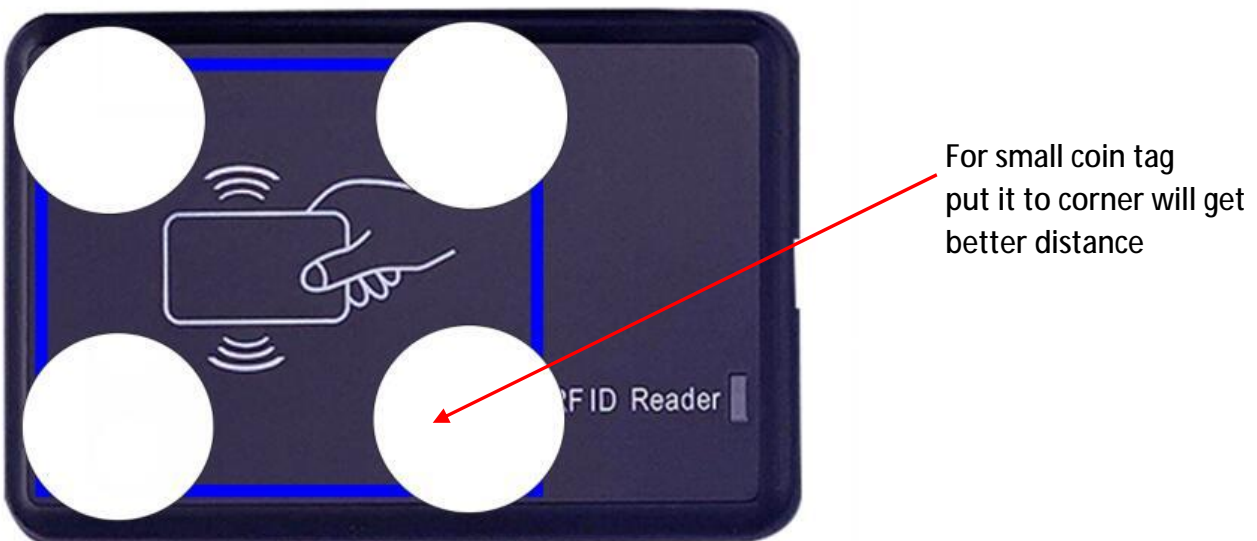
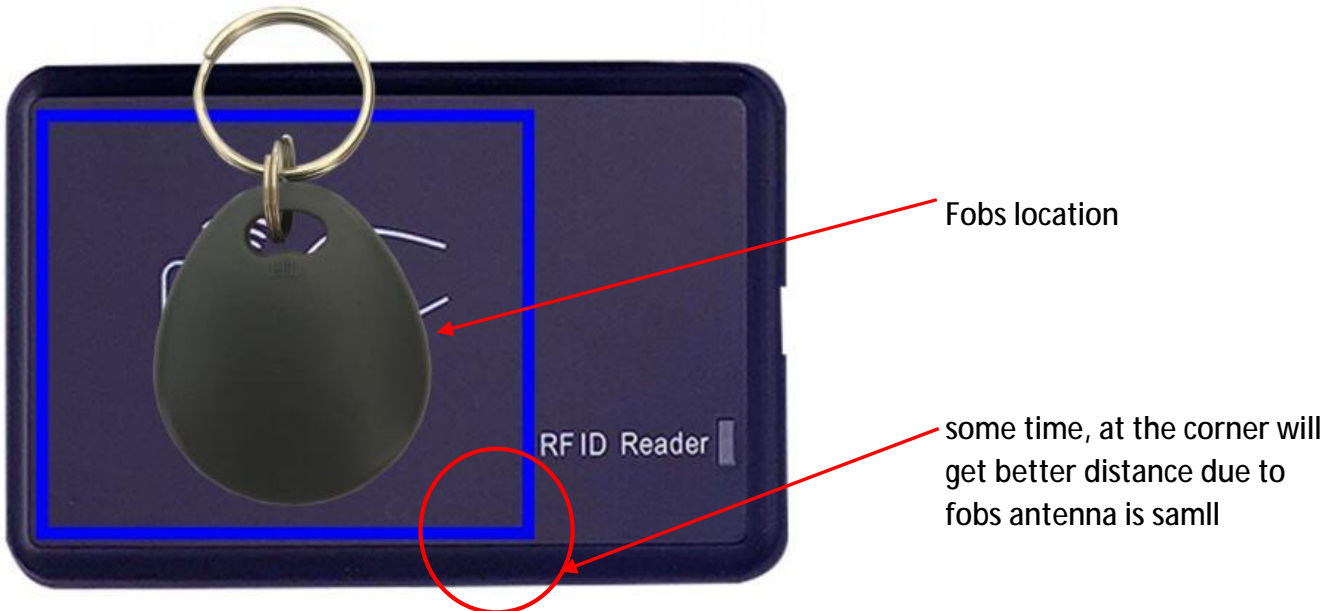
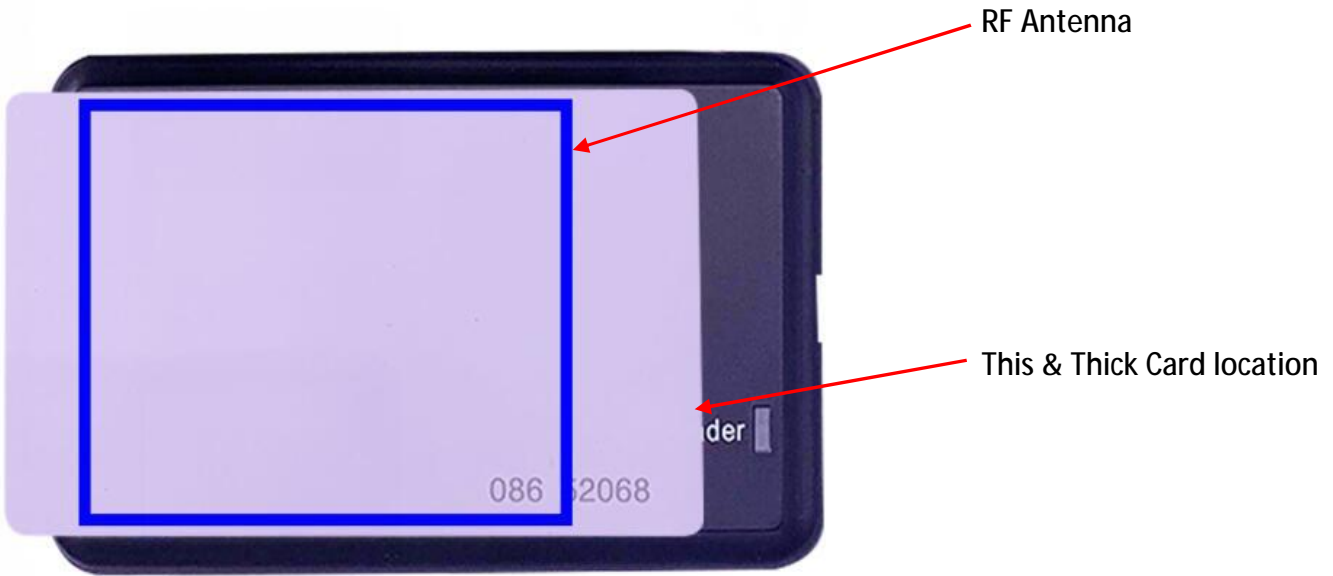


