HY3800W

Industrial Handheld Computer

User's Manual

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1 STANDARD PACKAGE CONTENT

Make sure whether the package contains the following contents after opening the packing:

(1) Host :(Fig. 1-1)

HY3800W Host

It contains a Hand Stripe and a Battery Cover.

Fig.1-1 Host

(2) Battery :(Fig. 1-2)

7.4V 2600MAH Li-ion battery

Fig.1-2 Lithium battery

(3) Adaptor :(Fig. 1-3)

Power Adapter

Fig.1-3 The charger and adapter

(4) USB cable :(Fig. 1-4)

USB Cable

Fig.1-4 USB cable

(5) Touch Pen

Touch Pen

Fig.1-5 Touch Pen

(6) Waterproof Blocker

Prevent water Infiltration into the machine from Data interface

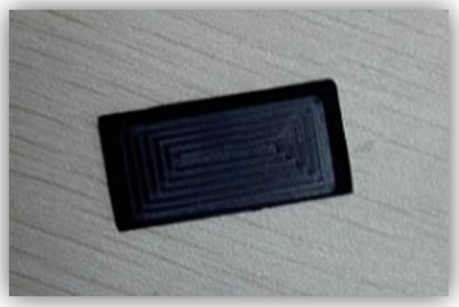


Fig.1-6 waterproof board

2 Introduction

2.1 Summary

HY3800W is a Industry Rugged Handheld Computer based on Windows CE 6.0 OS,It contains the following features.

(1) Compact structure design, multi internal plastic buffer, sustain 1.2 meters drop, Water proof, IP65 Industrial Standard ;

(2) Super Power Battery 7.4V,2600MAH, Long Working Time. Sustain consecutive Working above 10 hours (depends on specific situation), 6 days standby.

(3) Stable PXA3XX CPU，efficiency data processing;

(4) Readable under sun-shine 3.5 inch LCD;

(5) Multi-Thread WinCE 6.0 R3 System;

(6) Hardware extendable functions;

(7) High capability Barcode scanner engine, Designed for 10 years using;

(8) Sensitive UHF RFID Module;

(9) Wifi Module;

(10) Support further software development, SDK (Software Development Kit) Provided.

2.2 Specification

CPU		PXA3XX (624MHZ)
OS		Windows CE 6.0 R3 (Language Customizable)
Memory	RAM	128MB
	F-ROM	128MB
LCD	Type	TFT-LED QVGA Touch Screen
	Resolution	QVGA（240X320）
	Size	3.5 inch
Input	Soft Keyboard	English, Chinese Input(Multi Language Customizable)
	Hard Keyboard	30 Key
	ScanKey	At the Middle
Power	Main Power	7.4V,2600mah Li-ion
	Standby	6 days
	Working	Above 6 hours, depends on specific situation
Extension		Micro SD/TF Slot
Industrial Standard Size	Human Engineering Design	190(L)×78(W)×150(T) mm
Weight		430g(Including Battery)
Working Environment	Operation Temp.	-15~+50℃
	Storable Temp.	-20~+60℃
	Working Wet	5-95%
	Storage Wet	5-95%
UHF RFID	Frequency	902MHz~928MHz
	Modulation	FHSS
	Output Power	5 dBm ~ 28.5 dBm
Wifi	Frequency	2.412GHz - 2.462GHz
	Modulation	DSSS, OFDM, DBPSK, DQPSK, CCK, 16-QAM, 64-QAM
	Output Power	802.11b: typical 14dBm +/- 1dBm
		802.11g: typical 13dBm +/- 1dBm

2.3 Function Introduction

The main component position schematic diagram and instructions

Fig.2-1 Main component position schematic diagram

Noted:

1) LED Indicate the state of device

Booting: In Booting stage, LED turn into Red, after login into System, LED turn to Green

Deep Sleep: Press Power Key, turn into Deep Sleep stage. Firstly, LCD shut

down, after 2 Seconds, Green LED turn off, indicating the System run into deep sleep stage.

At Control Panel, could set the power management resolution.

Wake up: At deep sleep mode, press power key, Green LED On, upon 1 second, boot into system. (No need to Press power more times, After the Green LED on, and before LCD on.)

Sleep: idle at setting time (set at control panel) LCD could turn off, but Green LED still on, Just need to touch the LCD to wake the system.

2) USB and Charging port

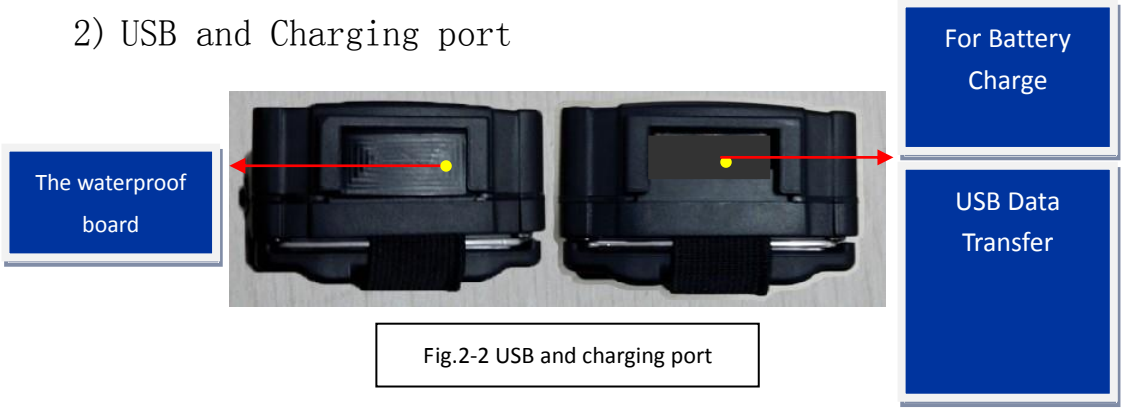


Fig.2-2 USB and charging port

2.4 Keyboard Manual

Key A1: Switch Key for Number and Characters ;

Key Aa: Caps Lock;

Key S1、S2: Combination Key.

