



# P1000

# 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.

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## 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.



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## PACKING LIST

### 1-1 Standard Accessories



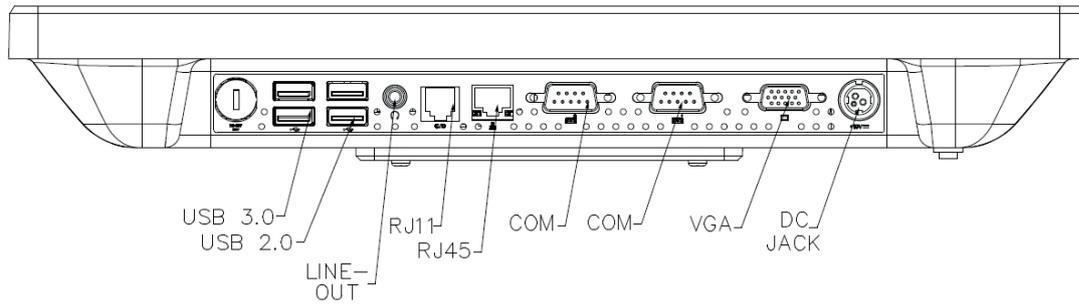
System (with stand)  
Power cord  
Driver Bank

### 1-2 Optional Accessories



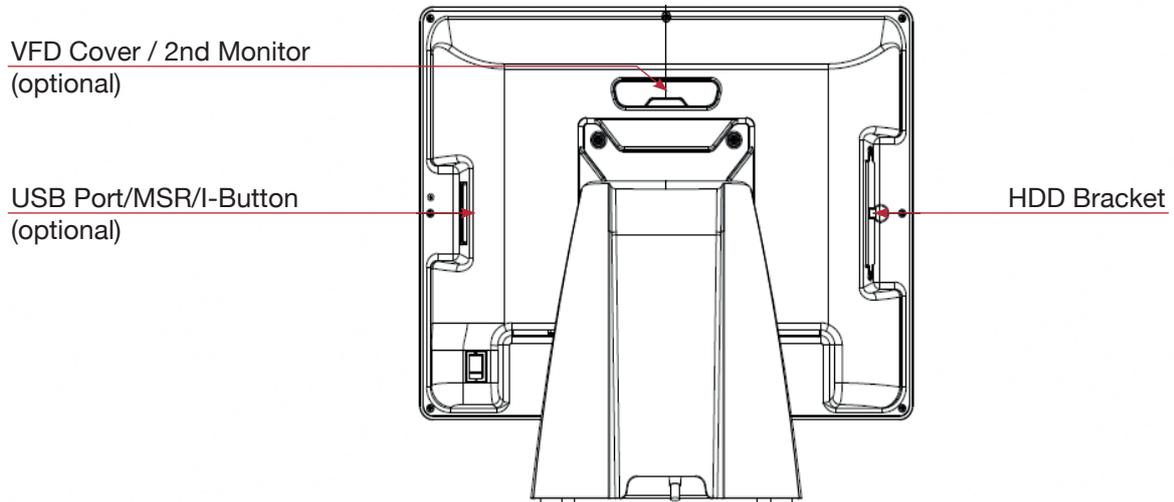
MSR  
VFD  
2nd Display (8", 10")  
i-button  
Barcode Scanner 1D / 2D

### 2-1 Rear View



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

### 2-2 Back View

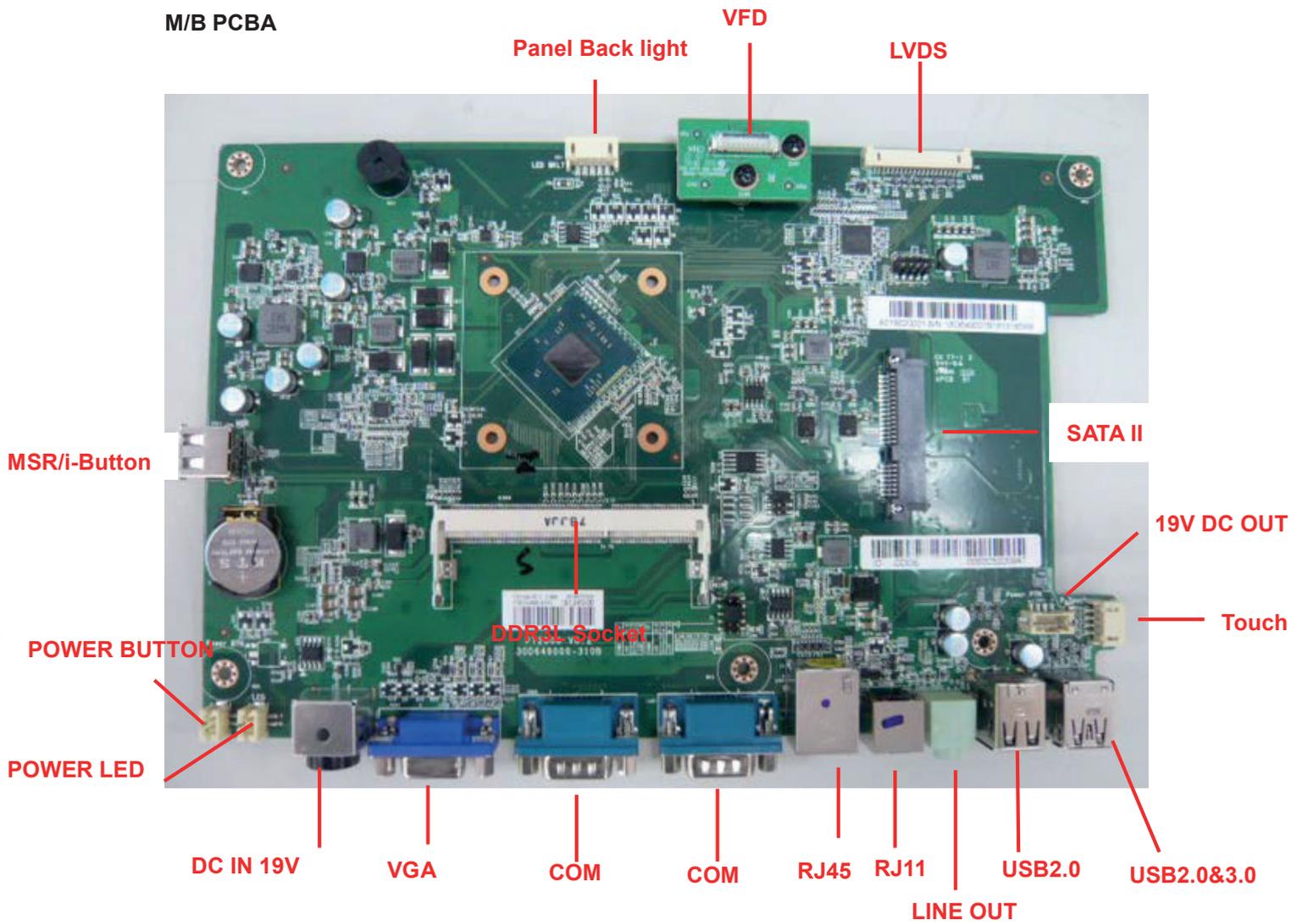


## 2-4 Internal Layout

<b>Display</b>	Display Size		15" TFT LCD
	Resolution		1024 X 768
	Brightness / Color		300 cd/m <sup>2</sup> , 16.7M colors
	Backlight		LED
<b>Touch Panel</b>	Type		Projected Capacitive touch
<b>Processor</b>	CPU/ Chipset		Intel® Celeron J1900 Quad-Core 2.0Ghz
<b>Memory</b>			X 1 SO-DIMM socket supports up to 8GB
<b>Storage</b>			X 1 (2.5" SATAII HDD or SSD)
<b>I/O Connectors</b>	USB 2.0		X 4 (Rear X 3, Side X 1)
	USB 3.0		X 1 (Rear)
	Powered COM (RS232)		X 2 (DB9 powered COM 5V/ 12V selected by jumper)
	Cash Drawer Port		X 1 (24V RJ11 cash drawer port)
	Audio Port	Line-out	X 1
	LAN		x 1 (RJ45 10/100/1000 Base-T)
	VGA		X 1 (DB15)
	DC In		Lockable 3-pin DC input
<b>OS Support</b>			Win 10 IoT Enterprise
<b>Optional Peripherals</b>			VFD / 8"/10.4" 2nd display / MSR / iButton
<b>Power Supply</b>			60W 19V lockable 3-pin power adapter
<b>Environment</b>	Temperature	Operation	32° to 95° F (0° to 40° C)
		Storage	-4° to 140° F (-20° to 60° C)
	Relative Humidity		20% to 80% non-condensing
<b>Dimension (W x H x D) mm</b>			364 x 339 x 229
<b>Certifications</b>			CE / FCC / LVD
<b>Protection</b>			IP64 on front bezel

## 2-4 Internal Layout

M/B PCBA



## 1. LVDS connector Pin Definition

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

## 2. DC Jack Pin Definition

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



COM1	J2
+5V	1-3
Default	3-5
+12V	7-9

COM2	J2
+5V	2-4
Default	4-6
+12V	8-10

You can change the com port voltage by jumper

#### 4. 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

#### 7. Power On/Off connector Pin Definition

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

## 8. 1D/2D scanner connector Pin Definition

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

## 9. Projected capacitive touch connector Pin Definition

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

## 10. Resistive touch connector Pin Definition

No.	Definition
1	+5V
2	RxD
3	TxD
4	GND

## 11. COM3 connector Pin Definition

No.	Definition
1	DCD#
2	RxD
3	TxD
4	DTR#
5	GND
6	DSR#
7	RTS#
8	CTS#
9	+5V/+12V/Ring
10	GND

## 12. Sideward MSR connector Pin Definition

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

## 13. RJ11 (Cash Drawer) connector Pin Definition

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

## 14. VFD connector Pin Definition

No.	Definition
1	RTS#
2	DSR#
3	TxD
4	RxD
5	CTS#
6	DTR#
7	+5V
8	USB D-
9	USB D+
10	GND

