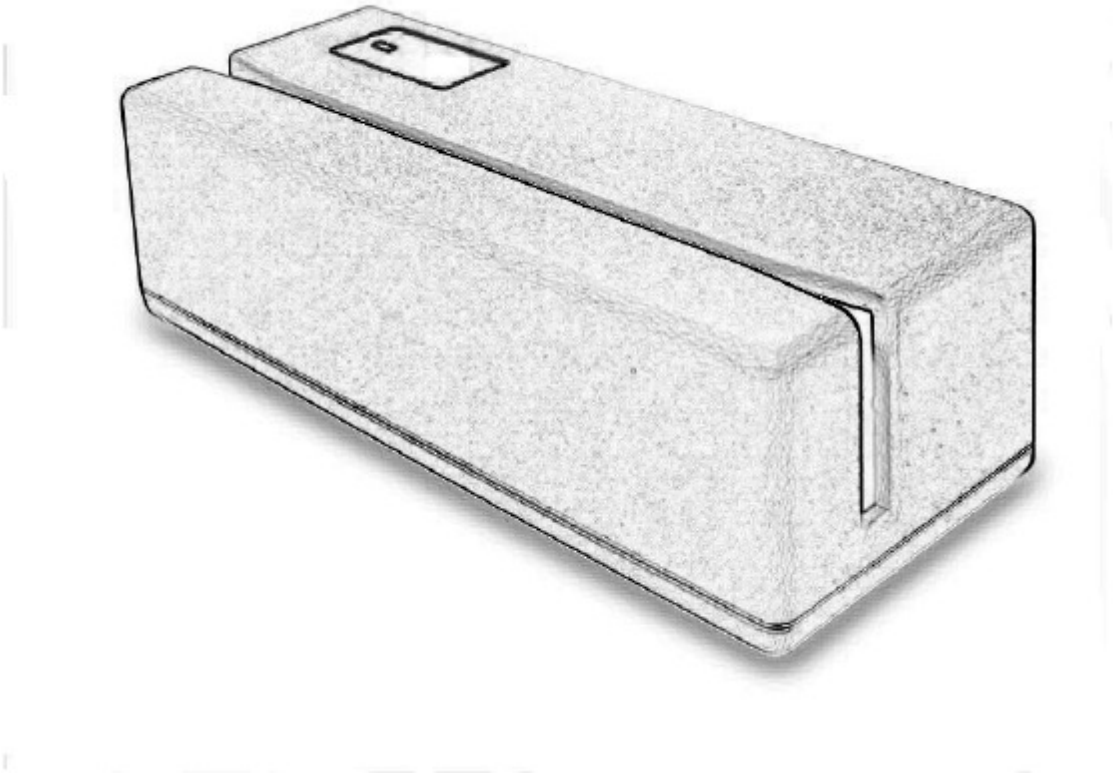
Magnetic Stripe Reader
SERIES 1290

Version 2.0



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 aresidential 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 causeharmful interference to radio or television reception, which can be determined by turning the equipment off and on.

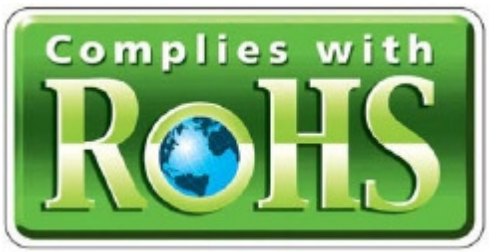
The user is encouraged to try correct interference by one or more of the following measures:

- 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's 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.



