Magnetic Stripe Reader

SERIES 1260 U

Operation Manual

Version 1.0

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 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.
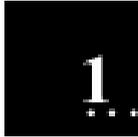
Contents

1. Introduction

1260USB is an advanced bi-directional, programmable magnetic stripe reader. That supports three formats: ***ISO standard format*** and ***North America driver license formats CADMV*** and ***AAMVA***. It is designed for use with credit authorization terminals, point-of-sale terminals, portable terminals, personal computers and banking terminals.

1260USB operates as a plug-and-play reader, which communicates with any computer or terminal via an USB interface. No software modification needed and easy installation.

What's in packing?

1260USB includes:
o 1 Pcs 1260USB Card Reader
o 1 User's Manual

2.∴ **Installation**

Step 1: Connect to the computer

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

Refer to Figure 2-1.

USB Port on Computer

1260 Card Reader

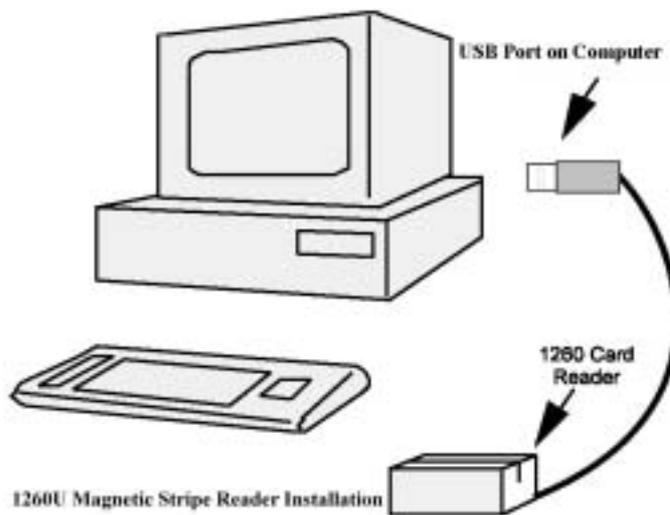**1260U Magnetic Stripe Reader Installation**

Figure 2-1

1260USB will have "Beep" sound to indicate that it is ready for operation.

Step 2: Driver installation for Windows98 & windows2000

1260USB simulates RS232 and Keyboard interface by USB with COM port selected. Following sections are 1260USB driver, utilities installation.

1. 1260USB Driver:

    a. Download 1260USB **Driver ZIP** files and extract them to your hard disk.

    b. When you plug in 1260USB, Windows operating system will detect new hardware for USB.

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

2. 1260USB Utility - Card Manger

    It helps you to complete COM port selection and it simulates the 1260USB reader as Keyboard interface or RS232 interface that you can easy to implement

to your application. Do the following steps to install it to your system.

After install 1260USB utility, it will make a shortcut to "start up" in windows "start" menu. That means the 1260USB will be with keyboard interface every time when you boot up your windows operating system (For details setting, please refer to Chapter 4).

a. Download 1260USB **Utility ZIP** files and extract them to your hard disk.

b. Execute "Setup.exe" of Disk1 in "Card Manger" folder.

b. Follow indicated steps to finish the installation.

- **Note:** *Windows NT: not support.*

3. 1260USB programming tools

The programming tool helps you to do customer programming on 1260USB reader. Do the following steps to install it to your system (For details setting, please refer to Chapter 5, Chapter 6).

a. Download 1260USB **programming tool ZIP** files and extract them to your hard disk.

b. Execute "Setup.exe" in Disk1 of "programming tool" folder.

c. Follow indicated steps to finish the installation.

Step 3: simulated COM port

After you installed 1260USB driver, then hardware will assign an USB simulated COM for 1260USB. So, you have to check the USB assigned COM port from "Device Manager" of windows operating system before you starting to run selection 1260USB simulated interface.
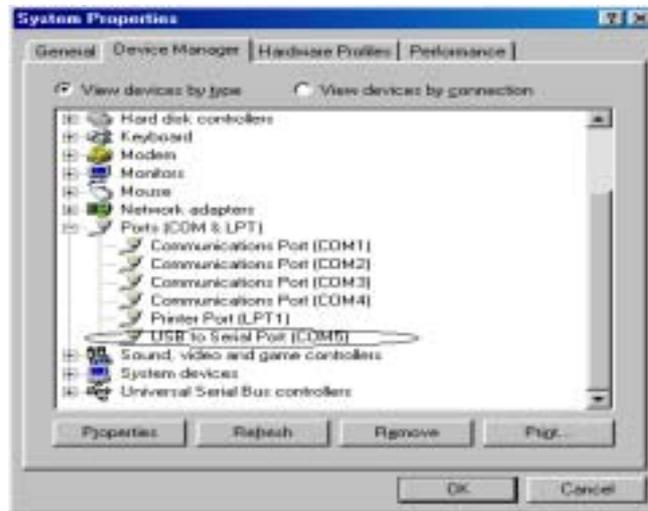
Figure 2-2

