RD200/300 TOOL OPERATION MANUAL







V02.21

Model description	2
Installation	4
Driver installation (For change to virtual COM port mode)	5
Common Setting	6
Auto Read (RD200-M1, RD300-H series supported)	11
NTAG/Ultralight (RD200-M1, RD300-H series supported)	12
MIFARE	14
MIFARE Key	15
LF Card (RD200-LF 125KHz supported)	17
EPC/eTag (RD200-U1 UHF reader supported)	18
ISO14443A (RD200-M1, RD300-H series supported)	19
ISO 14443B (RD200-M1, RD300-H series supported)	20
ISO 15693 (RD300-H series supported)	21
DESFire (RD300-DES1 supported)	22
Fingerprint (RD300-FH1 only)	25
Command Test	27
Firmware Update	

Model description

Model	Picture	Difference description
RD200-M1		HF RFID Desktop Reader
		Frequency: 13.56 MHz
		Support tag: ISO-14443A / Mifare Ultralight / NTAG203
RD200-LF		LF RFID Desktop Reader
		Frequency: 125 KHz
		Support tag: EM4100 compatible class / SYRIS/ FDX-B(ISO11784)
RD200-U1		UHF RFID Desktop Reader
		Frequency: 860~960MHz
		Support tag: Compatible with EPC Class 1 Gen 2;ISO-18000-6C
		HE REID Dealsten Booder
KD300-HT		Frequency: 13.56 MHz
		Support tag: ISO15693 / ISO14443A(Mifare) / ISO14443B / DESEire
		/ NTAG203
RD300-FH1	\cap	HF RFID and Fingerprint Desktop Reader
		High accuracy and high recognition speed Optical Fingerprint
		Sensor
		Frequency: 13.56 MHz
		Support tag: ISO15693 / ISO14443A(Mifare) / ISO14443B / DESFire
		/ NTAG203
RD300-L1		LF RFID Desktop Reader
		Frequency: 125 KHz
		Support tag: EM4100 compatible class / SYRIS/ FDX-B(ISO11784)
RD300-FL1	\frown	LF RFID and Fingerprint Desktop Reader
		High accuracy and high recognition speed Optical Fingerprint
		Sensor
		Frequency: 125 KHz
		Support tag: EM4100 compatible class / SYRIS/ FDX-B(ISO11784)

RD300-DES1



DESFire Reader Frequency: 13.56 MHz Support tag: DESFire full function with tools

Installation

The default setting of USB Mode is **USB Keyboard Emulation**. This Keyboard mode would send an "Enter" signal when read the card. If user let cursor focus on "Set" button and read the card that will press the "Set" button at the same time.

USB Mode	
USB Mode: USB K	eyboard Emulation 🔄
Set	Get Current Setting

Driver installation (For change to virtual COM port mode)

1. Follow firmware update procedure to change virtual COM port mode firmware.

(ex. RD200_U1_COM_V0191_20150316.SYB)

2. Connect RD200/RD300, system will automatically pop-up the "Found New Hardware Wizard"



3. Allocate the driver folder, and then complete the installation.

(SYRIS_RFID_DVD\RD200\Driver)



Common Setting

🖨 RD200/RD300 Tools V0206	
Eile Language About	
Common Auto Read NTAG/Ultralight MIFARE	MIFARE key DESFire ISO14443B Comma
USB Mode	Send ID Format
USB Mode: USB Keyboard Emulation	ID Format: 8H
Set Get Current Setting	□ ID Reverse Bit □ ID Reverse Byte □ Add Comma(,) □ Add Space
USB Keypad Delay Time	□ Add Brackets([]) □ Add Quotation(' ')
10 • ms ENGLISH •	Add Tab Add Down Arrow
	□ Add Ctrl+Enter(LF) □ Add Enter(CR)
Set Get Set Get	DEC Zero Remove Reverse Digit
Read Card Mode	Set Get Current Setting
🗹 Auto 🔽 Beep 🔽 LED	Read Card Time Postponement
Same Card Detection Energy Saving Mode	5 • x 10 ms
□ STX ASCII Format □ eTag	Set Get Current Setting
Set Get Current Setting	Same Card Detection Time
System Command	15 • x 100 ms
Reboot Reader Use Factory Settings	Set Get Current Setting
Connect VID (Hex): 0E6A PID (Hex): 0317 USB Auto T [Connected] (RD200-M1 0191) (SN:1	
Commar	nd Done.

