Magnetic Stripe Reader

SERIES 1218

Operation Manual

Version 1.0

Table of Contents:

Chapter 1 Introduction 2

Chapter 2 Appearance 3

Chapter 3 Installation 4

Appendix I – Specification 14

Troubleshooting. 16

CHAPTER 1 Introduction

This product is an advanced bi-directional and non-programmable magnetic stripe reader. It supports ISO Standard(7810,7811,7812, 7813 format card. It is designed for using with credit authorization terminals, point-of-sale erminals, portable terminals, personal computers and banking terminals.

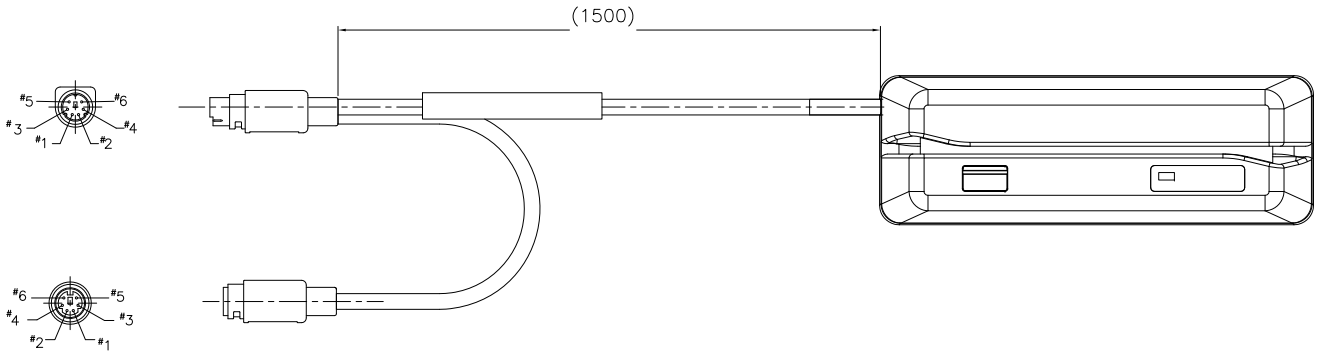
Model MSR keyboard Wedge is designed to be used with IBM/AT compatible computer and entering data. As if it were being generated though the Keyboard, no software modification, nor Programming of input/output devices, nor Addition power supply is needed. Model MSR RS232 is operated as an on-line card reader which communicates with any computer via RS232 interface.

The MSR RS 232 needs + 12V DC power from the external power supply or the internal power of your computer, even the terminal. The MSR U is with USB 1.1 Interface that communicates with which computer via USB ports.