Step 4: Interface selection

When you finished step3, you are ready
to do interface selection.

Figure 2-3

1. RS232 interface:

Default setting is on RS232 interface. It's simulated by USB interface.
You may also select it by "Card Manager"

Figure 2-4

2. Keyboard Interface:

It's simulated by USB interface.
Because of default interface is RS232, therefore, when you are going to change interface to Keyboard interface, you have to run "Card Manager". In "Card Manager", select COM port, then select "keyboard" and press "Apply" ensures you are with keyboard interface.

Figure 2-5

- **Note:** If you are going to *programming 1260USB* or you would like to *change interface to RS232*, you must close card manager utility; otherwise, the 1260USB will keep with keyboard interface as it is default setting and you could not run "1260USB programming tool" when you are running with keyboard interface. .

Step 5: Setting for programming tool

The 1260USB is an advanced programmable magnetic stripe reader. It can be programmed to change many internal parameters to meet some specific or security concerned application. Do the following steps, if you would like to make

1260USB setting to be what you like:

1. Under Windows environment, to check USB simulation COM port, see which port can be assigned.

2. Make sure 1260USB has already set to RS232 interface. If you are using 1260USB as keyboard simulated interface, close "Card Manager" to set this 1260USB back to the RS232 simulated status.

- *Note:* 1260USB creates system an additional virtual COM port with a number which behind your current COM ports. After the 1260USB driver installed, you are advised to go to windows operation system "Device Manager" to check USB simulated COM port (See figure 2-2). You have to know which COM port number in hardware was assigned for your simulated Keyboard or RS232 interface. So that, you can refer it to your application and make sure it being used by correct COM port number.
Due to the COM port assignment; remember to close "card manager" Before running "1260U programming tool"

program. Otherwise, the card manager will occupy COM port (Which's you selected), and the "1260U programming tool" won't be able to execute.

3. Default values

The following describes default values of the series 1260USB magnetic stripe reader:

All Tracks Card Format: ISO

      Message prefix: None

      Message suffix: [Enter]

      Field splitting: Disabled

      Start Sentinel: Disable

      End Sentinel: Disable

      LRC Data: Disable

RS232 Interface

      Baud rate: 9600 bps

      Data Bit: 8 its/character

      Stop Bit: 1 bit

      Parity: None

Figure 3-1

4 Card Manager Utility

Step1. Select simulated COM port for 1260USB (See figure 4-1)

User can use "Card Manager" to define 1260USB simulated COM port to RS232 interface or Keyboard interface.

Once user executes "Card Manager", a message box will pop up on the screen, user has to choose the simulated COM port, which you check previously (Step2, Chapter2), to simulate the desired interface for next step.

Figure 4-1

Step2. Interface Selection (See figure 4-2)

1. Tick "Mode" item to choose what interface you want 1260USB to simulate either RS232 or Keyboard.
2. Press "Setting" to select USB simulated COM port as step 1.
3. Press"Apply" to apply setting
4. User can test the 1260USB onto the below diagnostic box, then press "Clear" to clear what you read in below window.
5. Press "OK" to minimize "card reader" window. (Click the "X" button in this window on the top of right side, if you would like to close "Card Reader")

Figure 4-2

- **Note:** To check the USB simulated port that you can use form operation system's (windows98/ME/2000…) hardware configuration before you execute "Card Manager".

5. **Custom Programming Tool**

This section describes for programming tool of 1260USB magnetic stripe reader to match the specific requirements of your application environment.

Use the utility: JC1260U.EXE to define the specific parameters for your reader and program it directly under 1260USB programming tool

Step 1: Install programming tool to hard disk

Execute setup.exe from folder "Programming tool"; the install shield will help you to complete installation.

