EM9939 HANDHELD READER

INTRODUCTION

This handheld reader is builds with big capacity rechargeable battery &digital storage, with LCD display to show date, time & card numbers. It consumes very little power & with low power detect buzzer & can communication with computer via RS232. This handheld reader can read varictics of cards and tags of EM format.

Main functions & characteristics are bellow:

- Card storage : 5K options
- Card management function: Without compatibility ability to allow storage of same cards, but the time of read card is varying. While storage is full, buzzer will buzz 3 times & micro controller will be lighted with green.
- Electricity saving function: There will be 3 buzzing sound after 30 second of no card flash on reader. The power will automatically shut off by micro controller & remain is standby mode for saving electricity. For reading of cards from standby mode, the operator needs to press the power on button to switch the reader from standby mode to active.
- Low power warning function: The micro controller will under going lower voltage test each time when the reader is power on or reading 10 cards continuously. The following will indicate the level of the reader's voltage:

① when the voltage is sufficient, the voltage light will flash green once.

② When the voltage is low, the voltage light will flash red once, at the same time the micro controller light will flashing in red & green alternatively for 3 times, the buzzer will buzzing 3 times.

- LCD display will show time, date & card number: while at the standby mode, the LCD will display date & time format as bellow:

Shown time: Hour:Minute:Second

Show :please Read Card

Exp: Time : 15:48:18

Please Read Card

Time & date can be adjusted by the computer.

While reading the cards, LCD will display time & card number. (With decimal or hexadecimal)

Exp: Time : Hour: minute: second

NO: XXXXXXXXXX

- Power: voltage at DC12. Power indicator will shown in green light while charging power. The battery can be used continually 6 hours when it is charged full.
- Reading range : 4-8cm.

COMMUNICATION PROTOCOL

RS232 Connector specification:

Data baud rate : 9600bps Data bit : 8 Parity check : None

Stop bit : 1 Flow control : hardware

- Time & date adjustment

While adjusting time & date, the computer have to send the hexadecimal data by the following process:

5555(Correspond data)+ second(1 byte) +minute (1 byte)+ hour (1 byte) + day (1 byte) + month (91 byte) + year (1 byte, last 2 digits).

Exp: 55551848151013O3 means adjusted

① Time : 15 Hrs 48min18sec &

② Date : 13 Oct 2003

- Transfer the storage data in reader to computer

In order to transfer the storage data from reader to computer, the computer have to send a hexadecimal data AAAA (correspondent data) to reader, the data stored in reader will transfer to computer by the following format:

Last 8 digit of card number + day + time(hour & minute), with a total of 8 byte.

Exp: 0E1A345F10131548 means that:

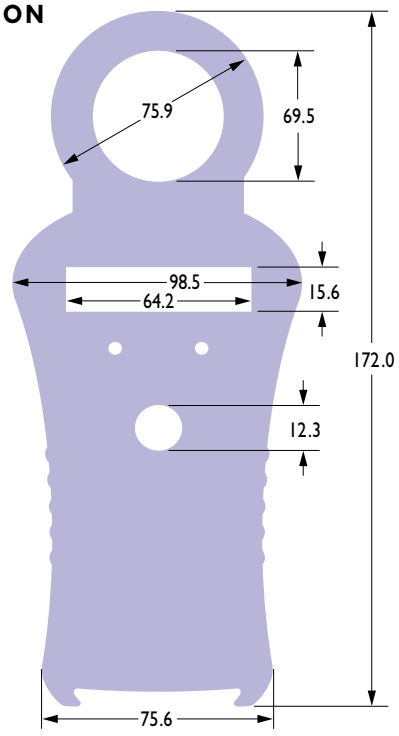
① last 8 digit of card is 0E1A345F

② Date : 13 October

③ Time : 15hours 48 minutes

After transferred all data, the buzzer will buzz twice & micro controller's light will change from green to red colour.

- Edit:
- EM9939A-EM
- EM9939-Mifare 1
- EM9939-HiTag 2
- EM9939-i-Code-SLI
- EM9939-5 in 1(H4102, EM4550, HiTag1, HiTag2, E5557)

DIMENSION

unit:mm