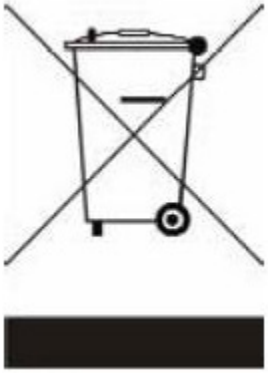




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CHAPTER 1 *Appearance*

MSR 1290

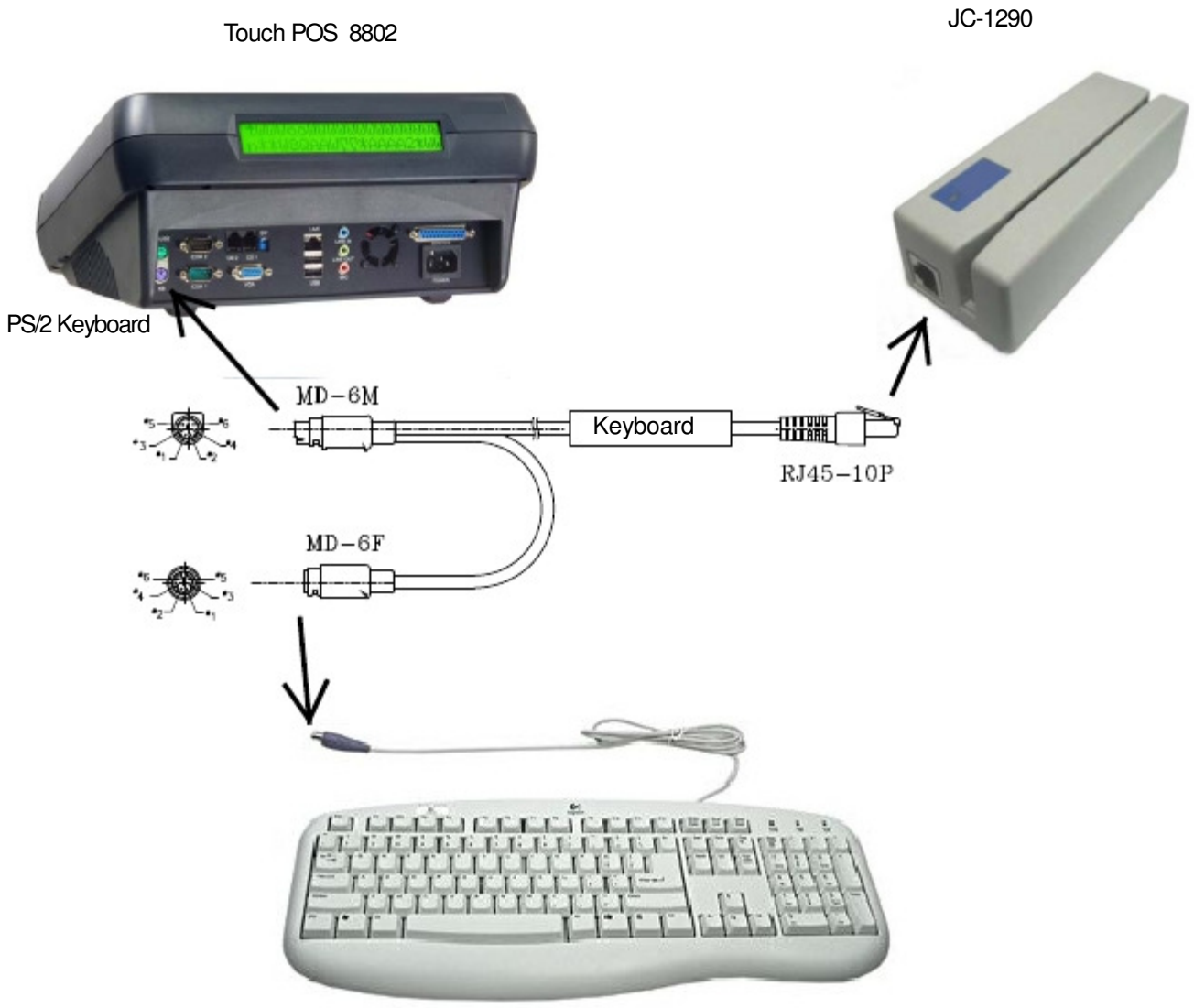


RJ-45 Connector

CHAPTER 2 *Installation*

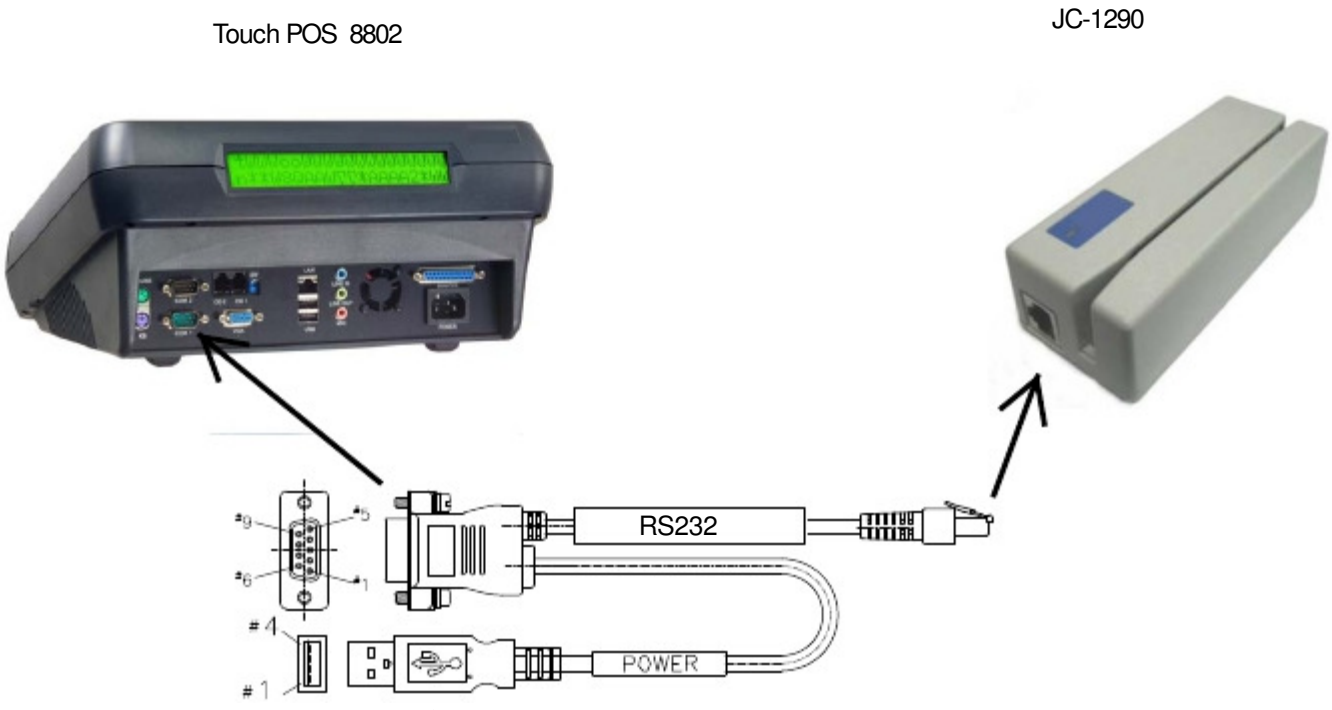
2-1. JC-1290 KB series

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.