Get Better Reading Distance



EasyMF 13.56M smart RFID Card reader writer Operation Manual

1. Product Profile

EasyMF is designed as an external input device to read Mifare14443A type A(or compatible) RFID card UID and send data to host machine (PC/ Mac/Android device) via USB interface according to the specified format, total 28 formats can be selected by user. It also can be set in Writer mode to read and write mifare S50/S70 sector data.

It is widely used in RFID application systems such as Access Control, Time Attendance, membership, logistics, industrial process control etc.

2. Feature:

As an UID reader

- a) Read Mifare 4 Byte and 7 Byte UID (S50,S70, UL, Desfire, Ntag etc)
- b) Total 28 formats can be set with a configuration card
- c) Driver-free, supports Windows, Linux, iOS, Android
- d) Buzzer enable or disable by config card
- e) configurable to suit for QUERTY, AZERTY, QWERTY keyboard layout
- f) Configurable for sending data to un-focused window
- g) in default, EasyMF is 10 digital format, send data to focused window, QWERTY keyboard.

As An USB writer:

Read and write the sector data of Mifare card, Max 64 Blocks (S50,70), includes each config block

3. How to use

Works as external input device (PS2 type):

Works with PC: connect reader to PC USB port; run editable software such as Word, Notepad, or existing user software ; read a card. The number is shown on window at the cursor location.

Works with Mac: same as work on PC (new Mac need type C converter)

Works with android device: an OTG adapter is required between the android device and EasyMF reader.