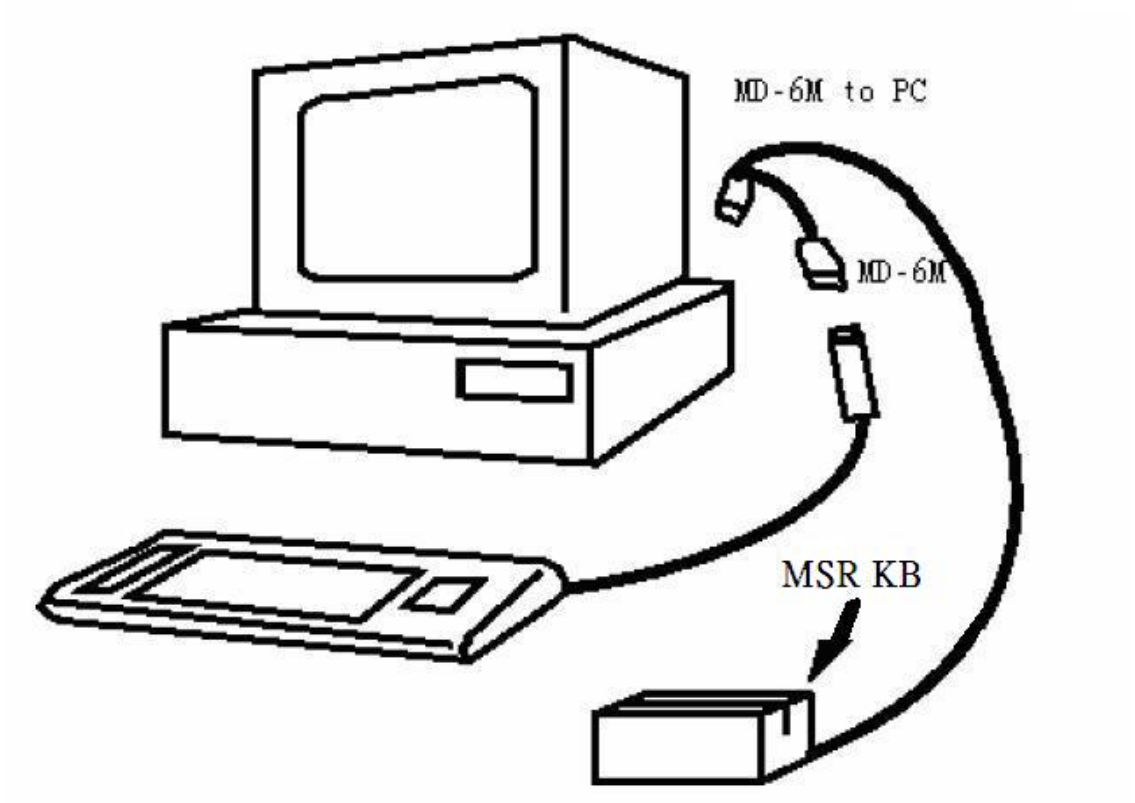
CHAPTER 2 Appearance

CHAPTER 3 *Installation*

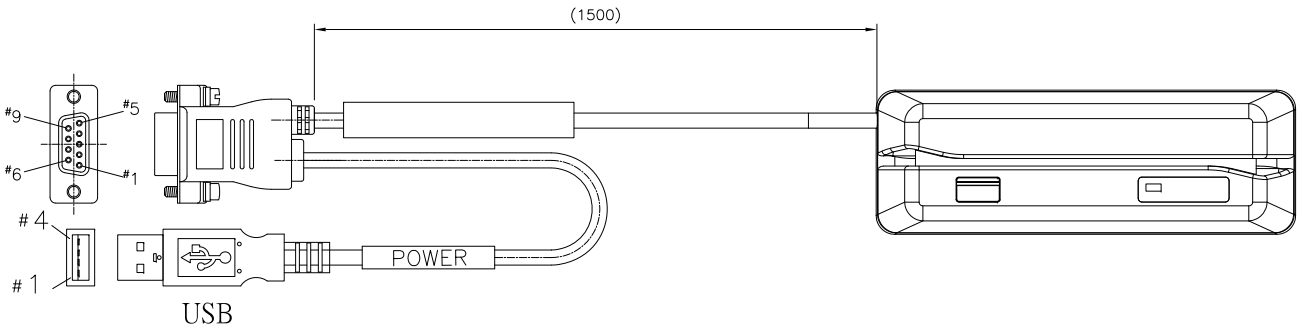
MSR KB series:



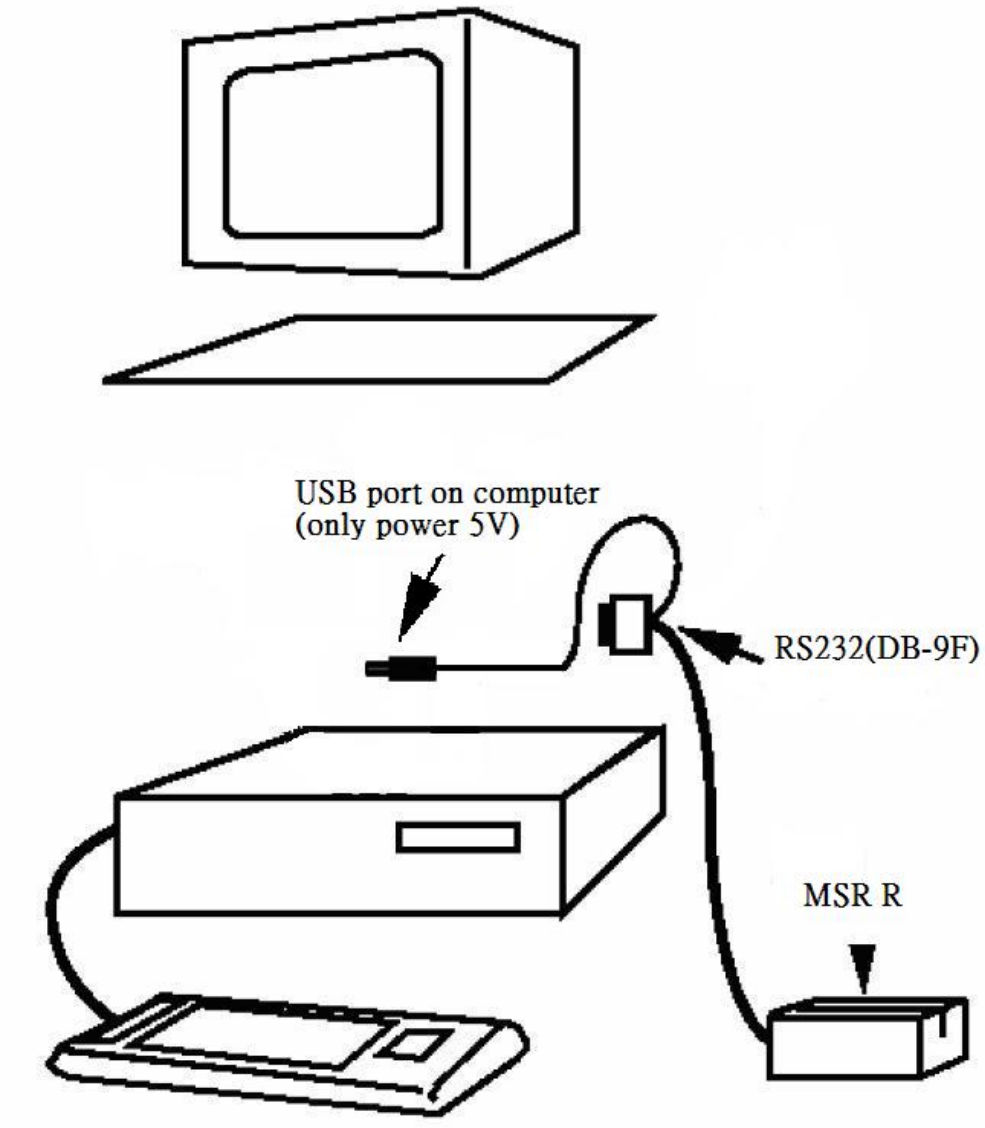
The MD-6M side of KB cable, shall be connected to PC PS/2 Keyboard port.
The MD-6F side of KB cable can be connected to normal PC keyboard, PC keyboard can work with the product together.



MSR RS232 series:



The DB-9F side of RS232 cable connects to PC COM port (COM 1 or COM 2 or other COMs) , and power connects to USB .



MSR USB installation

Step 1: Connect to the computer

Plug the USB-connector into the USB port of your computer.

Refer to Figure 2-1.

