

V1500 User Manual Version 1.0



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SAFETY INSTRUCTIONS

- 1. Read these instructions carefully. Keep these instructions for future reference.
- 2. Please disconnect this device from AC outlet before cleaning. Do not use liquid or spray detergent for cleaning. Use moisture sheet or cloth for cleaning.
- 3. Please keep your device safe from high levels of humidity.
- 4. Install the device and its driver on a surface plate. Any tilt plate might cause damage.
- 5. Do not place anything over the power cord. And avoid people from stepping on it
- 6. Please be aware cautious note or warnings on the device.
- 7. If the device will not be used for a long time, please unplug the power cord to avoid damages by transient overvoltage.
- 8. Never pour any liquid into the device; this could cause fire or electrical shock.
- 9. If one of the following situations happens, get the device checked by a service personnel: a. The power cord or plug is damaged.
 - b. Liquid has penetrated into the device.
 - c. The device has been exposed to moisture.
 - d. The device does not work well or you cannot get it work according to user manual.
 - e. The device has dropped and damaged.
- 10. Do not leave this device in an environment unconditioned, storage temperature below -20°C or above 60°C, it may damage the device.
- 11. Unplug the power cord when doing any service or adding optional kits.

Lithium Battery Caution:

- 1. 1. Danger of explosion can happen if the battery is incorrectly replaced. Replace only the original or equivalent type recommended by the manufacture. Dispose used batteries according to the manufacture's instructions.
- 2. Do not remove the cover, and ensure no user serviceable components are inside. Take the unit to the service center for service and repair.

CE Notice

This device complies with the requirements of the CE directive.

WEEE Notice

This appliance is labeled in accordance with European Directive 2002/96/EC concerning waste electrical and electronic equipment (WEEE). The Directive determines the framework for the return and recycling of used appliances as applicable throughout the European Union. This label is applied to various products to indicate that the product is not to be thrown away, but rather reclaimed upon end of life per this Directive.



1 Packing List	6
1.1 Standard Accessories	0
	0
1-2 Optional Accessories	0
2. System View	7
2-1 Rear View	7
2-2 Side View	7
2-3 Front View	7
2-4 Back View	8
2-5 Specification	9
2-6 Internal Layout	10
3. Pin Definition	11
4. System Assembly & Disassembly	17
4-1 HDD	17
4-2 Memory	18
4-3 MSR	19
4-4 VFD	20
4-5 The 2nd Display	21
4-6 WI-FI	22
5. Device Driver Installation	23
5-1 Resistive Type Touch Panel & P-CAP	23
5-2 MagStripe Card Reader Configuration Utility	29
5-3 RFID	41
5-4 Configuration Utility of i-Button Reader	47
5-5 VFD	52
6. BIOS/Utility Setup	59
6-1 Advanced	59
6-2 Security	64
6-3 Power	65
6-4 Boot	66
6-5 Exit	67
7. LCD Surface Cleaning	68

PACKING LIST

1-1 Standard Accessories



System (with stand) Power adapter Power cord Driver bank

1-2 Optional Accessories



VFD 2nd Display (8,10,) MSR RF-ID Leser MSR+RF-ID i-button MSR+iButton 1D Scanner 2D Scanner

SYSTEM VIEW

2-1 Rear View



ig< Please make sure the 19V DC is plugged in the right direction before plugging in DC jack.

2-2 Side View



2-3 Front View





2-4 Back View



2-5 Specification

Processor	Intel® Celeron J1900 Quad Core 2.0GHz
Memory	One SO-DIMM socket supports DDR3L 1333 up to 8GB
Storage	2.5" SATA II HDD / SSD
Audio	Line-out
Network	RJ45 10/100/1000 Base-T
USB port	5x USB 2.0 / 1x USB 3.0
COM Port	3x RJ45
BIOS	Insyde BIOS
Power	AC 19V 90W Adaptor
Thermal Solution	Fan-less
Dimension	366 (W)x 377 (H) x265 (D)mm
Operating Temperature	0°C ~ 35°C
Storage Temperature	-20°C ~ 60°C
Storage Humidity	20% ~ 80%, non-condensing

Display	
LCD Panel Size	15.1-inch TFT LCD (LED Backlight)
Resolution	1024*768 Pixels
Brightness	350 cd/m2
Touch Panel	5-wire Resistive Type / Projected Capacitive Type

Note:

Intel® Celeron J1900 CPU does not support POSReady 2009

2-6 Internal Layout



No.	Definition	No.	Definition
1	+5V	5	+5v
2	D-	6	D-
3	D+	7	D+
4	GND	8	GND

2. 2-Layer USB3.0+2.0 connector Pin Definition

No.	Definition	No.	Definition
1	+5V	8	TX-
2	D-	9	TX+
3	D+	10	+5V
4	GND	11	D-
5	RX-	12	D+
6	RX+	13	GND
7	GND		

3. LAN: RJ45 Pin Definition

No.	Definition
1	MDI0A+
2	MDI0A-
3	MDI1A+
4	MDI1A-
5	MDI2A+
6	MDI2A-
7	MDI3A+
8	MDI3A-

4. LINE-OUT JACK Pin Definition

No.	Definition
1	GND_AUD
2	GND_AUD
3	LINE_OUTR2
4	LINE_OUTL2
5	LINE2-JD

No.	Definition	No.	Definition
1	DDC_CLK	11	GND
2	DDC_DATA	12	RED
3	GND	13	GND
4	VSYNC	14	GND
5	GND	15	+12V
6	HSYNC	16	USB D-
7	GND	17	+12V
8	BLUE	18	USB D+
9	GND	19	Reserve for VGA +5V
10	GREEN	20	+5V

