

Main Features

- Software utility setting, easy to use.
- Bi-directional card swipe and read capability.
- Software and hardware modification is not required.
- Single, dual and tripe track(s) decoding, meet with ISO standards.
- Power up diagnostics.
- Card read confirmation by beep sounds.
- Magnetic head life: 300,000 passes minimum, 1,000,000 passes version can be requested.

Specifications

Electronics

Power supply	: +5VDC \pm 10%
Current consumption	: <100mA
Interface	: Keyboard Wedge, RS-232, or USB

Physics

Size	: 96mm(L) x 30.5mm (W) x 32mm (H)
Weight (g)	: 57g
Cable length	: 1.5M
Head life	: 300,000 pass minimum

Others

Storage temperature	: -40°C to +60°C
Operating temperature	: 0°C to +50°C
Operating humidity	: 20% to 90%

Basic Configurations

1. Green LED on the cover: Power on indicator.
2. Illuminate Red LED on the cover: Good read indicator.
3. Keyboard wedge cable: One cable-end with Female connector is connected to standard keyboard, while the other cable-end with Male connector is plugged into the keyboard port socket on the computer.
4. RS-232 cable: The cable-end is a Dsub 9 pins female connector with a DC-jack.
5. USB cable: The cable-end is a A-type USB connector.

Standard Package

- Reader x 1 piece
- Sticker x 2 pieces
- User's manual x 1 piece
- Bundled CD with setting software x 1 piece
- RS-232 model, connects with a fixed RS-232 interface cable, and bundled 1 piece of PS/2 power adapting cable
- Keyboard wedge model, connects with a keyboard wedge extended cable, and bundled one piece of RS-232 interface cable & 1 piece of PS/2 power adapting cable.
- USB model, connects with an USB extended cable, and bundled one piece of RS-232 interface cable & one piece of PS/2 power adapting cable.

note: The PS/2 power adapting cable is used to replace the AC-to-DC power adapter, can retrieve the 5VDC power from keyboard port.

Models

Keyboard Wedge Models:

TMSR-401	Track 1
TMSR-402	Track 2
TMSR-403	Track 3
TMSR-412	Track 1&2
TMSR-423	Track 2&3
TMSR-430	Track 1&2&3

RS-232 Models:

TMSR-501	Track 1
TMSR-502	Track 2
TMSR-503	Track 3
TMSR-512	Track 1&2
TMSR-523	Track 2&3
TMSR-530	Track 1&2&3

USB Models:

TMSR-U01	Track 1
TMSR-U02	Track 2
TMSR-U03	Track 3
TMSR-U12	Track 1&2
TMSR-U23	Track 2&3
TMSR-U30	Track 1&2&3

User's Manual

96mm-Length Mini-Type Magstripe Card Reader TMSR Series

*with Keyboard Wedge, USB, or RS-232 Interface
Program the Reader by software utility, Easy to use*



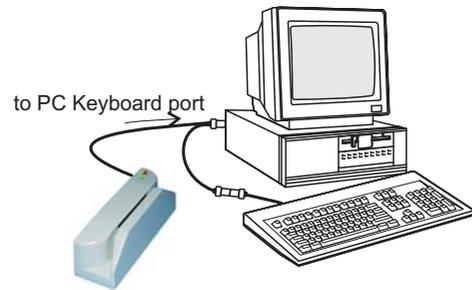
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Installation steps

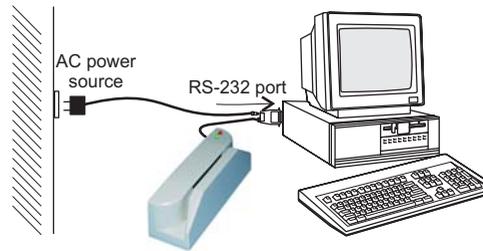
Keyboard Wedge Model:

- Step 1 Turn the computer system power off, and unplug the keyboard cable.
- Step 2 Connect the keyboard cable into the short-cable of the Reader.
- Step 3 Connect the long-cable of the Reader into the keyboard socket on the computer system.
- Step 4 Turn the computer system power on, then you can hear a beep sound for confirming the reader's self-test, and green LED will be lit to indicate that the reader is ready for operation.