1. USB Mode

There are three selections of USB modes in "USB auto" connection, after selected the mode then click Set to finish the setting procedure, or click Get Current Setting to read current setting from the reader.

USB Mode		·
LISB Mode: USB Keyboard Emulation		USB Keyboard Emulation 🔄
0001100001		USB Keyboard Emulation
Set	Get Current Setting USB HID-Compliant Device	
		USB HID-Compliant Device Auto

USB Keyboard Emulation :

The device can emulate keyboard to send character or string to host terminal.

2. USB HID-Compliant Device :

Device response data when received protocol command, and the data will be queued in device buffer.

USB HID-Compliant Device Auto Send :

The device sends UID to host terminal after read card.

3. Virtual COM Port mode (Need update firmware)

There are two selections of USB modes in "COM x" connection.

USB Serial Port Auto Send	•
USB Serial Port Auto Send	
USB Serial Port	
	USB Serial Port Auto Send USB Serial Port Auto Send USB Serial Port

USB Serial Port Auto Send :

The device send UID to host terminal after read card.

USB Serial Port :

Device response data when received protocol command, and the data will be queued in device buffer.

4. USB Keypad Delay Time

In this mode, you can set keypad delay timing to reduce the key code sending speed when

read tag.

USB Keypad Delay Time	
10 •	▶ ms
Set	Get

5. Read Card Mode

In this mode, program provided different options for user to choose, after ticked the options, just click Set to finish the setting procedure, or click Get Current Setting to read current setting from the reader.

Read Card Mode	
🔽 Auto 🔽 E	Beep 🔽 LED
🔽 Same Card Detec	tion 🔽 Energy Saving Mode
C STX ASCII Forma	at ⊏eTag
Set	Get Current Setting

Options	Descriptions
Auto	Automatically read card
Веер	Prompt the beep sound or not.
LED	Flash the LED when read the card.
Same Card Detection	If continuously read the same card, user has to wait around 1.5 sec then could read again.
Energy Saving Mode	Provide more energy saving method. (It is not recommend to use in writing card blocks or several cards)
еТад	Read Taiwan ETC eTag format.

6. System Command

This tool provides two system commands; user can use Reboot Reader to reboot the RD200

reader. The other command is Use Factory Default Settings which can restore the reader

settings to initial settings.

System Command	
Reboot Reader	Use Factory Settings

7. Send ID Format

This tool provide many ID format to choose,

such as 4~16 numbers of hexadecimal and

4~13 numbers of decimal.

Also can put comma, space...etc. into the ID

format, after ticked the items then click Set to

finish the setting procedure, or click Get



Current Setting to read current setting from the reader.

The ID format example as below:

ID Format	Example Result
4H	58E8
6H	D558E8
8H	00D558E8
10H	1800D558E8
16H	0000001800D558E8
32H	00000000000000000000000000000000000000
5D	47295
8D	01226943
10D	0001226943
13D	0098785474751
4D	6493
FDX (LF only)	00000001226943
16H + Card ID Reverse	E858D50018000000
16H + Comma	0000001800D558E8,
16H + Brackets	[0000001800D558E8]
4D + Space	1928 1928
16H + Quotation	'000001800D558E8'

8. Read Card Time Postponement / Same Card Detection Time

Read Card Time Postponement: The intermission time of card reading.

Same Card Detection Time: The intermission time of same card detection.

After adjusted the time then click Set to finish the setting procedure, or click Get Current

Setting to read current setting from the reader.

Read Card Time Postponement	
5 •	▶ × 10 ms
Set	Get Current Setting
Same Card Detection Time	e
15 •	▶ × 100 ms
Set	Get Current Setting

Auto Read (RD200-M1, RD300-H series supported)

- Available card type: Setup read card type.
- Set auto read Mifare Class or Ultralight in this tab to read specific block automatically.
 - 1. Enable and select correct block.
 - 2. Click set auto read.
 - 3. Reader will always read selected block automatically.