Ant Number Mode, The key 1, 2, 3……0 is

For number input:

Press A1, swith to Character Mode, with combination key, could key into 26 characters.

For Example: at Number Mode, press 2, is "2"

Press A1, switch to Character

Fig.2-3 Keys distribution in the area

Mode. And then:

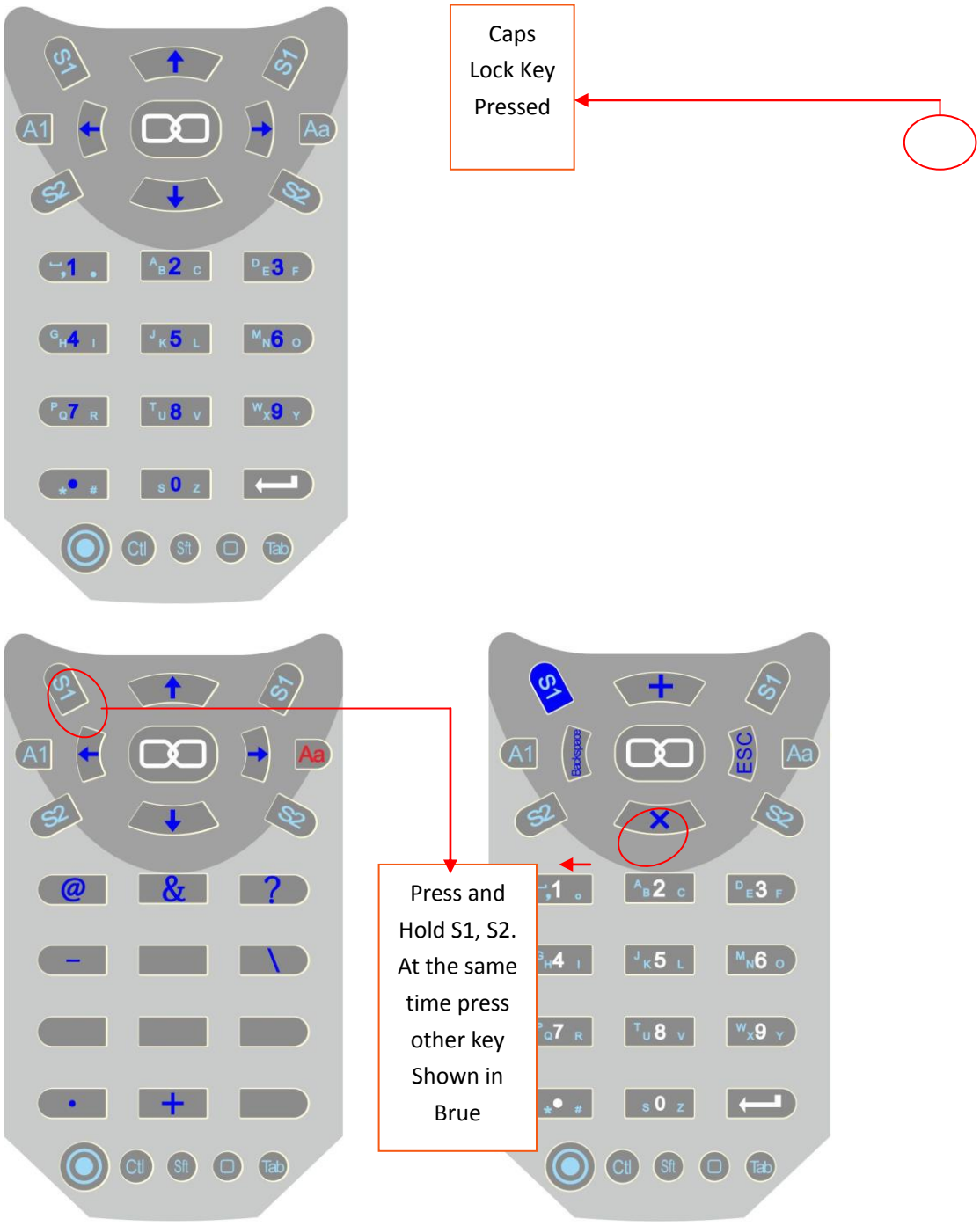
Press 2 is “a”