2-2. JC-1290 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 .



2-3. JC-1290 USB series (USB-KB & USB-RS232)

Step 1: Connect to the computer

!

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

! ! !

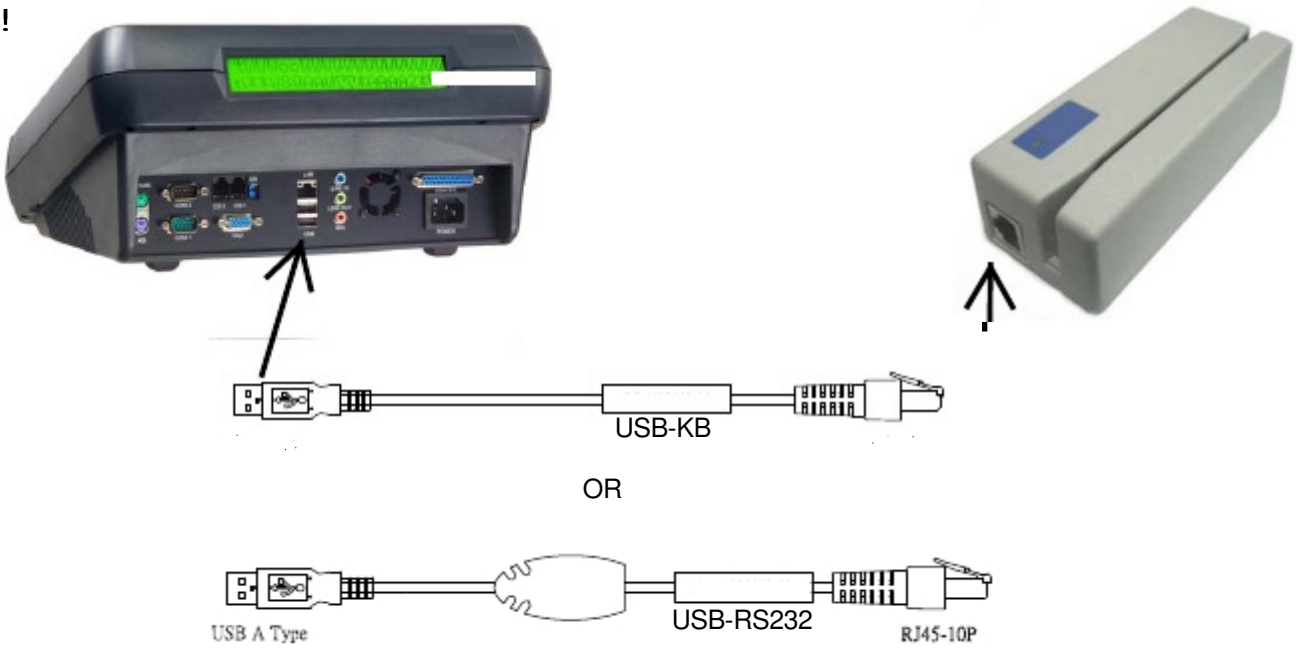
! ! !

Touch POS 8802

JC-1290

!

!



! !

G j h v s f 3

! ! ! ! ! ! ! !

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

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.

CHAPTER 3 *Driver Installation*

JC-1290 KB series : Standard PS/2 keyboard interface.(no driver needed)
JC-1290 RS232 series : Standard com port interface.(no driver needed)
JC-1290 USB-KB series : Standard usb keyboard interface.(no driver needed in Win2K/XP/2003/Vista)
JC-1290 USB-RS232 series : CP210x Visual COM V5.0 for Win2K/XP/2003/Vista

Please refer to the following picture to install USB-RS232 driver

1290 USB Driver for Windows

Specification.:

1. Support Microsoft Windows 2K/XP/2003/Vista
2. Support Visual COM port.
3. Plug and Play.

How to Install:

1.When you plug-in 1290 USB, Windows operating system will detect new hardware.