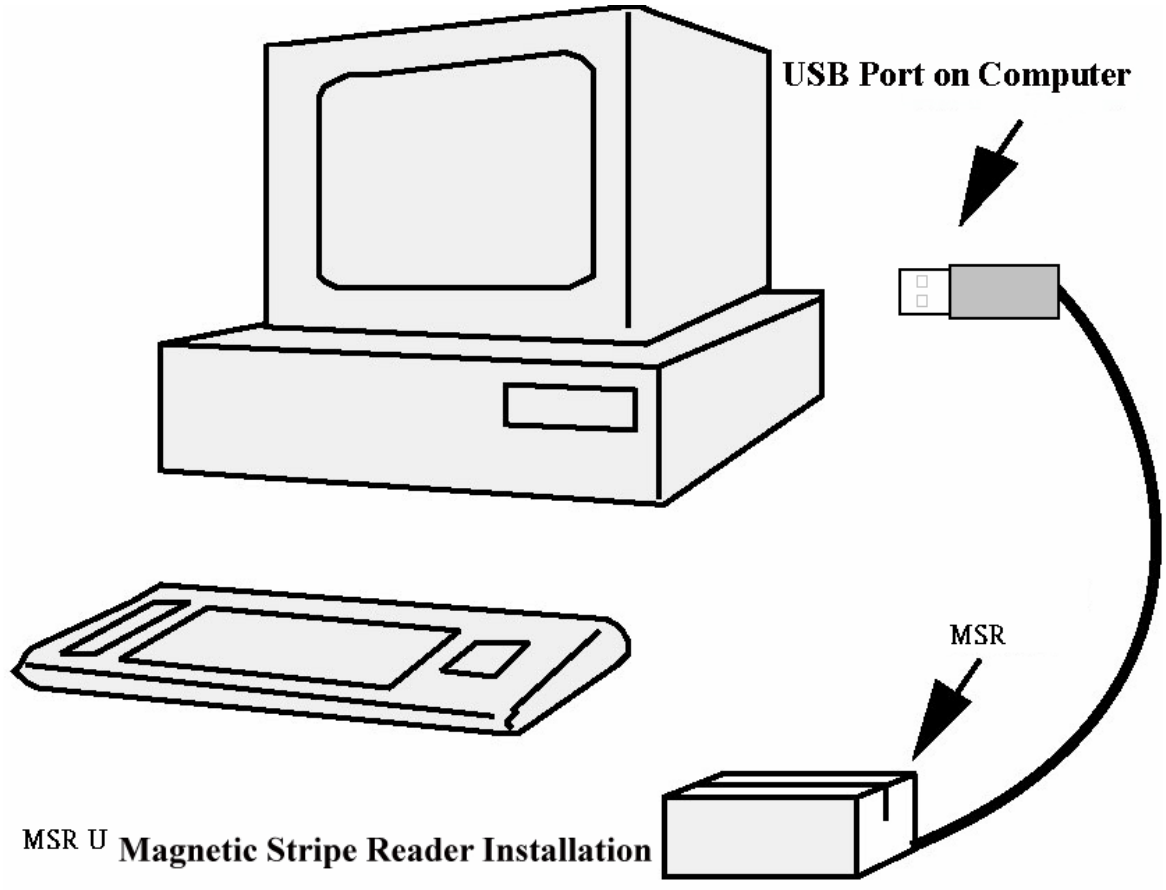


Figure 2-1

MSR USB will have "Beep" sound to indicate that it is ready for operation.

Step 2: Driver installation

v2.0.0.19 for Win98SE/ME
v2.0.2.1 for Win2K/XP/2003/Vista(32bit)
PL-2303 (H, HX, X chip version) Mac OS 8 & 9 driver for v1.3.6 build 1, Prolific Edition
PL-2303 (Chip H/HX/X) Linux driver for RedHat 7.3/8.0/9.0 Only

MSR USB simulates RS232 and Keyboard interface by USB with COM port selected.
Following sections are MSR USB driver, utilities installation.

MSR USB Driver:

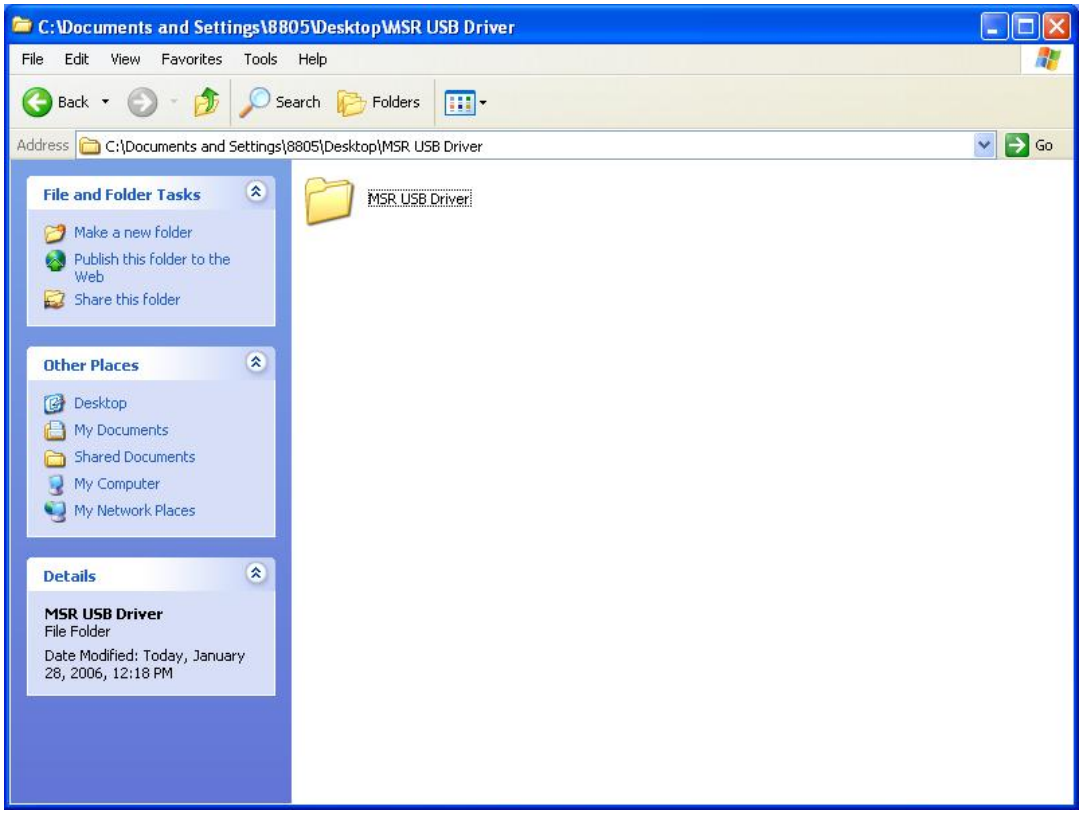
a. Download MSR USB Driver from CD, and extract them to your hard disk.

b. When you plug-in the USB device, WINDOWS operating system will detect the new Hardware automatically.