Step 2: Connect USB reader to the computer or terminal

See the previous section in this manual. (Figure 2-1)

Step 3: Execute JC1260U.EXE under windows environment

After you install 1260USB programming tool,
it will create a shortcut automatically in
"Programming Tools" of windows start menu's
"program", it will be named: 1260VBXX (XX
is version number). You may execute it from
this shortcut.
Click "1260vbXX" form windows start
menu\program\Programming Tools to begin the
program window; an example of the screen
is illustrated in Figure 6-1. The program will
ask you to select the basic parameters.
Follow the instruction step by step and
select the specifications that you want.

a. Factory fixed the connection interface port to
   the RS232.
b. Select tracks with the reader.
c. Select the data formats which can be multiple
   selections.
   To tick on ISO format; CADMV format; AAMVA
   format to specify this reader to work with ISO,
   and AAMVA formats.
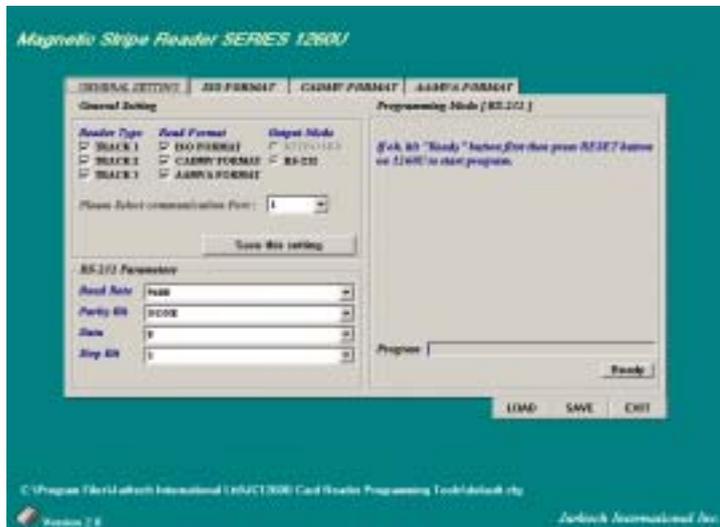
Figure 5-1

Step 4: Refer Figure 5-1

The utility needs you to define more settings for your card reader. Follow the guide box under the screen to specify the settings to match your requirements.
After your definitions, enter [Save this setting] to save your settings into the file "DEFAULT.CFG".

Step 5: Press [Ready] to program the reader

To record all your settings to 1260USB card reader, press "Ready" then hit the button at the bottom of the 1260USB utility to start the

program. You will hear a beep and see the LED on the reader flash while it is programming. It will take around ten seconds and then you will hear a long beep to indicate the ending of programming.

Note: *Remember to check USB simulated COM port number before you select COM port in programming tool.*

More Descriptions about the Settings
(*Refer to Figure 5-2 ~5-4*)

- **PREFIX and SUFFIX**

  Using PREFIX and SUFFIX allows you to differentiate between each track; you may input any 16 characters from ASC (001) to ASC (255) as prefix and/or suffix.

  Press "**Save this setting"** to accept your definitions or press [EXIT] to abort.

- **FIELD SPLIT**

  Click *FIELD SPLIT* to enable the field split. Once this field was enabled, the reader will add a [CR] + [LF] at end of each field automatically

- **START, END SENTINEL and LRC DATA**

When these settings are enabled, the card reader will automatically send these characters to computer together with the track data.

- **BAUD RATE of RS232 mode**
  Click to select the baud rate from 2400 to 19200bps. (See Figure 5-1)

- **PARITY BIT of RS232 mode**
  Click to select the parity bit among even, odd and none.

- **DATA BIT of RS232 mode**
  Click to select the data bit between 8 and 7.

