

USER MANUAL



T650 DATA COLLECTOR



UHF CAMERA



Data collector Overview

Handheld data collection Terminal which may contain one or more of the following features:
Blue tooth , IRDA ,
1D/2D Barcode Scan ,CDMA,WIFI
Camera ,RFID reader for UHF and HF tag .

WARNING

Before using T650 Data Collector, please carefully read all safety instructions.

Read this manual and use the T650 Data Collector device as instructed in order to prevent any type of damage or injury .

Pls familiarize yourself with the T650 Data Collector device and its capabilities before you use it for the first time.

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1. Basic Data collector Layout



2. Standard Configuration



T650
Data Collector



Holster



Communication Base



Adapter



Battery



USB Cable



Pen

3.Character Parameter

***Processor** : Marvell XSCALE PXA 270 High speed CPU

***Operation System**: MS-WinCE 5.0 Graph operating system

***EmS Memory** :64M Flash , 64SD RAM

***Screen**:high brightness&Vivid color , 320*240 TFT touch screen , hand writing supported

***Laser Scan Engine (Optional)** :

1D/2D code , Symbol SE955/Symbol Se4400

***RFID** :TI-Tagit, ISO15693 , ISO14443A/B ,

18000-6/GEN-2 standard supported

***Outer Interface**: one mini SD memory card socket
one CF-II socket

***LED Indicator Light** :

one dual-color light shows work and charge state
another dual-color light shows program is available

***Size&Weight**

193mm (L) x87mm (W) x33mm (H)

weight :300g

***Environment**

Operation Temperature : -20°C to +50°C

Storage Temperature : -20°C to +70°C

Operation Humidity: 10% to 80% RH (no congealment)

Storage Humidity : 5% to 90% RH(no congealment)

Dust and splash resistance :Ip64

Proof-Fall impact : Industry Level---1. 2m

***Shot Photo (optional)** :200 Million pixel low lux camera,
shooting photos on the scene

***Keyboard/key**: with backlight, big key designed , input
data accurately even wearing gloves.

16 keys of standard keyboard , can input english , number ,
symbol and smart chinese characters

4 direction keys

1 reset key

2 side keys

***Sound**:Built-in MIC and speaker , can record and play
sound , with outer earphone/MIC port

***Battery** : 3. 6V 3000mAH/4500mAH Huge capability ,
recharged Liithium-ion battery , charge quickly , using
for a long time outside(one charge)

***Wireless Bluetooth (Optional)** :Built-in Wireless
Bluetooth with antenna , Bluetooth 1. 2 compatible version.

***Communication** : USB/RS232/IRDA Port

***Infrared Fixing** :IRDA 1. 2

***wireless network (optional)** : IEEE802. 11b/
IEEE802. 11g WLAN CF Card

.4. Power Supply

4. 1 Battery Installation



1. Open battery compartment
Clip and carefully remove
the cover .



2. Insert the battery as shown
above . Pls note position
of tabs and corresponding
holes in the body of the
T650' s battery compartment .



3. Carefully insert battery
as shown .



4. After inserting the battery,
Replace the compartment
lid and lock by pressing
the Clip .

5. SIM Card & Mini SD Card Installation



Mini SD Card

Mini SD Card: Insert metal circuit face side "down" ,
and the notch on the upper left .

To remove Cards : press the card inward until it
"Clicks" and pops back out of its slot .

6. Keyboard

ZKS-T650 DATA COLLECTOR keyboard:
Big Key design for Inputting data accurately even
wearing gloves;
It's consisted of 21 keys, Cursor key, 0~9 Alpha key,
ON/OFF, Function Key, Escape key, Backspace key,
OK key.



[ON/OFF] Power On / Off terminal
[ESC] Escape Key
[OK] Confirm/Enter Key
[Cancel Key] Can cancel no need characters .
[TAB] Similar as PC keyboard, Tab used to switch
between two input boxes or skip to next byte
[FUNC] Function Key . Can be used in second
development
[Alpha] Input key . press this key can change input
method
[0 ~] Blank key . press key can input "0" or blank
[. / #] Interpunction Key. Press this key can choose
any interpunction according to your need .
[Touch off Key] these two keys is for
second development which can be used for customer
user-defined.

4. 2 How to connect with adapter?



T650 Data/Power Connection Port



When the T650 is connected to the Base Charger , a **Red** "power" light will go on to indicate that the battery is charging .