5. VGA+USB+DC12V connector Pin Definition

6. VGA Pin Definition

No.	Definition	No.	Definition
1	Red	9	N/C
2	Green	10	GND
3	Blue	11	N/C
4	N/C	12	I2C DATA
5	GND	13	HSYNC
6	GND	14	VSYNC
7	GND	15	I2C CLK
8	GND		

7. LVDS connector Pin Definition

No.	Definition	No.	Definition
1	+3.3V	2	+3.3V
3	+3.3V	4	+3.3V
5	GND	6	GND
7	DATA1-	8	DATA0-
9	DATA1+	10	DATA0+
11	GND	12	GND
13	CLK-	14	DATA2-
15	CLK+	16	DATA2+
17	GND	18	GND
19	N/C	20	DATA3-
21	Brightness	22	DATA3+

23	BKL enable	24	GND
25	GND	26	GND
27	LED Power +12V	28	LED Power +12V
29	LED Power +12V	30	LED Power +12V

8. eDP connector Pin Definition:

No.	Definition	No.	Definition
1	N/C	16	GND
2	GND	17	HotPlug Detect
3	N/C	18	GND
4	N/C	19	GND
5	GND	20	GND
6	TxD0-	21	GND
7	TxD0+	22	BKL enable
8	GND	23	Brightness
9	AUX+	24	N/C
10	AUX-	25	N/C
11	GND	26	+12V
12	+3.3V	27	+12V
13	+3.3V	28	+12V
14	N/C	29	+12V
15	GND	30	N/C

9. DC Jack Pin Definition

No.	Definition
1	+19V
2	Ground
3	+19V

10. RJ45(COM) connector Pin Definition

No.	Definition
1	+5V/+12V
2	DSR#
3	GND
4	DTR#
5	RST#
6	CTS#



7	TxD	
8	RxD	

11. SATA: 22-pin SATA Pin Definition

No.	Definition	No.	Definition
S1	GND	P1	N/C
S2	SATA_TX0_P	P2	N/C
S3	SATA_TX0_N	P3	N/C
S4	GND	P4	GND
S5	SATA_RX0_N	P5	GND
S6	SATA_RX0_P	P6	GND
S7	GND	P7	+5V
		P8	+5V
		P9	+5V
		P10	GND
		P11	GND
		P12	GND
		P13	N/C
		P14	N/C
		P15	N/C

12. Mini-PCIE Pin Definition

No.	Definition	No.	Definition
1	WAKE#	29	GND
2	+V3.3V	30	SMB_CLK
3	N/C	31	PCIE_TX_N
4	GND	32	SMB_DATA
5	N/C	33	PCIE_TX_P
6	+1.5V	34	GND
7	CLKREQ#	35	GND
8	N/C	36	USB D-
9	GND	37	N/C
10	N/C	38	USB D+
11	CLK_PCIE_N	39	N/C
12	N/C	40	GND
13	CLK_PCIE_P	41	N/C
14	N/C	42	N/C

15	GND	43	N/C
16	N/C	44	N/C
17	N/C	45	N/C
18	GND	46	N/C
19	N/C	47	N/C
20	W_DISABLE#	48	+V1.5V
21	GND	49	N/C
22	RESET#	50	GND
23	PCIE_RX_N	51	N/C
24	+3.3V_AUX	52	+V3.3V
25	PCIE_RX_P	53	GND
26	GND	54	GND
27	GND	55	GND
28	+V1.5V	56	GND

13. Int. Speaker Pin Definition

No.	Definition
1	Left Out +
2	Left Out -
3	Right Out-
4	Right Out+

14. Touch Button for Power On/Off connector Pin Definition

No.	Definition
1	+5V Standby
2	+5V Status
3	Power On#
4	GND

15. NFC port connector Pin Definition

No.	Definition
1	+5V
2	USB D-
3	USB D+
4	GND

No.	Definition
1	GND
2	USB D+
3	USB D-
4	+5V
5	GND
6	USB D+
7	USB D-
8	+5V

17. Front Panel function connector Pin Definition

No.	Definition	No.	Definition
1	+5V	2	+5V
3	DSR4#	4	TxD5 for touch panel
5	DTR4#	6	RxD5 for touch panel
7	RTS4#	8	GND
9	CTS4#	10	+12V
11	TxD4	12	+5V
13	RxD4	14	+3.3V
15	GND	16	GND
17	+5V	18	+5V Standby
19	USB D-	20	+5V
21	USB D+	22	Power On#
23	GND	24	GND

18. RJ11(Cash Drawer) connector Pin Definition

	,
No.	Definition
1	GND
2	C/D_OPEN#
3	C/D Status
4	+12V/+24V
5	N/C
6	GND

SYSTEM ASSEMBLY & DISASSEMBLY



- 1. Unscrew 4 screws and remove the base cover
- 2. Fasten HDD on HDD bracket with 2 screws
- 3. Install HDD with 2 screws



4-2 Memory



1. Put the memory into socket

4-3 MSR



- 1. Remove MSR cover
- 2. Install MSR holder with 2 screws
- 3. Plug MSR cable
- 4. Install MSR with 2 screws



4-4 VFD



- 1. Remove the Top cover
- 2. Plug VFD display cable
- 3. Install VFD with 2 screws
- 4. Cover the Top cover (with Hinge hole)

4-5 The 2nd Display



- 1. Remove the Top cover
- 2. Plug 2nd display (VFD) cable
- 3. Install 2nd display with 2 screws
- 4. Cover the Top cover (with Hinge hole)