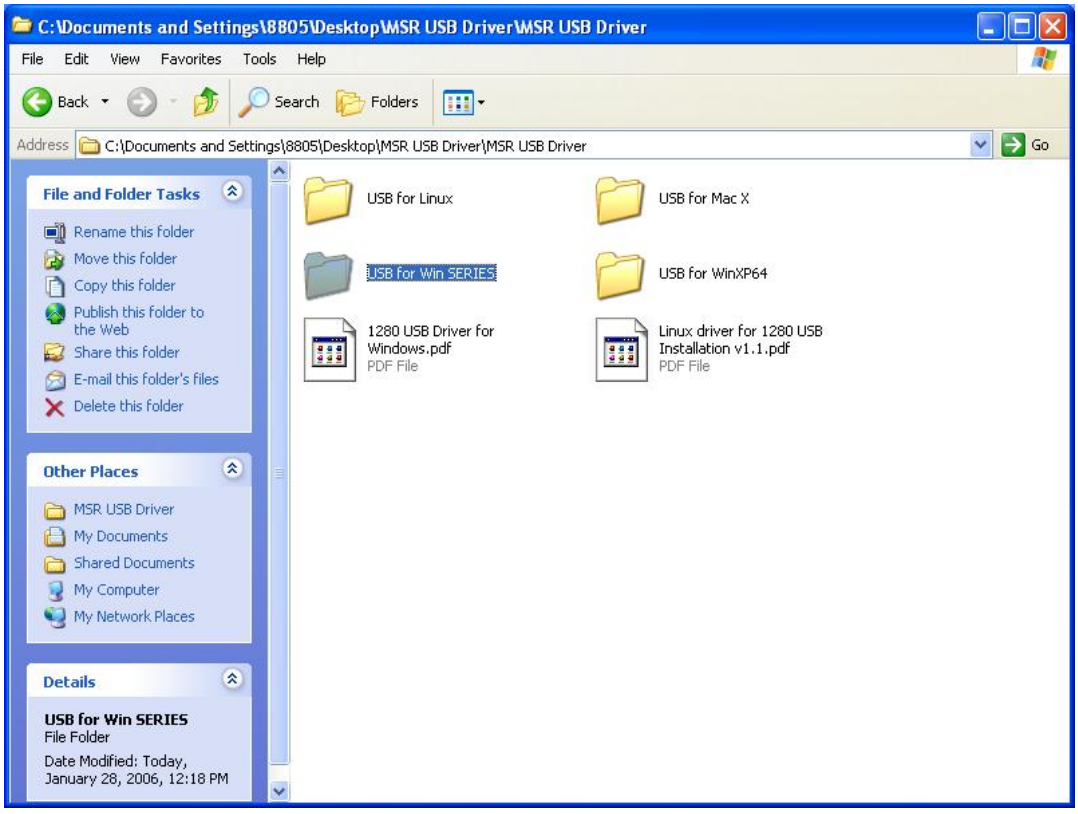
c. Follow indicated steps to install the driver and finish the installation.

Installation for WindowsXP

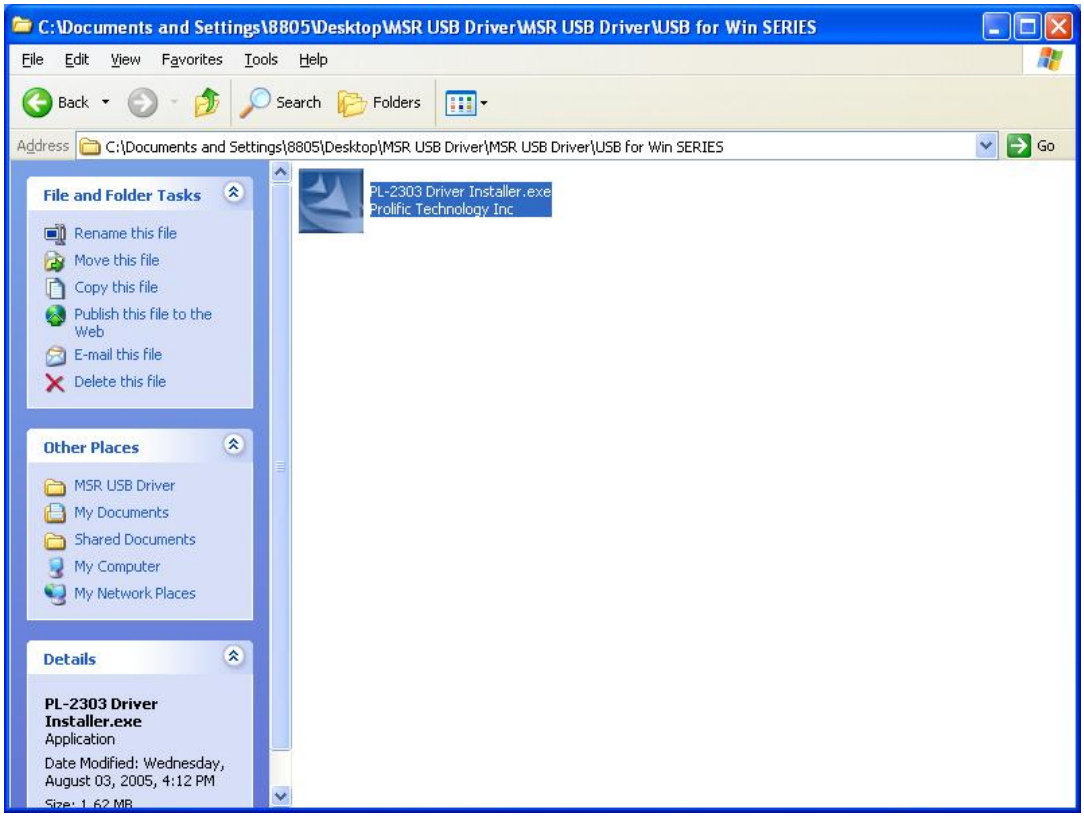
1. Insert CD-ROM and select "MSR USB Driver" folder.



