POSIFLEX

SD-460/466(Z/W) SERIES
UPGRADE KIT
USER'S MANUAL
Rev.: A0

I. Features

- ISO 7811 Magnetic Stripe Reader with USB interface
- Dual directional operation for MSR
- 3 tracks type MSR reads AAMVA and CA DMV card
- Textured front surface
- Built-in Optical Finger Print Sensor
- Side-mounted on KS-62/68/69/72/75/77 series (SD-460Z/466Z) or KS-66/73 series (SD-460W/466W)

II. Installation

1. Hardware Installation

1. Release the 2 screws on the back of the right side of the terminal to remove the protective cover. Store the protective for future use.
2. Connect the cable found under the cover with the white connector inside SD-460/466(Z/W).
3. Attach SD-460/466(Z/W) to the terminal with the corresponding screw holes in alignment, and then secure the 2 screws.
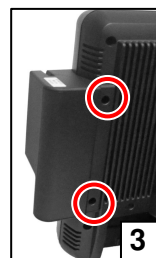
2. Driver Installation

1. **MSR:** The magnetic stripe reader connects to the host through USB port working as a USB KB and also requires no driver installation except setting up the USB keyboard to be enabled in system CMOS setup if the OS does not do it automatically. Refer to "Operation Guide" for manipulation over the reader configuration.
2. **Finger Print Sensor:** To include the drivers for this sensor to perform finger print registration or verification (authentication) in an AP requires the software programmer to purchase and utilize its SDK (software developer's kit). However, Posiflex delivers this optical finger print sensor with its drivers. Please find in the mini CD delivered with SD-460/466(Z/W) series except SD-460/466(Z/W) model or Product Information CD delivered with Posiflex POS system the folder for "Posiflex Optical Finger Print Sensor".

III. Operation Guide

1. Magnetic Stripe Reader

The MSR in SD-460/466(Z/W) series reads an ISO magnetic stripe card without driver. Yet, there is a "MSR.EXE" program for SD-460/466(Z/W) model and a "Posiflex USB MSR Manager" program for other model provided to control some parameter configuration for this MSR. Through this program, you can enable/disable track, set up Alt+Num approach for ASCII codes, and enable/disable Leading/Stop code. Please look for "USBMSR" and "SetUp" folders in the mini CD delivered with SD-460/466(Z/W) or Product Information CD delivered with Posiflex POS system to install the program or download it from our web site: http://www.posiflex.com or http://www.posiflex.com.tw.

2. Finger Print Sensor

a. Cautions

1. Never pour the glass cleaner directly on the sensor window
2. Never use alcohol-based cleaners
3. Never submerge the sensor in liquid
4. Never rub the window with an abrasive material, including paper
5. Do not poke the window coating with your fingernail or any hard item, such as a pen.

b. Principle

The finger print sensor software never stores fingerprint images. The finger print sensor software creates a fingerprint template, which is a highly compressed and digitally encoded mathematical representation of fingerprint features. This template is created when a user registers a finger and is stored in an encrypted file. When the user later touches the fingerprint reader to authenticate, a new template is created and compared to the "registered" template. If there is a match, the authentication is successful.

c. Finger Print Recognition

In order for the sensor to acquire a good image of your finger, you must place the pad of your finger but not the tip in the center of the sensor window, and apply gentle, even pressure. Do not "roll" your finger as usually practiced in the traditional ink and paper fingerprint taking technique. Pressing too hard will distort your fingerprint. Pressing too lightly will not expose a large enough area of your finger. Also, make sure to hold your finger on the sensor until you see the sensor light blink; this may take longer for dry fingers. Then, lift your finger. Although you may use any finger with the sensor, your index finger of either hand works best. If the sensor is capturing your finger image as indicated by the sensor blink and you have tried all the above suggestions, you may need to reregister your finger.

d. Sensor Activation

The LED behaviors are described in the following table.

LED Color	Description
Blue	Finger print sensor on standby
Red	Reading successfully

Failure to connect to a self-powered USB port will cause non-operation of the sensor. If you activate your terminal's power-saving functionality but your third party application does not support this, then your fingerprint sensor will enter "sleep mode" even though your workstation does not. If this occurs, you will need to reboot the system. Please check with your application developer for compatibility.

e. Cleaning the Sensor

Depending on the amount of use, the sensor window may need to be cleaned periodically. To clean it, apply the sticky side of a piece of adhesive cellophane tape on the window and peel it away as in the drawing at right.

Under heavy usage, the window coating on some sensors may turn cloudy from the salt in perspiration. In this case, gently wipe the window with a cloth (not paper) dampened with a mild ammonia-based glass cleaner.

IV. SPECIFICATIONS

1. Reader Specifications

Applicable card type	ISO 7811	JIS X 6302
Card feed method	Manual	Manual
Card feed direction	Bi-direction	Bi-direction
Read / write function	Read only	Read only
Card feed speed	5 to 55 inches/sec.	100 to 1200mm /sec.
Error rate	< 0.5%	< 0.1%

* Reader specs option must be specified upon ordering.

2. Card Data Specifications

Data standard	IATA	ABA	THRIFT	JISII
Track used	Track 1	Track 2	Track 3	Rear section
Recording method	F^2F (FM)	F^2F (FM)	F^2F (FM)	F^2F (FM)
Recording density	210 BPI	75 BPI	210 BPI	210 BPI
Recording capacity	79 / 7	40 / 5	107 / 5	72 / 7

* Card data specs is decided by reading head type, and must be specified upon ordering.

3. Other Specifications

Standards	AAMVA, CA DMV
Interface	USB
Rated Voltage	5V DC
Rated Current	300 mA (Max)
Reading Head	Single ISO head or Dual ISO Head or JISII head*

* Reading head type must be specified upon ordering.