- **STOP BIT of RS232 mode**
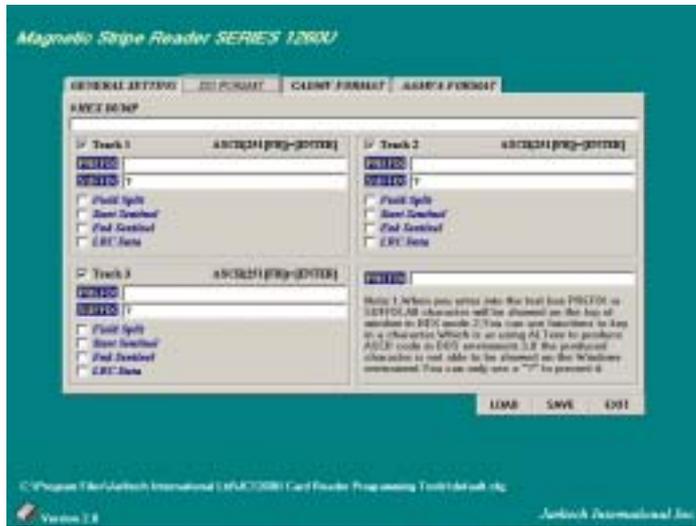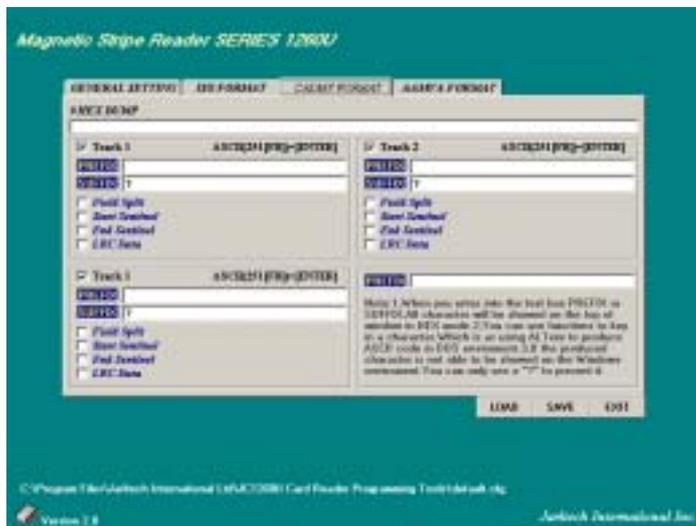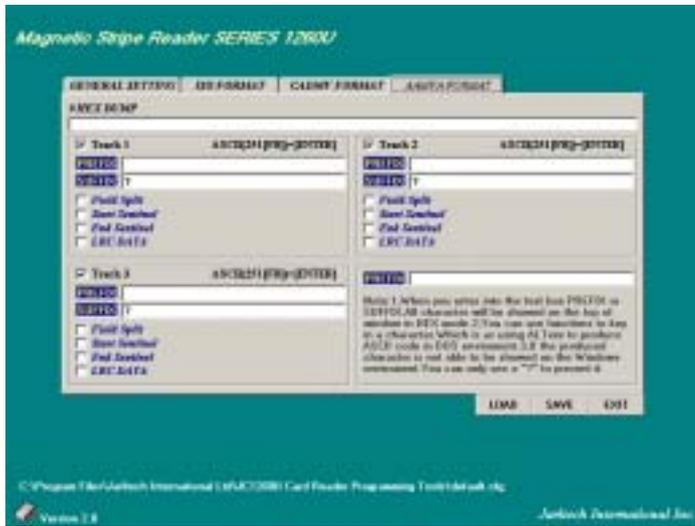 Click to select the stop bit between 1 and 2

Figure 5-2

Figure 5-3

Figure 5-4

6. JC1260U.INI & DEFAULT.CFG

This section describes **JC1260U.INI** and **DEFAULT.CFG** files. You can generate the parameters in these files with a word processor, with the TXT file format, and then program your reader directly. The changing result will be the same as you use "1260USB programming tool".

Figure 6-1

Step 1: Install software to your hard disk

After Programming Tool installation, it'll create a folder:
C:\Program Files\JC1260U Card Reader Programming Tools

With the DEFAULT.CFG and
JC1260U.INI will be inside the folder.

Step 2: Make sure the RS232 interface is uses to program card reader

Series 1260USB can only be
programmed via RS232 interface.