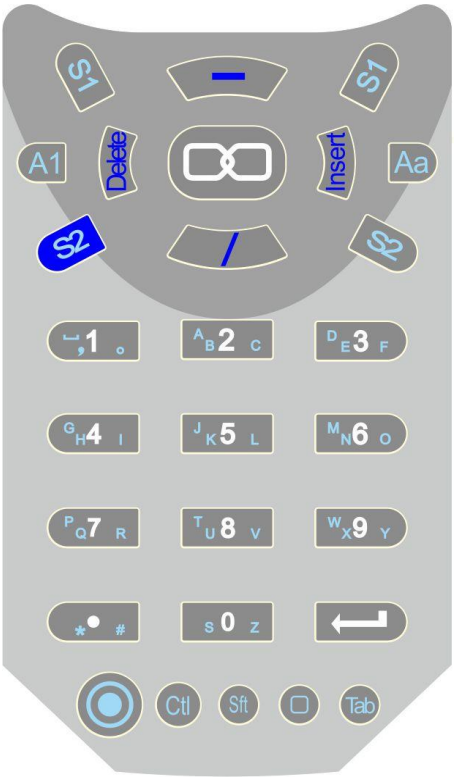
Press and hold S1, at the same time press 2, is “b”,

Press and hold S2, at the same time press 2, is “c”,

Key Board Detail As below:

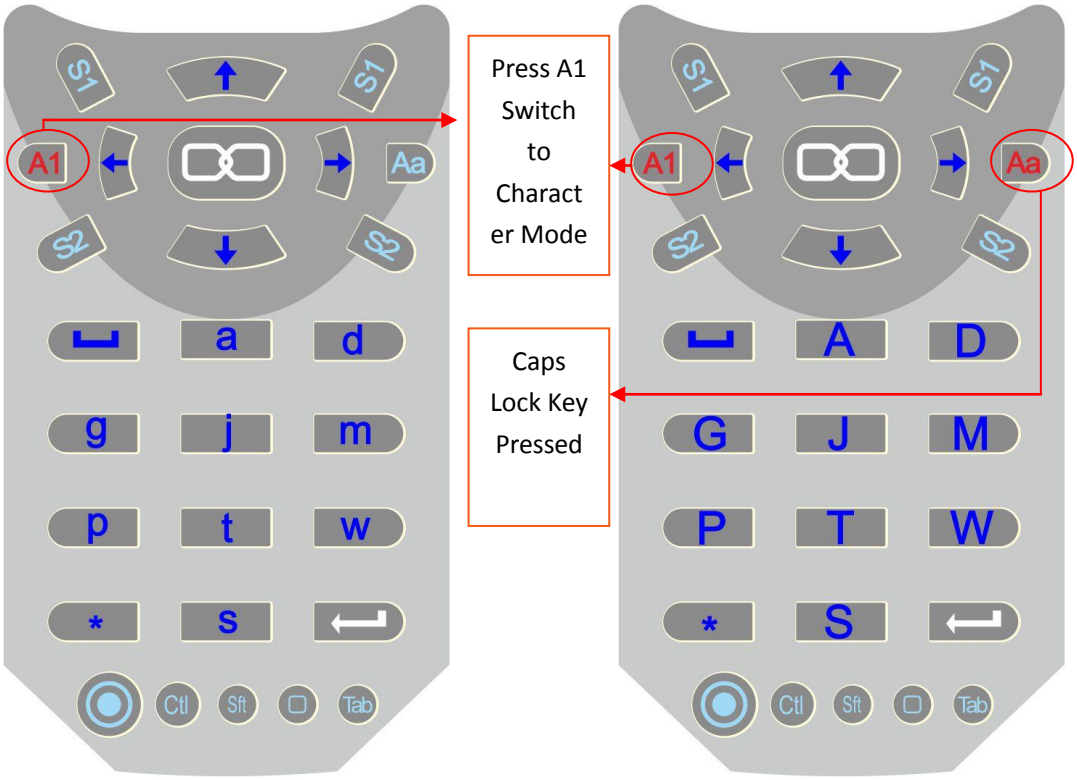
Under Number Mode:

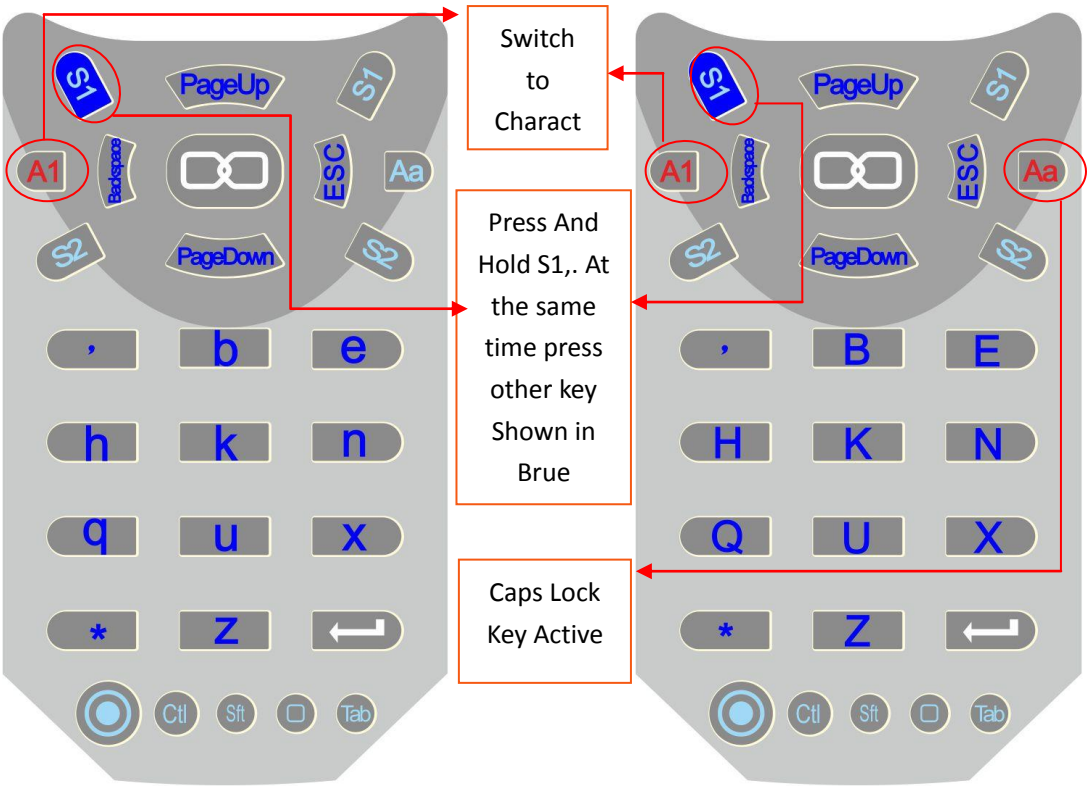


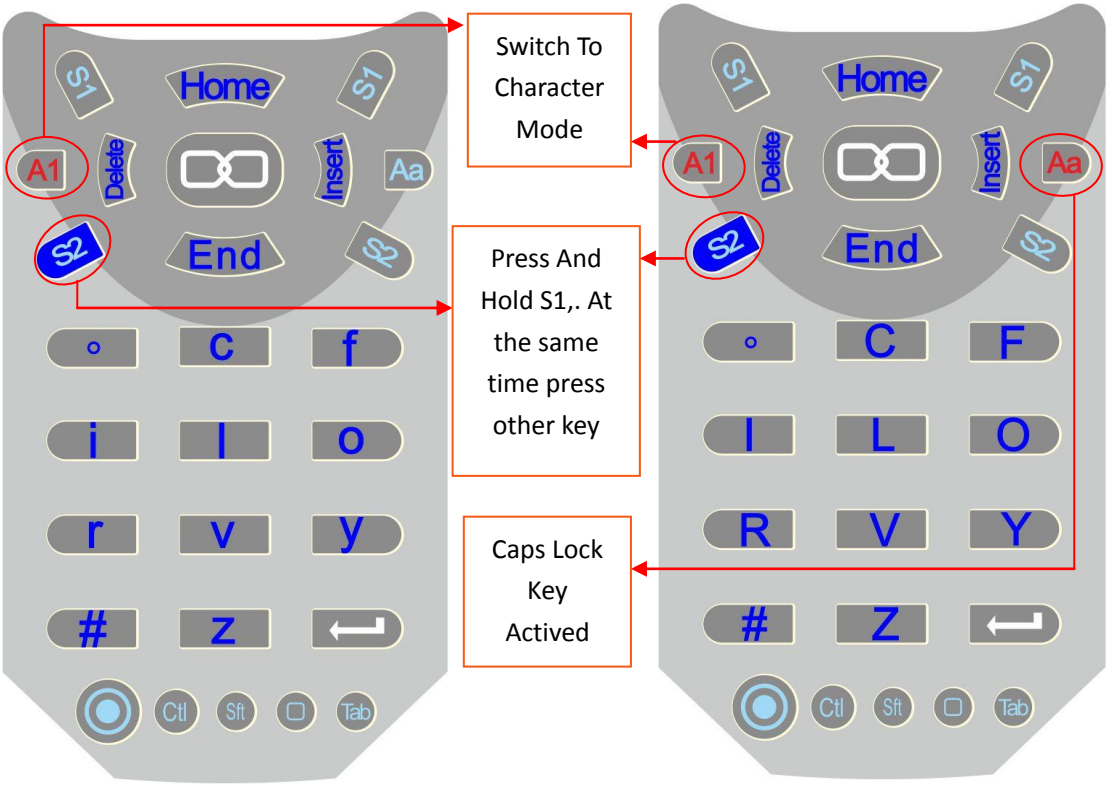


Combination	Function
S1 + ⌒	“+” plus
S1 + ⌣	“×” multiplication
S1 + (	Back space
S1 +)	ESC
S2 + ⌒	“-” minus
S2 + ⌣	“/” divide
S2 + (	Delete
S2 +)	Insert

Under Character Mode:


Press A1 Switch to Charact er Mode
Caps Lock Key Pressed
S1
A1
Aa
S2
a d
g j m
p t w
* s
Ctl Sft Tab
A D
G J M
P T W
* S


Switch to Charact
Press And Hold S1,. At the same time press other key Shown in Brue
Caps Lock Key Active
S1
PageUp
A1
Backspace
ESC
Aa
S2
PageDown
, b e
h k n
q u x
* z
Ctl Sft Tab
B E
H K N
Q U X
* Z



Under Character Mode;

Combination	Function
S1 +	Page Up
S1 +	Page Down
S1 +	Backspace
S1 +	ESC
S2 +	Home
S2 +	End
S2 +	Delete
S2 +	Insert

3 The First Time Operate

3.1 Touch Screen Adjustment

The first time and after a period of time, you may find out the touch screen is not so sensitive, thereafter, you may recalibrate the touch screen.