Works as USB device (send data to un-focused window), your own program is required.

Works as USB Writer (Download windows PC software)

<http://www.fissaid.cn>

4. Change the output format

Each Mifare card is with 32 bits identification numbers, and the number grouped as 10 digitals Hex data that called as 10H. In different application, specified output format of those 10H data is required, for example in Access Control system, wiegand26 is used, the wiegand26 format is 2H_3D_4H_5D in EasyMF output system. That's mean, convert 2 digitals Hex data to 3 digitals decimal data, and convert other 4 digitals Hex to 5 digitals decimal data.

The advantage of EasyMF reader is easy to change output, and total 28 formats can be set in 2 different way which is listed below:

A) By the config card in shipment box

Run an editable software, like notepad, plug in reader. Reads this config card 3 times before read any other card, reader will enter auto config mode, the output format or function will be display on window at each second. Plug off reader when the demand format or function is appeared, setting is stored automatically and will work at next power on.

B) By plug in and plug off (when config card is lost)

- b.1) Run an editable software, like notepad, plug in reader and let it to read one cards. Then plug off reader. Now do below step
- b.2) Plug IN and plug off Reader within 1 second
- b.3) Plug IN and plug off Reader within 1 second
- b.4) Plug IN and plug off Reader within 1 second
- b.5) Plug IN Reader, reader will enter auto config mode also.
If you can not get success with B, pls try more times

5. Output format list

1 8H-10D-E	15 8H-10D-R-E
2 2H-3D-4H-5D-E	16 2H-3D-4H-5D-R-E
3 8H-E	17 8H-R-E
4 6H-E	18 6H-R-E
5 6H-8D-E	19 6H-8D-R-E
6 6H-10D-E	20 6H-10D-R-E
7 4H-5D-4H-5D-E	21 4H-5D-4H-5D-R-E
8 8H-10D	22 8H-10D-R
9 2H-3D-4H-5D	23 2H-3D-4H-5D-R
10 8H	24 8H-R
11 6H	25 6H-R
12 6H-8D	26 6H-8D-R
13 6H-10D	27 6H-10D-R
14 4H-5D-4H-5D	28 4H-5D-4H-5D-R

Remark:

1-28 are output format, suffix with -E means after data output, ENTER is sent ; otherwise, only data is sent; -R, means reverse data

E: QWERTY keyboard layout

F: AZERTY keyboard layout

H: QUERTY keyboard layout

Disable buzzer: no beeps after reading card

Enable buzzer: buzzer sounds after reading card

PS2 : Read only mode, emulate keyboard input data to cursor location

USB: Writer mode, communicate with host, to read or write sector data

4 byte and 7 Byte UID: when reader format is set in 8H, reader will distinguish the card type and send 4 or 7 byte UID accordingly

There are several reference documents can be download on line
Manual (This document)/ Operation Video:
[http:// http://www.fissaid.cn](http://www.fissaid.cn)

Demo code for USB function
Send Email to request

6. Quick Start and trouble shooting:

Quick testing: plug reader to PC & run Word, lets cursor on Word window. Then read sample cards in the shipment package. If reader beeps & data is shown on window, means reader work properly.

Q: connect to PC, no beeps, no LED, do not reading

A: try on other USB port or re-start PC

Q: Reader beeps & LED on, read sample card but not my card?

A: your card is not Mifare 14443Ac card. EasyMF does not support other type cards

Q: reader reads card but reading distance is too **short?**

A: if is reader on a metal surface (example: laptop is metal case, and reader was on laptop surface) or other 13.56M reader is nearby.

Q: Lost config card, how to set reader?

A: a) Run any editable software, Plug in reader till buzzer sounded

b) Fast Plug IN then Plug Off reader immediately (within 1 second)

c) repeat step b 2 times again, then

d) Plug IN reader to host, buzzer sound, reader enter config mode

Refer Viedo: www.Jatsecurity.com/config-reader-output-viedo-2.html

7. About Return:

Pls. contact with us before return goods. Our team will help to solve your issues due to we are original designer/ manufacturer of this reader.

You know, each return to Amazon is creating rubbish, due to all returns will be scrapped by FBA.