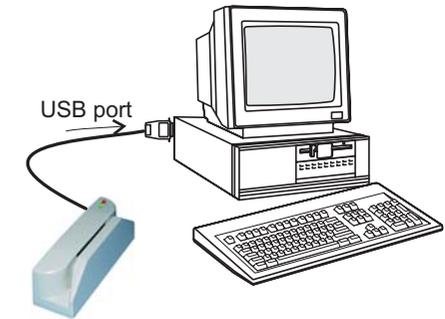
RS-232 Model:

- Step 1 Turn the computer power off.
- Step 2 Connect the Reader's cable to the RS-232 COM port on the computer.
- Step 3 Connect the DC-plug of 5V DC power adapter to the DC jack on the cable-end of the Reader, you can hear a beep sound for confirming the Reader's self-test, and the green LED on the Reader will be lit to indicate that the Reader is ready for operating.
- Step 4 Turn the computer power on, and run your application software, include one RS-232 drive utility, to get the data from the serial port which connects the Reader.



USB Model:

- Step 1 To make sure the Windows USB utility is available in your computer.
- Step 2 Connect the Reader to the USB port on the computer, you can hear a beep sound for confirming the Reader's self-test, and the green LED on the Reader will be lit to indicate that the Reader is ready for operating.



Reader's Programming/setting

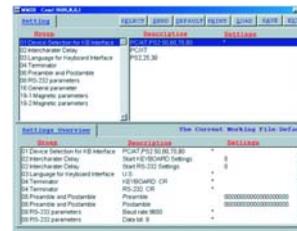
(Suggest to do the programming/setting under Windows system)

Note :

1. Suggest doing the programming/setting under Windows system
2. All settings should be done through RS-232 COM port, so the RS-232 model can be set directly through its installation.
3. To do the programming/setting of keyboard wedge or USB models, please refer to the Installation Steps of RS-232 model, using the bundled RS-232 extended cable and PS/2 power adapting cable to do the setting through RS-232 port.
4. After programming/setting, install back the keyboard wedge or USB extended cable to the reader.

Step 1 Insert the TMSR bundled CD into the CD drive of your computer system. Then execute "SETUP.EXE." to setup the program.

Step 2 To run the program "MMSR" that you just installed. You will see the following screen:



1. **SETTING:** the setting list as following
 - 01 Device selection for KB interface only available for KB interface
 - 02 Intercharacter delay select KB or RS-232 setting, then the delay time for intercharacter to match the sending speed.
 - 03 Language for keyboard interface select one language
 - 04 Terminator select one instruction following the data string
 - 06 Preamble and postamble set the preamble and postamble characters attached to the data string
 - 08 RS-232 parameters -to select the RS-232 parameters

- 16 General parameters to setup the data output mode and beep sound
- 19-1 Magnetic parameters to setup the track data sequence and magstripe format
- 19-2 Magnetic parameters to setup the start/end sentinel
2. **SELECT:** COM port selecting to select COM1 or COM2 port
3. **SEND:** to store the setting inside the Reader.
4. **DEFAULT:** to set the Reader as default setting.
5. **PRINT:** to list or print the setting result.
6. **LOAD:** to load the setting data to computer.
7. **SAVE:** to save the setting data into an indicated file.
8. **EXIT:** to exit from the setting program.
9. **Setting Overview:** to display all present settings.

Step 3 The Reader's setting procedure:

1. Select "SETTING" first, and setup all the parameters as you want.
2. Go to "SELECT", to select a COM port that connects the Reader.
3. Click "SEND", to store the settings inside the Reader and finish the setting.