4-6 Wi-Fi



1. Put the WI-FI module into the Mini-PCIE Slot.

2. Connect 2 antennas on Wi-Fi module.(Notice: The antenna in black should be connected on position 1 of WI-FI module, and antenna in gray should be connected on position 2 of WI-FI module)

3. Put Wi-Fi module into socket with 1 screw

5-1. Resistive Type Touch Panel and P-CAP

1. Click "<u>Next</u>".



2. Click "<u>Next</u>".

GalaxTouch			
Setup Type			
Select the setup type that best stats your	recut		
Extra PS/2 interface driver for eGalaxTor Please check the check box for PS/2 to	uch controller. uch controller.		
Install PS/2 interface driver			
stafShidd			
	K Back	Nest >	Cancel



3. Click "<u>Next</u>".



4. Select "<u>None</u>", Click "<u>Next</u>".

eGalaxTouch			X
Setup Type Select the setup type that best suits your ne	eds.		
Do 4 point calibration after system reboot			
C Every system boot up			
Next system boot up			
(None			
InstatShield -			
	< Back	Next >	Cancel
	3108		10 Mile

5 Click "<u>OK</u>".



6. Select "Support Multi-Monitor System", Click "Next".



7. Click "<u>Next</u>".

eGalaxTouch	×
Choose Destination Location Select folder where setup will install files.	
Setup will install eGalaxTouch in the following folder.	
To install to this folder, click Next. To install to a different folder, another folder.	click Browse and select
Destination Folder C:\Program Files\veGalaxTouch	Вюже
installinelr	Next > Cancel



8. Click "<u>Next</u>".



9. Click "<u>Next</u>".

elect Program Folder	
Please select a program folder.	
Setup will add program icons to the Programme, or select one from the existing fol	gram Folder listed below. You may type a new folder ders list. Click Next to continue.
Program Folder:	
SCBaxTouch	
Existing Folders:	
Accessores	
Administrative Loots Startup	
erSheld	
	< Back Next> Lance

10. Select "Create a eGalaxTouch Utility shortcut on desktop", Click "Next".

eGalaxTouch	e e e e e e e e e e e e e e e e e e e
Setup Type Select the setup type that best suits your needs	
Select the features you want to install, and deselect the features yo Click. Next to continue.	u do not want to install.
Create a eGalaxTouch Utility shortcut on desktop	
etalSheld	Next> Cancel
GalaxTouch	E
Setup Status	1
eGalaxTouch is configuring your new software installation.	
statShed	
	Cancel
GalaxTouch	
Setup Status	1
eGalaxTouch is configuing your new software installation.	
Install USB driver	
statShe'd	Cancel



11. Would you do 4 point calibration now? Click "Yes".



12. Do 4 points alignment to match display.



13. Calibration utility.



5-2 MagSwipe Card Reader Configuration Utility

The MagSwipe Configuration Utility is used to set up the output format of MagSwipe

Installation

Below steps guide you how to install the Utility program

- Insert the setup CD
- Run the 80066804-006_Magswipe_Configuration_Software_V2_1_A setup file that is located in the Software folder of CD.
- Follow the wizard to complete the installation.

Launching Program

Below steps guide you how to load the Utility program.

- From Start/Programs, click MagSwipe folder
- Click MagSwipe Configuration Utility to launch the program.

No formare de atol (Windows Embedded
Try Halwert House Provide Dh HD_/TTLF	
Credit Image: Settings Settings Settings Image: Settings	
i start	≅ २<u>२</u>७∰ निशस

29

Configuration



Select Reader Interface

The reader to be configured should be connected. Select the corresponding connected reader

interface and click the Continue button



After the interface selection is made, click the **Continue** button. The utility attempts to communicate with the connected reader. If successful, the Home Menu Page is displayed. The Home Menu Page is shown below



Change Basic Reader Setting

After selecting the appropriate interface for the reader, select one of the Home Menu Page buttons to proceed with the Magnetic Stripe Reader (MSR) configuration process. The "Basic Reader Settings" group defines the basic operating parameters and data output format of the reader.

IDT	ECH [®] MagSwipe Configuration Utility
	Change Basic Settings: General Settings Pre/Postamble R5232 Parameters Track Settings Keyboard Settings
SELECT READER INTERFACE	Beep O DFF O LOW O HIGH O Quick HIGH O Quick LOW
HOW TO USE THIS UTILITY	MSR Reading MSR Reading Disabled MSR Reading Enabled
CHECK CURRENT	Terminal Type IBM PC/AT IBM PC/AT, External Keyboard NoteBook IBM PC/AT, NO External Keyboard
CHANGE BASIC READER SETTINGS	Decoding Method Inter-Character Delay O Raw Data © 2 ms 20 ms © Decoding In Both Directions © 5 ms 50 ms
CHANGE ADVANCED READER SETTINGS	O Decoding reverse direction only
HELP	Default Page Help
EXIT	Send to MSR Save to File Load from File Default Al Close

Button Definitions

Send To MSR

When all the setting parameters are selected, use the "Send To MSR..." button to send configuration data to the reader device. When the reader has received the data correctly, the settings take effect immediately.

Load From File

The configuration data can be loaded into the configuration utility from a file that has been previously saved. Select this command, start a "File Open" dialog, which allows selection of the file.

pen				<u>?</u> ×
Look in: [) MagSwipe	•	- 🖻 📥	•
File name:	[Open

Save To File

The configuration data can be saved as a file and being used later to configure other readers. When saving a configuration the "File Save" dialog is opened as shown below. Input a filename and file location.

Save As					? ×
Save in: 🔁	MagSwipe	• •	• €	of III-	
_					
File name:	[Save	
Save as type:	MagSwipe Config Files.cfs2		•	Canc	el

Default All

This button sets the reader with the default configuration parameters (the default factory settings). The settings take effect immediately. The default parameters affect all reader configurations settings.