RD200/RD300 Tools V0206						_ 🗆 X
Common Auto Read	NTAG/Ultralight	MIFARE	MIFARE key	DESFire	ISO14443B	Comma 🖌 🕨
Available Card Type	🗖 190 14443B		🗖 ISO 15693		Se	et
ISO14443A (7 Byte)	CHINA GUI)			Get Curre	nt Setting
MIFARE NTAG/UltraLig	ht ISO15693					
ID Block/Byte (MIFAR Enabled Auto Read Sector: 0 • Block: 0 • Start: 0 • Byte: 4 • Key Error M Set Auto Read I	A Classic)	© Key A ○ Key B ▼ Get	Write Key Sector: Key:	FFFFFFF	FFFFF	© Key A © Key B
Connect VID (He PID (He	ex): 0E6A USB Aut	0 🔻	[Connected] (RD200-I	M1 0191) (SI	N:12110283)
Command Done.						
TX:020303028F			RX : 02 04 03	00 02 8F		

• Write Key to EEPROM: Save Mifare key to reader.

NTAG/Ultralight (RD200-M1, RD300-H series supported)

- 1. Read Card Data: Select correct block to read NFC tag's data.
- 2. Write Card Data: Select correct block to write NFC tag's data.

(Recommend select HEX code to write.)

- 3. UID : Read tag's UID
- 4. Read Card All Data: Input max block number in "NO" and start to read all data.
- 5. URL address: This is a simple demo to read/write URL to tag.

Common Auto Read NFC NTAG203/Ultralight M	IFARE MIFARE key Command Test Updat ()	
Card Data Read/Write Test	Read Card All Data	
Block: 7 •	00:049CB6A69A402B8071480000E1101200	
Read Card Data:	04:0103A010440330D1012C5501696C6579 08:2E636F6D2E74772F6368696E6573652F	
HEX:	12:30325F626C6F672F30305F6F76657276	
ASCII:		
Read Card Data	」 「琟?@+口qH └? D└0?,U iley.com.tw/chinese/02_blog/00_overv	
Write Card Data:	, NO:	
C HEX FFFFFFFFFFFFFFFFFFFFFFFFFFFFF	Read Card All Data	
ASCII syris.com/		
	URL Address	
Write Card Data	lev com tw/chin	
	606C6E702E626E6D2E74772E6269606E (Block 7.10)	
UID:	030C03/32E030F0D2E/4//2F0308030E (6100K/-10)	
049CB69A402B8000	Read Write	
	[]	

For example

Write a URL to NTAG203. (NDEF specification)

http://ftp.syris.com/index.php?folder=U1ISSVNfUkZJRF9EVkQvUkQyMDA=

URI is "http://" (URI Identifier Code =03(Hex))

String is "ftp.syris.com/index.php?folder=U1ISSVNfUkZJRF9EVkQvUkQyMDA="

(Total 59 characters)

You need write block with RD200 tool as blow.



6B5176556B51794D44413D000000000 =ASCII:kQvUkQyMDA=

MIFARE (RD200-M1, RD300-H series supported)

※Please set the MIFARE Key before you change the Key in EEPROM.

The following sections will describe the different functions as below.

Common Auto Read NFC NTAG203/Ultralight	MIFARE	MIFARE key	Command Test	Updat ┥ 🕨
Card Data Read/Write Test	Read	Card All Data]
Sector: 1 • • • • • • • • • • • • • • • • • •				
Block: 0 •				
Key: FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF				
Read Card Data:				
HEX:				
ASCII:				
UID Read Card Data				
Write Card Data:				
• HEX FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF	1			
C ASCII		Read Ca	rd All Data	NO 15
Write Card Data		Read Write	e Card Loop	NUM 3

1. Card Data Read/Write Test

When user intend to read/write the card data that could tick the "EEPROM" to use the "Key" in the EEPROM (the prerequisite is the "Key" must has been stored in EEPROM already) or manually input the Key value for verifying.