**1. 2-Layer USB2.0 connector Pin Definition**

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		

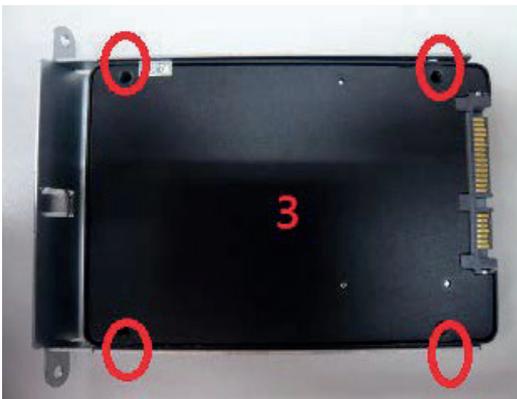
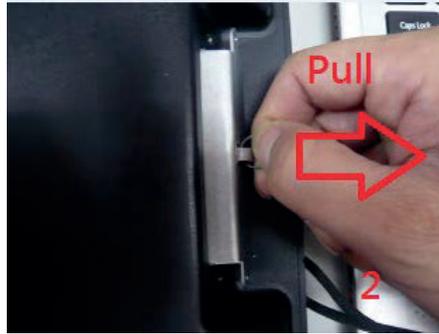
**3. LAN: RJ45 Pin Definition**

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

**4. LINE-OUT JACK Pin Definition**

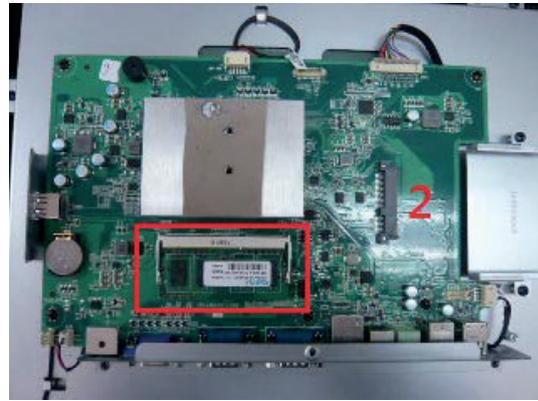
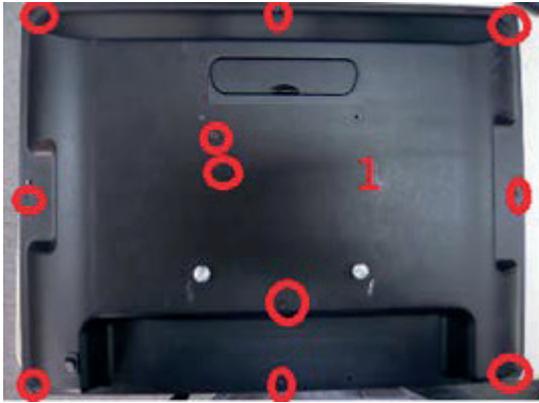
No.	Definition
1	GND_AUD
2	GND_AUD
3	LINE_OUTR2
4	LINE_OUTL2
5	LINE2-JD

### 5-1. HDD



1. Dis-fasten 2 screws.
2. Pull out the hard drive case in an outward direction to remove it from the system.
3. Install the hard drive in the hard drive case and fasten 4 hard drive case screws.

## 5-2. Memory



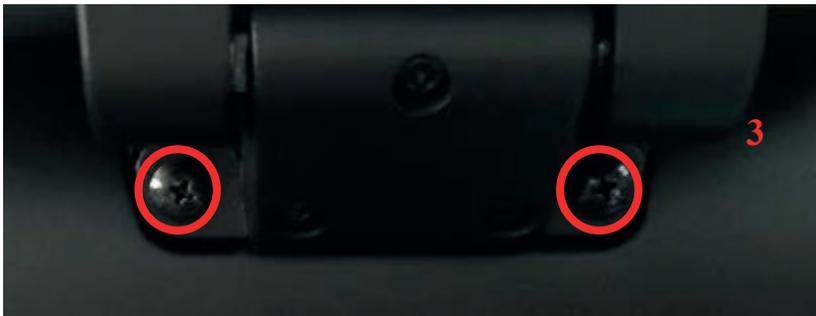
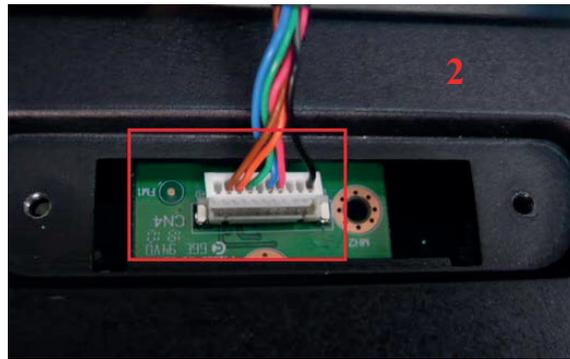
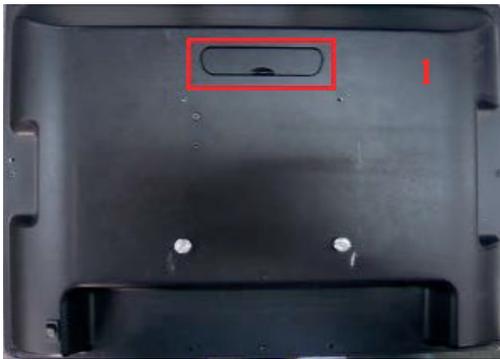
1. Dis-fasten 11 screws and remove the back cover.
2. Insert the RAM into the RAM slot.

### 5-3. MSR / i-Button / RFID



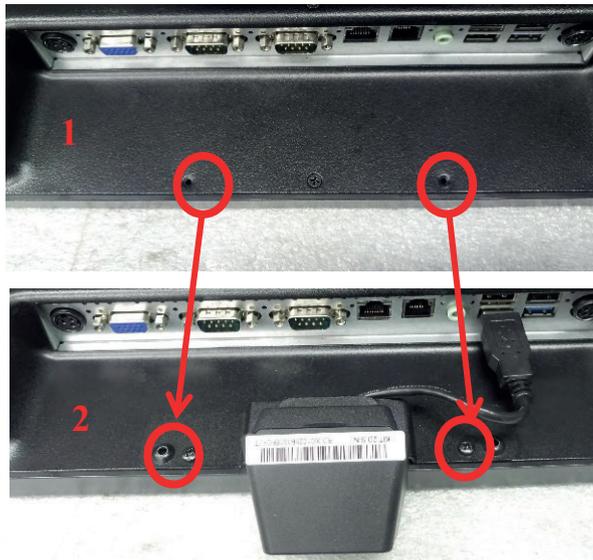
1. The MSR/iButton easily install on the side of the LCD Touch Screen's USB 2.0 connector.
2. Insert the USB connector on the MSR/iButton into the side USB port
3. Secure the module with the two screws onto the system.

#### 5-4. VFD / 8" or 10" 2<sup>nd</sup> Display



1. Remove top cover.
2. Either plug the VFD cable into the VFD connector or plug the 8" or 10" 2<sup>nd</sup> display cable into the 2<sup>nd</sup> display's connector (note: display connector can only be connected to one device at a time).
3. Install VFD with 2 screws / Install 8" or 10" 2<sup>nd</sup> display with 2 screws.

## 5-5. 1D/2D Barcode Scanner



1. Install the barcode scanner with bracket attached by tightening the 2 screws
2. Plug the barcode scanner Type-A Male USB cable into a USB port

### 6-1. MagSwipe Card Reader + iButton Configuration Utility

The MagSwipe Configuration Utility is used to set up the output format of MagSwipe  
CIDTestAp V07.01 Operation Manual

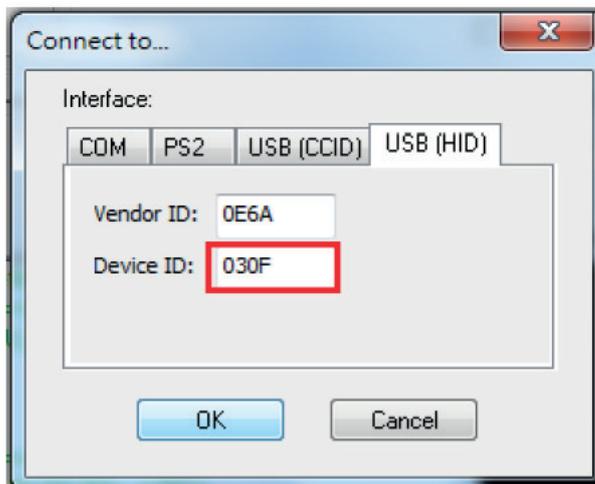
1. Device Connection
2. Utility Features
3. Configuration Setup

Version: V01.00 .

1. Device Connection

#### 1. USB(HID) Interface

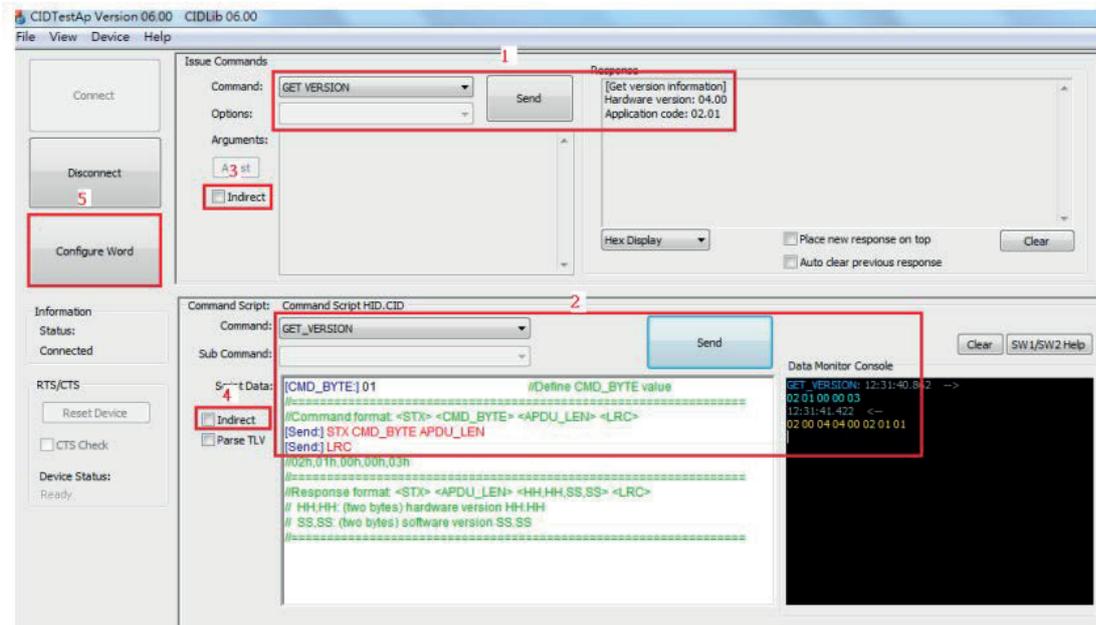
Select the USB HID device which has been plug into the PC USB port, enter the correct Vendor ID = 0E6A and Device ID then press 'OK", different device has its own Device ID., e.g. DID=0x030F for keyboard and HID USB, DID=0x5082 for keyboard, HID and VCP USB.



