time keeping systems, security systems and the card reader related systems. The MSR120 series are designed to offer the user a card reader solution that will complement many applications. Triple track MSR120 reader is uniquely designed to read both credit cards and Driver Licenses (AAMVA and California standard).

### FEATURES

1	Light weight: 120g
2	Compact size: 100L*34W*28H (mm)
3	LED and Buzzer indicators indicate card status
4	Low power consumption
5	Single, dual, or triple track versions allow for reading all types of magnetic cards, including credit cards and drivers licenses.

### CONFIGURATION

MSR120-33 Triple track 1&2&3

#### AGENCY APPROVED

- Comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules.
- Comply with CE mark Class A, UL, and cUL

#### 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.

#### WARNING

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

#### SET-UP

1) Turn the system power off.

2) Connect PC and MSR120 USB connector of signal cable to a free USB port

3) Turn the system power on.

4) Install USB driver (ref. to Appendix A)

#### **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: 5VDC/120mA

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Communication: Standard USB signal levels (comply with USB specification v 1.1)			
Operating Temp:	- $10^{\circ}$ C to + $50^{\circ}$ C	Storage Temp: -30°C to +70°C	
Operating Humidity:	10% to 85% relative hu	imidity	
Magnetic Head Life:	500K swipes Min. 1M	option	
Dimensions:	100mm in L x 34mm in W	x 28mm in H	
Weight:	120g		
Signal Cable Length:	1.7M		

## **OUTPUT DATA FORMAT**

MOD 100 C.

1 3 4

DUAL TRACKS: <SS><TRACK1 or 2 DATA><ES><SS><TRACK2 or 3 DATA><ES> TRIPLE TRACKS: <SS><TRACK1 DATA><ES><SS><TRACK2 DATA><ES><SS><TRACK3 DATA><ES> For ISO card: SS (Start Sentinel)="%" (Track 1), and ";" (Track 2 & 3); ES (End Sentinel)="?" (Track 1, 2, & 3)

#### **SETTING OPTION** by USING utility disk

Parameter	Default Setting	Option
SS, ES CODE	Exist*	Non-exist
Buzzer	Enable*	Disable
* FACTORY SETTING AT TIME OF SHIPPING		

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# Appendix A USB Driver Installation

- > This section illustrates instructions in the USB driver installation guide for Windows 95/98.
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## System Requirements

Before you use the MSR120, make sure your computer is an IBM PC-compatible with the following minimum system requirements:

- 1. Intel-compatible 486DX-66 MHz CPU or higher
- 2. One standard USB port (4-pin) and has the symbol
- 3. Either the following operating systems:
  - Windows 95 OSR2.1 (B version) with USB version 1214, Windows 98, Windows 98 SE, or Windows 2000.

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## Driver Installation

Follow the steps below on installing the MSR120 for the first time:

- 1. Power on computer where you will connect the MSR120 and make sure that the USB port is enabled and working properly.
- 2. Plug in the USB cable into the USB port and Windows will detect an USB Device and run the Add New Hardware Wizard to assist you in setting up the new USB Composite Device.

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- 3. Insert the USB driver diskette (DISK 2) into the floppy drive and click Next to continue:
  - a. Select Search for the best driver for your device and click Next.

Add New Hardware Wizard		
	What do you want Windows to do?   Search for the best driver for your device. (Recommended).	
	< <u>B</u> ack Next> Cancel	

- b. Select Specify a location and click Browse. Change the folder of your floppy drive
  - (i.e.: A:\Driver\Windows) and click OK.

Add New Hardware Wizard	
	Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.         Image: Element of the following selected locations         Click Next to start the search.         Image: Element of the following selected locations         Clock Next to start the search.         Image: Element of the following selected locations         Image: Element of the following selected locationselected locations
	<back next=""> Cancel</back>

c. Double-check the directory that Windows prompts. Click Next.

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d. Windows will detect the driver (SER9PL.inf) and shows the USB Card Reader.

Click Next to continue until installation is complete.

	Windows driver file search for the device:
	USB Card Reader
	Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue.
🗞 🏤 -	Location of driver:
$\sim$	
	<back next=""> Cancel</back>

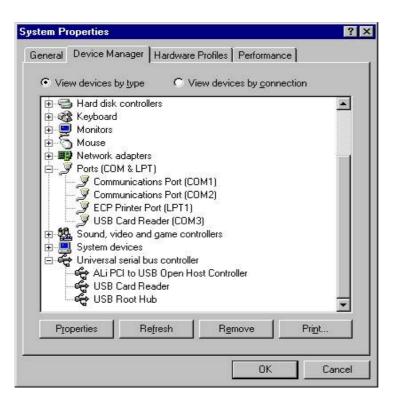
e. Click Next to continue and let Windows copy the needed files to your hard disk.

Click Finish while installation is complete.

Add New Hardware Wiz	rard
	USB Card Reader
	Windows has finished installing the software that your new hardware device requires.
<b>~</b>	
	<back cancel<="" finish="" td=""></back>

f. After installing, the System will generate an additional COM Port, USB Card Reader (e.g.: COM3) for the connection to RS232 Serial Device.

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#### Driver Un-installation

You can uninstall the MSR120 driver by executing Uninstall Program: Dremover98.exe in the driver diskette and click the

Remove button to accomplish the un-installation.

<table-of-contents> USB-Serial Driver Remover</table-of-contents>	×
Press OK to remove driver.	
Fress OK to remove unver.	
<u>C</u> ancel <u>O</u> K	

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