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	: 96.2mm(L) x 30.1mm (W) x 32mm (H)
Weight (g)	: 57g
Cable length	: 1.5M
Head life	: 300,000 pass minimum

Others

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

Basic Configurations

1. Red LED on the cover: Power on indicator.
2. Illuminate Green 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
- Keyboard wedge model; reader equips a cable with PS/2 connector
- RS-232 model; reader equips a cable with female Dsub 9 pin connector and bundled with a PS/2 adapting power cable
- USB model; reader equips with a cable with PS/2 connector and an extended USB 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-01K	Track 1
TMSR-02K	Track 2
TMSR-03K	Track 3
TMSR-04K	JIS-II
TMSR-12K	Track 1&2
TMSR-23K	Track 2&3
TMSR-33K	Track 1&2&3

RS-232 Models:

TMSR-01R	Track 1
TMSR-02R	Track 2
TMSR-03R	Track 3
TMSR-04R	JIS-II
TMSR-12R	Track 1&2
TMSR-23R	Track 2&3
TMSR-33R	Track 1&2&3

USB Models:

TMSR-01U	Track 1
TMSR-02U	Track 2
TMSR-03U	Track 3
TMSR-04U	JIS-II
TMSR-12U	Track 1&2
TMSR-23U	Track 2&3
TMSR-33U	Track 1&2&3

note: MMSR is the model number for 100mm-Length Mini-type
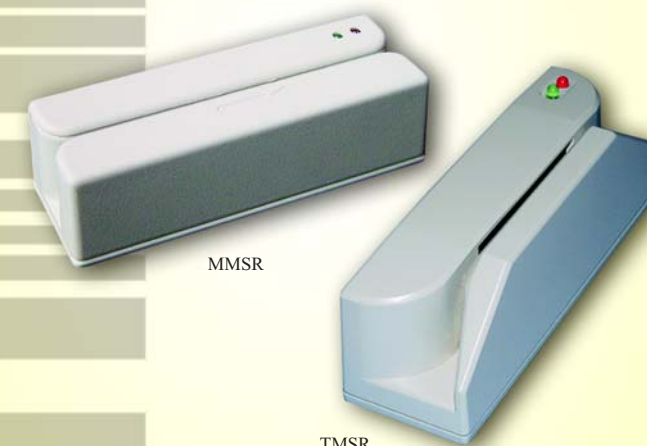
Contents

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 Red LED will be lit to indicate that the reader is ready for operation.

to PC Keyboard port
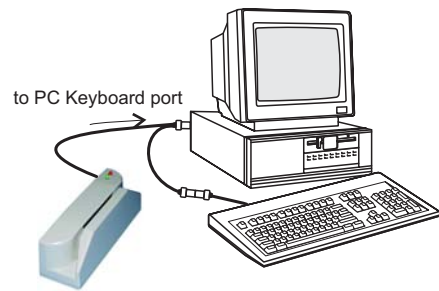
RS-232 Model:

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 Red 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.

AC power source   RS-232 port
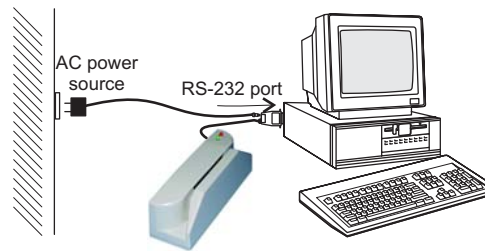
USB Model:
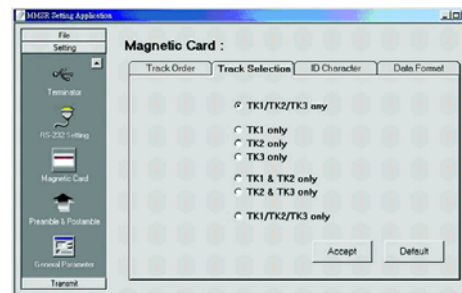
Step 1 To make sure the Windows USB utility is available in your computer.
Step 2 Connect the Reader to the USB port on the computer, you can hear a beep sound for confirming the Reader's self-test, and the Red LED on the Reader will be lit to indicate that the Reader is ready for operating.

USB port
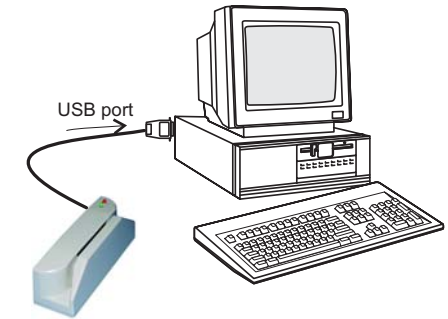
Reader's setting

Note :

1. The bundled CD includes the setting utility for Windows.
2. The setting of USB interface is same as the setting of keyboard interface, please disconnect the extended USB cable and use the keyboard wedge cable to set up the reader.
3. There are two folders of MMSR Utility in CD ROM:\Utility\MMSR\Windows, one is MMSR and another is KBIDrv. MMSR folder is the utility and KBIDrv is keyboard interface driver. If your MSR reader is RS-232 interface, then you don't need to install the driver inside KBIDrv folder. Otherwise both Folder programs will be installed.

MMSR Setting Application

Magnetic Card :

Track Order | Track Selection | ID Character | Data Format

TK1/TK2/TK3 any
TK1 only
TK2 only
TK3 only
TK1 & TK2 only
TK2 & TK3 only
TK1/TK2/TK3 only

Accept   Default

Setting procedure:

Step 1 Run the attached CD ROM:\Utilities\MMSR\Windows

Step 2 If Reader is keyboard interface, please install KBIDrv (Interface driver) and follow by MMSR utility.
or

Step 2 If Reader is RS-232 interface, then, install MMSR utility only.

Step 3 After step 2, please follow the dialog boxes of the utility to do the necessary setting to meet your applications.