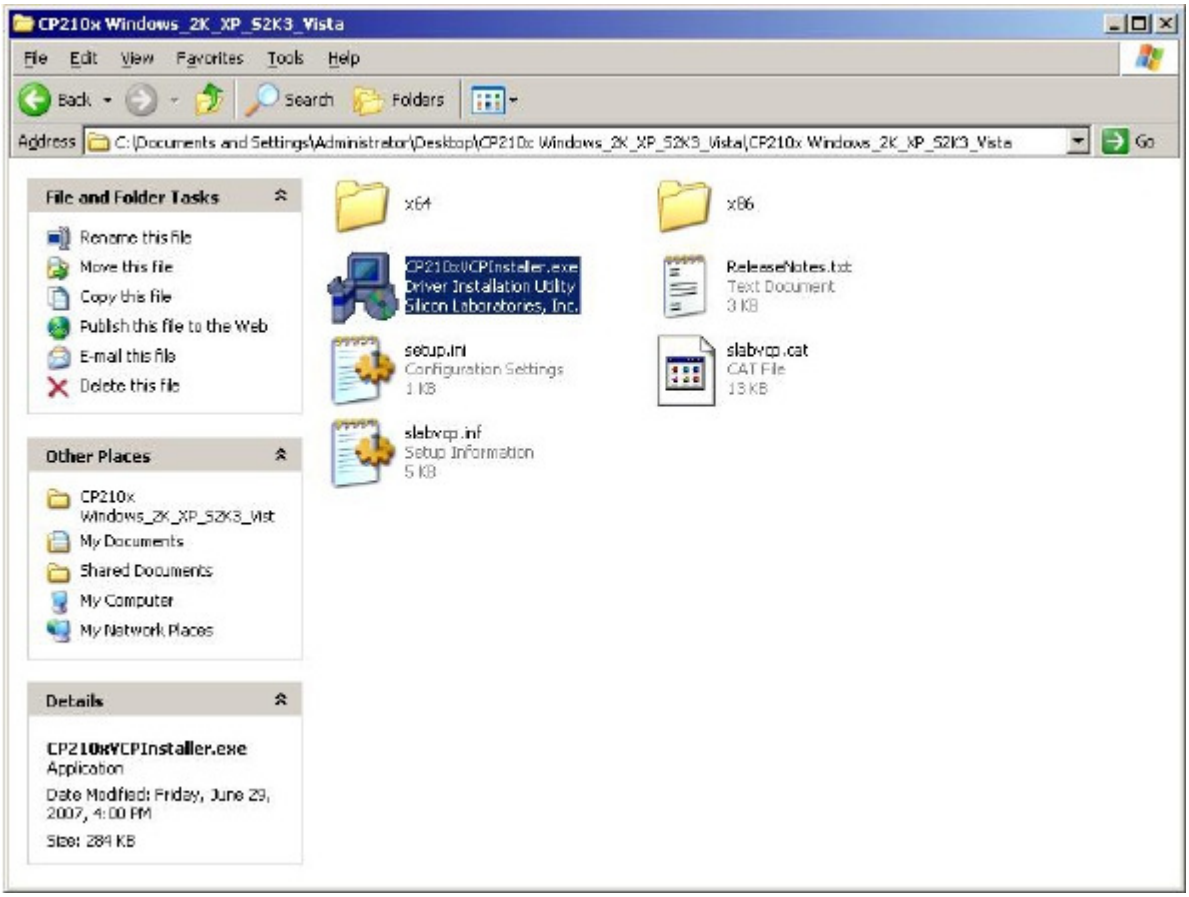
a. Follow indicated steps to install the drivers (Please select the driver in the disk) and finish the installation.

How to Test Visual COM:

1. After you installed 1290USB driver, then hardware will assign an USB simulated COM for 1290USB. So, you have to check the USB assigned COM port from "Device Manager" of windows operating system before you starting to get data from 1290USB .
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.