Once fully charged , the "power" light will turn **Blue** .

If the light does not go on , pls re-check all power and terminal connections to the charging Base .



Data/Power Base



Power Adaptor

Enter adapter plug to AC socket, and insert another plug to DC interface of base charger

When the terminal is in the Power-On state , the **RED** indicator at the top left of the terminal will light to signal that the terminal is charging . When the terminal is in the power-off state , Only the "Power" light on the charging base will be turned on .

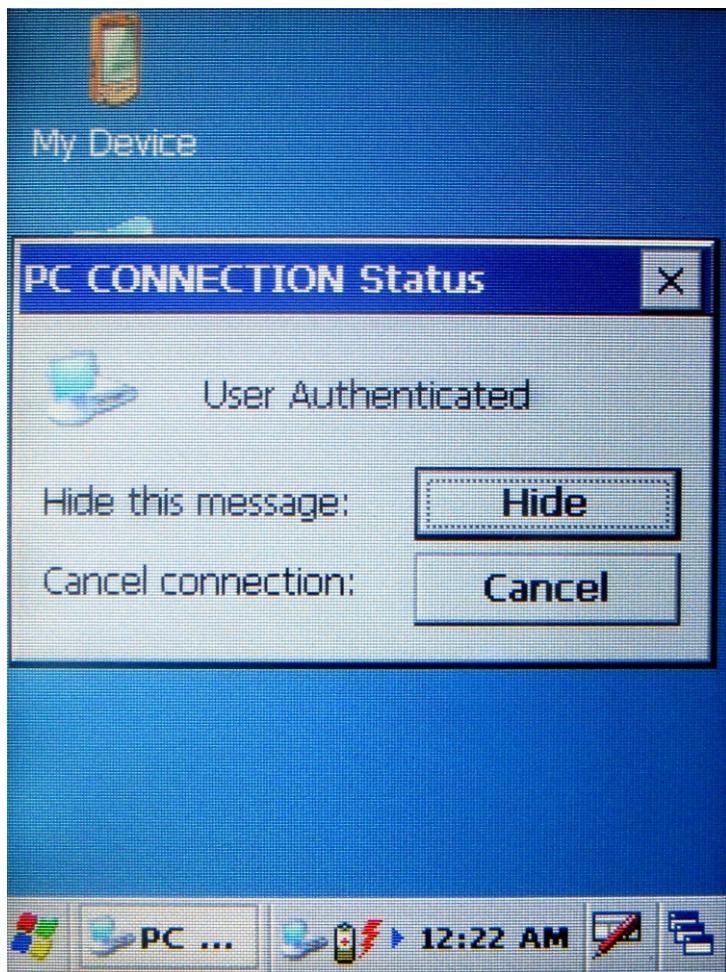
Notice:

Please use ZOKO's adapter or permitted adapter by ZOKO Company ! Please pull out the plug vertically to avoid the damage to communication port!



Pls use two hands to hold T650 to let its back cling to this surface of communication base. Then Slide T650 to base bottom to let it connect with charger by each port naturally .

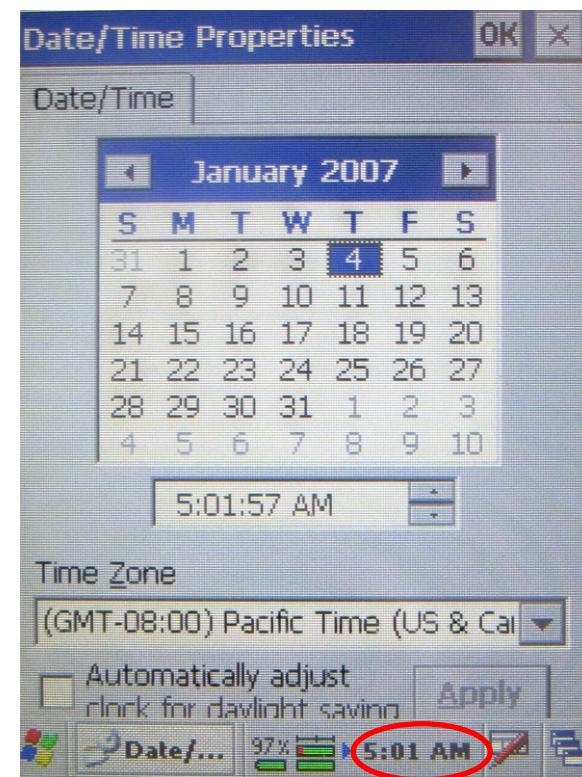
7. 2. System Toolbar Introduction



Connection State Icon:

The icon will be shown when DATA COLLECTOR get a good connection to PC.