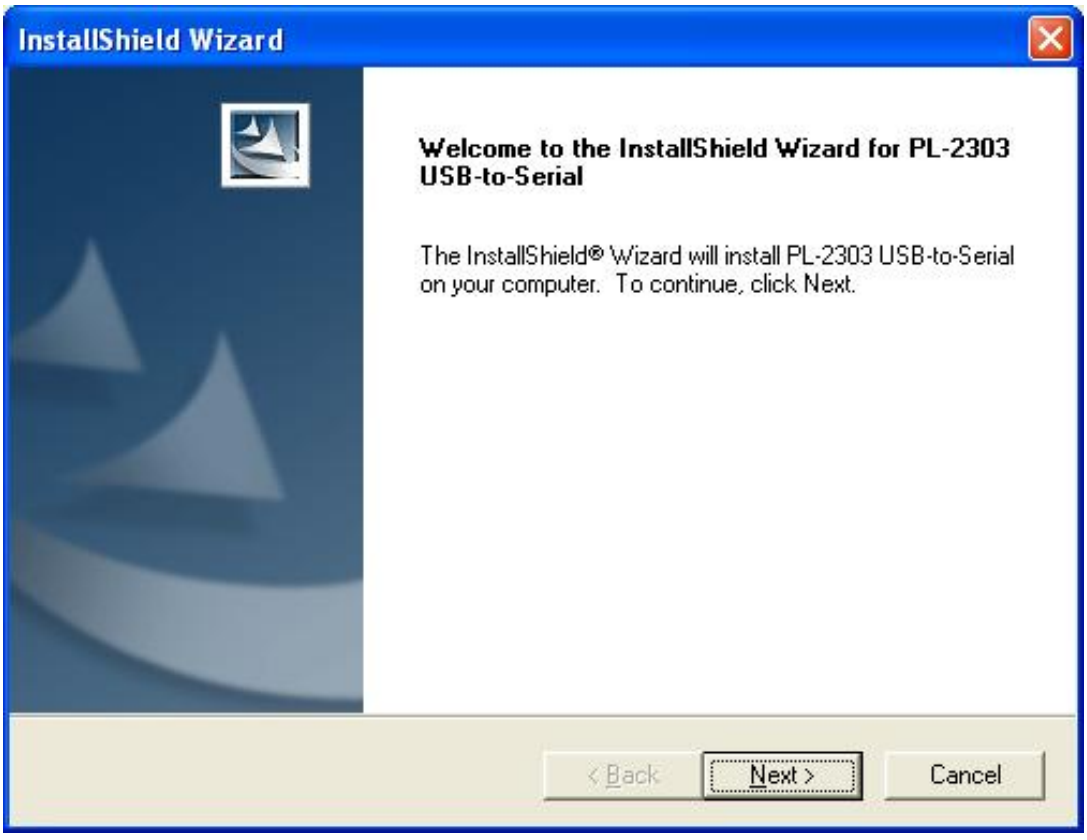
2. Then select "USB for Win SERIES" folder.



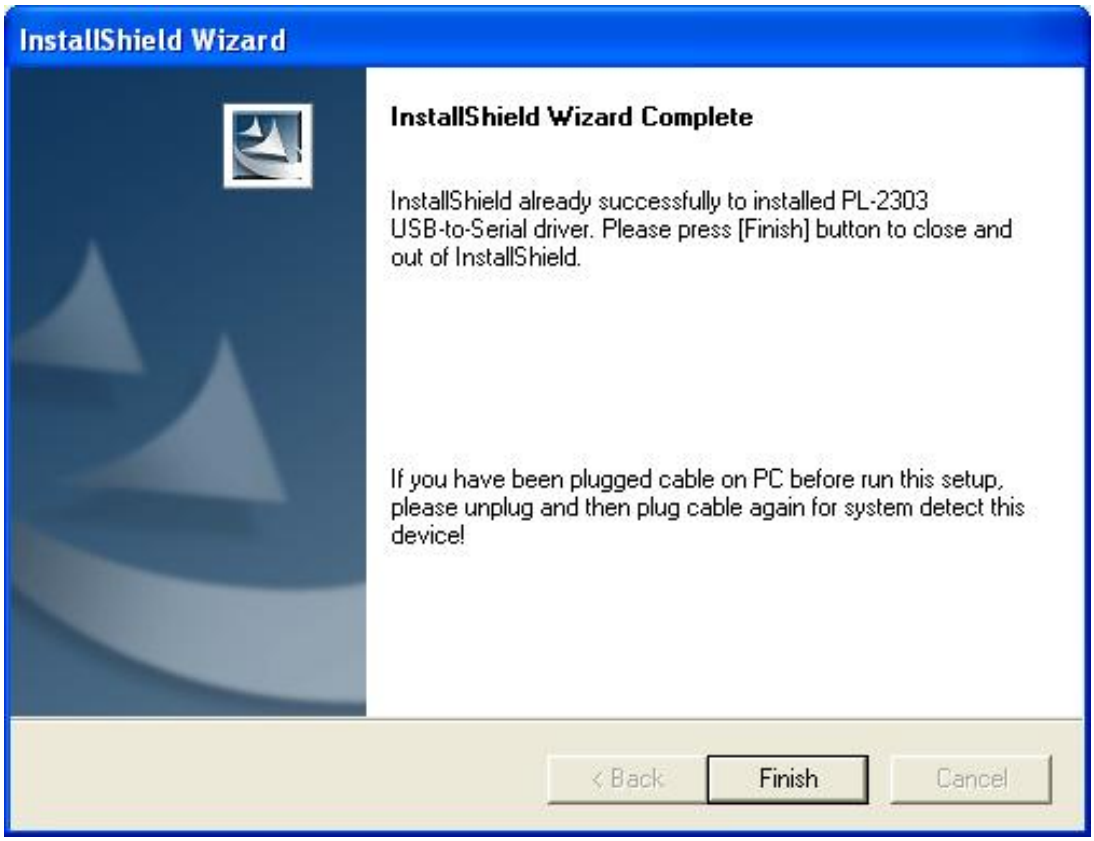
3. Select "PL-2303 Driver Install.exe".