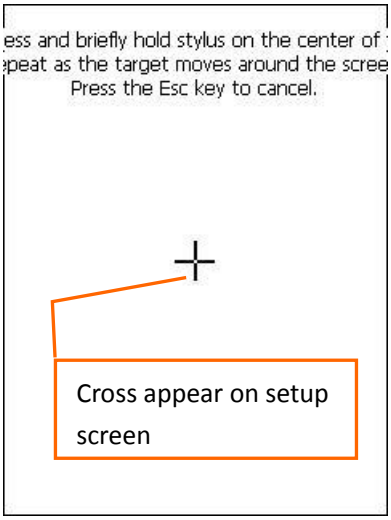


Fig.3-1 Cross appear on setup screen

(1) Choose Control Panel, select "pen point", then select "adjustment", select "readjustment", the adjustment screen will appear. (Fig.3-1);

The above words "pen point", "adjustment", "readjustment" may appear differently in your machine due to the following reason.

- This is a direct translation from foreign language, therefore the actual message prompt at the screen with your local language may appear different, but the meaning should be equivalent.
- This may also caused by different version of operating system

(2) Use stylus point to center of cross appear on creen and hold at least one second and release, Adjust until advance to next screen;

(3) By press the key in the keyboard, then control like Fig.3-2, press 『OK』 Storage cursor location seting

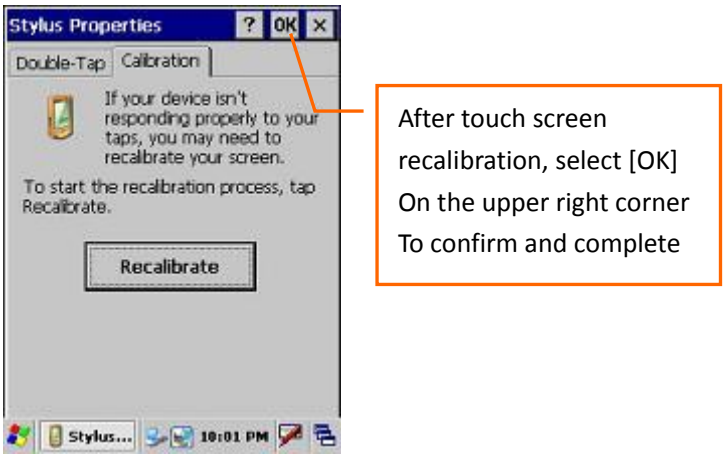


Fig.3-2 Select [OK] to confirm and complete

3.2 Time and Date Setting

Double touch lower bottom"time" display to access to time/date setup screen

Setup Time Zone first,touch pull Down arrow on the right to appear a Selection of time zone,and choose The correct time zone and high-light it

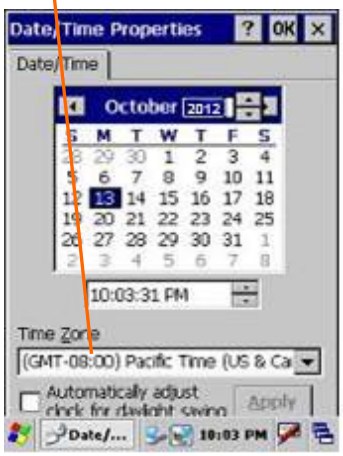
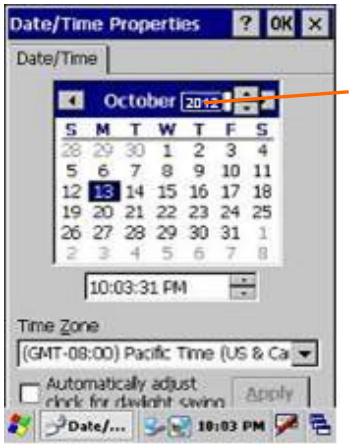


Fig.3-3 Double touch lower bottom "time"

Fig.3-4 select the time zone first



Touch up/down pull down arrow to Select year and high-light

Touch Month pull down and high light to select the correct month

Fig.3-5 Select the correct year

Fig.3-6 Select the correct month

Touch and high light the selected day

Touch "OK" on the upper right corner to finish and complete

Fig.3-7 Select the correct day

Fig.3-8 Press the bottom [OK] to confirm and complete

3.3 Touch setting and skills

Just like using mouse in your PC, use the stylus touch screen is the basic operation of HY3800W.

When first time use HY3800W, screen will prompt instruction to follow.This procedure include screen adjustment. This adjustment will calibrate the internal circuitry to correspond to the touch sensor on the screen.Therefore, when you touch the screen the HY3800W will response correctly and accurately.

Notice: Please use stylus to touch the HY3800W screen, do not use any sharp point object such as ball pen to scrape on the screen.

When HY3800W is in operating mode, you may touch HY3800W touch screen to execution program, example:

- Open Startup menu
- Select menu instruction
- Select pull down choice item
- Open virtual keyboard

Similar to the mouse drag and drop high-light wording or move selected items, you may also press on the scroll up and down on display.

3.4 Connects to PC

(1) Install Microsoft ActiveSync first in PC (Can download from Microsoft website).

(2) Setup in HY3800W:

(3) Select Start/Setup/ Control Panel/ PC Connect/ Change connection, select USB Socket Default.

3.5 Reset

In normal condition,you do not need to press “Rest” button,However, when you encounter situation of no response from touch screen, then you should press

“Reset” and resume HY3800W to normal operation.