Then select correct block and fill out the Read or Write Card Data field and click UID . Read

Card Data or Write Card Data to finish the read/write action.

2. Read Card All Data

Click Read Card All Data or Read Card All Data Loop to read card data.

MIFARE Key

Common Auto Read NFC NTAG203/Ultra	alight MIFARE MIFARE key Comma	nd ⊺est Updat ()
Sector: 1 • • • • • • • • • • • • • • • • • •	Block 0 Read Read • A/B • B • never Write • A/B • A/B • B • never INC • A/B • A/B • B • never DEC • A/B • A/B • never	Key A Fead Fead Fead Fead Fead Fead Fead Fead
New key: Key A: FFFFFFFFFFF Access bits: FF078069	Block 1 Read $\widehat{\bullet}$ A/B $\widehat{\bullet}$ B $\widehat{\bullet}$ B $\widehat{\bullet}$ never $\widehat{\bullet}$ never $\widehat{\bullet}$ never $\widehat{\bullet}$ N/B $\widehat{\bullet}$ B $\widehat{\bullet}$ never $\widehat{\bullet}$ never \widehat	Access bits Fead G A C A/B C A/B C never
Key B: FFFFFFFFFFFF	Block 2	Key B
Issue MIFARE Card	Read Write INC DEC	Read Write A A B C never C

1. Write KEY to Card

User can write key value to card, the steps as below:

- 1. Allocate a Sector
- 2. Input Old key value and select Key A or B
- 3. Input New Key A or Key B value
- 4. Click Issue MIFARE Card to update the Key value.

Note 1: "Access bits" value will auto-compute by the

program.

Note 2: The Old key must be correct otherwise the program will shows up an error message.

Note 4: The access bits control the rights of memory access using the secret keys A and B.

Note 5: Please use Key A to change Key B at first time.

Sector: 1	1
Uld key: Key: FFFFFFFF	FFFF © Key I
New key:	
Key A: FF	FFFFFFFFFF
Access bits: FF	078069
Key B: FF	FFFFFFFFF

2. Access bits (KEY)

User can set the verifying conditions for read/write or other actions.

Read: Read block.

Write: Write block.

INC: Add transfer restore.

DEC: Subtract transfer restore.

A/B: Verify Key A or Key B

A: Only verify Key A

B: Only verify Key B

never: will not verify any Key

Please refer to MIFARE specification for more detail.



LF Card (RD200-LF and RD300-L series 125KHz supported)

This function can let user to set all available 125kHz card types, after ticked the items then click Set to finish the setting procedure, or click Get Current Setting to read current setting from the reader.

Common Auto Read NFC NT	FAG203/Ultralight MIFARE	MIFARE key LF Card EPC/eTag	
-Available Card Type			
🔽 EM/TEMIC - 125 kHz	🔲 SYRIS - 125 kHz	🔲 SECURITY - 125 kHz	
□ FDX-B (ISO11784) - 134.2 kHz			
Set		Get Current Setting	

EPC/eTag (RD200-U1 UHF reader supported)

RD200/RD300 Tools V0207 Eile Language About	
Common EPC/eTag Command Test Update Fin Auto EPC Data Read Bank © EPC © TID © USER Shift one byte Address	EPC Data Read/Write Bank © EPC © TID © USER Address
Set Auto Read EPC Get Current Setting	
eTag Data Read/Write	
Read eTag Data:	Read EPC Data
Read eTag Data	
Write eTag Data: 00000000000000000000000000000000000	Write EPC Data 00000000000000000000000000000000000
Write eTag Data	Write EPC Data
Auto INC Auto Read	W1,2,4,
Connect VID (Hex): 0E6A PID (Hex): 0317	[Connected] (RD200-U1 0191) (SN:13319002)
Comman	d Done.

1. Auto EPC Data Read : Select correct bank(EPC, TID or USER), address and length to setup RD200-U1 auto read data.

Shift one byte: auto read data will shift a byte.

ex. Unselect shift one byte : 012DF30008DD97B5230F02BD Select shift one byte : 00012DF30008DD97B5230F02

- 2. eTag Data Read/Write: Read/Write test function for Taiwan freeway eTag.
- 3. EPC Data Read/Write: Test read/write EPC tag data in this area.