4.When the setup screen appears then to select "Next" step.



5. After the installation completes, please select " Finish" and restart the computer.



1218 USB Driver for Windows

Specification.:

1. Support Microsoft Windows 95,98,ME,NT,2000,XP
2. Support Visual COM port.
3. Plug and Play.

How to Install:

1.When you plug-in 1218 USB, Windows operating system will detect new hardware.

a. Follow indicated steps to install the drivers (Please select the driver in the disk) and finish the installation.

How to Test Visual COM:

1. After you installed 1218USB driver, then hardware will assign an USB simulated COM for 1218USB. So, you have to check the USB assigned COM port from "Device Manager" of windows operating system before you starting to get data from 1218USB .
2. Use COM test software to open simulated com port . Setting COM port as 9600-N-8-1.
3. Swiping the magnetic card, tracks data will be shown on the screen.

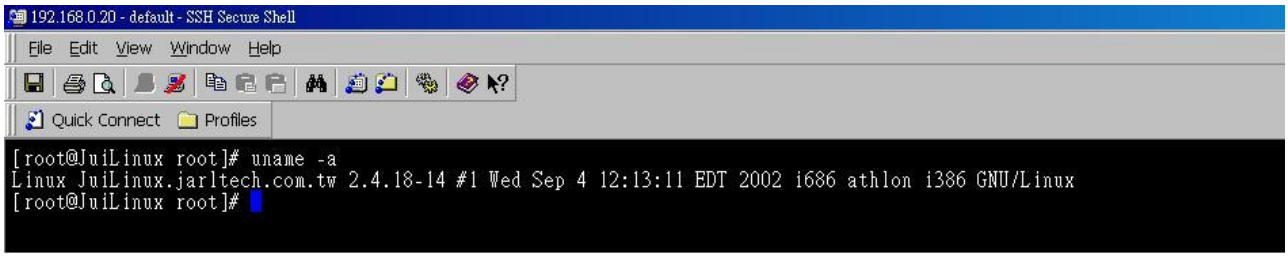
Installation for Linux

1218 USB Linux Driver:

Linux Driver supports for RedHat 7.3 / 8.0 / 9.0 Only

1. At present, the determination uses the core edition(below blue typeface is under the linux instuction).

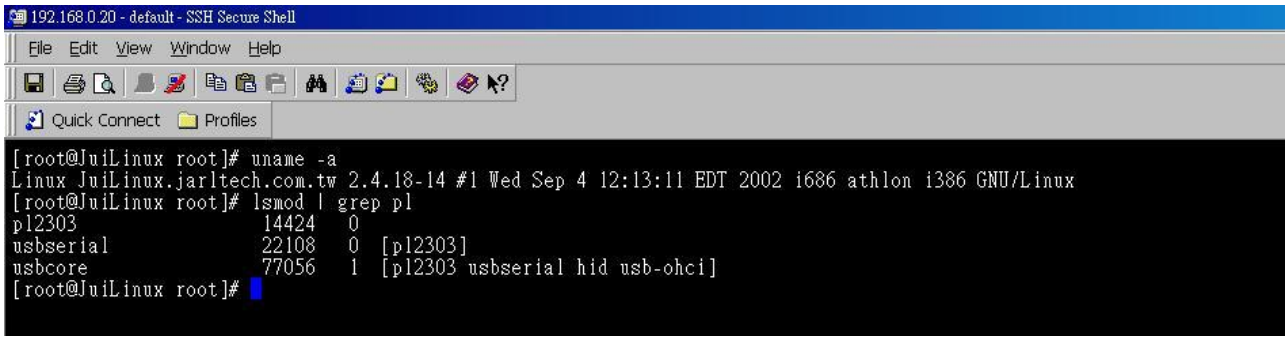
[root@JuiLinux root]# uname -a
Linux JuiLinux.jarltech.com.tw 2.4.18-14 #1 Wed Sep 4 12:13:11 EDT 2002 i686 athlon i386 GNU/Linux



2. After the product installation, it determines the driver has written down correctly (Plug-in USB port to able to hear "Beep").