Insert CD-ROM and select "CP210x windows_2K_XP_S2K3_Vista" ***folder.***



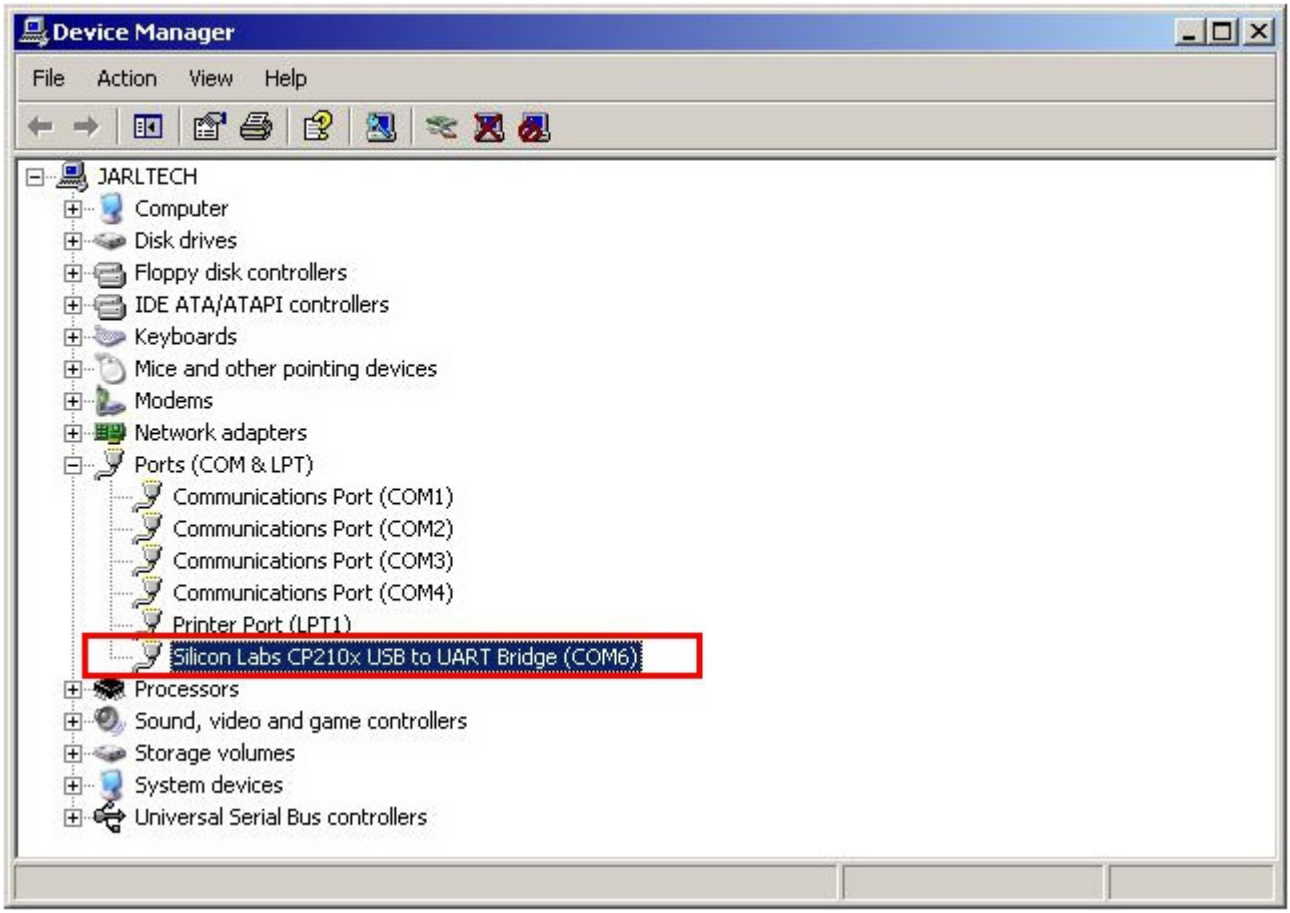
Please select the "**CP210xVCPInstaller.exe**"



When the setup screen appears than to select "**Install**" step.



After installation complete select "**OK**".



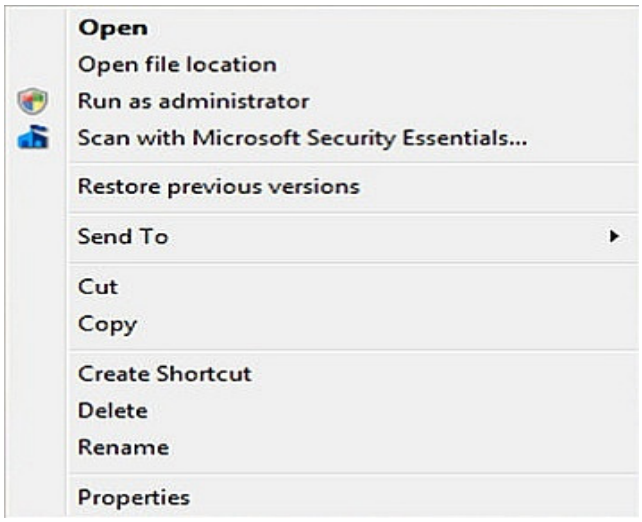
Please connect the 1290 USB-RS232 to computer, then check the device installed normally in device manager.
"Silicon Labs CP210x USB to UART Bridge(COM6)"