Close

Close this dialog and return to the Home Menu Page.

33

General Settings

This group of configuration settings defines the basic operating parameters of the reader.

	Change Basic Settings:	
	General Settings Pre/Postamble R5232 Para	meters Track Settings Keyboard Settings
SELECT READER INTERFACE	O DFF O LOW O HIGH	O Quick HIGH O Quick LOW
HOW TO USE	MSR Reading MSR Reading Disabled	 MSR Reading Enabled
	Terminal Type ⊙ IBM PC/AT	O IBM PC/AT, External Keyboard
EADER SETTINGS	NoteBook	 IBM PC/AT, NO External Keyboard
	Decoding Method	Inter-Character Delay
CHANGE BASIC	O Raw Data	⊙ 2 ms ○ 20 ms
EADER SETTINGS	Decoding In Both Directions Decoding to used direction only	◯ 5 ms ◯ 50 ms
	Decoding roward direction only Decoding reverse direction only	○ 10 ms ○ 100 ms
HANGE ADVANCED		
CADEITOETING		
	Default Page	Help

MSR Reading

This option will turn on or off the MSR. If MSR is disabled no data is sent out to host in any case. The default is MSR Reading Enabled.

Decoding Method Settings

This option gives four kinds of decoding methods. Raw Data (output in both forward and reverse directions) Decoding in Both Directions (forward and reverse reading) Decoding in Forward Direction only (card entering slot from LED end) Decoding in Reverse Direction only (card entering slot from end opposite LED)

With the bi-directional operation, the user can swipe the card in both swipe directions and the data encoded on the magnetic stripe will be output. In the single swipe direction selections, the card can only be swiped in one specified direction to read the card. The default setting will decoding card data with the card swiped in either the forward or the reverse direction.

"Raw Data" is an output of the decoded magnetic stripe data in hexadecimal format (no ASCII character conversion is performed). In the Raw Data setting, the reader outputs all track-decoded data. The MSR will represent the raw data with two ASCII characters: the first ASCII character is for high bits of the raw data byte and the second is for the low bits. For example, the two ASCII characters "4"and "1"represent raw data byte 41h(01000001).

Beep Volume

The Beep volume can be adjusted to four loudness levels or off. Four loudness levels are: Quick High Quick Low High Low The default is High beep.

Terminal Type

NoteBook IBM-PC/AT IBM-PC/AT, External keyboard IBM-PC/AT, No External keyboard

The firmware can be programmed to interface as a keyboard wedge to 4 different types of terminals. The default is IBM-PC/AT.

Inter-Charater Delay :

2ms, 5ms, 10ms, 20ms, 50ms, 100ms;

This is the time period the reader will delay between sending successive characters. Some terminals or computers (host) require an inter-character delay to simulate the effects of keystroke delays. Choosing a longer inter-character delay causes the characters to be sent at a slower rate. If the host system is not capable of receiving characters as fast as the reader

can transmit, setting an appropriate inter-character delay will keep the reader from overrunning the host input buffer. The default is 2ms.

Default Page Button

After you click the Default Button, the general settings page will change back to the default value. Settings are not sent to MSR until the "Send to MSR" button is clicked.

Help Button

Click the help button to open the help index for this section.

Pre/Postamble

Preamble

Characters can be added to the beginning of the reader's output string of data. These can be special characters for identifying a specific reading station, to format a message header expected by the receiving host, or any other character string. Up to nine ASCII characters can be defined for the Premable.

Postamble

The Postamble serves the same purpose as the Preamble, except the extra characters are added to the end of a data string. The Postamble can be added only after a terminator character, if specified.

Track Prefix and Suffix

For some Host applications, it may be convenient to start or end a string of reader data with a Sentinel or terminator character. The maximum Prefix/Suffix string is six charecters and its default is NULL(no prefix or suffix).

Track Start Sentinels

Characters can be added to the beginning of each track data string to simulate the start of the track data. These can be special characters for identifying a specific track.

End Sentinel

The magnetic stripe End Sentinel character can be added to the end of a magnetic stripe data string. This character simulates the end of character for track1, track2 or track3. This default is ,?'

Track Settings

	Change Basic Settings:
	General Settings Pre/Postamble RS232 Parameters Track Settings Keyboard Settings
SELECT READER	Track Select
INTERFACE	Any Track O Track1 Only O Track2 Only
	Track1 And Track2 Track3 Only Track1 And Track3
HOW TO USE	○ Track2 And Track3 ○ All Three Tracks ○ Track1 Or Track2
THIS UTILITY	Track2 Dr Track3
CHECK CURRENT	Send Start/End Sentinel Send LRC in Card Data
EADER SETTINGS	For Track 2 Only Send Account Number
	Send Error Indication
CHANGE BASIC	
EADER SETTINGS	Track Separator: [cr] Non-Printable Char:
	Teminates [cr] New Rivable Chas
HANGE ADVANCED	
EADER SETTINGS	
	Default Page Help
	Detauk Faue

Track Selection

There are three tracks of info

rmation possible on a magnetic stripe. This option selects the tracks that will be decoded (read). Note that the magnetic stripe reader must have the hardware configuration (read head and circuits) for reading the specified tracks. If a single or dual track reader is used, the heads must be positioned to read the tracks selected by this option. The default is Any Track.(All tracks written on the card will be read).

Track Separator Selection

This option allows the user to select the character to be used to separate data decoded by a multiple-track reader. The default value is CR



Send Start/End Sentinel

The reader can send the Start/End sentinel for a track, decoded without error.

Send LRC in Card Data

The reader can send the track LRC for a properly decoded track.