#### 2. Utility Features

After success device connection each supported command will get its response, e.g. Get Version command should response with the device HW/FW version, for all command set supported please reference its programming guide. There are two command/response windows can be used (see block1 & 2). For second level device the Indirect command signal should be selected (see block3 & 4).

Press the button “Configure Word” to enter the parameter setting function (see Block 5). The two response windows show up the data from the device connected.



## 2. Configuration Setup

Device functions(e.g. MSR, iButton, RFID, Chip card) behavior can be defined and stored by this tool.

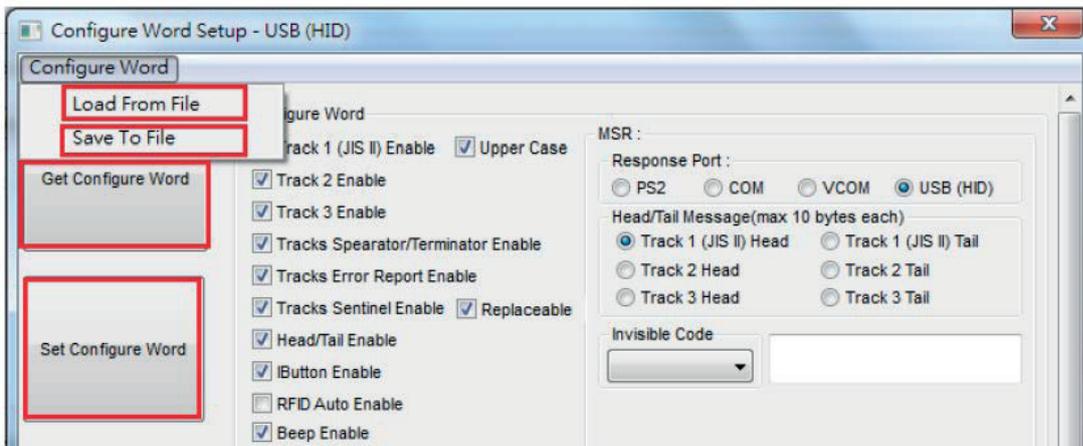
Four operation buttons define as below:

“Load From File”: Load the previous setting configuration file from storage.

“Save To File”: Save the current screen setting to file in storage.

“Get Configuration Word”: Get current setting in the device connected.

“Set Configuration Word”: Set current setting on the screen to the device connected.



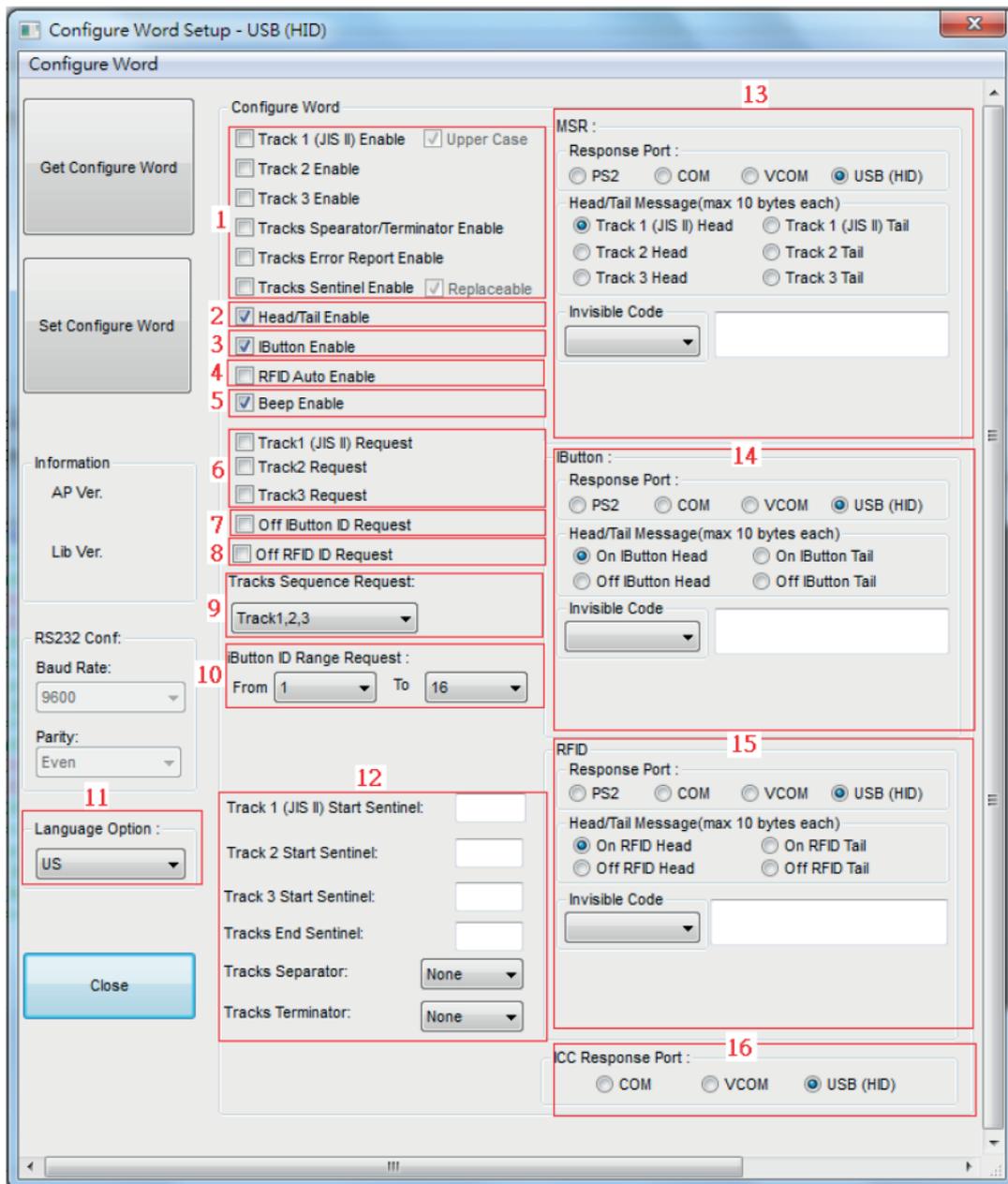
16 parameter areas(see below) are used for four functions, each function related area should be setup correctly and press Set Configure Word button before operation.

MSR function areas: 1,2,5,6,9,11,12,13

iButton function areas: 2,3,5,7,10,11,14

RFID function areas: 2,4,5,8,11,15

Chip card function areas: 16



## Configure word detail

### Area 1

Track 1 (JIS II) Enable:	If enabled, the track 1 data will response.
Track 2 Enable:	If enabled, the track 2 data will response.
Track 3 Enable:	If enabled, the track 3 data will response.
Upper Case:	If selected, the track1 data read will transfer to upper case before response.
Track Separator /Terminator Enable:	If enabled, the reader will send Track Separator and Track Terminator code defined in this configure word between tracks data or after the last track data.
Track Error Report Enable:	If enabled, the character "F" will response when track data read fail.
Track Sentinel Enable & Replaceable:	If enabled, the reader will send start and end sentinel at begin and last position of each track data. If replaceable, these sentinels will be replaced by the sentinel defined in this configure word.

### Area 2

Head/Tail Enable:	If enabled, all of the Head/Tail message defined in this configure word will prefix and suffix to each data returned.
-------------------	-----------------------------------------------------------------------------------------------------------------------

### Area 3

iButton Enable:	If enabled, iButton key ID may response when key attached or removed.
-----------------	-----------------------------------------------------------------------

### Area 5

Beep Enable:	If enabled, the beeper will activate to
	indicate the operation result.

#### Area 6

Track 1 (JIS II) Request:	If selected, the reader will response track data only if track1 read correctly.
Track 2 Request:	If selected, the reader will response track data only if track2 read correctly.
Track 3 Request:	If selected, the reader will response track data only if track3 read correctly.

#### Area 7

Off iButton ID Request:	If selected, key ID will response while key removed.
-------------------------	------------------------------------------------------

#### Area 8

Off RFID ID Request:	If selected, RFID ID will response while RFID card removed.
----------------------	-------------------------------------------------------------

#### Area 9

Tracks Sequence Request:	Select the order of three tracks data returned.
--------------------------	-------------------------------------------------

#### Area 10

iButton ID Range Request:	Define the ibutton data range returned.
---------------------------	-----------------------------------------

#### Area 11

Language Option:	Select one of supported keyboard language for PS2 or keyboard USB interface.
------------------	------------------------------------------------------------------------------

#### Area 12

Track 1 (JIS II) Start Sentinel:	Define Track 1 Start sentinel byte, default is "%".
Track 2 Start Sentinel:	Define Track 2 Start sentinel byte, default is ";".
Track 3 Start Sentinel:	Define Track 3 Start sentinel byte, default is "+".
Tracks End Sentinel:	Define all Tracks End sentinel byte, default is "?".
Tracks Separator:	Define the insertion byte between each track data returned.
Tracks Terminator:	Define the appending byte after the last track data returned.

### Area 13

MSR Response Port:	Select MSR data response port right after swiped.
Head/Tail Message:	Message prefix and suffix to each track data returned.
Each Head/Tail accepts10 bytes max. long. Invisible code:	Enter keyboard control code.

### Area 14

IButton Response Port:	Select Ibutton key ID response port right after key attached or removed.
Head/Tail Message:	Message prefix and suffix to key data returned. Each Head/Tail accepts10 bytes max. long.
Invisible code:	Enter keyboard control code.