And 'PC CONNECTION Status' interface appears.
You can choose 'Hide this message' or 'Cancel connection'



Time Icon:

Double click it, you will see 'Date/Time Properties' interface.

or double click 'My Device'- 'Control Panel'- 'Date/Time', and then double click 'date/time' interface.

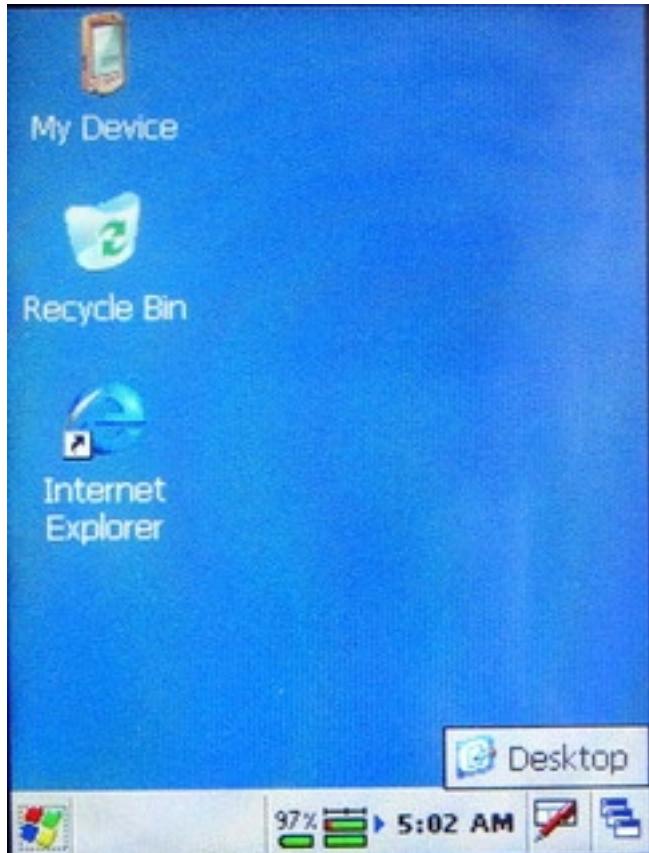
After setting, click 'Apply' to confirm your setting.

Time come back : after battery take out and install again . The time will be in the time when you take out of battery . Pls wait for some seconds . Time will back to current correct time automatically . If don't want to wait , pls reset Handheld machine after reset battery in .

Time will back to current correct time immediately after reset .

7. Operation Interface

7. 1 Desktop Introduction



From picture, you will see:

The desktop is divided two parts.

Part 1:

Recycle Bin, My Device, Internet Explorer.

Part 2:

The system toolbar lying bellow, from left to right:

Startup Icon:

click it, you will see a list.

Connection State Icon:

the icon will be shown when DATA COLLECTOR get a good connection to PC.

Battery Charge Icon:

present battery charge will be shown on desktop. Click it, and see "WR-Tools ResInfo" interface

Volume Icon:

click it to adjust volume or choose mute.

Time Icon:

real-time shown, click it and see 'Date/Time Properties'

Input Icon:

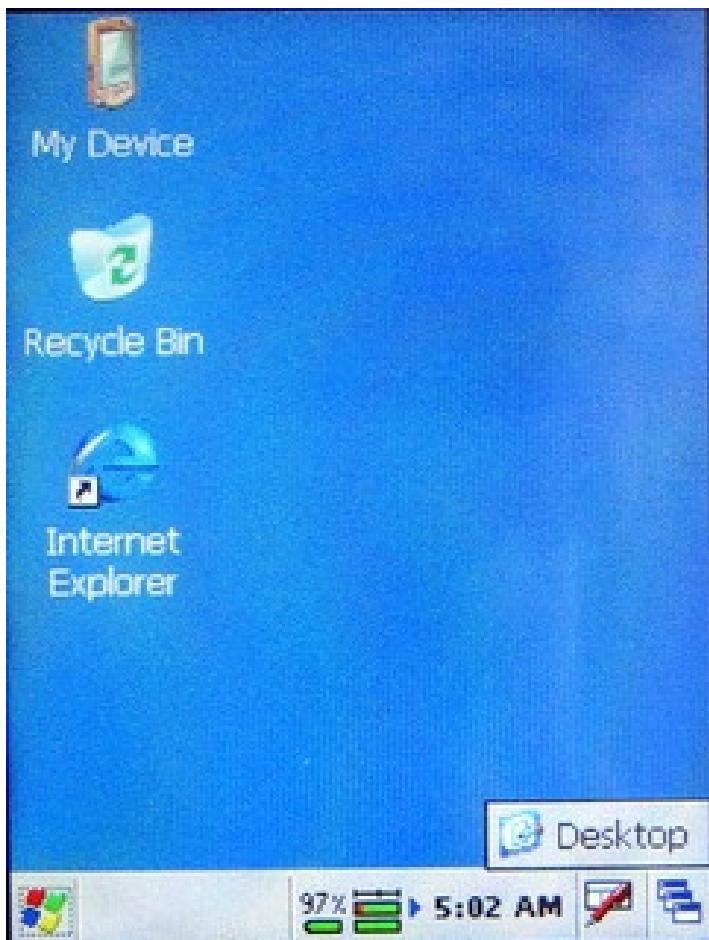
Desktop Shortcut Icon:

click it and show "Desktop" soon.

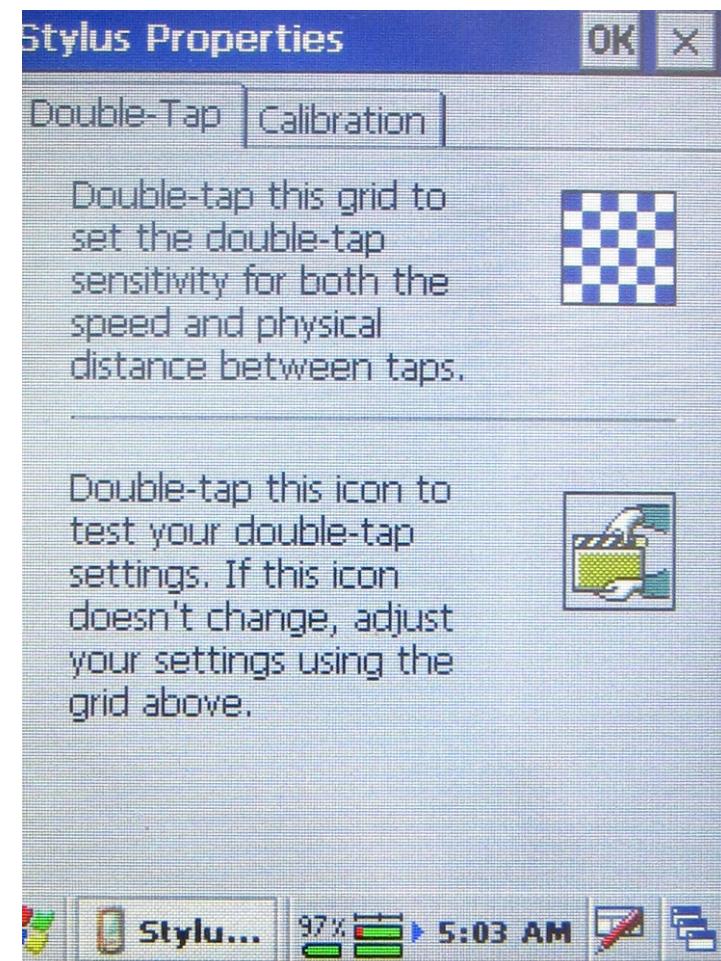
7. 3 Application Introduction

How to calibrate your screen?

Double click 'My Device'- 'Control Panel'-'Stylus'.
Then you will see 'Stylus Properties' interface.