For Track 2 only Send Account Number

The reader can only send account Number if it is true. And if it is false, the reader sends all Track 2 data.

Send Error Indication

This option let reader to send out [SS]E[ES] if failed to read or missing data on a selected track.The default is off.

The error output for track 1 is "%E?". The error output for track 2 is ";E?". The error output for track 3 is "+E?".

Keyboard Settings

	General Settings Pre/Postamb	le RS232 Parameters Tra	ck Settings Keyboard Settings
ELECT READER INTERFACE	Language Option		
	⊙ US	Swiss	Swedish
HOW TO USE	Spanish(Mexico)	Norwegian	O Italian
	German	O French	
IF OK OUDDENT	O UM	C Heinend	Ovepanese
ADER SETTINGS	Ouk	Ouriversal	
	- Function Key Dutout		
HANGE BASIC	r uncourredy compose		
ADER SETTINGS	 Ctrl Key Output 	O Alt Key I	Dutput
ANGE ADVANCED ADER SETTINGS	USB HID KB Poli	ng Interval (Input value is from	n 1 to 255) 1
		du à Para	Hab
ADER SETTINGS	Oth Key Output USB HID KB Poli	O Alt Key i	Dutput n 1 to 255) 1
		du à Para	Hab

Keyboard Settings

There are keybroad settings information on a magnetic stripe. MiniMag II will support following foreign language keyboard and function key output for PS/2 and USB HID Keyboard Interface.

Language Option

This option allows the user to select the keyboard language of US, Swiss, Swedish, Norwegian, Italian, Spanish(Mexico), German, French, Japanese, UK and Universal. Universal language sends out all the data as a series of ALT keyped sequence.

Function Key Output

The function key output be used to support the special key to delay card data output.

USB HID KB Polling Interview

The user can input the number between 1 to 255 for the delay of output.



Check Current Reader Setting

After you connect the device, the current reader configuration can be displayed by selecting

this button. The configuration data of the connected reader will be displayed like in the

example:



5-3 RFID

1. Install driver

1.1 Check the Device Manager to verify the status of RFID reader.

Computer Management -> Device Manager -> Other devices (The device will show a

question mark if the installation is not done properly.)



1.2. Double-click to Update driver.





1.3. Select "Browse my computer for driver software."



1.4 Click Browse to select file called HFF320U \Driver\FTD\x64

And click Next.



1.5.. Install the driver

💭 👖 Update Driver Software - USB 4-> Senal	
Installing driver software	

1.6 Install complete and then click "close"

ι	JSB Serial	Converter Propert	ies	×
	General	Advanced Driver	Details	
	1	USB Serial Conver	ter	
		Device type:	Universal Serial Bus controllers	
		Manufacturer:	FTDI	
		Location:	Location 0 (Port_#0008.Hub_#0001)	
	- Devic	e status device is working pro	operly.	*
				•
			OK Cancel	lelp

1.7 Restart the computer





2. Install framework 4.0

2.1 Double-click to install.

Contraction of the second				
Corperine - Includerer Control Control Contro	librony = Shann woth = New Folden Name ∰ antherFielD Full u86 u66	Forte enaceField 3:13:2010 Sold AME	Type Application	500 6,200 G
) L tem				
xtracting files	3dbf8bcefbf427a7cc40\netf	x_Core.mzz		Cancel

2.2 Select "I have read and accept the license terms. And click Install..

S Microsoft .NET Framework 4 Set	tup	X
.NET Framework 4 Setup Please accept the locuse term	s to continue.	.NET
		Î.
MICROSOFT SC	FIWARE	
V (have read and accept the	license torms.	
Download size estimate:	0 MB	
Download time estimates:	Dial-Up: 0 minutes	
	Broadband: 0 minutes	
		Instal Cancel

2.3 Click Finish.

Microsoft NET Framew	ork 4 Setup
Microsoft .NET	Installation Is Complete
	Check for more recent versions on <u>plandons updates</u>
	Frah

3. Quick Start with Demonstration Software

3.1. The demonstration software is "MP Studio.exe" provided in the folder "Demo

Software". There is no software setup required; just double click the"MP Studio.exe".

The demonstration software can run either from CD or a copy on hard drive. The GUI of

software is shown in below picture and ready to use.

PROMAG Multi-Protocol Studio		- • ×
Interface View Firmware Help		
Command List 🚽 🕂	× Parameters	+ ×
GeneralSet Communication ProtocolAuto Polling	ISO1443A + Standard + Get UID 🗼 👔	
- LED - UD - UD - UD - UD - Rats - Ra	No Parameter	
B- 1S014443B	Personne	- 1 ×
○ PicoTag ○ Felica ○ ISO7816 ○ ePassport ○ 無高工廠専用	n spunze	
		-
	<	► at
Commnunication Logs		+ 4 ×
		*
<		- F
Status		

3.2 Following steps, as shown in below picture, demonstration a simple usage in reading UID of



ISO14443A card for quick understanding.

5-4 Configuration Utility of i-Button Reader Installation

Below steps guide you how to install the Utility program.

- Insert the setup CD
- Run the Colormetrics I Button Utility.exe setup file that is located in the Software folder of CD
- Follow the wizard to complete the installation.

