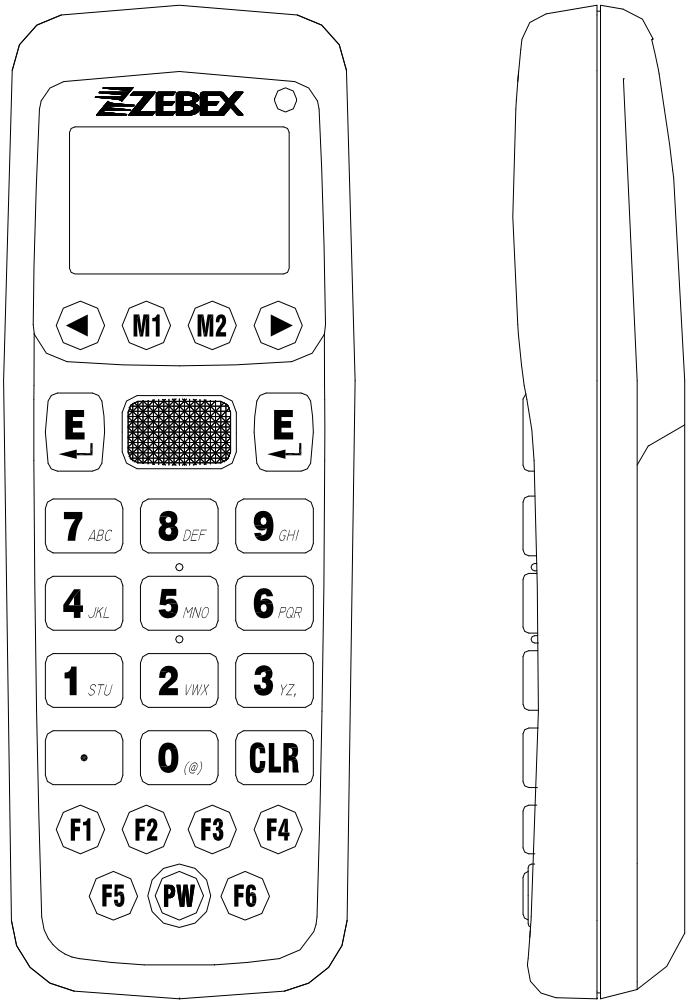
ZEBEX INDUSTRIES INC.

Portable Data Collector

Z-2121 series

(Version 3.01)

User's Manual



Editorial Record

Version	Date of edited	Description of Version
V1.0	Nov. 15, 2010	Initial release
V2.0	April. 12, 2011	Updated for firmware V.1.05. Added Bluetooth section
V3.0	April. 26, 2011	Added BT-HID section
V3.1	July 2, 2012	Corrected General Guide picture
V4.0	July 20, 2012	Added descriptions to device functions

Table of Contents

Preface

About This Manual

Thank you for your purchase of the ZEBEX Z-2121 Portable Data Collector. ZEBEX Z-2121 product is at the forefront of data collector technology, and this manual will provide the necessary information on the many and varied options available to you.

The Z-2121 product is a compact, ergonomic, modular and durable data collector. It is designed for easy upgrade with an integrated BT communication, 1D barcode scanner and vibration. The design is ideal for the mobile worker as it simple and easy to use anywhere along a supply chain.

Symbols used in this manual

	A triangular shape indicates you should exercise caution.
	A circle shape indicates something you should not to do.
	A black circle indicates something you must to do.
	A note symbol indicates you the information that is important and you should be observed.

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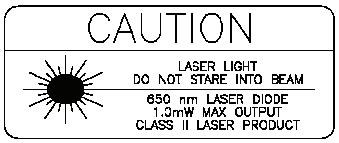
Safety Information

Your safety is of the utmost importance so please observe and follow the following guidelines that allow you to use the scanner in a safe and responsible way.

Laser Safety

The Z-2121 series Portable Data Collector complies with safety standard IEC825-1(1993) for a Class 2 laser product. It also complies with U.S.21CFR1040 as applicable to a Class II laser product. Avoid staring at direct laser light as the laser beam may hurt your eyes.

LASER BEAM



Never look directly into the laser beam.
Doing so can cause serious eye damage.

Safety Operation

WARNING

Disassembly and Modification

Never try to disassemble or modify the device in any way. All servicing should be carried out be qualified Zebex personnel or Zebex- approved engineers.

Interior Parts and Components

Never touch interior high voltage parts or components. Doing so creates the danger of electrical shock.