ISO14443A (RD200-M1, RD300-H series supported)

Provide to test ISO14443A command.

RD200/RD300 Tools V0206 File Language About	
MIFARE MIFARE key DESFire ISO14443B Co DESFire Command Test	ommand Test Update Firmware
ISO14443A Config	Auto Read Card Disable 10 Sec
DESFire Select+RSTS+PPS	
Send APDU (First)	90 60 00 00 00
Send APDU (Second)	90 AF 00 00 00
Send APDU (Third)	90 AF 00 00 00
Transparent With CRC	0A 00 90 60 00 00 00
Transparent Without CRC	26
Connect VID (Hex): 0E6A PID (Hex): 0317	[Connected] (RD200-M1 0191) (SN:12110283)
Comma	nd Error!
TX : 02 01 30	RX :

ISO 14443B (RD200-M1, RD300-H series supported)

Provide to test ISO 14443B command.

RD200/RD300 Tools V0206 File Language About	
MIFARE MIFARE key DESFire ISO14443B Configuration Configur	ommand Test Update Firmware
ISO14443B Config	Auto Read Card Disable 10 Sec
Request	
Transparent #1	05 00 00
Transparent #2	1D 00 00 00 00 00 00 00
Transparent #3	0D 00 00 00 00
Get China Card GUID	
Get CEPAS Card CID	
Connect VID (Hex): 0E6A PID (Hex): 0317	[Connected] (RD200-M1 0191) (SN:12110283)
Comma	nd Error!
TX : 02 01 30	RX :

ISO 15693 (RD300-H series supported)

Provide to test ISO 15693 command.

RD200/RD300 Tools V0205 File Language About	
NTAG/Ultralight MIFARE MIFARE key DESFire ISO15693 Command Inventory Inventory	ISO14443B ISO15693 Command Test U Card Data Read/Write Test Block: 0 Blocks: 4 Read Block Data: Read Block Data:
ISO15693 Transparent ISO15693 Config Auto Read Card Disable 10 Sec	Write Block Data:
Transparent 24 01 00	
Connect VID (Hex): 0E6A PID (Hex): 0317	[Connected] (RD300-FH1 0206) (SN:15149002)
Comma	nd Error!
TX : 02 01 21	RX : 02 02 21 01

DESFire (RD300-DES1 supported)

RD100/RD200/RD300 Tools V0251	– 🗆 X
<u>F</u> ile <u>L</u> anguage <u>A</u> bout	
Common Option DESFire Command Test Up Read / Write File Data UID UID HEX: 041D302A2C5D80 File ID: 01 BlockID: 01 KeyNo: 1 <	Auto read file/block (DESFire) Enabled File ID: 01 BlockID: 01 KeyNo: 1 • Start: 0 •
Read Block Data :	Byte: 4 •
	Key Error Message: LED
<u>R</u> ead block	Set Get
Write Block Data:	
	Write key to EEPROM
<u>W</u> rite block	No: 1 🗸 0000000000000000000000000000000000
Old Key: 000000000000000000000000000000000000	
Eormat card Change key	
Connect VID (Hex): 0E6A PID (Hex): 0317	[Connected] (RD300-DES1 0236) (SN:14300007)
Comma	nd Done.
TX : 02 17 9F 16 01 B2 01 01 00 00 00 00 00 00 00 00	RX : 02 27 9F 00 25 01 B2 00 00 00 00 00 00 00 00 00 00

- 1. UID : Click to read Desfire card's UID.
- 2. File ID : RD300-DES1 support 4 files (01~04)
- 3. Block ID : Each File ID have 4 block ID (01~04), Every block have 32 bytes data.