1. Setup IButton _V1.0.exe software

赐 IButton Utility Setup	
	Welcome to the installer for IButton Utility 1.01e. It is strongly recommended that you exit all Windows programs before continuing with this installation. If you have any other programs running, please click Cancel, close the programs, and run this setup again. Otherwise, click Next to continue.
	< Back Next > Cancel
🎭 IButton Utility Setup	
License Agreement Please read the following license a	agreement carefully.
Software Product Use Consent C You are permitted by CLIENTR use consent contract (henceforth use the software program(hencef	Contract ON ,according to the following use consent conditions of this p"this contract") to the nonexclusive, nontransferable right to forth, "this program") and its add-ons, such as the user guide.
 I agree to the terms of this lic I do not agree to the terms of 	ense agreement : this license agreement



, IButton Utility Setup
Hear Information
Enter your user information and click Next to continue.
Name:
cuentron
Company:
< Back Next > Cancel
a IButton Utility Setup
Installation Folder
Where would you like IButton Utility to be installed?
The software will be installed in the folder listed below. To select a different location, either type in a new rath or click Change to brows for an existing folder.
new party of enery charge to browse for an existing forcer.
Install IButton Utility to:
C:\Program Files\IButton Utility Change
Space required: 2.31 MB
Space available on selected drive: 1.69 GB
< <u>Back</u> <u>N</u> ext> <u>C</u> ancel
🖥 IButton Utility Setup 🛛 🛛 🔀
Shortent Folder
Where would you like the shortcuts to be installed?
The shortcut icons will be created in the folder indicated below. If you don't want to use the default
folder, you can either type a new name, or select an existing folder from the list.
Shortcut Folder:
IButton Utility
Install shortcuts for current user only
 Install shortcuts for current user only Make shortcuts available to all users
Install shortcuts for current user only Make shortcuts available to all users
 Install shortcuts for current user only Make shortcuts available to all users
 Install shortcuts for current user only Make shortcuts available to all users
Install shortcuts for current user only Make shortcuts available to all users < Back



- 2. To execute "IButton_V1.0.exe" for setup communication between software and IButton module.
- The utility program will detect the connected reader. If detected, all the input text boxes will be enabled.
- If the reader has not been connected to PC yet, please connect the reader and then click Refresh to get connected



	TICIA.		Suffix:			
Package:		< 15		~ >		
	Succeed:		Failed:			
Delimiter:		<		< >		
fessage: [Device Founded!				 	

Configuration

Below is the main window of i-Button Utility program.

				and a second second second
	Prefbc	Suffix:	ErrorMossage:	Extract From: Length:
Attach!	15		-	1 4 16 4
	Prefix	Suffic	Message:	Extract Franc Length:
Remove:	P		Ro	ference ibutton 64 bit
1	1 1	11		in the second of the
	1.1	Output Order	reg	distration number
-		Attach: 0-Att	- /	
ES:	1	Remove: 1-CRC	JD	
		2-40,9 3-40 6-0isa	c bled	
	Update Successed	wilk to the		2
	1			
		evious Settings		

	Prefix:	Save i Button info	2	C Length
Much:		儲存於(I): 🔄 Program Files	- ta 💣 🖽 -	1
	Prefic	Youte	🔄 Wastowillipdate 🗧	c Length
Romeve:		Xenocode	Windowsetzp	16
-	1	WindCP	🔄 Windows Media Flayer 🧧	-
SS:		WuRAR Wulderge	Wandows Love Fevorates	
ES:	?	<		
		檔案名類(2) :	(MAR)	
_	-	存稿编录(①): [ibetten info(* MAF)	- Reim	-
Hessage:	Update	DECCEPTE.		-
Suma la			Can save your Settings	

For the settings, there are:

• Prefix/Suffix: Defines the data string which you would like to append in front or end of the i-Button key string.

iButton Data Package :



- Error Message: Indicates error message when i-Button key read fail.
- Message: Indicates message when i-Button key read correctly
- SS/ES : Define Start and End sentinel byte for the i-Button ID string

iButton data format:

SS + iButton 64- Bit Registration Number + ES

- Length : i-Button ID length request from 0~16
- Output order : 4 formats could be select at Attach /Remove i-Button ID

iButton 64- Bit Registration Number: 8-Bit CRC + 48-Bit ID + 8-Bit FC

DEMO SETUP&OUTPUT



OUTPUT DATA : a!ab00000003bdfa01? b!ab0000003bdfa01?



5-5 VFD

1. Power on VFD and waiting test page of EEPROM test, Baud rate and Command page. Set up the customer display by "VFDset.exe"

2. Setup VFDset.exe software.

WFDset15 - InstallShield Wi	zard 💌	VFDset15 - InstallShield Wizard	22
2	Welcome to the Installshield Wizard for VFDset15	Customer Information Please onter your information.	と
	The InstallShield(R) Waard will instal VTDset IS on your computer. To continue, dick Next.	Liner Nerse:	
Y,	WVGNING: This program is protected by copyright law and international treatme.		
	< Back Next > Cancel	Trastalibiald	Cancel
VFDset15 - InstallShield Wiz	and 🔂	방 VFDset15 - InstallShield Wizard	
Destination Folder Click Next to install to this folde	r, or dick Change to install to a different folder.	Ready to Install the Program The wizard is ready to begin installation.	E
Linstal VHP socials for Criterogram Files (val	((yiTheet) Change	If you want to review or change any of your installation settings, dick Bac exit the wizard. Current Settings: Setup Type: Typical Destination Folder:	k. Click Cancel to
		User Information: Name: user Company:	
installshedd	(Keck Next > Canad	InstallShield Kender Kender Ken	Cancel

VFDSet1.5		
Interface Setting 1 Com Port Sclect Buad Rate 2 9600,n.0,1	Load Save	Set All Default
3 Open COM	Get Setting From VFD	Download Setting To VFD
Command Setting Welcome Msg User Defi	ined Character	
Character Type		
Command Made		
Command Mode	EPSON(Default)	
BaudRate Select	9600,n,8,1[Default]	
Passthru Mode	None(Default)	

3. To execute "VFDset.exe" for setting up communication between software and VFD module.

Please then follow the steps as shown in the above figure, the baud rate will show on states page of VFD module (Note: You may check it when power on VFD module), then click "Open COM" button.