### Area 15

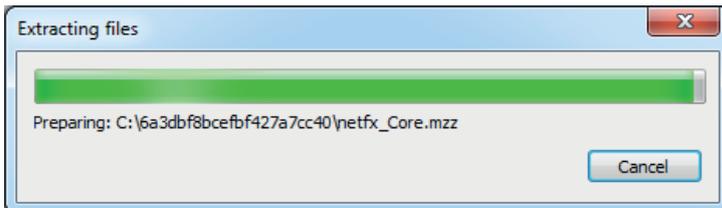
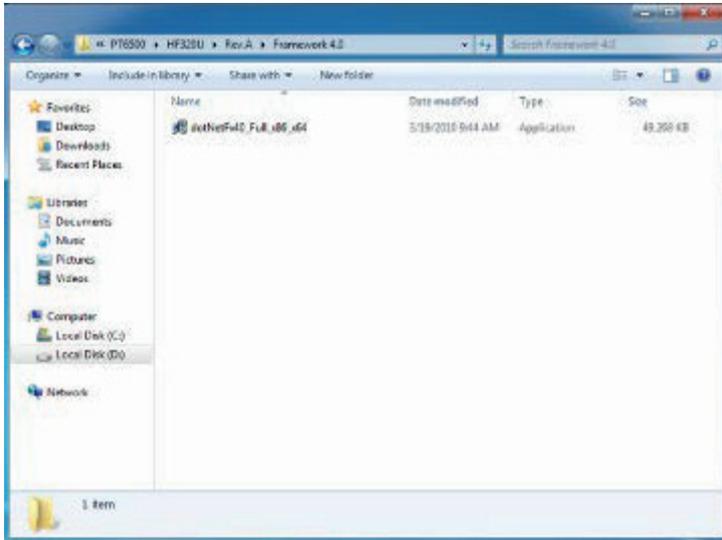
RFID Response Port:	Select RFID ID response port right after tag attached or removed.
Head/Tail Message:	Message prefix and suffix to tag data returned. Each Head/Tail accepts10 bytes max. long.
Invisible code:	Enter keyboard control code.

### Area 16

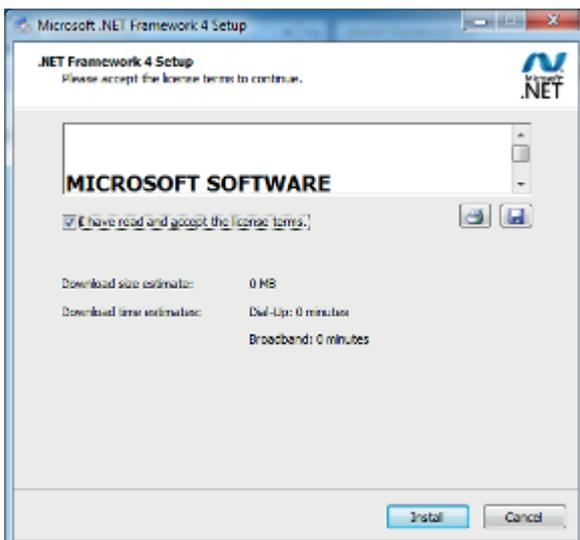
ICC Response Port:	Select chip card auto. ATR response port,
--------------------	-------------------------------------------

## 6-2. Install framework 4.0

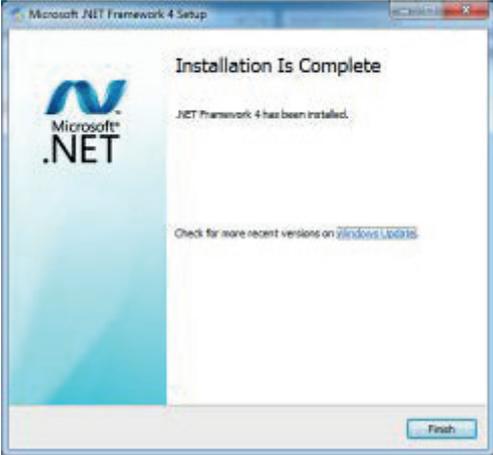
1. Double-click to install.



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

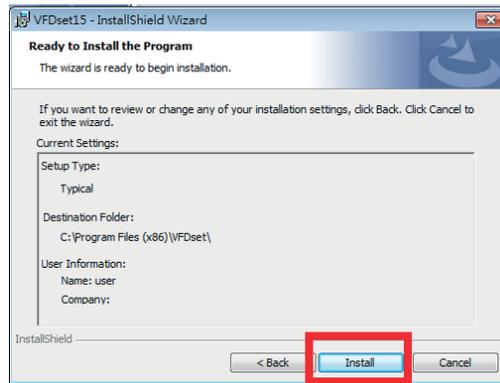
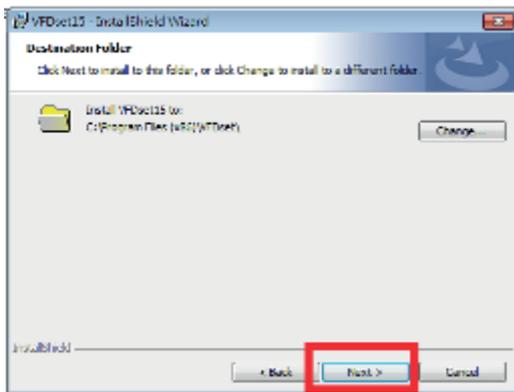
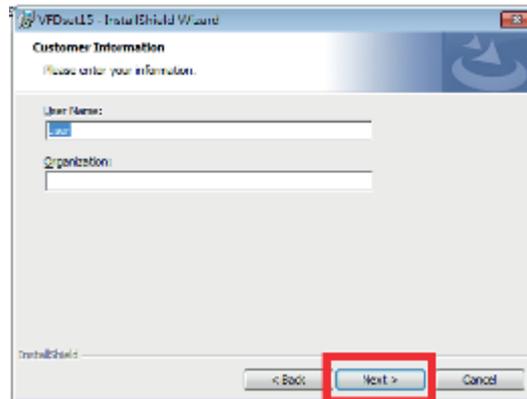
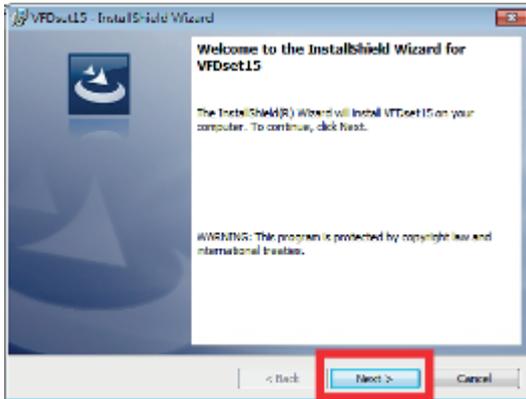


3. Click Finish.

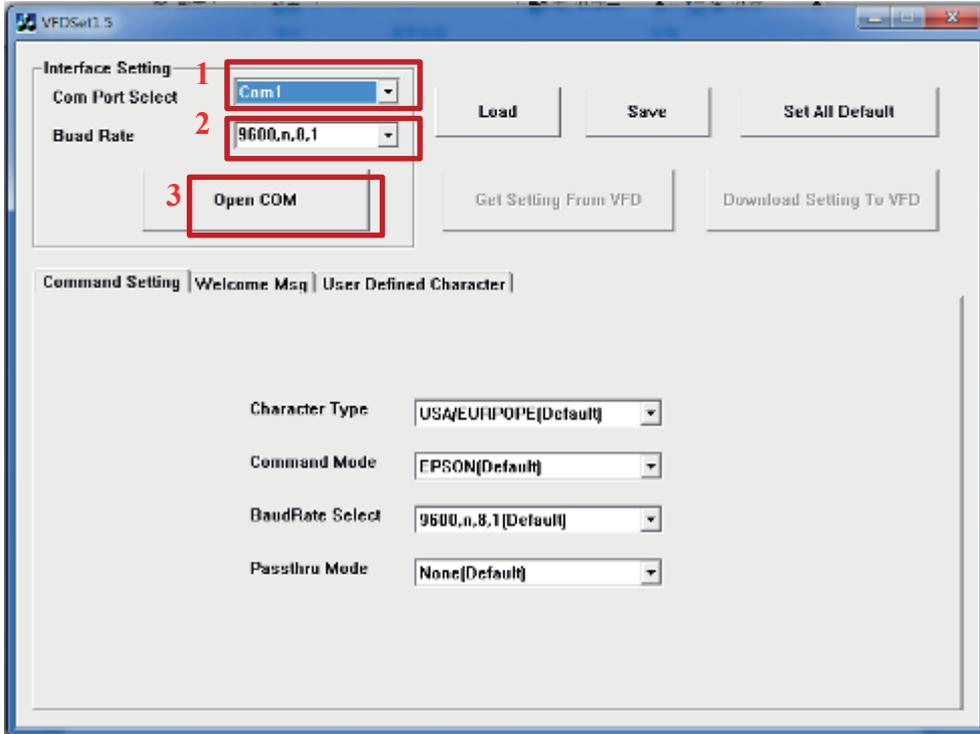


## 6-3. VFD

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.



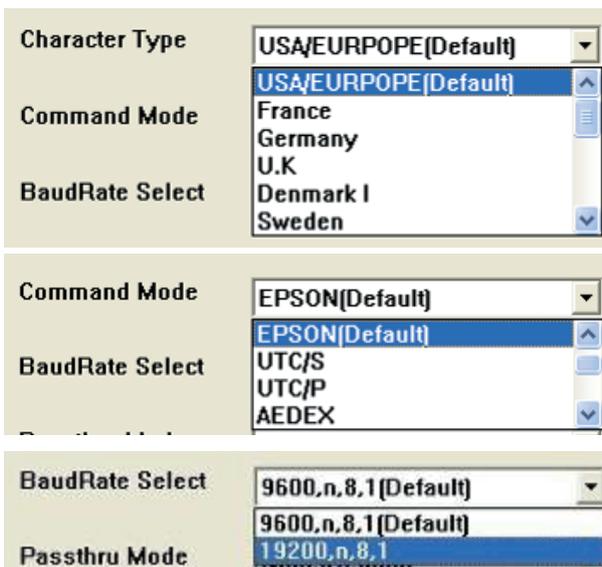
3. To execute “VFDset.exe” for setting up communication between software and VFD module.



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”/ “pass thru Mode”.