Drop and Knock the Device

Be careful when using the device; do not drop or knock the device as irreversible damage to the unit may occur.

Extreme temperature

Do not operate the device under extreme temperature.

Battery and Charger

The use of third-party battery or charger may either damage the device or shorten the life of the device.

CAUTION

Dropping and Damage

Should the drop the device and damage it, immediately turn off the power and contact your original dealer or an authorized ZEBEX service provider. Continued use creates the danger of fire and electrical shock.

Abnormal Conditions

Should the device become hot or start to emit smoke or an original dealer or an authorized ZEBEX service provider. Continued use creates the danger of fire and electrical shock.

Foreign Objects

Should any foreign matter ever get into the device, immediately turn off the power and contact your original dealer or an authorized ZEBEX service provider. Continued use creates the danger of fire and electrical shock.

Moisture

Keep the device away from vases, planters, cups, glasses and other containers of liquid. Also keep it away from metal. Water and metal getting into the device creates the danger of fire and electrical shock.

Federal Communication Commission (FCC) Statement

15.21
You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)
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 the 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.

Operation is subject to the following two conditions: This device may not cause interference;
This device must accept any interference, including interference that may cause undesired operation of the device.

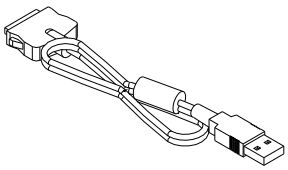
FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

Unpacking

Package Contents

Z-2121 series
Portable Data Terminal



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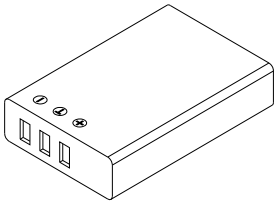
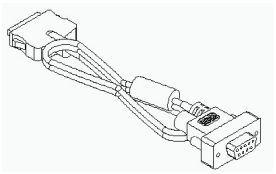
USB Cable
(Terminal connect to PC USB port)