4. "Get Setting from VFD" button to get all the settings from Colormetrics and it'll refresh the "VFDset.exe" software.

5. Select "Character Type"/ "Command Mode"/ "Baud Rate Select"/ "passthru Mode".

Character Type	USA/EURPOPE(Default)
Command Mode	USA/EURPOPE(Default)
BaudRate Select	Denmark I Sweden
Command Mode	EPSON(Default)
	EPSON(Default)
BaudRate Select	UTC/S
	AEDEX
BaudRate Select	9600.n.8.1(Default)
	9600.n.8.1(Default)
Passthru Mode	19200,n,8,1



6. Click "Set All Default" button to show default setting, the Default table is

Character Type	: USA
Command Type	: EPSON/EURPOPE
Baud Rate Setting	: 9600/n/8/1
Pass-through Mode	e : None
Welcome msg line1	: *** VFD DISPLAY ***
Welcome msg line2	2 : **HAVE A NICE DAY AND THANK YOU**

7. Welcome Message

Welcome Message line1 maximum 20 characters, line 2 maximum 20 characters, total of 40 characters.

a. ASCII mode

Walcome May	ongol					
C ASCII	ssayer					
-	0	5	10	15	20	
Hex	2A 2A	2A 20 56 46 44	20 44 49 53 50	4C 41 59 20 20	2A 2A 2A	Clear
Welcome Me	ssage2					
	0	5	10	15	20	
C ASCII	2A 2A	48 41 56 45 20	41 20 4E 49 43	45 20 44 41 59	20 41 4E	
		25	20	30	40	

You can type the character by keyboard ($0x20h \sim 0x7Fh$), if you press clear icon, it will clear the all Message characters on AP.

b. Hex mode

Hex mode can define the character from $0x20h to 0xFFh \cdot$ the range $0x80\sim 0XFF$ which depends on the code page table.

-Welcome Me	ssage1					
C ASCII						
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	5	10	15	20	
• Hex	2A 2A	2A 20 56 46 44	20 44 49 53 50	4C 41 59 20 20	2A 2A 2A	Cle
Welcome Me	ssage2	1000		15511		
	0	5	10	15	20	
C ASCII	2A 2A	48 41 56 45 20	41 20 4E 49 43	45 20 44 41 59	20 41 4E	
	1000	1.1.1				

Like the first character (0x80), in default code page will show on VFD module.

8. Click "Download setting to VFD" button

This button is to download the setting from VFDset.exe to VFD module. After success dialog "Download O.K! Please restart!" message popped up. Please restart display for enable new setting

Down	load O.K Please restart
	確定

9. Click "Save" button

To save user's setting in file; for example, below picture to save file name as "GOODLUCK" file set for Welcome Message.





10. Click "Load" button

After saving, you must restart the utility here. Then load your setting rename-GOODLUCK.vfd.

9600,n,8,1 <u>*</u>			
se COM	Get Setting	From VFD	Download S
me Msg User Defi	ined Character		
3 0001 001			
ige1			
pen 🦯			
pen 🖌 Look in: 🔁 vfd			ا ۵۵۴۵۰
Look in: 🔁 vid	0.vfd me-soco Luck vfd	→ ← (ð ď 🖬 •
Look in: Convertion	0.vfd me-6000 (WCK.vfd)	• + () df 🖬 -
Look in: Cover Look in: Cover My Recent Documents	0.vfd me-GOOD LUCK vfd		5 ď 8.
Look in: Constant My Recent Documents Desktop	0.vfd me-Good Luckvfd		
Look in: Constant Look in: Constant My Recent Documents Desktop	9.vfd me-6000 LUCK vfd	¥ + [
Look in: Look in: My Recent Documents Desktop My Documents	0.vfd me-Good Luck.vfd		
Look in: Constant My Recent Documents Desktop My Documents	o,vfd me-soop Luck vfd		

Press key to enter SETUP CMOS UTILITY when system boot up.

★ Please press key tenderly and slowly



★ Please press <ENTER >over SCU Button key.





Press <F9> to view the system information

		InsydeH20 Setup Utility	Rev. 5.0
Stam Advanced Security	Power Boot Exit		and the second data with the second data and the second data and the
Platform firmware informat VLV SOC MRC Version PUNIT FW RSC FW PMC FW Patch	tion 0E (CO 0,98 0×11 N/A 0×4_31	Stepping)	This is the help for the hour, minute, second field, Valid range is from 0 to 23, 0 to 59, 0 to 59. INCREASE/REDUCE : + /
TXE FW Version Microcode Revision			
CPU Flavor Board ID Fab ID Processor Type System Rus Speed System Henory Speed Cache RAM Total Henory Channel A - SODIMI O System Time System Date	Hanufacturer Name Product Name Serial Number UUID HAC LAN Address CPU Name Cpu Clock System Bus Speed BIOS Version Hemory Total Size	: colormetrics V1500 : 123456789 : 20 B0 40 B8 48 F0 80 E0-40 B8 : 00-E0-C5-5C3-2F intel(R) Celeron(R) CPU J190 : 1.99GHz : 83 HHz : Bella650 V:3,7,00-02192016 : 2048 HB	8 18 78 54 48 49 4E 0 @ 1.99GHz
		Press [ESC] Exit	
F1 Help	Select Iten	F5/F6 Change Values	F4 Setup Defaults F10 Save and Exit

Date and Time

The Date and Time items show the current date and time on the computer. If you are running a Windows OS, these items are automatically updated whenever you make changes to the Windows Date and Time Properties utility.