3.6 Note about Battery Usage

Because the files and information are stored in RAM (Random Access Internal Memory), therefore retain the battery at functional level is very important. If you operate until the battery is depleted, your data information will be lost. Although the O.S. and internal programs will not be erased, however, add on program and special setup will be lost.

In normal situation, HY3800W can operate 18 hours after complete charge.

When connect HY3800W to power adapter, HY3800W will automatically charge up main battery.

At Deep Sleep Mode, Connect to Power adapter, The battery will be automatically on Charging. (LCD and LED no need to be on at this stage)

Checking of battery level

Method 1

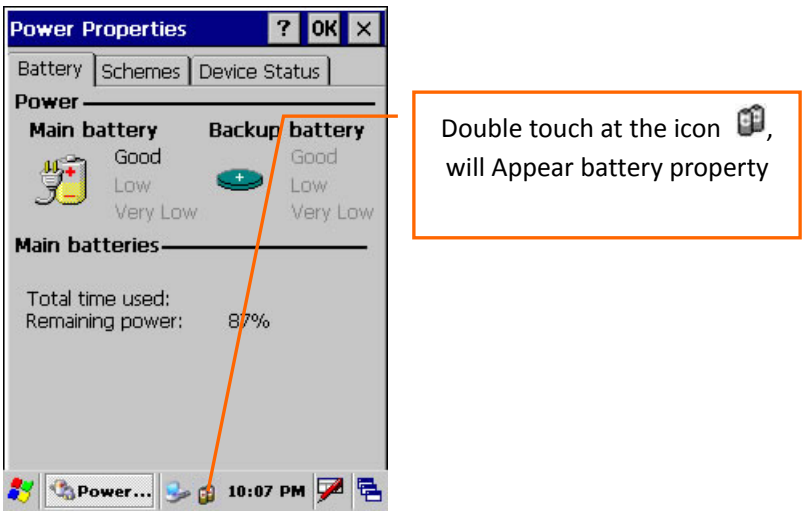
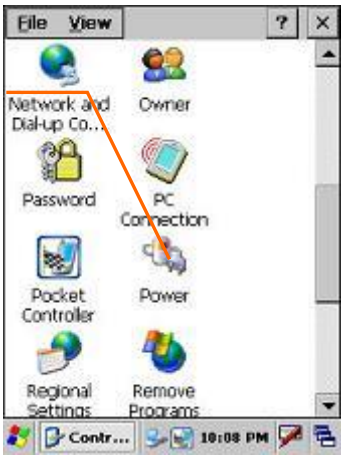


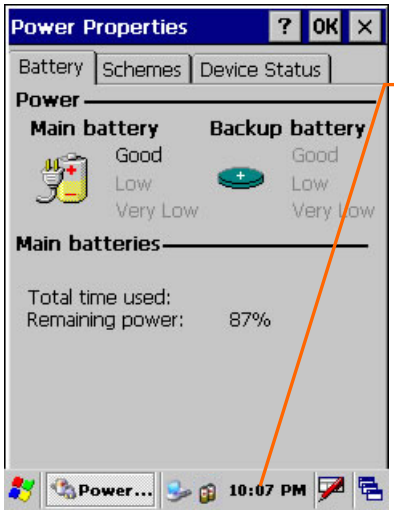
Fig.3-9 the status of charging

Method 2

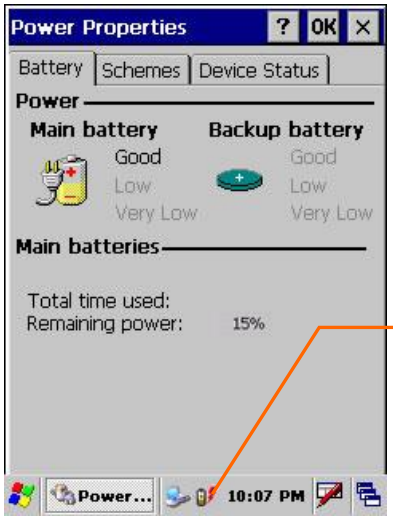
Touch and select setup Start/setup/control panel

Double Click





When Voltage is below 3.5V, this screen Will appear to indicate low battery, warning message shows the main battery extremely low, and there will shows dual battery icon ,
When Voltage is below 3.4V, this screen Will appear to indicate low battery, warning message shows the main battery extremely low, and there will shows single battery icon