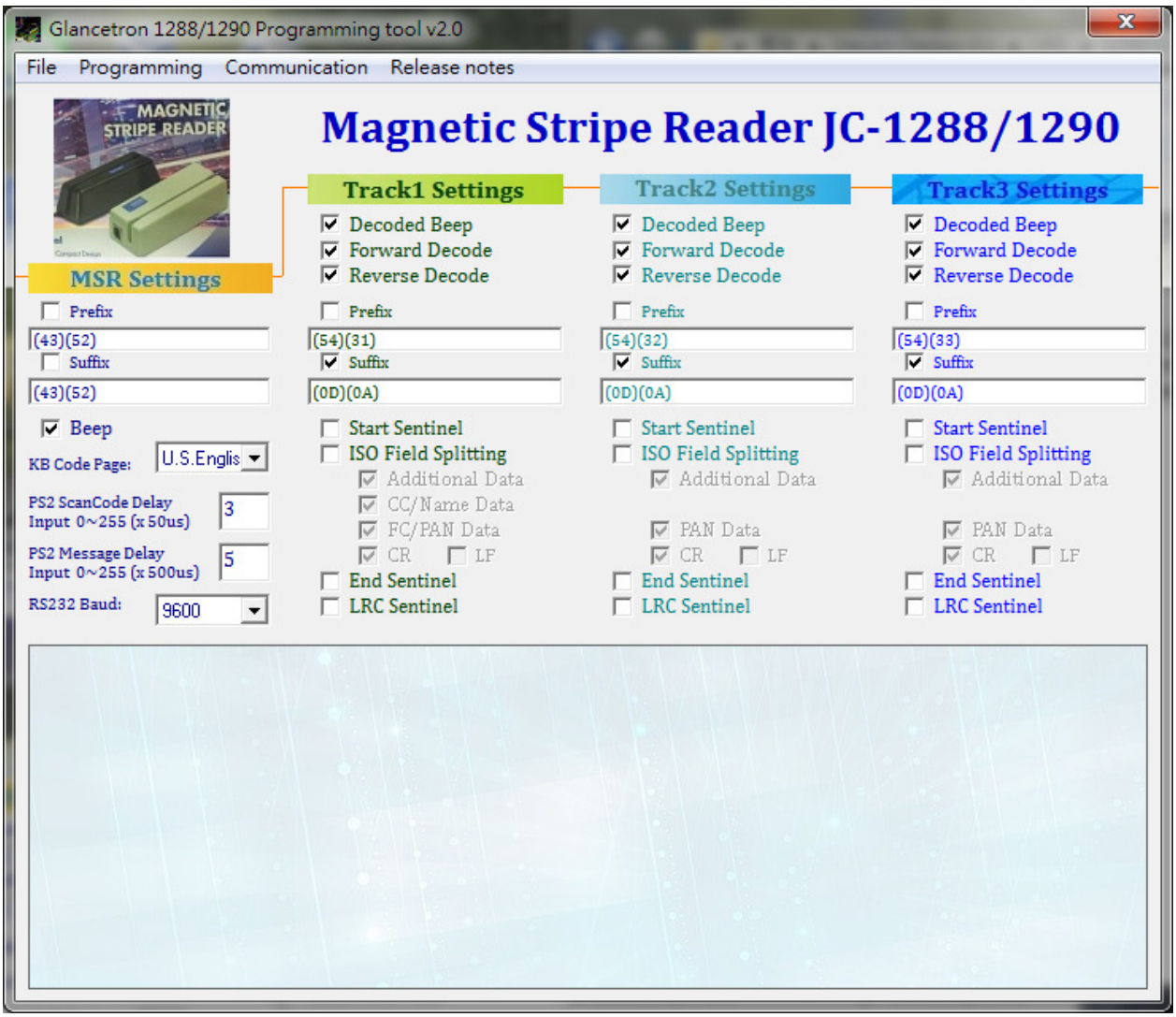
Notes: COM number may be different on each computer.

CHAPTER 4 Programming Tool v2.0

(1) Copy the folder "1288-1290 Programming v2.0" from the CD to the HDD, Do not run programming tool from CD.

(2) Mouse right click on the "1288-1290 Programming tool v2.0.exe" for run as Administrator.



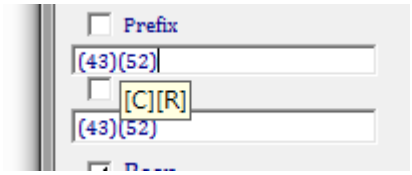


The 1290 output card data block format :

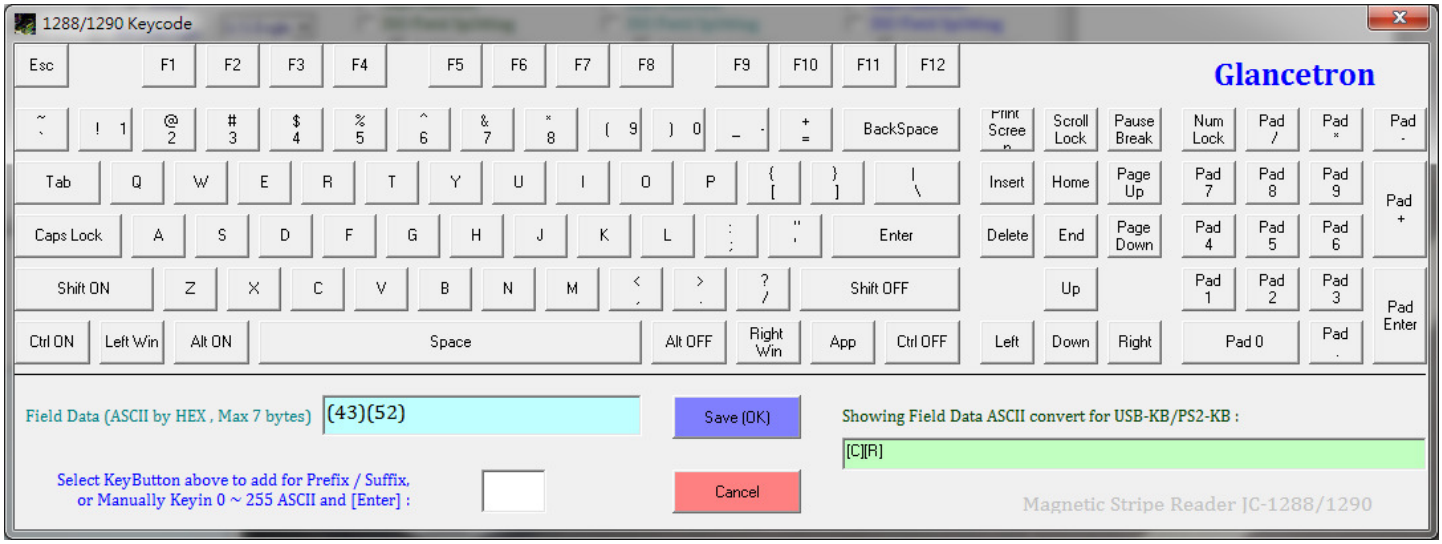
< MSR Prefix > < Track1 Prefix > <ISO Start Sentinel> <ISO Field or data> <End Sentinel> <LRC Sentinel> <Track1 Suffix>
< Track2 Prefix > <ISO Start Sentinel> <ISO Field or data> <End Sentinel> <LRC Sentinel> <Track2 Suffix>
< Track3 Prefix > <ISO Start Sentinel> <ISO Field or data> <End Sentinel> <LRC Sentinel> <Track3 Suffix><MSR Suffix>