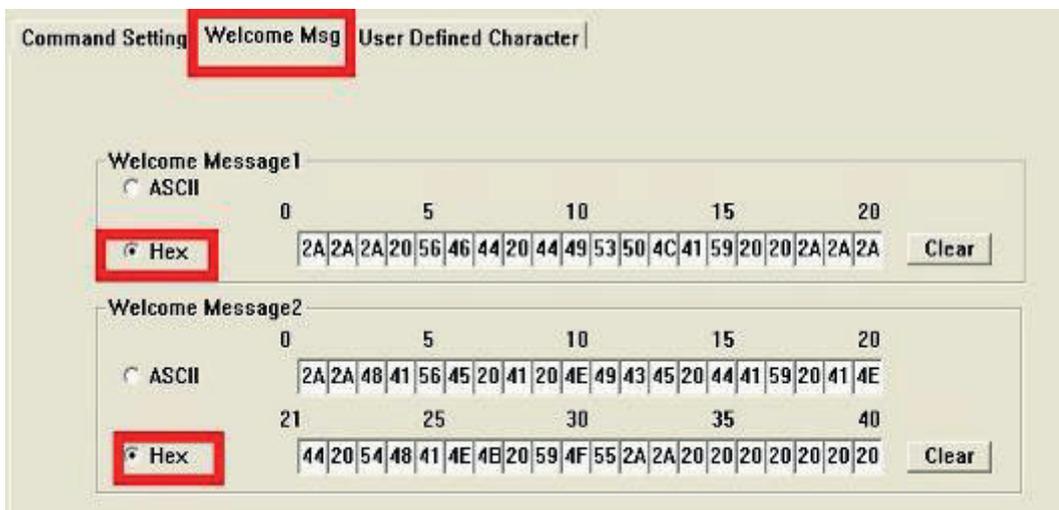
6. Click "Set All Default" button to show default setting, the Default table is

Character Type : USA  
Command Type : EPSON/EUROPE  
Baud Rate Setting : 9600/n/8/1  
Pass-through Mode : None  
Welcome msg line1 : \*\*\* VFD DISPLAY \*\*\*  
Welcome msg line2 : \*\*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.

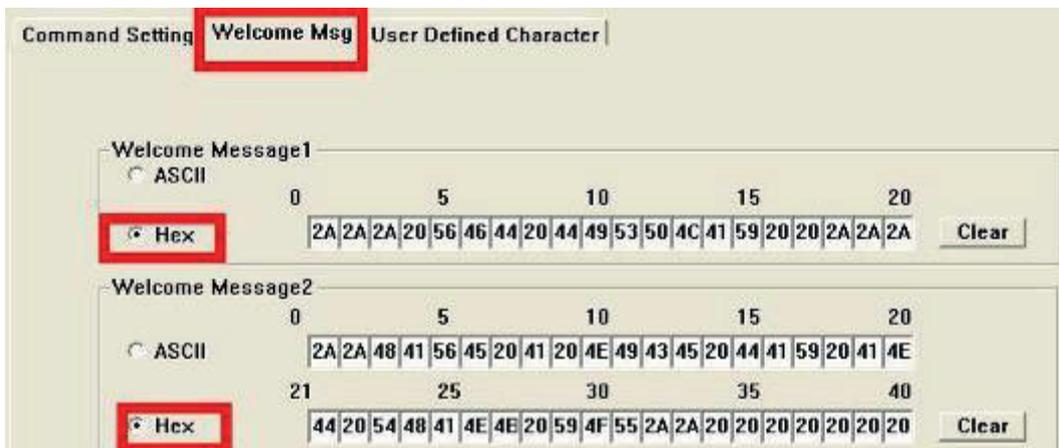
a. ASCII mode



You can type the character by keyboard (0x20h ~ 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 · the range 0x80~0xFF which depends on the code page table.



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

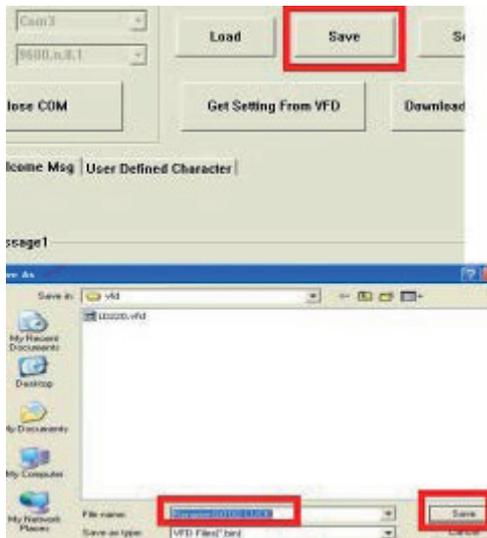
8. Click “Download setting to VFD” button

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



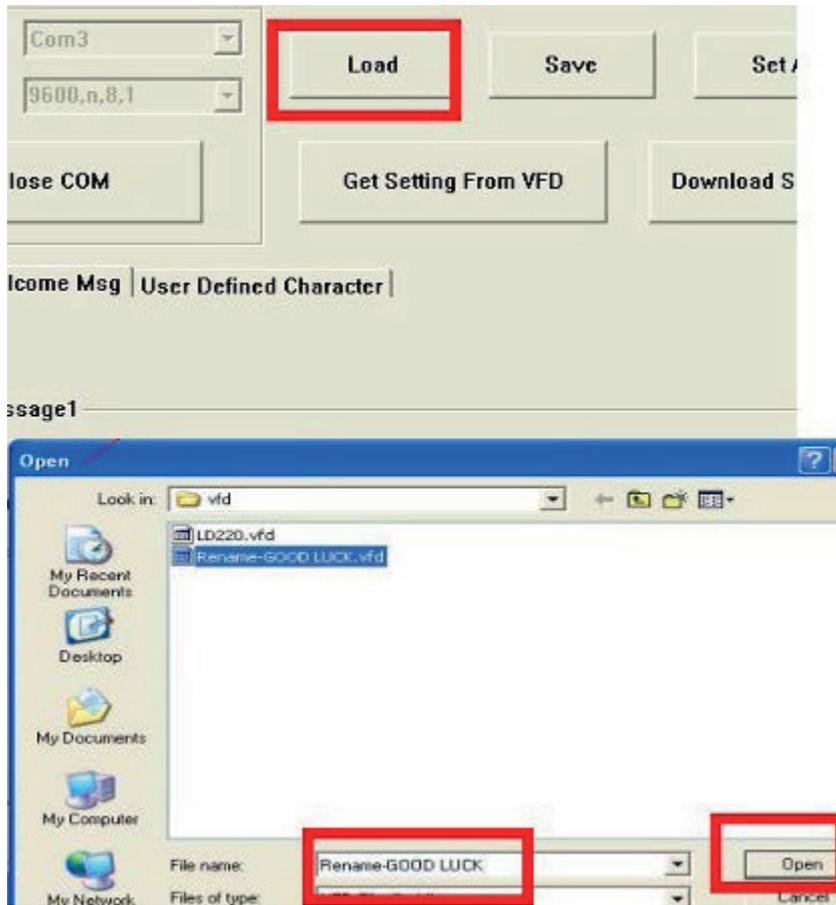
9. Click “Save” button

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.

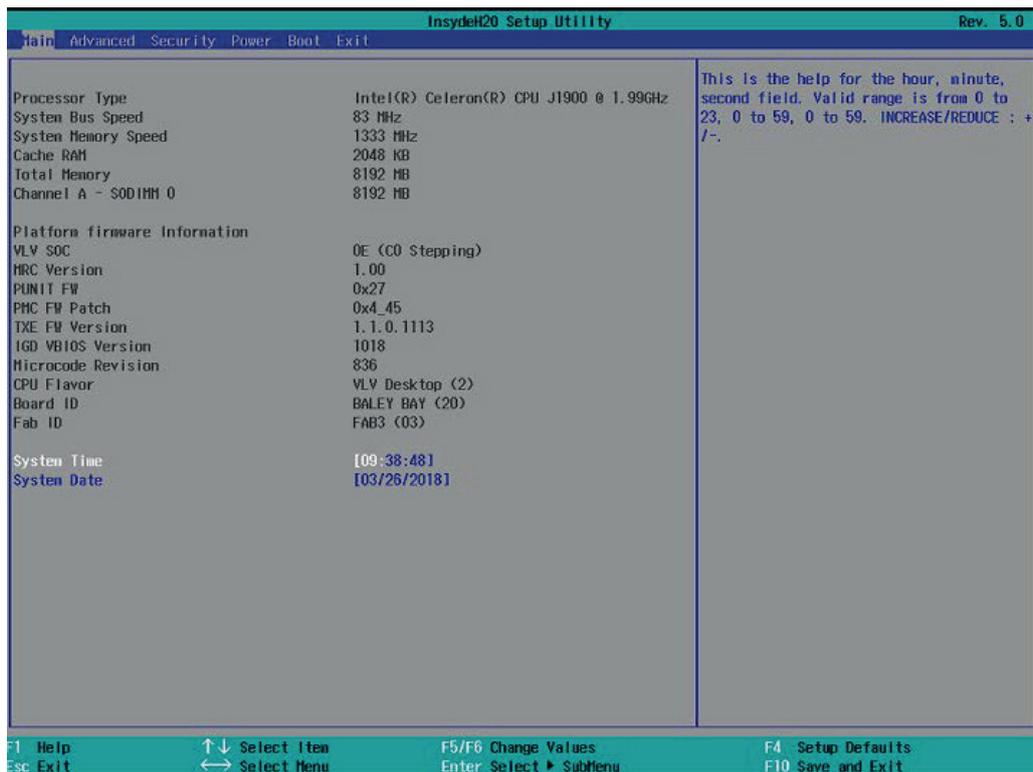


## BIOS / UTILITY SETUP

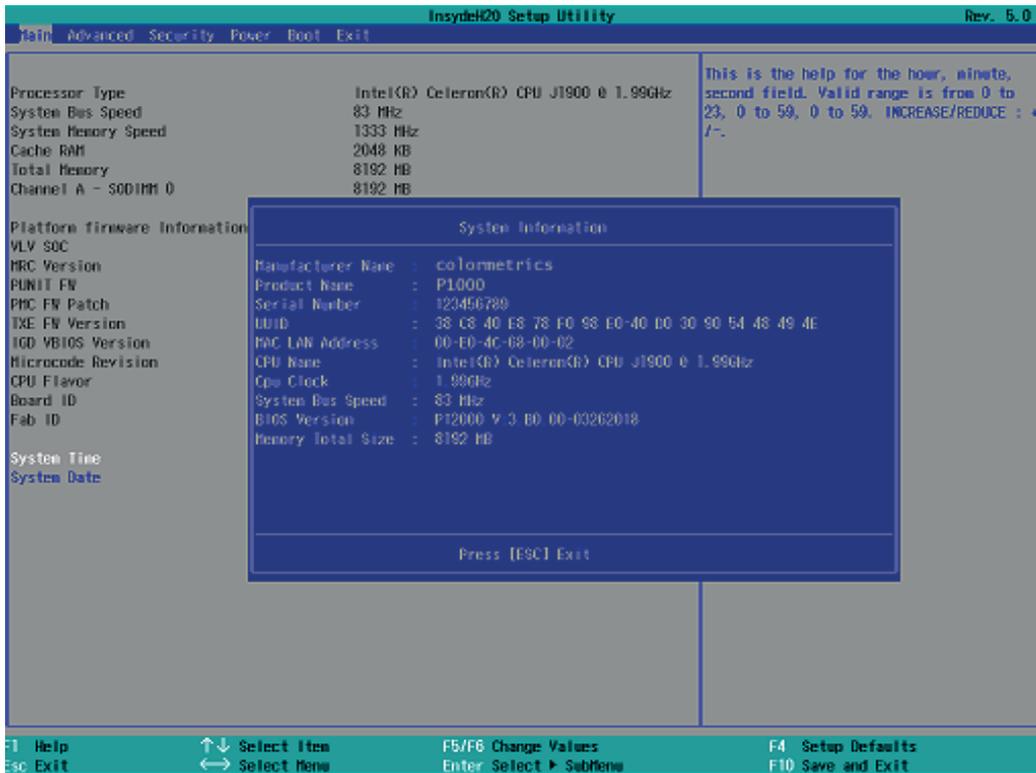
1. Press <DEL > key to enter SETUP CMOS UTILITY when system boot up.