WARNING!

Setting the wrong values in the sections below may cause the system to malfunction. Make sure that the settings made are compatible with the hardware.

6-1 Advanced

Use the Advanced menu to configure the system for basic operation through the following sub-menus:

Hain Advanced	Security Power Boot Exit	Insydell20 Se but UTITITy	Roy, 5.0
▶Root Configurat ▶USB Configurat ▶Audio Configur ¥Video Configura ▶SATA Configura	tion ion ation ation tion		Configures Doot Settings
11 Help	14 Select Iter	F5/F6 Change Values	Setup Defaults



6-1-1 Boot Configuration

Use the Boot Configuration menu to select power-on state for Numlock.



6-1-2 Audio Configuration

Use the Audio Configuration menu to read Audio configuration information and configure the Audio settings

Advanced		Insystem of Second Strategy	
Audio Configuration	and the second		Control Detection of the Azalia device.
Audio Controller	<dation of="" sec<="" second="" td="" the=""><td>b led></td><td>Disabled - Audio will be unconditionally disabled</td></dation>	b led>	Disabled - Audio will be unconditionally disabled
			Enabled - Audio will be unconditionally Enabled
	The second state	STOR Property Values	
En Help	Select Kenu	Enter Setect + Sublienu	all Save and Exit



6-1-3 Video Configuration

Use the Video Configuration menu to read Video configuration information and configure the Video settings



6-1-4 SATA Configuration

Use the SATA Configuration menu to read SATA configuration information and configure the SATA settings

Advanced		daydel20 Septembri 19	Rev. 5.0
SATA Controller	<enab i<="" th=""><th>ed></th><th>DISABLED: Disables SATA Controller.</th></enab>	ed>	DISABLED: Disables SATA Controller.
▶Serial AlA Port 0 ▶Serial AlA Port 1	1753200450370 1 INot installed]		Distant Charles with Carriering
Help De Exit	11 Select Lten Select Reput	Forffo Change Values Enter Select > Subtlenu	FIO Save and Exit



6-2 Security

Use the Security menu to install or change the password

Hain Advanced Sec	urity Power Boot Exit	Tresydel120 Setup (111)		Rev. 5.0
Supervisor Password Set Supervisor Passw	Nat	Installed	install or Chang length of passwone character.	e the password and the and must be greater than
Help	1) Select Item	F5/F6 Change Value Enter Select + Sub	s F4 Set Nenu F10 Sav	up Défaults e and Exit

6-3 Power

		DISHONING SETUE OTHER	
Tain Advanced Secu	rity Jower Boot Crit	The second s	
Restore AC Power Loss Vake on LAN Enable	Ena	er Off> bled>	Specify what state to go to when power is re-applied after a power failure (G3 state).
COM2 Voltage	dia (5V)	abled?	
LMDS Fireware Update	<0is	abled>	
F1 Help	1) Select ites	PS/F8 Change Values Enter Select + Subben	F4 Series Detaults F10 Save and Lait

Use the Power menu to install or change the power settings.

AC Loss Auto Restart

Enable or disable system power on automatically after AC power restored

Wake on LAN

Enable or disable system wake by onboard LAN chip

COM Voltage

This item allows you to select off, 5V or 12V powered COM

LVDS Firmware update

This item allows you to enable or disable LVDS Firmware update

6-4 Boot

Use the Boot menu to select type to Dual type, Legacy type or UEFI type.

	Jasyneit20 Sea		Retw. 5.0
Hain Advanced Security Powe	a Hoot Exit		
Boot Type Galck Boot Network Stack PRE Boot capability EFT/Legacy Device Order	<pre>dual Boot Type></pre>	Select boot type or UEFI	type to Dual type. Legacy type
▶EFT ▶Legacy			
1 Help 1 Selec	1 Itee F5/F5 Charg	e Values F4	Setar Defaults

6-5 Exit

Use the Save & Exit menu to load default BIOS values, optimal failsafe values or to save configuration changes.

Hain Advanced	Security Power Bout	Insyde#20 Setup Utivity	Any 5.0
Hain Advanced Exit Saving One Save Change Will Exit Discarding Load Optimat Det Dad Custon Det Save Custon Det Discard Changes	Security Power Boot Till		Exil system setup and save your changes.
a ven	11 Select Itsu	F5/F6 Change Values	E Setup Defaults



1. How to clean the LCD surface properly?

- ☆ Do not spray any liquids on the LCD screen directly, and do not use paper towels,
 this can cause the LCD screen to become scratched.
- Always apply the solution to your cloth first, not directly to the parts you are cleaning. You want to avoid dripping the solution directly into your computer or laptop.
- ☆ Stroke the cloth across the display in one direction, moving from the top of the display to the bottom.

2. What are some of the basic supplies needed to clean an LCD screen?

- A soft cotton cloth. When cleaning the LCD screen it is important to use a soft cotton cloth, rather than an old rag. Some materials, such as paper towels, could cause scratches and damage the LCD screen.
- Solution of water and isopropyl alcohol. This solution can be used along with the soft cotton cloth.
- Computer wipes. Only use these if they specifically state on the package they are designed for LCD laptop screens. Computer wipes can come in handy for fast clean-ups or when you want to avoid mixing up a cleaning solution yourself.

3. What types of cleaners are acceptable?

- ☆ Water
- \therefore Vinegar (mixed with water)
- ☆ Isopropyl Alcohol

NOTICE: The following cleaners are unacceptable:

- ☆ Acetone
- ☆ Ethyl alcohol
- ☆ Ethyl acid
- 🛠 Ammonia
- ☆ Methyl chloride