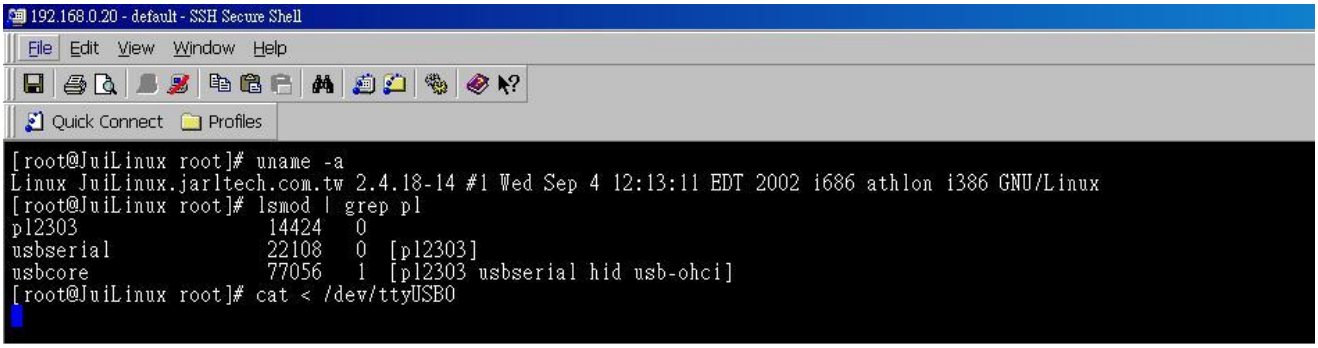
[root@JuiLinux root]# lsmod | grep pl

pl2303	14424	0	
usbserial	22108	0	[pl2303]
usbcore	77056	1	[pl2303 usbserial hid usb-ohci]

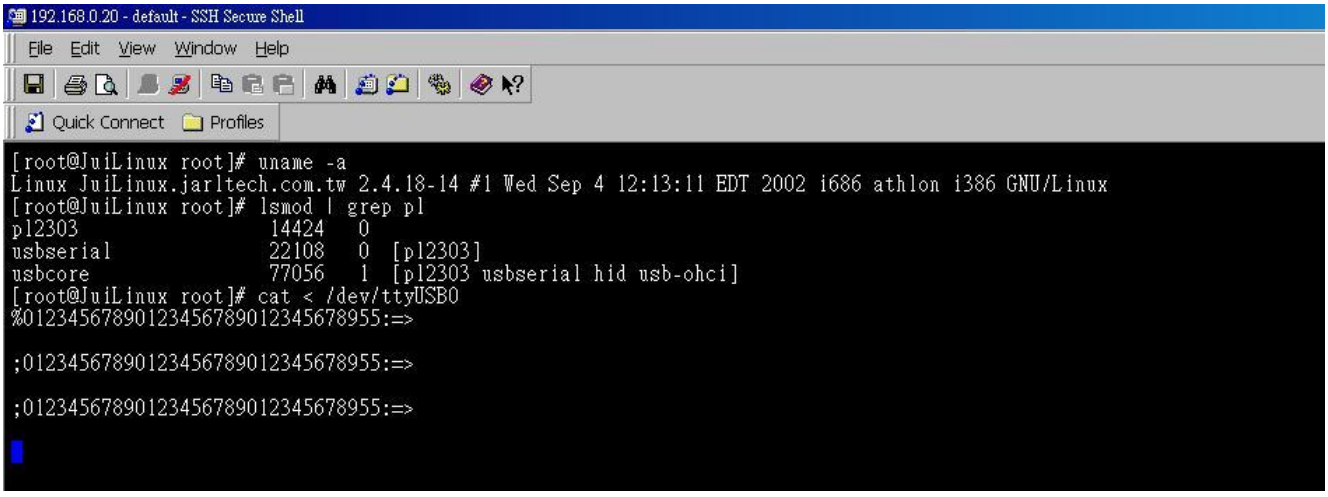


3. Obtain the data from USB0 .

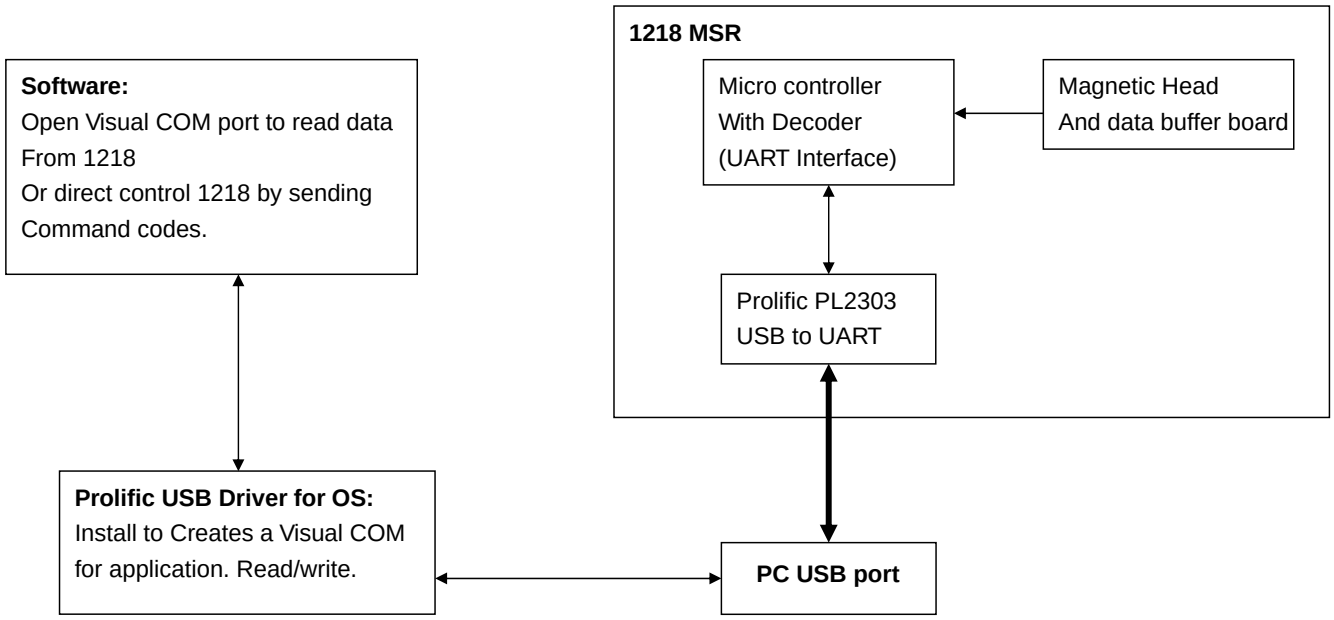
[root@JuiLinux root]# cat < /dev/ttyUSB0



4.