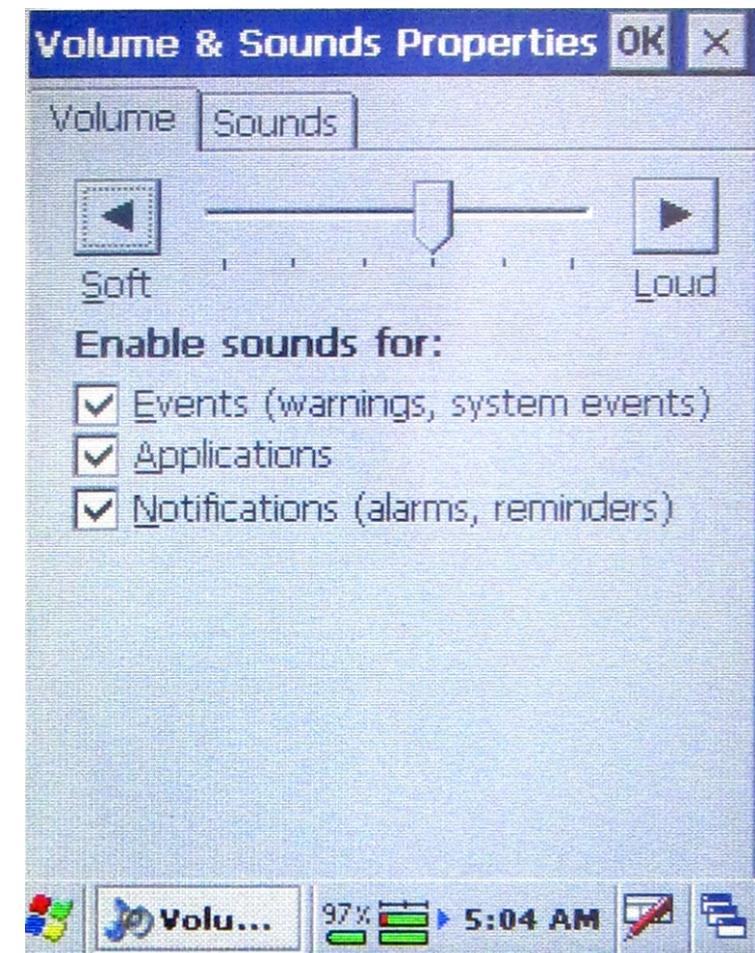
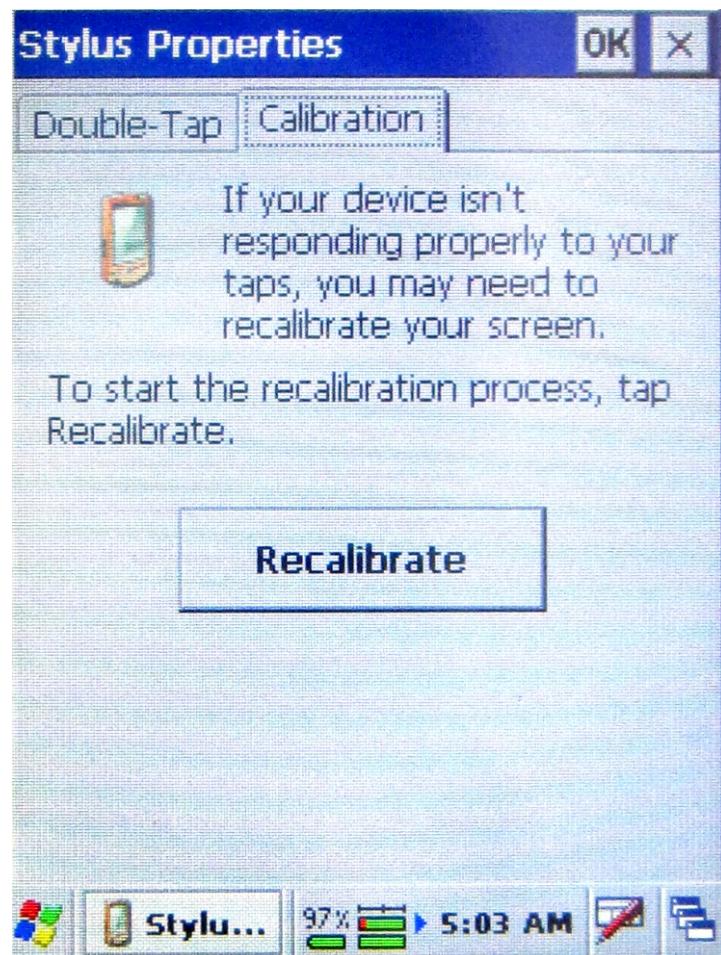
Desktop Shortcut Icon:
Click it and see 'Desktop'.
Click 'Desktop', desktop will be shown soon.



Double-Tap:

- 1.Double-tap this grid to set the double-tap sensitivity for both the speed and physical distance between taps.
- 2.Double-tap this icon to test your double-tap settings.
If this icon doesn't change, adjust your settings using the grid above.

How to set speaker?