2. Press <ENTER >over SCU button to enter the utility.



Press <F9> to view the system information.



## Date and Time

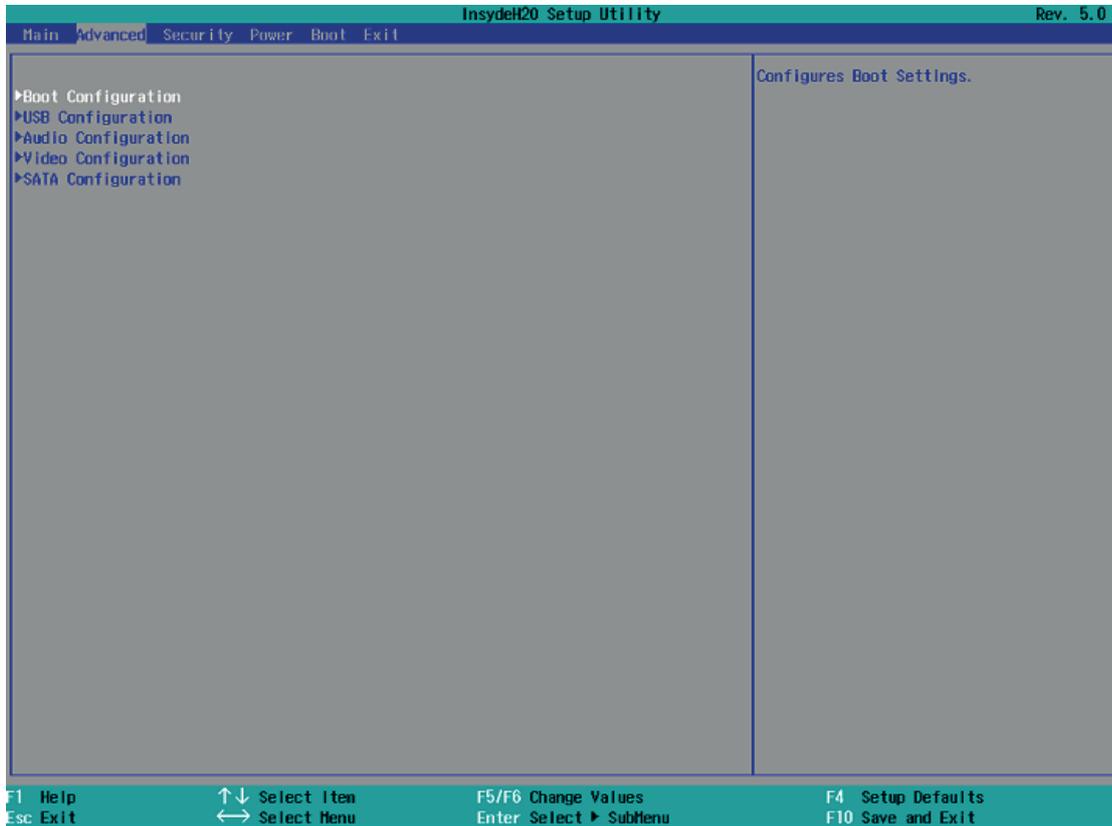
The Date and Time items show the current date and time on the computer. If you are running a Windows OS, these items are automatically updated whenever you make changes to the Windows Date and Time Properties utility.