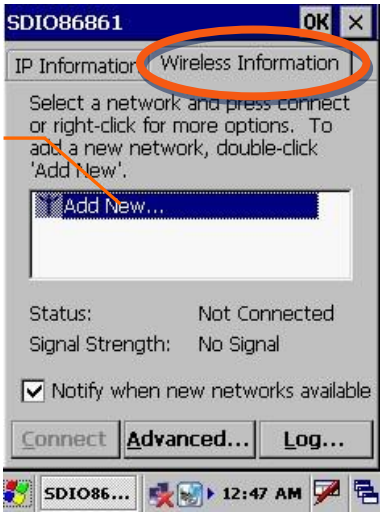


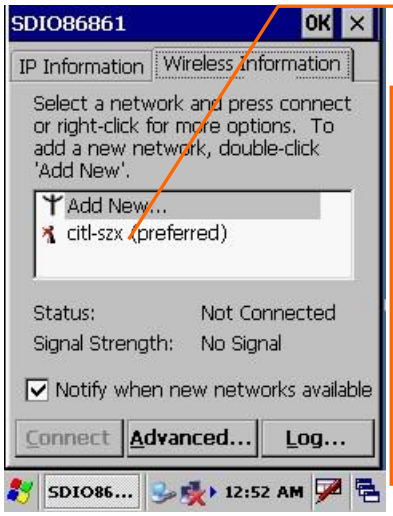
A red Thunder icon shows it is charging

3.7 Advanced Feature

Select network connect figure

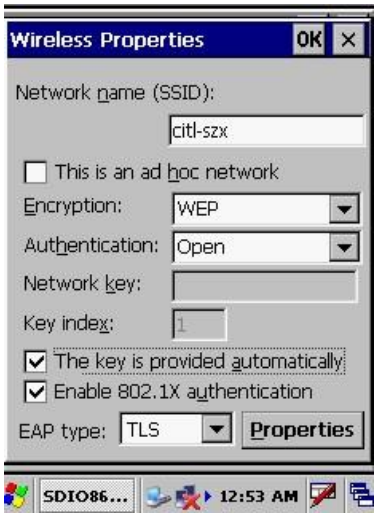
Select wireless message, double click add new network, if your modem or AP sets broadcast, it will be detected by the equipment automatically

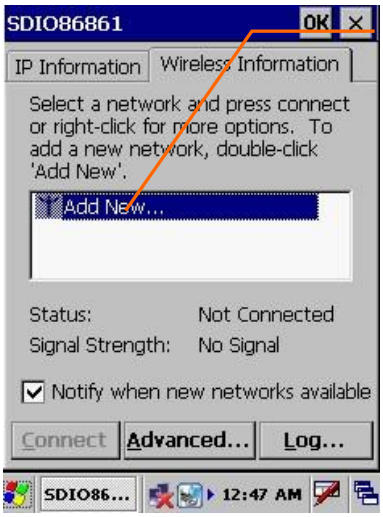




Select AP or SSID number

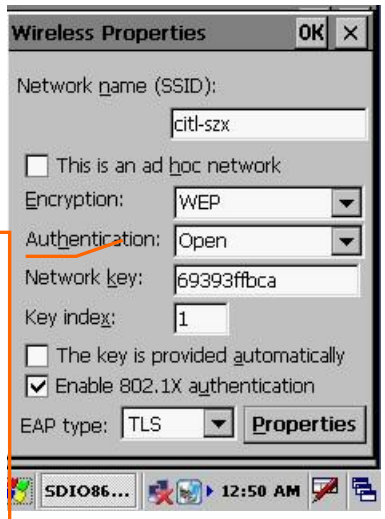
Erase the tick, select the corresponding encrypted and authentication method, and input the key, this parameter can get from network manager

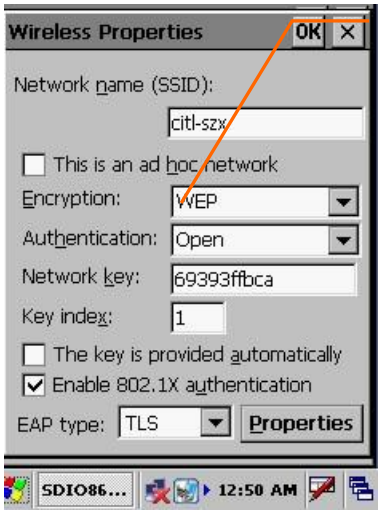




Can be added manually if the wanted wireless modem or AP didn't set broadcast

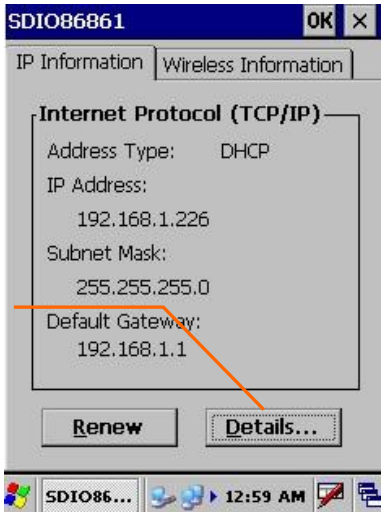
Select encrypted type, please contact your network manager to get it, for the non-encrypted network access, it need to open authentication and forbid encrypt



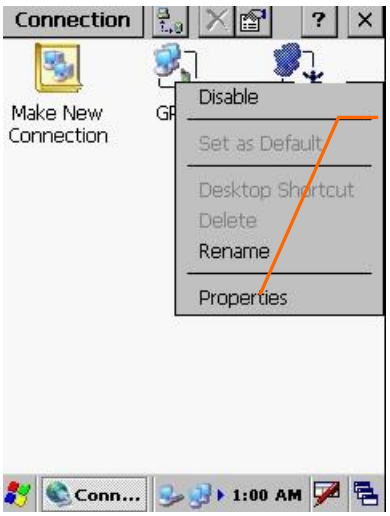


Input various wireless network parameter, please contact your network manager to get it, then click "OK" to connect

The IPE condition after connect successfully can get more information from "details information", include equipment MAC Address



If can not get it automatically and need to set static IP, please set by follow steps:Control Panel-Network and Dial-up connect, open wireless connect property to set.