4. Key No (1~8)

0	Format key	Can't change
1	File Key	FileID 1 read key
2	File Key	FileID 1 write key
3	File Key	FileID 2 read key
4	File Key	FileID 2 write key
5	File Key	FileID 3 read key
6	File Key	FileID 3 write key
7	File Key	FileID 4 read key
8	File Key	FileID 4 write key

(*Default ke	y is all "(0" or all "F".))
· · · ·				1

Read / Write File Data							
UID HEX: 041D302A2C5D80							
File ID: 01	BlockID: 01	KeyNo: 1 💌					
² Key: 123400	000000000000000000000000000000000000000	00000000000					
Read Block Data	:						
000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000					
	<u>R</u> ead block						
Write Block Data:							
FFFFFFFFFFFFFFFFFFFFFF	FFFFFFFFFFFFFFFFFFFFFFFFFFFF	FFFFFFFFFFFFFFFF					
<u>W</u> rite block							
Old Key: 000000000000000000000000000000000000							
<u>Format card</u> <u>3</u> <u>Change key</u>							

Select KeyNo and input correct key then click "Change key" to change Desfire card's file key.

- 5. Read block : Click read block to read current configured block data.
- 6. Write block : Click write block to write current configured block data.

7. Format card: Input correct old key and new key to format card to clear all data and change format key.

When the format card is successful, all file keys will be initialized to all "0"

Read / Write File Data				
UID HEX: 041D302A2C5D80				
File ID: 01 BlockID: 01 KeyNo: 1				
Key: 1234000000000000000000000000000000000000				
Read Block Data : New Key				
000000000000000000000000000000000000000				
<u>R</u> ead block				
Write Block Data:				
FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF				
<u>W</u> rite block				
Old Key: 000000000000000000000000000000000000				
<u>F</u> ormat card <u>C</u> hange key				

- 8. Auto read :
 - a. Enable this function and configure FileID, BlockID and KeyNo (EEPROM KEY)
 - b. Enable "Auto" in common tab.
 - c. Open notepad and punch Desfire card to read.
- 9. Write key to EEPROM : Input and save key to RD300-DES1 (1~8)

Fingerprint (RD300-FH1 only)

A. Basic

RD200/RD300 Tools V0205						
Eile Language About						
Common Auto Read F	ingerprint NTAG/Ultraligh	t MIFARE MIFARE key	/ DESFire ISO1444 ◀ ▶			
Basic Fingerprint UID Ma	anager					
Open	Close	Ok.				
Finger NO: 1	•					
Delete	Delete All	Template				
		*				
Check Free	Get Enroll Count					
Auto	Enroll		-			
Identify:		Get Template	Set Template			
Set Auto Identify AUTO Green 5 Min: UID Add: 00000000000000 Get						
VID (Hex): OE6A USB Auto [Connected] (RD300-FH1 0206) (SN:15149002 PID (Hex): 0317 [Connected] (RD300-FH1 0206) (SN:15149002						
Command Done.						
TX:020165		RX:02 0E 65 00 01 05 0	0 00 00 00 00 00 00 00 00 00			

- 1. **Open / Close** : Setup fingerprint sensor enable/ disable.
- 2. **Finger No**: RD300-FH1 support 2000 fingerprints. Select from 0 to 1999 to configure fingerprint.
- 3. **Delete**: Delete selected fingerprint number (Finger No).
- 4. **Delete all**: Delete all fingerprints.
- 5. **Check Free**: Check selected fingerprint number is in use or free.
- 6. Get Enroll Count: Check how many fingerprint numbers was used.
- 7. Auto Enroll: Select fingerprint number and click auto Enroll to save fingerprint to reader.
- 8. **Template**: Fingerprint's template. Every fingerprint have unique template.
- 9. Identify: Identification of the capture fingerprint with database number.
- 10. Set Auto Identify: Default is auto, set to off will disable fingerprint recognition.
- 11. Green: Setup fingerprint sensor auto sleep timing. Default is 5 minutes.
- 12. UID Add: Change prefix to fingerprint numbers.