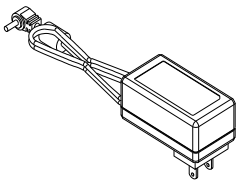


Battery Pack

OR



RS-232 DB9 (F) Cable



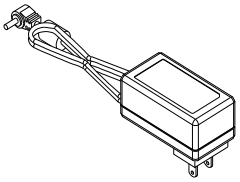
AC Adapter

Optional Parts

Cradle package

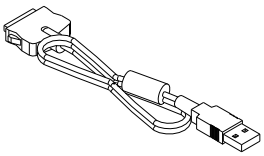
RS-232 Docking Cradle

USB Docking Cradle

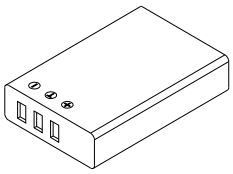


AC Adapter

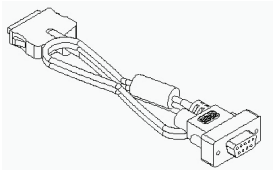
Purchaseable accessories



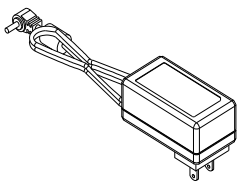
USB Cable



Main Battery

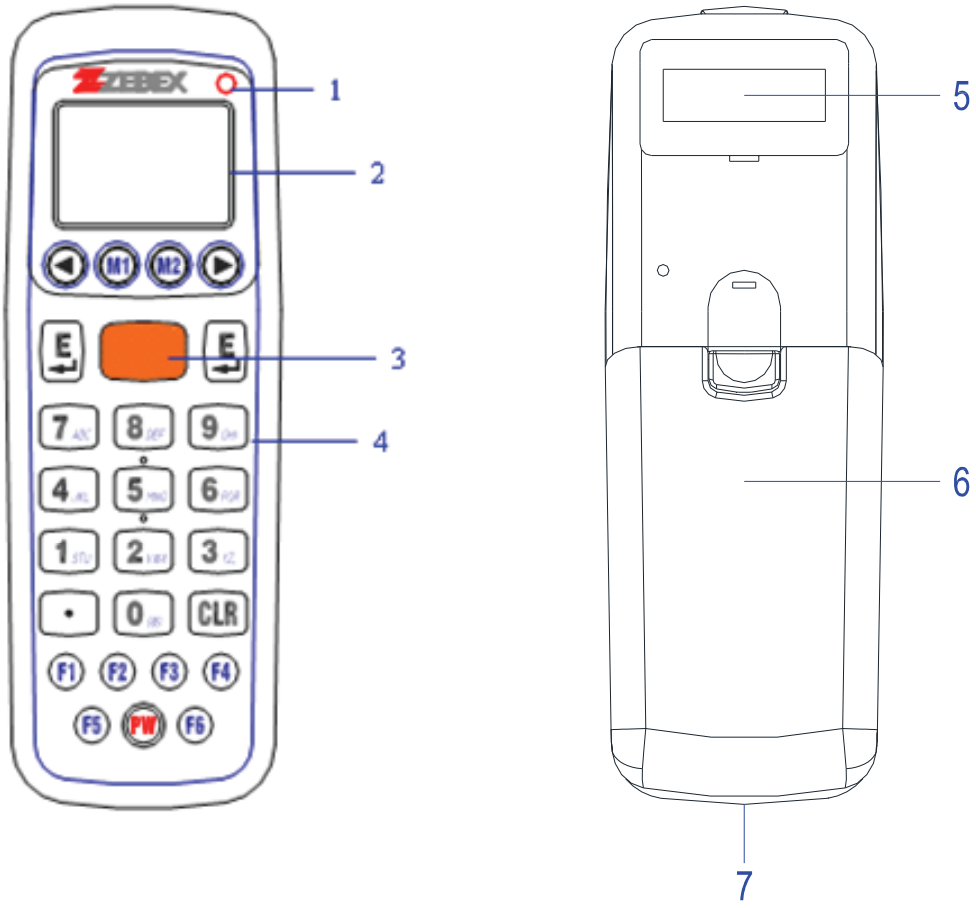


RS-232 DB9 (F) Cable



AC Adapter

General Guide



1	LED indicator (Right)	Indicates the status of battery charge : Red for battery just on charging and Green for full.
2	LCD screen	Display various data when a program is being run.
3	Scan button	The trigger of Barcode reading.
4	Keypad	A total of 26 keys are provided to the power and other function keys.
5	Scan windows	Emits a laser for bar code reading.
6	Battery	Main battery
7	Communication port	Communication with PC or charge by USB port

Getting Started

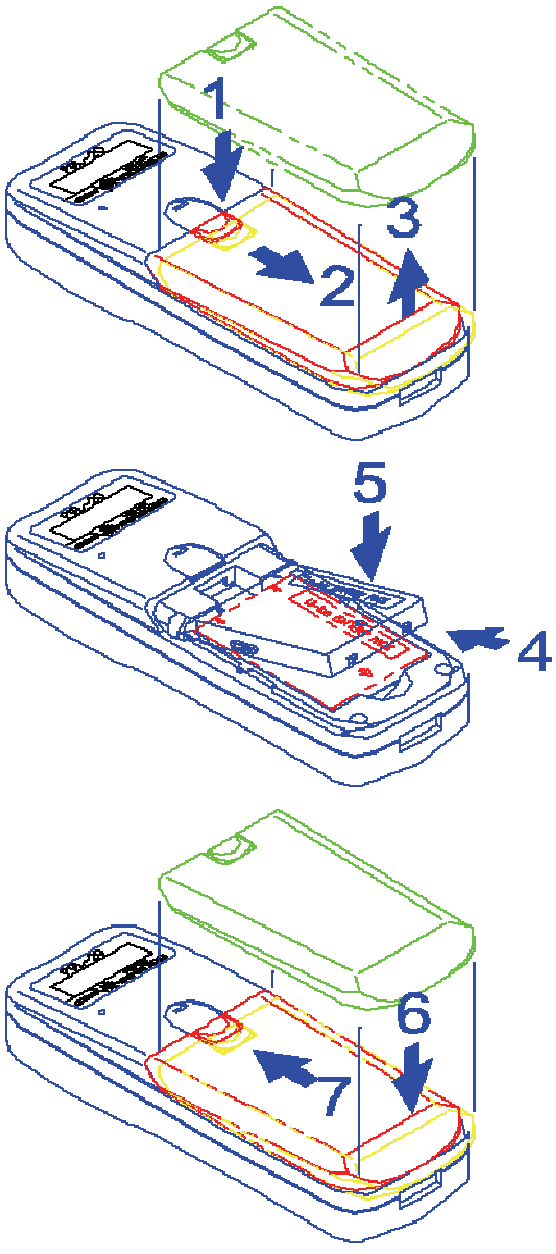
Inserting the Battery

When inserting the battery for the first time, follow these directions:

1-3. Push the top lock to pick up the battery pack.