Service Email: Taylor@szjat.com.cn / www.jatsecurity.com

Config reader by config card

Step:

- 1 run NotePad or Excel or other Editable program and keep cursor in this window
- 2 Connect reader to PC
- 3 Before reading any card, read the config card
- 4 In NotePad window, you will see how many time config card is read
For 13.56M reader, need to read 3 times config card(sometime, the config card will be read as normal card, and you will see the card number, at this situation please read more times. Or re-power on reader and try again
For 125Khz reader, only 1 time reading is enough
- 5 once config card is read well, reader goes to config mode automatically
- 6 some reference information is appeared at the notepad window first
- 7 then reader start to config, each 1 second, the new format will be displayed when the demand format/function is appeared, plug off reader from pc, setting is automatically saved.
- 8 repower on reader, reader will work with new setting

Parameter description

There are 4 groups setting can be done with the config card

Group 1: Choice one output format

Option is from 1-28, Displayed informat include format number & and name

Example:

- 1 8H_10D_E : take 8 digit HEX data, and transfer it to 10 digits Decimal data.
_E here, means after 10 digits, the Enter key will be sent
- 11 8H_10D : take 8 digit HEX data, and transfer it to 10 digits Decimal data.
without "E" here, means only a 10 digits number is sent

Group 2: choice keyboard layout

- KE : American keyboard layout, QWERTY
- KF : French keyboard layout, AZERTY
- KH : Europe keyboard layout, QUERTY

Group 3: Disable or Enable Buzzer,

once it is disabled, after reading card, buzzer will not sound

Group 4: choice reader work mode

- USB : Mifare Card writer (Mifare classic, 1K and 4K byte card)
- PS2 : Mifare Card CSN reader emulate USB keyboar input to host

Remark

1. change item will not affect current setting in other groups
2. Each group parameters setting need to be done separated.
For example, default setting is:
format 1, KE keyboard, Buzzer enable, PS2 emulate keyboard input
You want to change to format2, buzzer disable
Have to do 2 times the process step from 2 to 8, one choice format 2,
one time choice disable buzzer
3. in 8H format, the 7 byte card(Desfire, UL, N Tag etc), whole 7 byte number will be sent

(take reference in next page for card number displayed in each format)

CONFIG CARD 1
CONFIG CARD 2
CONFIG CARD 3

FM-V3.4 ← reader firmware version

SUPPORT EMAIL TAYLOR@SZJAT.COM.CN ← any issues, pls. send email to get support on time

DOWNLOAD WRITER Instructin Manual and SOFTWARE @ WWW.FissaiD.cn

← download manual etc

FORMAT DESCRIPTION

1 - 28 DATA FORMAT
E QWERTY KEYBOARD
F AZERTY KEYBOARD
H QUERTY KEYBOARD
USB WRITER FUNCTION
PS2 READER FUNCTION

CONFIG READER ...

WHEN DEMAND FORMAT IS APPEARED PLUG OFF READER

	Desfare	Mifare
1 8H-10D-E	3415874621	0632198271
2 2H-3D-4H-5D-E	15407229	17438015
3 8H-E	8062CB9A1C3D04	25AE947F
4 6H-E	9A1C3D	AE947F
5 6H-8D-E	10099773	11441279
6 6H-10D-E	0010099773	0011441279
7 4H-5D-4H-5D-E	5212207229	0964638015
8 8H-10D	3415874621	0632198271
9 2H-3D-4H-5D	15407229	17438015
10 8H	8062CB9A1C3D04	25AE947F
11 6H	9A1C3D	AE947F
12 6H-8D	10099773	11441279
13 6H-10D	0010099773	0011441279
14 4H-5D-4H-5D	5212207229	0964638015
15 8H-10D-R-E	1025284811	2140450341
16 2H-3D-4H-5D-R-E	06107322	14844581
17 8H-R-E	043D1C9ACB6280	7F94AE25
18 6H-R-E	3D1C9A	94AE25
19 6H-8D-R-E	04005018	09743909
20 6H-10D-R-E	0004005018	0009743909
21 4H-5D-4H-5D-R-E	1564439627	3266044581
22 8H-10D-R	1025284811	2140450341
23 2H-3D-4H-5D-R	06107322	14844581
24 8H-R	043D1C9ACB6280	7F94AE25
25 6H-R	3D1C9A	94AE25
26 6H-8D-R	04005018	09743909
27 6H-10D-R	0004005018	0009743909
28 4H-5D-4H-5D-R	1564439627	3266044581
29 E	8062CB9A1C3D04	25AE947F
30 F	*)^@CB(Q!C#D)\$	@%QE(\$&F
31 H	*)^@CB(A!C#D)\$	@%AE(\$&F

-DISABLE BUZZER 8062CB9A1C3D04 25AE947F
-ENABLE BUZZER 8062CB9A1C3D04 25AE947F

-USB ← M301 wihout those function
-PS2 ← M303 EasyMF with those function
Remark: PS2 -- reader simulate the keyboard to send data
USB-- Writer, must work with windows software

FissiaD reader is much simple for 2nd development as below:

The MF reader can be configured as below 3 work mode, in all mode, reader are HID USB, no any driver is required.