## 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.

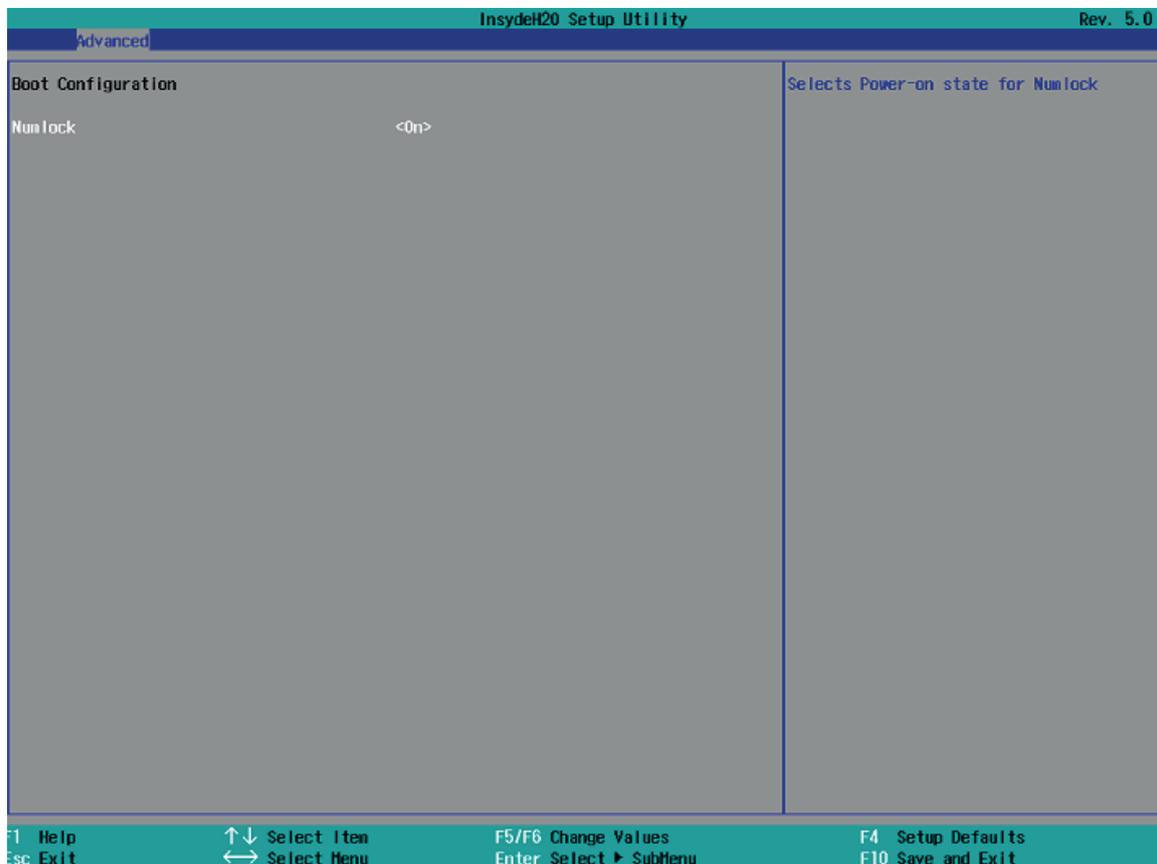
## 7-1. Advanced

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



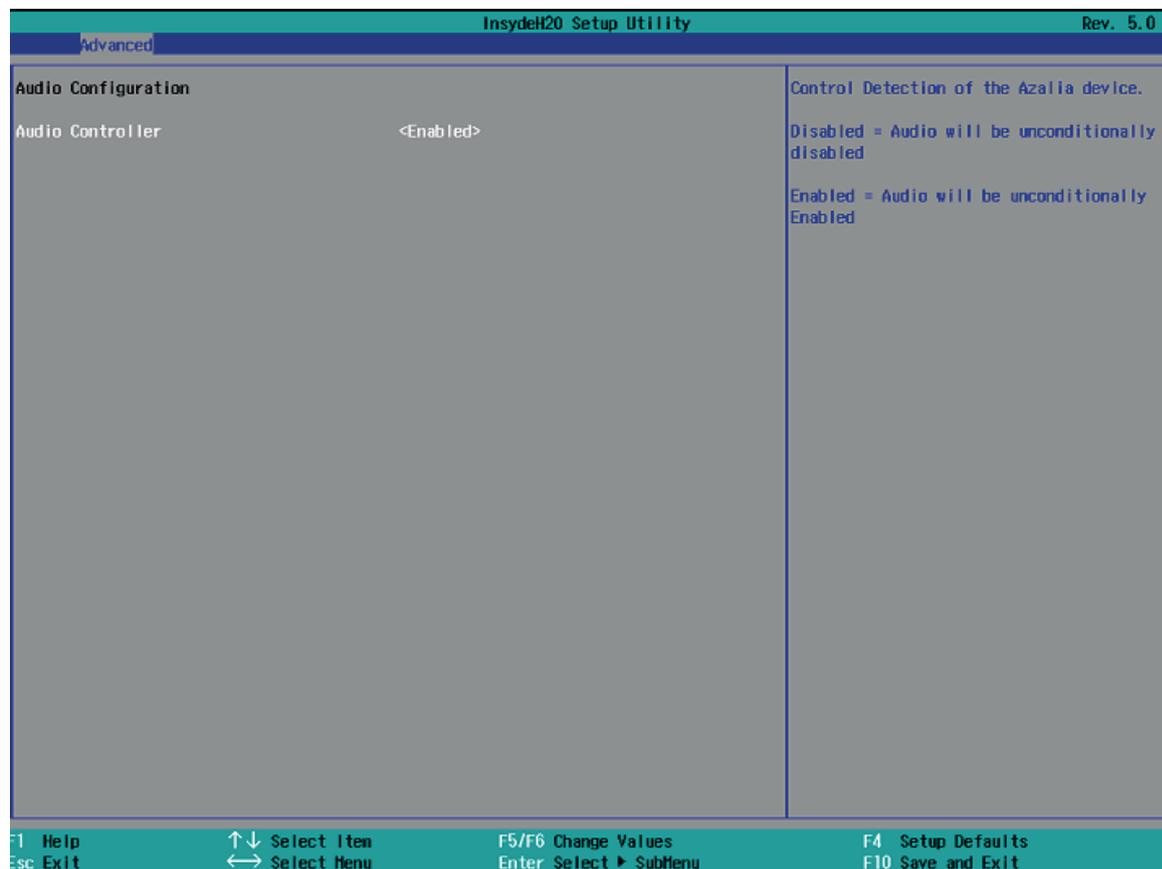
## 7-1-1. Boot Configuration

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



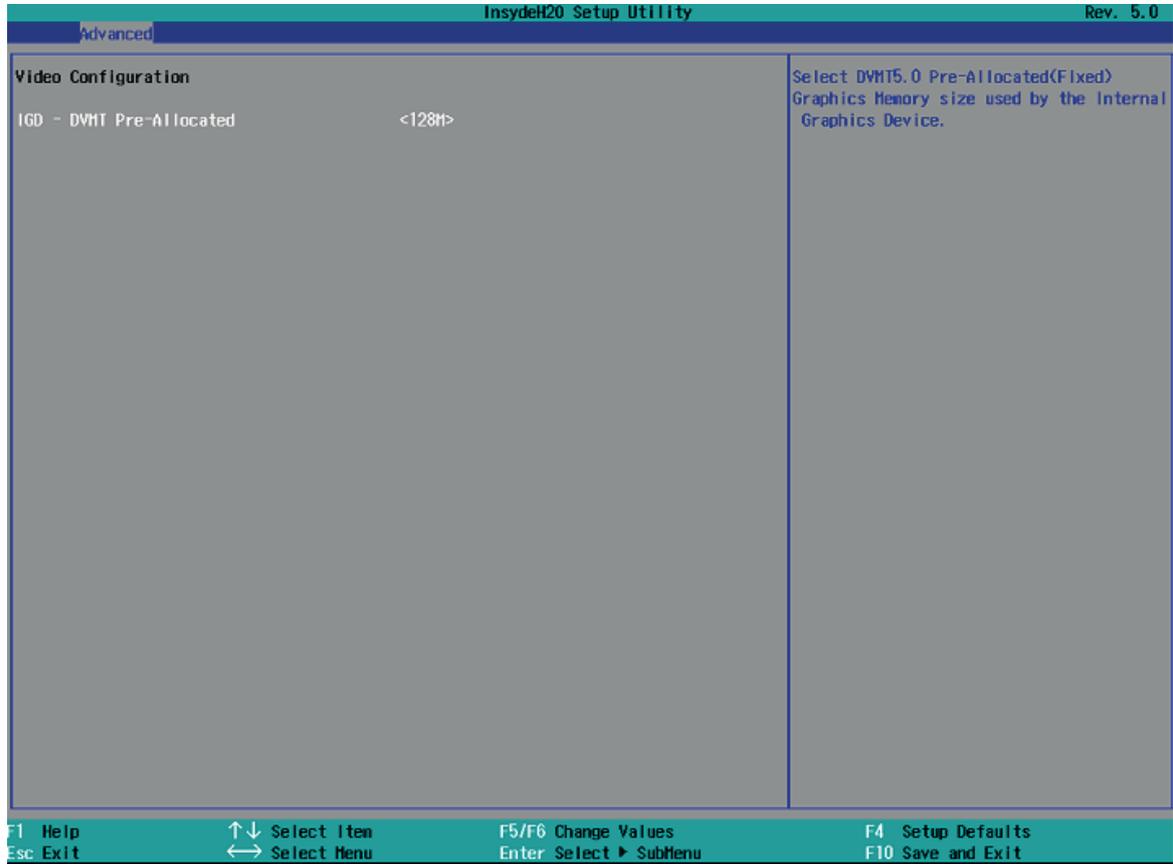
## 7-1-2. Audio Configuration

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



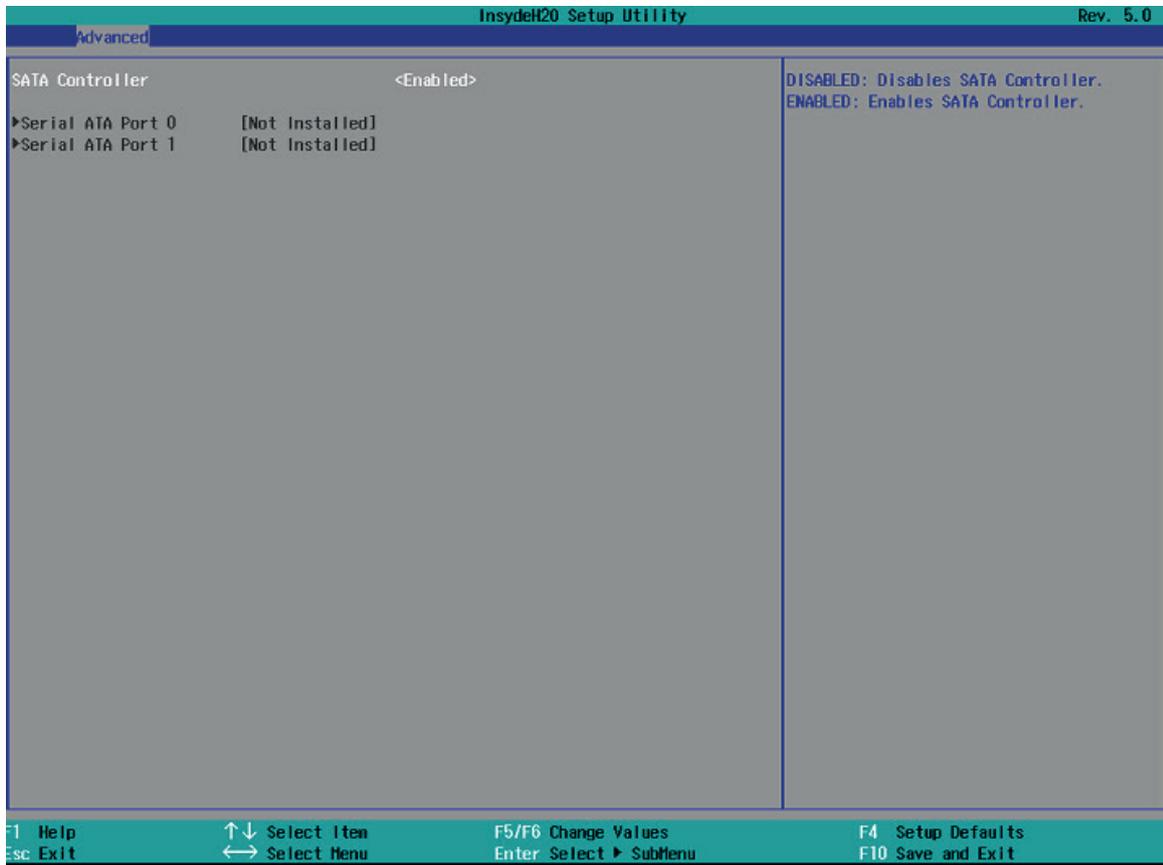
### 7-1-3. Video Configuration

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 ,?'