Edit Prefix / Suffix:

In the field it shows the codes of prefix / suffix.
To move the mouse cursor on the filed of Prefix / suffix for over 1 second,
It will display the real code name of prefix / suffix.



Click on the field of prefix / suffix, shows emulate keyboard for edit field:



(a) Click on the keys , to add key code in the field for prefix / suffix

(b) Manually keyin 0~255 ASCII code for the prefix / suffix,
Please note this is for RS232 mode output,
If the card reader with USB-KB / PS2-KB interface cable then the output codes will be converted.

(c) Click button "Save (OK)" when finish, or click "Cancel" for abort field edit.

Data Settings :

MSR Settings

Beep:
Enable / disable sound when MSR reading error.

KB code Page:
Select language code page for data output , this is only for USB-KB / PS2-KB interface.

PS2 ScanCode delay:
Enter 0~255 (x50us) for PS2 interface Key Scan code delay (for fix older PC protocol timing)

PS2 Message delay:
Enter 0~255 (x500us) for PS2 interface Key message delay (for fix older PC protocol timing)

Track1 Settings | Track2 Settings | Track3 Settings

Decoded Beep:
Enable / disable sound when decoded ok for tracks

Forward Decode:
Enable / disable Forward decoed for tracks.

Reverse Decode:
Enable / disable Reverse decode for tracks.

Note : Disable both Forward and Reverse will disable the track decode.

Start Sentinel:
Enable / disable ISO standard start sentinel
(Track 1 start sentinel is “% “, Track 2 / 3 start sentinel is “; “)

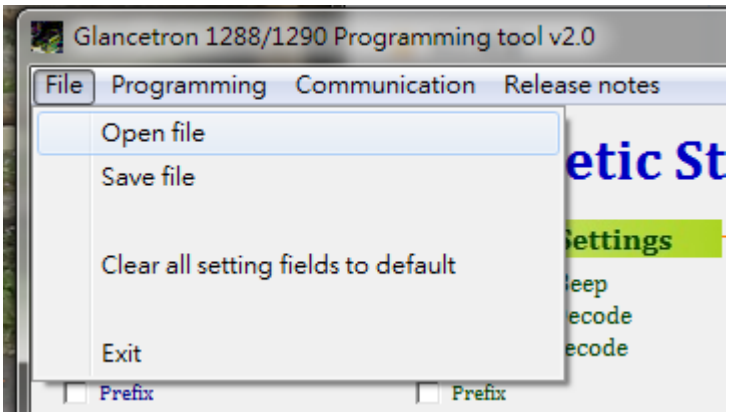
ISO Field Splitting:
Disabled (unselected) : Output all field data in the track.
Enabled (selected) : User can define which filed data will be output,
Every filed data will be output with [CR] or [LF] if be seleced
(Enter / Line feed)

End Sentinel:
Enable / disable ISO standard end sentinel
(The end sentinel is “? “ for all tracks)

LRC Sentinel:
Enable / disable the LRC sentinel is the checksum character for the data of card track.

Programming tool function:

1. File:



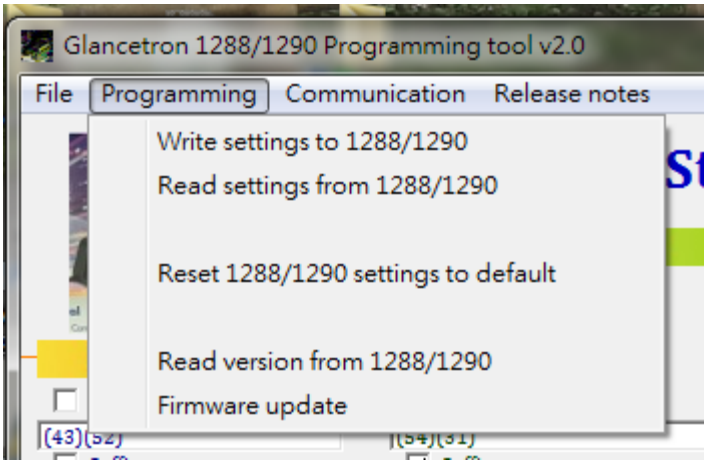
[Open file]: To open a settings file , the fields data on the screen will be replaced.