1. MF CSN reader, positive to send data

When card is read, reader will emulate USB keyboard to send data directly. The data is appeared in the cursor location. If User program want to receive the card number, just need to use an input box in the program.

2. MF CSN reader, send data via USB 2.0 port

2.1 USB device information is: VID=5138 PID=1518 (data in HEX)

2.2 Command description, There are 3 commands works at this mode:

- a. Read UID / b. LED blink / c. Active beep sound

2.2.1 Read UID

Host send command 03 03 02 00 00 to reader (all data are in hex format)

If 4 byte UID is read, Reader returns : 03 03 05 64 4A 81 89 B8 (data example)

If 7 byte UID is read, Reader returns: 03 03 08 04 15 91 00 01 F8 BA EF (data example)

The first 2 byte are fixed as 03 03

The 3rd byte 05 means 4 byte UID is sent, and followed 4th to 7th are 4 byte UID (64 4A 81 89)

If the 3rd byte is 08, means 7 byte UID is sent, and followed 4th to 10th are the 7 byte UID (04 15 91 00 01 F8 BA)

Reader returns 030403CCDDA9 , means read UID failure.

2.2.2 Blink LED

Host send command 03 02 02 00 00 to reader (all data are in hex format),

Read will blink LED and return fixed data: 03 02 03 AA BB 65

2.2.3 Active buzzer

Host send command 03 02 02 00 00 to reader (all data are in hex format),

Reader buzzer will sound one time and Reader return fixed data: 03 01 03 AA BB 65

3. MF S50 S70 card sector reader/writer, USB 2.0

3.1 USB device information is: VID=5138 PID=1518

There are 5 commands works at this mode:

- b. Read UID / b. LED blink / c. Active beep sound ----- same as above
- d. read block / e. write block

3.2 Command description

3.2.1 Read block

Host send command 03050806FFFFFFFFF00 to reader (all data are in hex format)

The first 3 byte are fixed 03 05 08

The 4th byte 06 means which block want to read, it is calculated as : 4*sector+block,

for example, if want to read data from sector 10, and block 2, it is 4*10+2=42(Decimal) transfer to Hex is 2A

The 5th to 11th byte FFFFFFFFFF are sector code (KeyA is used)

The latest byte 00, means KeyA is used, If want to use KeyB, this byte must be 0B.

Reader returns 030511 00000000000000000000000000000000 00

The first 3 byte are fixed 03 05 11 Followed 4th to 19th are 16 BYTE data 00000000000000000000000000000000

Reader returns 030403CCDDA9 , means write data failure

2.2.2 Write block

Host send command 030418 06 FFFFFFFFFF 1234567890ABCDEF1234567890ABCDEF 16 to reader (all data are in hex format)

The first 3 byte are fixed 03 04 18

The 4th byte 06 means which block want to read, it is calculated as : 4*sector+block,

for example, if want to write data to sector 1, block 2, it is 4*1+2=6(Decimal) transfer to Hex is 06

The 5th to 10th byte FFFFFFFFFF are sector code (KeyA is used)

The 12th to 26th 1234567890ABCDEF1234567890ABCDEF are 16 byte data want to write

The latest byte 16, means KeyA is used, If want to use KeyB, this byte must be 0B.

Reader returns 030403AABB65 , means write data successful

Reader returns 030403CCDDA9 , means write data failure

Remark: Write block 3 in each sector, is changing sector secure code and config bit, read the datasheet first when writing block3

About Return

Reduce returns - be a respected customer

- ✓ Email your issues before ask Return goods
You will get professional solution for the issues, even include new firmware to upgrade reader your ordered.
We want you GET from the purchase instead of LOSING
- ✗ **Return Goods**=You pay + I pay To **Create garbage**
Unreasonable return have no meaning other than that!
Due to amazon has no ability & man power to verify the return goods, So all of them will be destroyed as garbage
- ✓ **Keep All items well if have to return goods**
Pls. keep original box clean, keep barcode label clear
Mark return reason as ordered wrong product if it function well but only not read your card, sent it back in 2 days.