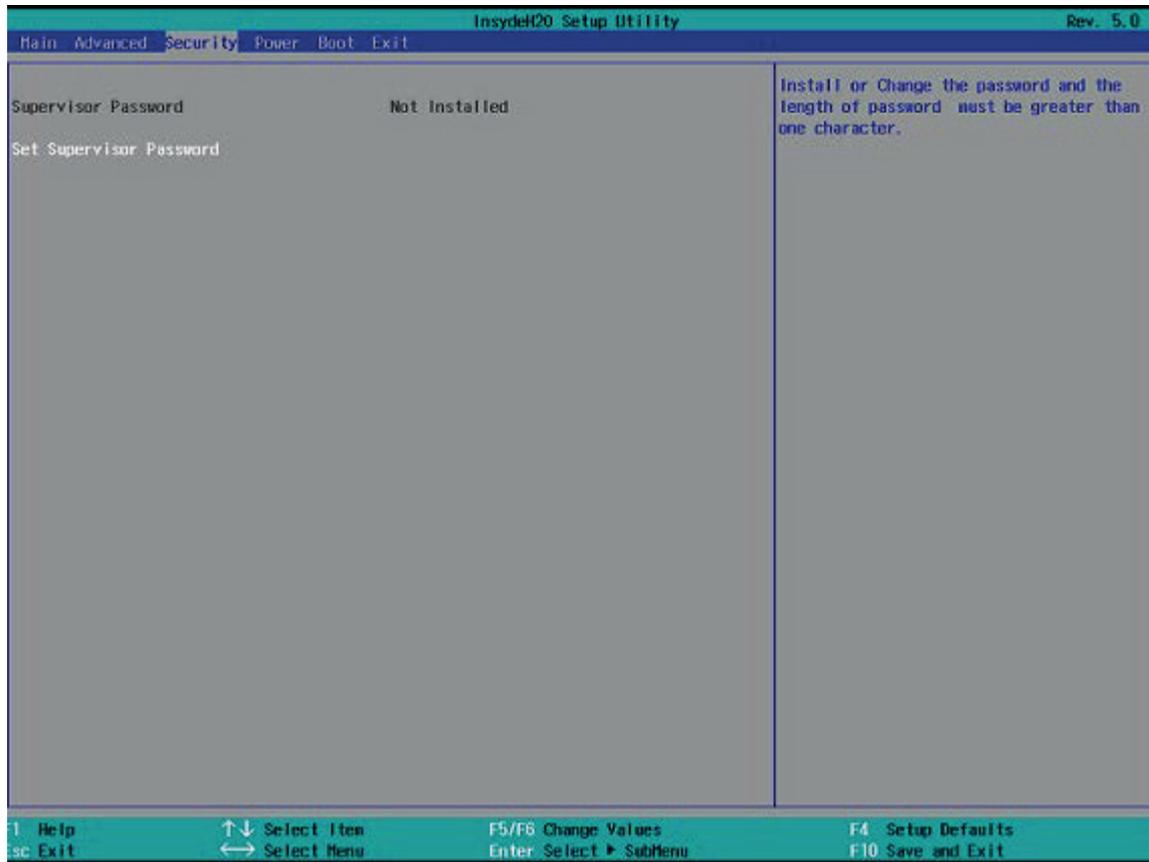
## 7-1-4. SATA Configuration

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



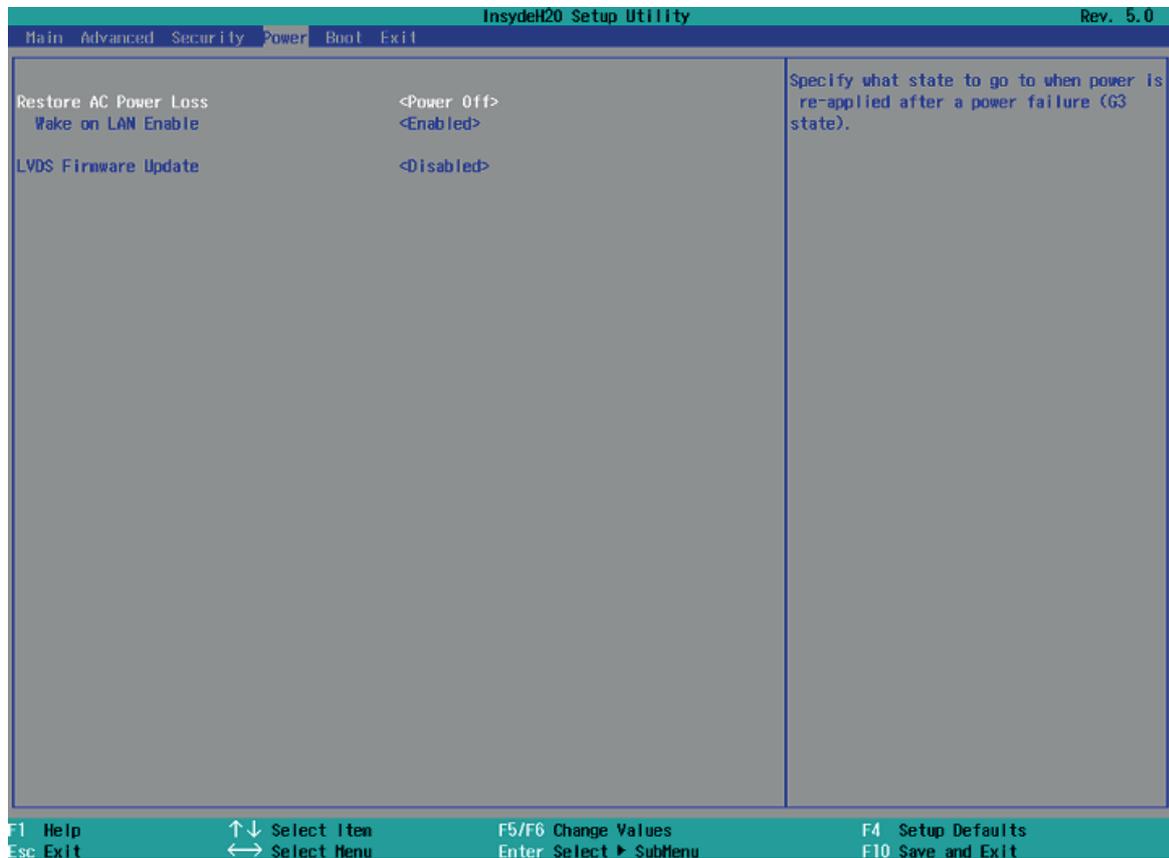
## 7-2. Security

Use the Security menu to install or change the password



## 7-3. Power

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

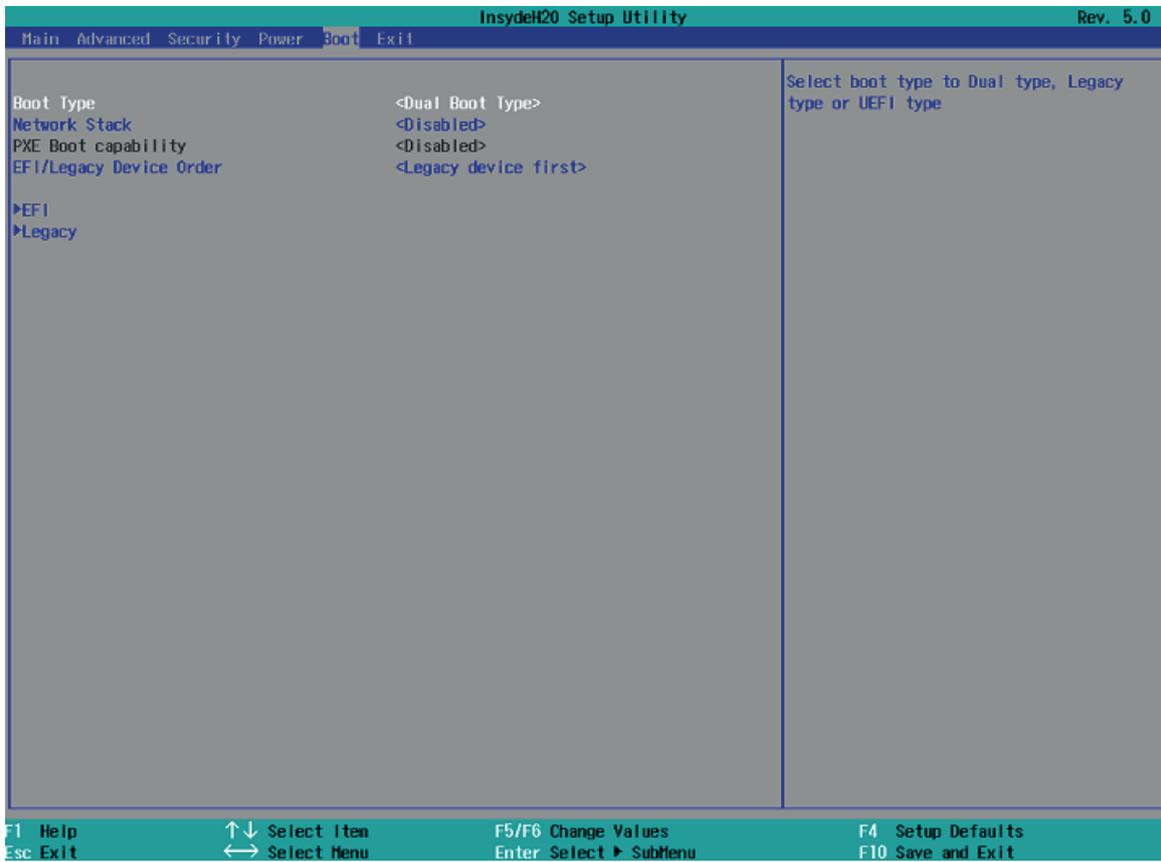
Enable or disable system wake by onboard LAN chip

### LVDS Firmware update

This item allows you to enable or disable LVDS Firmware update

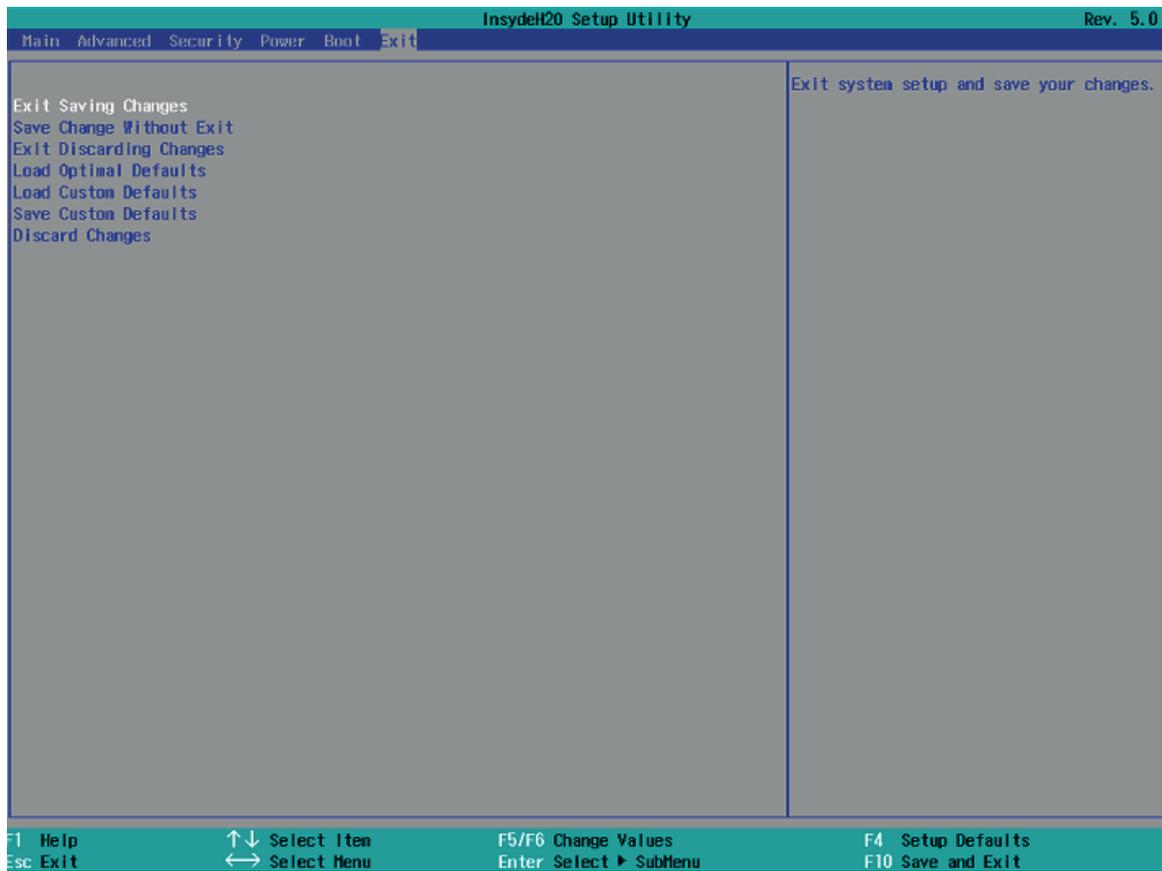
## 7-4. Boot

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



## 7-5. Exit

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



### 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
- ☆ Vinegar (mixed with water)
- ☆ Isopropyl Alcohol

#### **NOTICE: The following cleaners are unacceptable:**

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