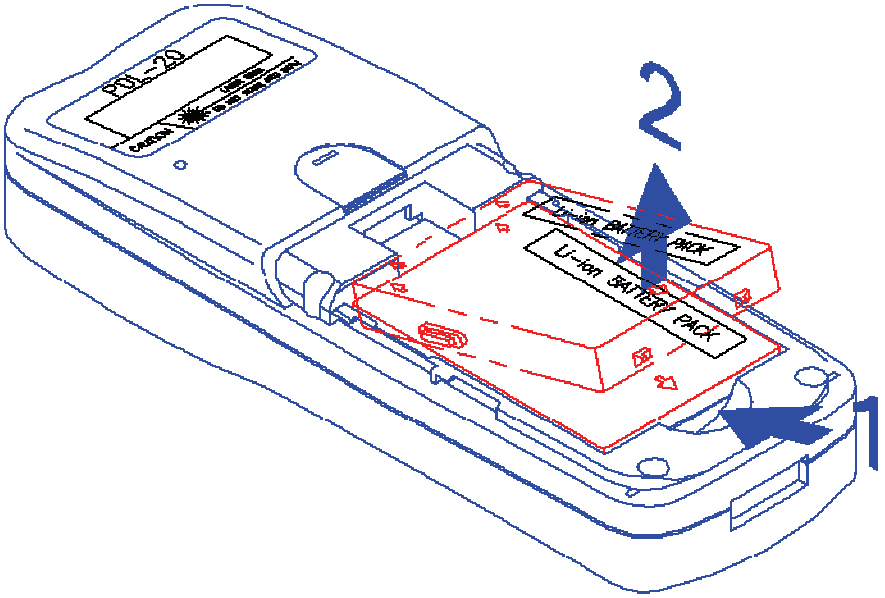
5-4. Insert the battery as shown.

6-7. Put the battery cover back.



Remove the Battery

1. Turn the power off.
2. Remove the back cover.
3. Press the battery against the **Z-2121** terminal, and lift it up and away from the compartment.
4. Put the cover back.

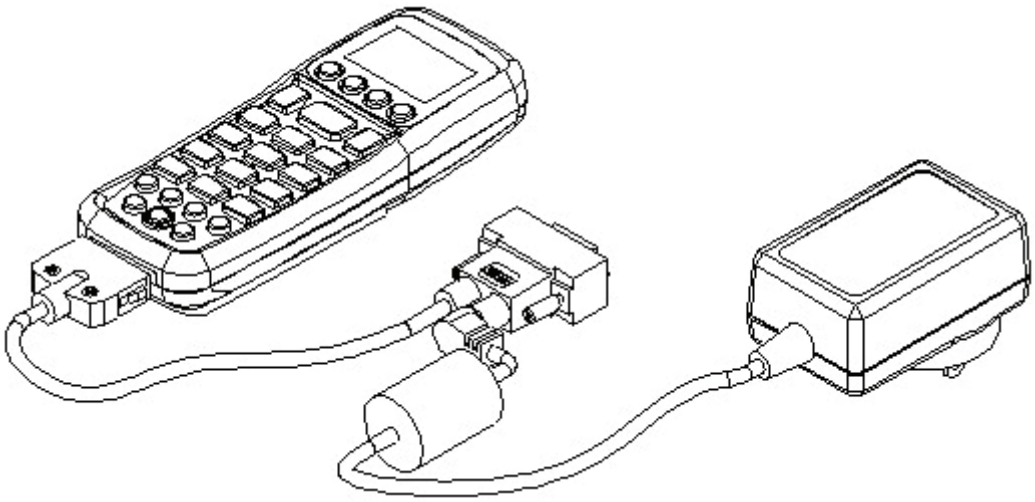


Charging the Battery

The Li-ion rechargeable battery can be charged while inserted in the device itself or independently via the recharging slot at the back of the cradle.

Charging by cable

Connect the charging cable and USB AC adaptor as shown.