Calibration:

- 1.If your device isn't responding properly to your taps, you may need to readjust your screen.
- 2.Click 'Recalibrate' and do it by instruction.

Double click 'My Device'- 'Control Panel'- 'Volume & Sounds'. Then you will see ' Volume & Sounds Properties' interface. From Soft to Loud, you can adjust volume.

8. Communication



T650 DATA COLLECTOR connects to PC by
*RS-232
*USB
*Bluetooth,
*wifi (802. 11b/g)

T650 DATA COLLECTOR can be communicated to PC with Microsoft® ActiveSync.

With Microsoft® ActiveSync, you can do:
1.Move Data
2.Backup and Restore Data
3.Add and Delete Data

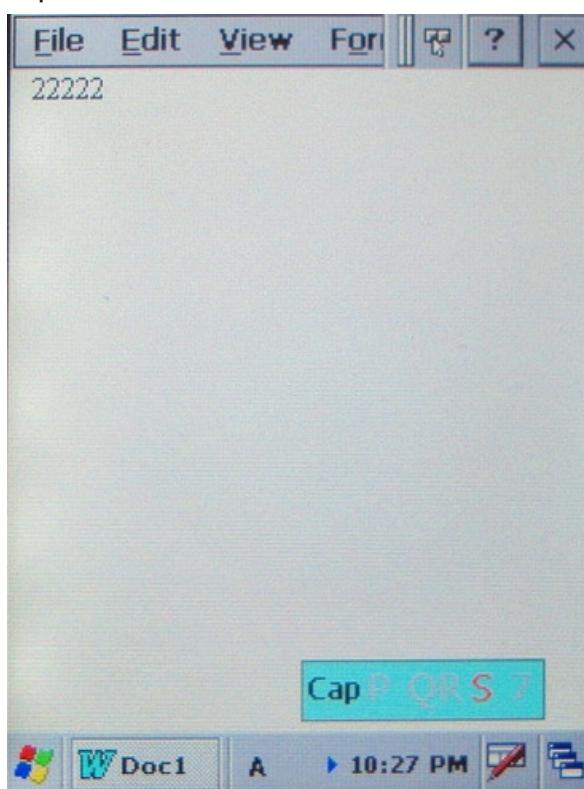
Please take notice before installation:
1.Please keep in the archives and exit some running programme when you are going to restart PC after installation.
2.Please set communication parameter when connecting T650 DATA COLLECTOR with COM Cable.
3.If your OS is with a service package, you should reset the service package and try to connect. If it's ok, please set the latest service package.
4.Please install Microsoft ActiveSync step by step. Connecting T650 DATA COLLECTOR to PC, and build a synchronized connection.

Double click 'My Device'- 'Control Panel'- 'System'.
Then you will see 'System Properties' interface.
To check System information, from 'General', 'Memory',
'Device Name' to 'Copyright'.

9. Input Character

9. 1. Input character on keyboard .

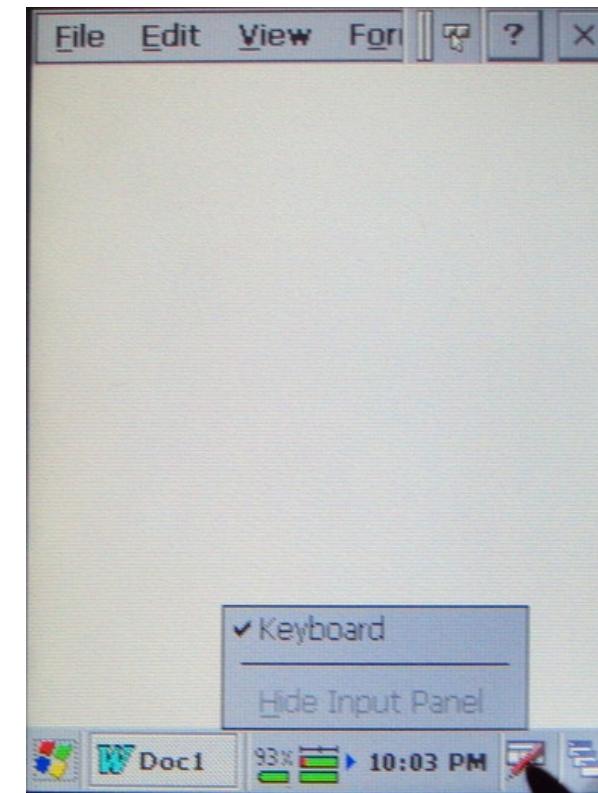
Type "Alpha" key can change Alpha Capital and small letter or number . Type "./#" Key can input interpunction . Type "OK" key means "enter" . To input character from keyboard is similar as "Nokia" Mobile phone.