B. Fingerprint UID Manager

🗑 RD200/	RD300 Tools V0206								L. L.	
<u>File Language About</u>										
Commo	on Auto Read Fin	gerprint	NTAG/Ultra	light	MIFARE	MIFA	RE key	DESFire	ISO1444	• •
Basic	Basic Fingerprint UID Manager									
NO	UID	Note	Т	emplat	NO: 1	. Т	0 12	- Terr	plate	
0001	0000000000000001						·····			
0002	000000000000000000000000000000000000000				Re	ad Data	a	Wr	ite Data	
0003	000000000000000000000000000000000000000				L					-11
0004	0000000000000000					🕮 Load Form File				
0005	000000000000000000000000000000000000000									
0000	000000000000000000000000000000000000000					Save To File				
0007	0000000000000000									
0000	0000000000000000000				Pand			Initi		
0010	A0000000000000000A				Kanu					
0011	000000000000000000B		04	422500	NO: 0	001	UID:	000000000	0000000	
0012	000000000000000000				No	to:	, 			-11
					INU					_
					Templa	te:				
				▶		Add		U	pdate	
VID (Hex): OE6A USB Auto Connected] (RD300-FH1 0206) (SN:15149002)										
Command Done.										
TX : 02 04 66 00 00 0C RX : 02 05 66 01 00 00 0C										

- 1. **Read Data**: Select number range to read fingerprint database in reader.
- 2. Write Data: Select number range to write fingerprint database in reader.
- 3. Load Form File: Load "uid.txt" file.
- 4. Save to File: Save current data to txt file.(uid.txt)
- 5. Random All UID: Set fingerprint's UID to random value.
- 6. Initial All UID: Set fingerprint's UID to default value.
- Add / Update: Add / modify specific fingerprint's UID, note and template. (Only add / modify to screen, please don't forget save to file.)

Command Test

This page provides several command examples, user can choose the example from the Request

Sample List, or directly input the CMD and {DATA} to test

the command.

- Select Request Sample List

 [01] Read Card UID

 [02][02] Run Action Command

 [03][01] Get USB Mode

 [00] Read User Data

 [0C] Write User Data

 [0D] Get S/N

 [0E] Get Model, Version

 [0F][01] Set Reboot
- Click Send Request to send command to reader, Click Read Card to read card data.
- 2. The response data of the request command are all display on Response Data fields.
- 3. The bottom of screen function is a utility to convert ASCII characters to Hexadecimal.

🖨 RD200/RD300 Tools V0206					
<u>Fi</u> le <u>L</u> anguage <u>A</u> bout					
MIFARE MIFARE key DESFire ISO14443B Command Test Update Firmware					
Request Data [0D] Get S/N STX LEN CMD { DATA } 02 01 0D (Hex) Request(Hex) 02 01 0D					
Send Request Read Card					
Response Data STX LEN CMD STA { DATA } (Asci) 02 0A 0D 00 31 32 31 31 30 32 38 33 (Hex) Response(Hex): 02 0A 0D 00 31 32 31 31 30 32 38 33					
ASCII To Hex (Asci) (Hex)					
Connect VID (Hex): 0E6A PID (Hex): 0317 USB Auto Image: Connected (RD200-M1 0191) (SN:12110283)					
Command Done.					
TX : 02 01 0D RX : 02 0A 0D 00 31 32 31 31 30 32 38 33					

Firmware Update

Before update the firmware, system will pop up a warning message window.

ĺ	Note !	
	Note: Update firmware may cause the device crash! If not necessary, Please do NOT update firmware.	
	(OK]	

The firmware update steps as below:

- Step 1. Click Select firmware file
- **Step 2.** Choose a firmware file (*.SYB)
- Step 3. Click Update Firmware to finish the firmware update

MIFARE MIFARE key LF Ca	ard EPC/eTag Command Test	Update Firmware	• •			
USB ID VID (Hex): 0E6A PID (Hex): 0317	Firmware file Code size (Hex): 0000 Code checksum (Hex): 0000	Code type: Code version:				
Firmware file path:						
Select firmware file						
Upgrade progress:						
Update Firmware						

FCC INFORMATION

The Federal Communication Commission Radio Frequency Interference Statement includes the following paragraph:

The equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no grantee that interference will not occur in a particular installation. If this equipment dose cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on , the user is encouraged to try to correct the interference by one or more of the following measures:

--Reorient or relocate the receiving antenna.

--Increase the separation between the equipment and receiver.

--Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.