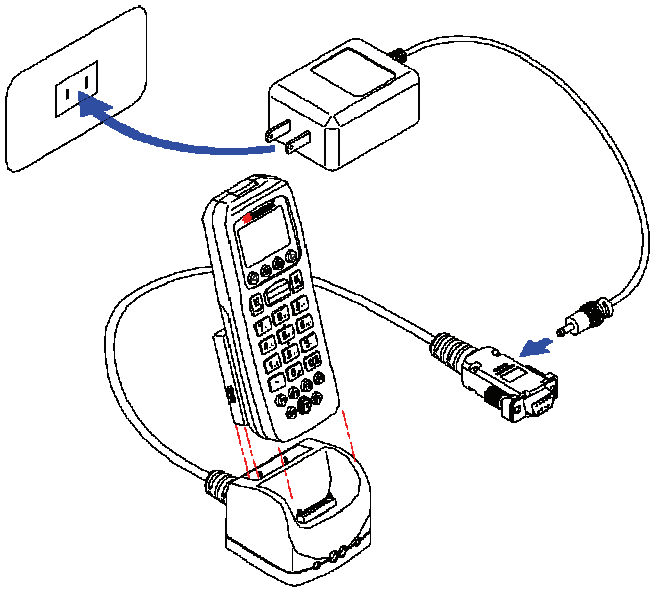
Charging by cradle

1. Put the **Z-2121** on the cradle as shown in figure 2.
2. Connect the power adapter to the DB-9 (female) connector
3. Insert the power adapter to the wall socket.

Note 1:

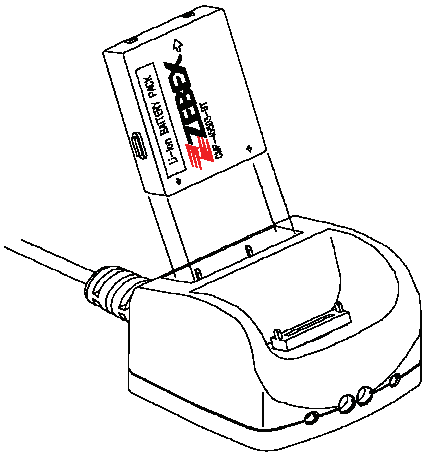
1. The cradle can be connected both to the power adaptor for battery charging and to the host computer for data uploading as well as downloading at the same time.
2. To charge the battery, connect the power plug of the power supply into the power jack on the **DB-9** female connector.
3. The **DB-9** (female) connector is used for battery charging and/or communication with the PC.

4. Battery charging and data exchange can be done at the same time or respectively. The **Z-2121** Data Collector, however, is unable to communicate with the host computer when placed on the cradle without the battery attached to it.
5. The battery is always charged via the cradle. There are two ways to charge the battery. First, take the battery out from the **Z-2121**, and insert it in the back slot of the cradle for fast charging, as shown in Fig 3, which takes about 3 hours before it is fully charged; second, put the battery in the **Z-2121**, and place it on the cradle, with the **Z-2121** either on or off, for slow charging, as shown in Fig 2. This will need approximately 6 hours. To maximize the battery's life span, it is recommended that slow charging be adopted unless there is a need for fast charging.
6. While the battery is being charged within the **Z-2121** on the cradle, data can still be exchanged between the PC and the **Z-2121** via the DB-9 connector and the RS-232 port.
7. The battery should stay on the cradle (either with the terminal or independently) for at least 12 hours before being used the first time or after months of idleness.



Charging the Battery separately in the cradle

Insert the battery into the compartment at the rear of the cradle.



Cradle-front view

Connect the power jack to the cradle and plug AC adapter into the socket.

NOTES

When charging the battery for the first time, charge for at least 12 hours prior to use.

PC System Requirements

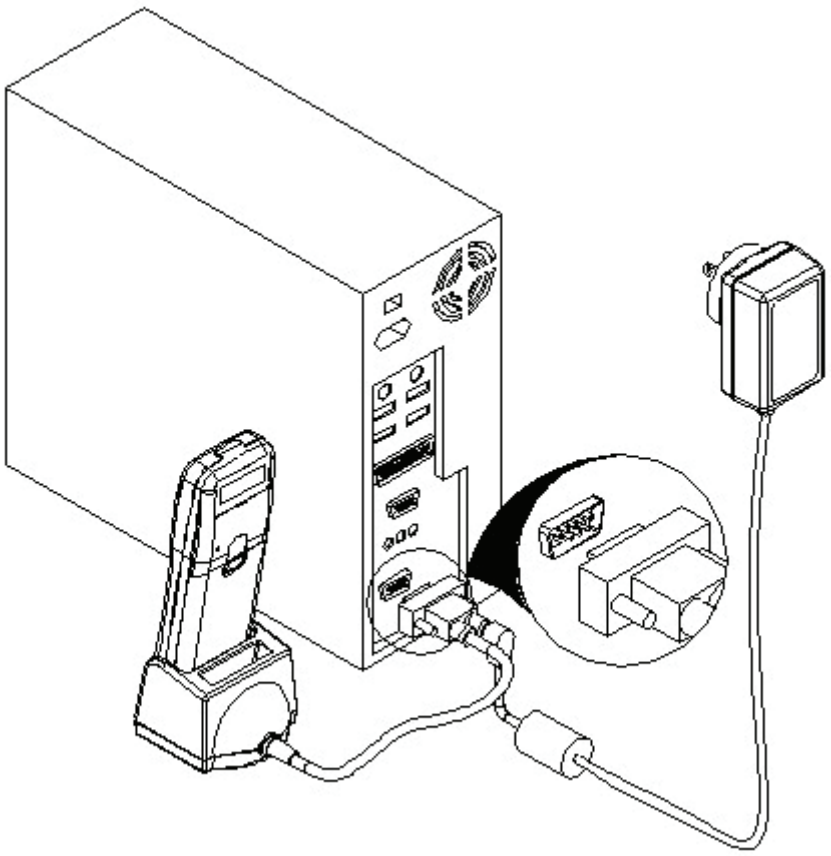
Windows XP Operating System
64 MB RAM
50 MB free HDD space
USB ports communication Interface
WLAN transmitter (optional)
Bluetooth transmitter/receiver (optional)