When you type any key you can see characters on this key showed on screen . For example , if you want to Type "S" . type the key have "S" and keep typing this key until "S" become red. stop for a moment . "S" will be on screen .

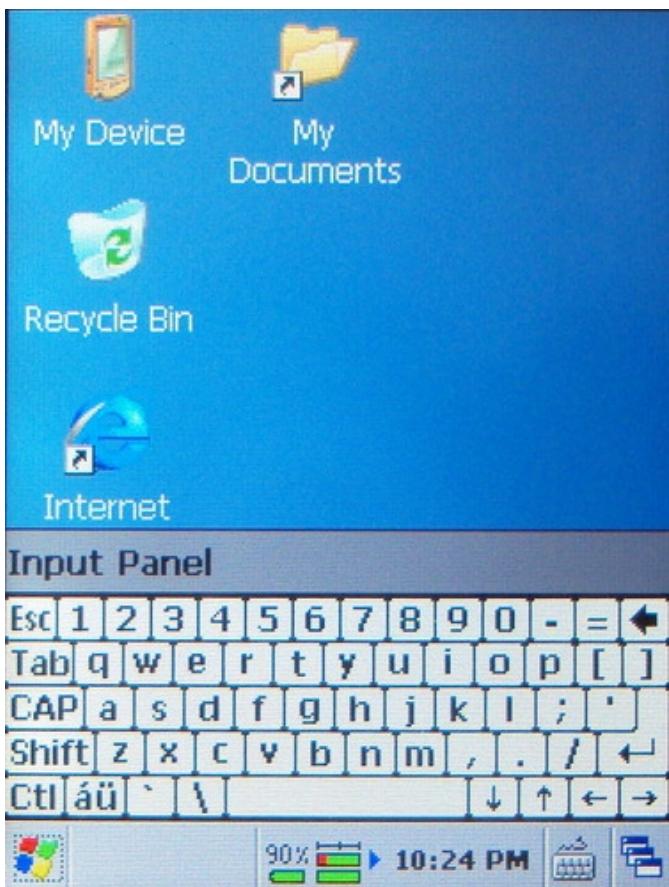
9. 2. Input character on screen .

Type the small logo as picture in below:



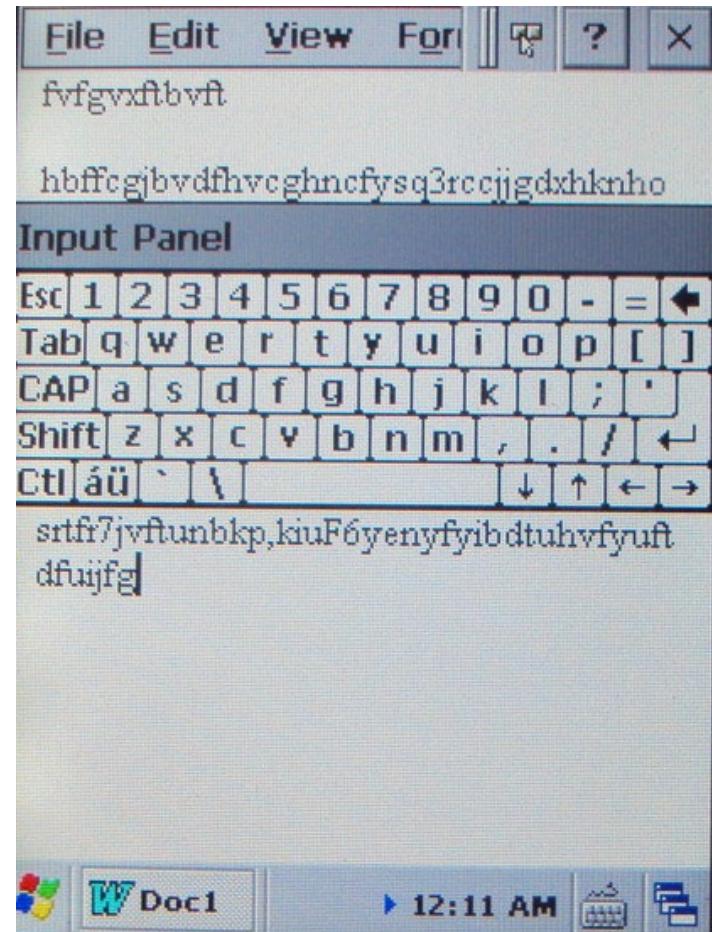
Then click the "keyboard" when your screen is same as picture on above .