Step 3: Check the JC1260U.INI with your environment

The contents in the JC1260U.INI should
be as follow:

Users can modify it with any kind of word
processor utility. You are advised NOT to
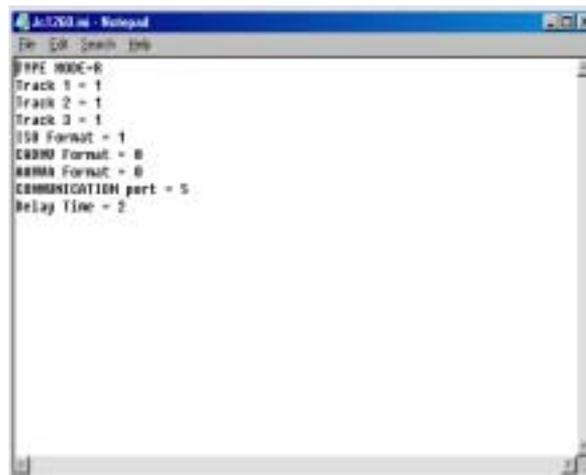change the location and texture of each
command.

Figure 6-2

TYPE MODE=K; K= Keyboard mod
                   R= RS232 mode
TRACK 1=1; 1= Enable 0= Disable
TRACK 2=1; 1= Enable 0= Disable
TRACK 3=1; 1= Enable 0= Disable

ISO FORMAT=1; 1= Enable 0= Disable
CADMV FORMAT=1; 1= Enable 0= Disable
AAMVA FORMAT=1; 1= Enable 0= Disable
COMMUNICATION PORT=1; 1= COM1
                             2= COM2
                             :
   8= COM8
(This communication port value can be
  ignored while Keyboard wedge)

Step 5: Check the DEFAULT.CFG with your requirements

The user can save the current settings as an external file with fixed extension "CFG", and then load it into to program another 1260U in the future. (Mass unit's programming).
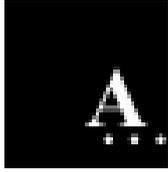The default value was saving as "DEFAULT.CFG".
Refer to Appendix III to check the settings

or modify the parameters. You can rename the file as any file name with the fixed extension "CFG". You are also advised NOT to change the location and texture of each command.
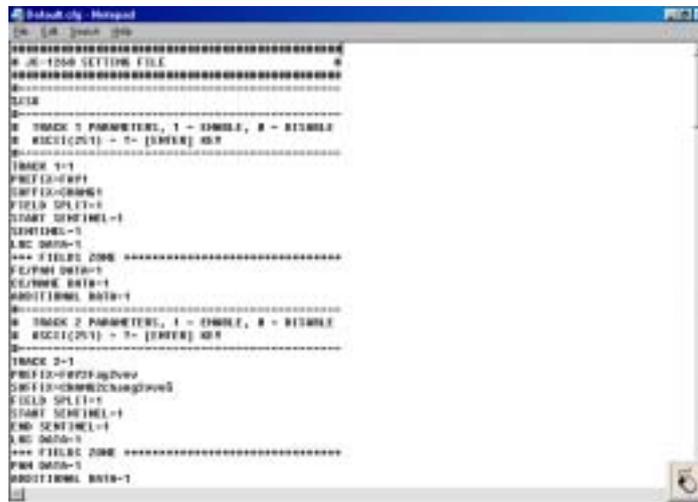
 Appendix I

Specifications

Decoding Capability
- Single-track: Track 1 or Track 2 or Track 3
- Dual-tracks: Tracks 1 & 2 or Tracks 2 & 3
- Triple-tracks: Tracks 1 & 2 & 3

Card Reading Speed
- 8 to 125 cm/sec
- Bi-directional

Magnetic Head Life
- 300,000 passes

Status Indicator
- Audible beep for each
- Successful reading

Programming Capabilities
- Track selection
- Prefix (16 characters max.)
  Suffix (16 characters max.)
- Field selection
- Start and end sentinel

- LRC selection
- Inter-character delay
- Inter-scan code delay
- RS232 parameters (baud rate, data bit, parity, flow control)

System Compatibilities
- 1260USB simulated standard RS232C and Keyboard interface operates with IBM AT, PS/2 and Compatibles.

Physical
- Dimensions: 100mm x 42mm x 27mm
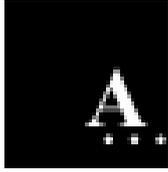- Weight: 183g

Environmental
- Operating temperature: 0 ~ 40℃
- Storage temperature: -20 ~ 60℃
- Humidity: 10% ~ 90% RH (non-condensing)

Power Requirement
- Model 1260U: from USB port.

Power Consumption
- During operation: max 300 mA
- While idle: 60 mA

Appendix II

The Pin assignment of the cable

#1 VCC

#2 DATA+

#3 DATA-

#4 GND

#5 Shields

31