Click Property to set static IP and server information, if capture IP automatically is wrong, then you can forbid first then open it to get IP address again.

4 CONTACTS

More About HY3800W Contacts :

Company Name:Hyin Technology CO.,LTD

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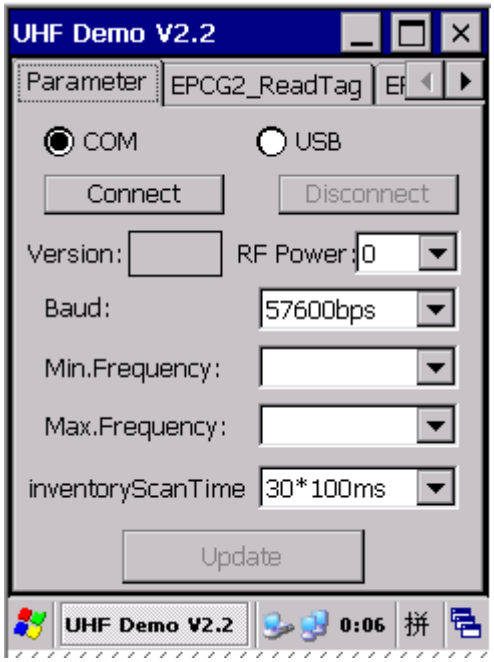
Address: 709,Building 212 Tairan Industrial Park,Che gong miao,Futian District,ShenZhen,China

Telephone:0755-82195183 Ext 858

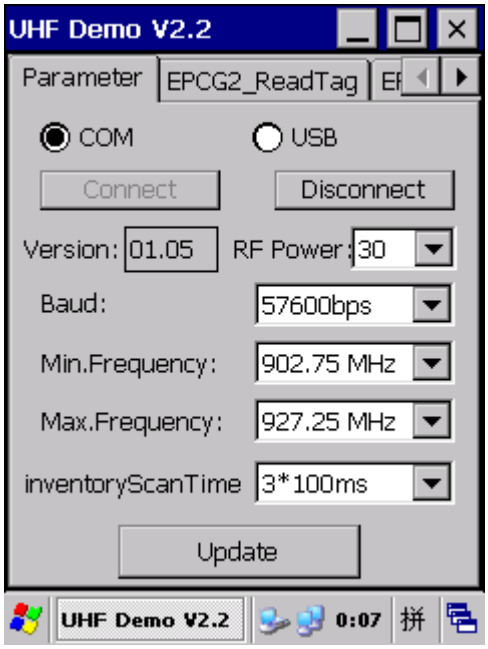
Fax:0755-82195183 Ext 808

HY3800W

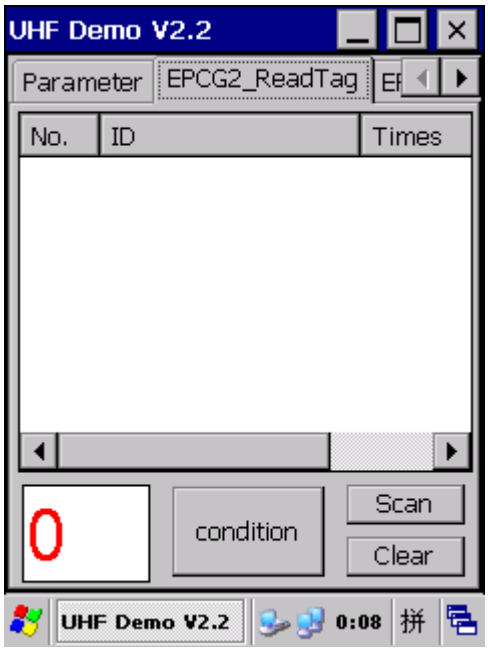
RFID Demo Guidance



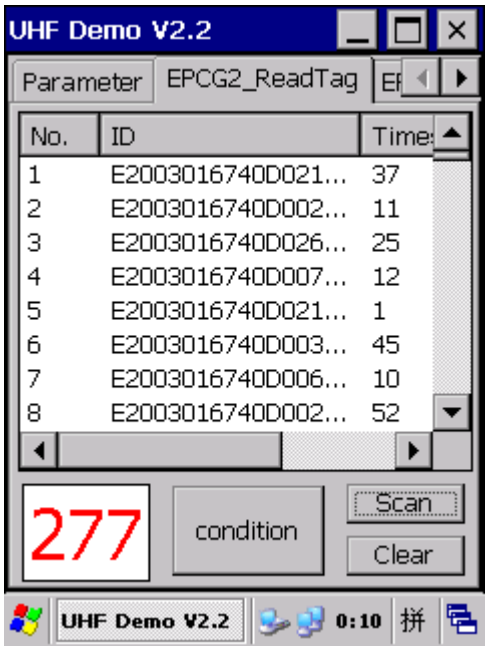
1) Active Demo Software and Click Connect



2) Elect Page EPCG2_ReadTag



3) Click Scan, All Tag Read Listed and The Quantity of Tag Shown in Red



FCC Warning Statements:

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

This 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 instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does 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.
- Consult the dealer or an experienced radio/TV technician for help.

RF Exposure Information:

The hand grip is permanently fixed on the device, do not try to dissemble or remove this hand grip for operations.
This device meets the government’s requirements for exposure to radio waves.
This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.
This device complies with FCC radiation exposure limits set forth for an uncontrolled environment.