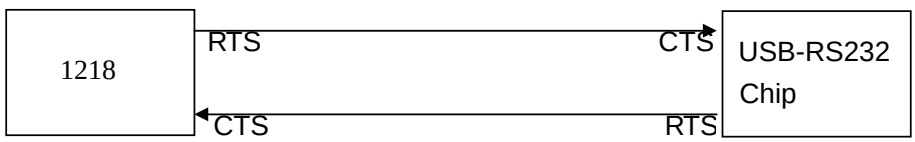


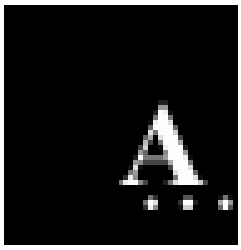
1218 USB / Device and Driver block chart v1.0



1218 Handshake with visual COM

1. 1218 uses RTS / CTS handshake check with USB-RS232 chip.
2. When PC software needs to send data to 1218, check CTS of PC side in advance.
   If no action, it means 1218U is busy, PC software stop sending data, wait for CTS ready then start sending.
3. When 1218 needs to send data to PC, check CTS of 1218side in advance.
   If not active, means PC is busy, 1218 stop sending data, wait for CTS ready then start sending.





Appendix I : Specifications

Model	**1218**		
Decoding Capability	Triple-tracks: Tracks 1 & 2 & 3		
Card Reading Speed	7.5 to 125 cm/sec		
	Bi-directional		
Card Format Supports	ISO standard 7810,7811,7812,7813		
Magnetic Head Life	300,000 passes		
Status Indicator	Audible beep for each		
	Successful reading		
System Compatibilities	RS232C interface : IBM AT, Compatibles.		
	USB interface : USB port on IBM AT or compatibles		
	Keyboard Wedge Interface : IBM AT, PS/2		
Power Requirement	Model MSR K: from KB port.		
	Model MSR R: from USB power(+5V DC)		
	Model MSR U: from USB port (+5V DC)		
Power Consumption	During operation: max 300 mA		
	While idle: 60 mA		
Physical Dimension			
Dimension (L)x(W)x(H)mm	Physical: 115mm x 46mm x 34mm		
	Package: 238mm x 146nn x 47mm		
Weight	N.W: 100g		
	G.W: 110g		
Color	Black, White		
Environment			
Operating Temperature	0℃~ 45℃ (32℉ ~ 113℉)	Storage Temperature	-20℃~ 60℃ (-4℉~ 140℉)
Operating Humidity	0% ~ 80% RH non condensing	Storage Humidity	10% ~ 90% RH non condensing
Certification			
EMC & Safety	FCC, CE, RoHS, Class A		

This equipment has been tested and found to comply with the limits for Class A 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 if not installed and used in accordance with the instructions may cause harmful 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 correct 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. This booklet is available from the U.S. government Printing Office, Washington, DC 20402, Stock NO.004-000-00345-4.

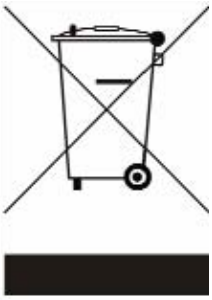
Caution:Any changes of modifications not expressly approved by the grantee of this device could void the user authority to operate the equipment.

Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received including Interference that may cause undesired operation.

FC Tested To Comply With FCC Standards
FOR HOME OR OFFICE USE

CE

Complies with RoHS



Troubleshooting

Q1. When 1218 USB plug-in the USB port, the operating system will require to install the driver?

Ans: It needs to install the specialized driver of 1218 USB. After installation, it will produce a virtual COM port in the administrator.

Q2: 1218 USB swipes with "Beep" sound, but the data can' t show up on the screen.

Ans: Step 1. Confirm the 1218 driver installation properly.
Step 2. Confirm the testing program of RS232 or COM operating properly and the opened COM port is correct.
Step 3. Confirm the Baud Rate of opening COM port is 9600.
Step 4. Confirm there is no application program using the COM port.
Step 5. If the "Beep" sound is long-short-short, it means the card reader can' t read the data from the card. Please check the card status in advance is available or change new card for testing.

Q3.1218 USB plug-in to USB port, there is no reaction.

Ans: A. Use other USB devices for testing the USB port is available or not.
B. If the USB port is ok, use new 1218 USB for testing the unit is available or not. If not available, it means the 1218 USB is damaged.

Q4. The 1218 USB transmission speed?

Ans: Please note the USB communication Interface is 1.1 Version. The transmission Baud Date of the virtual RS232 COM port is 9600bps-N-8-1.

Q5. Why 1218RS232 needs to connect the 5V Power supply?

Ans: Because the PC Standard COM port doesn' t provide the output of power.

Q6. After connecting the cable of 1218 K keyboard to PC, the swiping data can't show up on the screen?

Ans: A. The connection of 1218 K keyboard cable should be ready before you turn on the computer. Otherwise, the keyboard device is no action.

B. Please use the software which can receive from the keyboard data for testing, such as Notepad, Microsoft Word…so on.

Q7. Installation of 1218 Series, how about the normal "Beep" sound?

Ans: Plug-in the power supply, it will have the response of sound, "Beep". After 1218 device automatically checks, 1218K will have 2 short sounds, 1218 USB/R will have 2 long sounds.The led indicator will present "Green."

If the sound is 1 short and 1 long sound, the led indicator is glimmering and exchanging. It means the 1218 firmware is wrong. Please check the firmware version and upgrade it.