[Save file]: Save all settings to a file, type the file name manually to save as a different file.

[Clear all setting fields to default]: This will set all fields to default value.

[Exit]: This will close the programming tool.

2. Programming:



- Notes: The programming tool does not support PS2 interface programming.

[Write settings to 1288/1290]: Write all settings to 1288/1290, the programming tool will Auto search the 1288/1290 on all interfaces (USB-HID, USB-RS232, RS232) and show the results on the status message window.

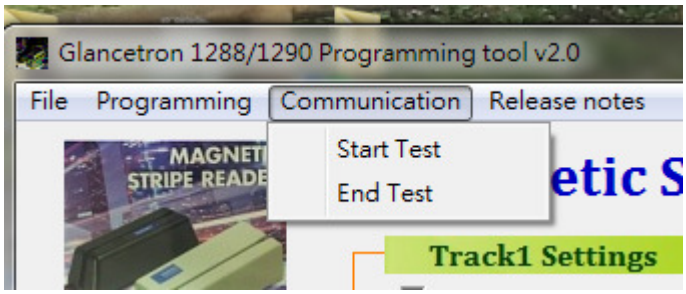
[Read settings from 1288/1290]: To read all settings from 1288/1290.

[Reset 1288/1290 settings to default]: This will reset 1288/1290 to factory default settings.

[Read version from 1288/1290]: To read firmware version of 1288/1290.

[Firmware update]: Update the 1288/1290 firmware to new released firmware.

3. Communication:



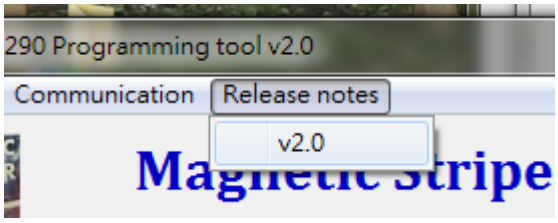
[Start Test]: To test reading card data with 1288/1290.

This is helpful to test the settings. Which programmed to 1288/1290 before.

Will auto search the 1288/1290 on all interfaces, the data will be showed on the status message window.

[End Test]: End 1288/1290 communication.

4. Release notes:



The history of programming tool release notes.

Switch Settings

This switch is provides the user for fast settings.

Default is all OFF

	OFF	ON
SW1	Track data sets by software	Fixed track data output: 1. Fully track data. 2. Fixed prefix: Track1 "%" , Track2 ";" , Track3 "+" 3. Send [ENTER] (KB mode) or <0Dh><0Ah> (RS232 mode) after each track.
SW2	Normal ISO Track 2	Track2 for Credit Card (Only Show Card number)
SW3	Auto Caps lock ON (USB-KB) when Card data output	Disable Auto caps lock ON
SW4	Prefix/suffix output in ASCII mode	Prefix/Suffix output in Scan code mode
SW5	Enable Buzzer	Disable Buzzer
SW6	Software sets RS232 Baud	RS232 Baud rate fix to 9600
SW7	Normal Operation	Reset all settings to default
SW8	Card Data output in ASCII mode	Card Data output in Scan code mode



Appendix I : Specifications

Model	**MSR JC-1290**		
Decoding Capability	Triple-tracks: Tracks 1 & 2 & 3		
Card Reading Speed	7.5 to 125 cm/sec		
	Bi-directional		
Magnetic Head Life	300,000 passes		
Card Format Supports	ISO standard 7810,7811,7812,7813		
Status Indicator	Audible beep for each		
	Successful reading		
Programming Capabilities	Track selection		
	Prefix (7 characters max.)		
	Suffix (7 characters max.)		
	Field selection		
	Start and end sentinel		
	LRC selection		
	Inter-character delay		
	Inter-scan code delay		
	RS232 parameters (baud rate,)		
System Compatibilities	RS232C interface : IBM AT, Compatibles.		
	USB interface : USB port on IBM AT or compatibles		
	Keyboard Wedge Interface : IBM AT, PS/2		
Interface	Standard RS232		
	Standard PS/2 Keyboard		
	USB-KB (USB Keyboard Mode)		
	USB-RS232 (USB RS232 Mode)		
Power Consumption	During operation: max 100 mA		
	While idle: 30 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		

Troubleshooting

Q1. When 1290 USB plug-in the USB port, the operating system will require to install the driver?

Ans: It needs to install the specialized driver of 1290 USB. After installation, it will produce a virtual COM port in the administrator.

Q2: 1290 USB swipes with "Beep" sound, but the data can't show up on the screen.

Ans: Step 1. Confirm the 1290 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.

Q3.1290 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 1290 USB for testing the unit is available or not. If not available, it means the 1290 USB is damaged.

Q4. The 1290 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 1290 RS232 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 1290 K keyboard to PC, the swiping data can't show up on the screen?

Ans: A. The connection of 1290 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 Note pad, Microsoft Word…so on.

Q7. Installation of 1290 Series, how about the normal "Beep" sound?

Ans: Plug-in the power supply, it will have the response of sound, "Beep". After 1290 device automatically checks, 1290 will have 2 short sounds, 1290 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 1290 firmware is wrong. Please check the firmware version and upgrade it.