Then it will show screen as follows :



You can use your pen to type any character from keyboard .

If this keyboard hide any place you need to see you can use your pen to adjust its location as picture in below



10. Function Instruction

For T650 Handheld machine . All function instructed in next pages are optional .

10.1 RFID reader

(1) HF RFID Reader

[I]" HF" RFID definition

High Frequency . For T650 handheld machine HF part reading frequency is 13. 56MHz . It support TI-tagit , ISO15693, ISO14443A/B standard.

[II] HF location on T650 handheld machine.



When reading HF tags use this side face to read tags

(2) UHF RFID Reader

[I]" UHF" RFID definition

Ultra High Frequency . For T650 handheld machine HF part reading frequency between 913-923MHz . And can also support to read for European Standard between 865-868 Mhz . It support 18000-6/GEN-2 standard.

[II] HF location on T650 handheld machine.



When reading UHF tags use this side face to read tags

10. 2 Barcode Scan

[I] "Barcode Scan" definition

For ZKS-T650 handheld machine . Its Barcode Scan part can read 1D/2D code .

[II] Barcode Scan location on T650 handheld machine.



When reading Barcode informations use part which marked in red circle scan barcode.

10. 4 Camera

[I] " Camera" definition

For ZKS-T650 handheld machine . Its Camera function can help user to take and save photos to make his work more convenient.

[II] Camera location on T650 handheld machine.



When taking photo pls use part which marked in red to take photo .

11. Fault Disposal

1. the indicator light is not light when charging

Solution : Check the plug of adapter

2. standby time is not enough

Solution :

* Check the battery volume;

* Check the battery, if it's damaged,
please change a new one.

3. RS232 Communication Problem

Solution :

* Check the plug of RS232 communication cable.

* Check communication interface to ensure it's clean.

* Sometimes the communication is not stable and need to
swing the plug to verify.

This phenomena shows communication interface is
oxidized.

Please clean the oxidized interface with a foil.

* Please check COM port of PC to ensure it's same with
COM port chose by T650.

If it's not, please reset it.

* Please check baud rate of port to ensure it's same with
T650 DATA COLLECTOR setting.

If it's not, please reset it.

* If all of above is right, there must be parts of an apparatus
problem.

Please contact after-sales department.

4. USB Communication Problem

Solution :

* Check the plug of USB communication cable.

* Check communication interface to ensure it's clean.

* If all of above is right, there must be parts of an
apparatus problem.

Please contact after-sales department.

5. No battery volume shown on LCD

Solution :

* Check the battery, if it's damaged, please change a new one.

6. LCD can't show

Solution :

* Check on-off of power supply

* Check whether DATA COLLECTOR is in inactive state.

If it's. Please press power key to exit.

* Check the battery, and ensure it's full of power.

* Check whether battery gets a good contact with
DATA COLLECTOR.

If it's not, please take out battery, and try to make them closer.

* Check the battery, if it's damaged, please change a new one.

* If all of above is right, maybe it's the communication problem
between LCD and mainboard.

Please contact after-sales department.

7. DATA COLLECTOR can't be turned on

Solution :

- * Check the battery, and ensure it's full of power.
- * Connect to adapter directly, if
DATA COLLECTOR can be turned on, showing
battery volume is low, please go on charging
the battery.
If DATA COLLECTOR still can't be turned on after
charging, pls reset machine . If it is still can't
turn on after reset means battery have problem
please change a new battery.
- * Maybe Application downloading problem, please
download application again.
- * Downloading failed, but COM is right.
Please contact after-sales department.

9. DATA COLLECTOR turn off suddenly without type "Turn off" key

Solution:

- * Turn on machine to see whether it can be turn on .
If it can be turn on again back to the interface you
just opened means the battery power will finished
soon . This is the alarm for power will finished .
Charge the Data collector or change another full
battery .

8. DATA COLLECTOR is freezing

Solution:

- * Maybe Application downloading problem, please
download application again.
- * Maybe sudden power-off made, please press the
'RESET'key on the back of DATA COLLECTOR with
a needle to reset.

Note:

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.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

NOTE: 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.