Connecting To PC

In order to use the software supplied with the Terminal, the mobile data terminal must be connected to a PC.

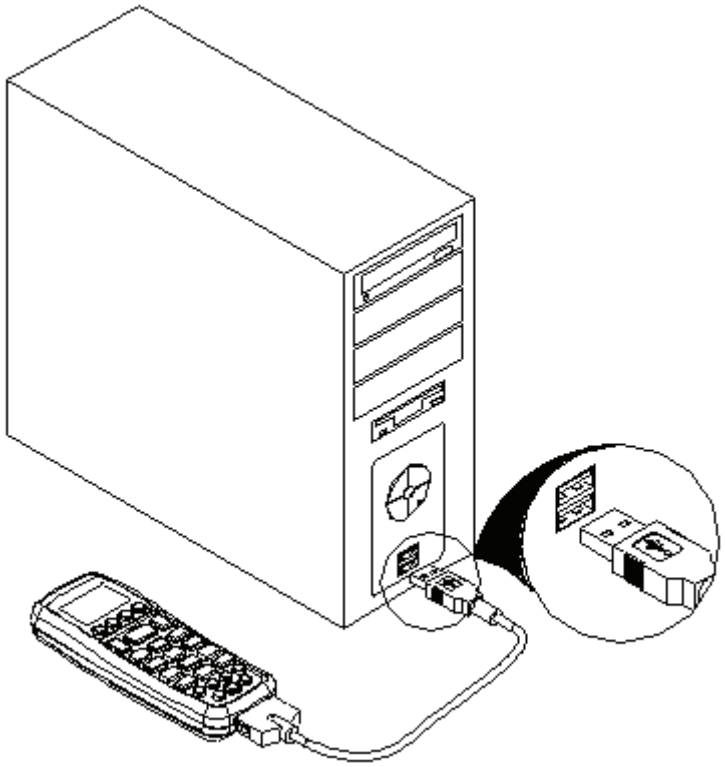
Connecting via USB Cradle

The cradle must also be connected via one of your PC's USB ports. Attach one end of the cable to the USB interface on the cradle and the other to your PC.



Connecting the Z-2121 directly via USB cable

You can connect the Z-2121 directly to your PC, without the need for the cradle, using the Mini USB cable, attaching it to the port on the left hand side of the device.



About The Product

The Z-2121 is a compact, ergonomic and durable portable data collector. It is designed with an integrated Bluetooth communication and 1D laser barcode scanner and 26-keys keypad. The design is ideal for the mobile worker as it simple and easy to use anywhere along a supply chain.

The Z-2121 features a 32-bit C-MOS Microprocessor. This combination delivers high performance, low power consumption and the diversity of a Bluetooth communication. Compared with other systems currently available on the market, Z-2121 is the most cost-effective to offering optimum performance.

Features

Hardware features

a. Compact size, lightweight, elegant, and easy to carry on the waist strap by means of a tab mounted on the back of the unit and a clip attached to the user's waist strap.

b. Ergonomic design, operated with one hand, easy to capture data.

c. Low power consumption. Good for 48-hour operation after a full charge.

d. Auto shut-off function reduces power consumption and extends battery life.

e. Built-in FREETASK allows the Z-2121 to be used for data collecting without outside supports.

f. Programmable functions support WinTask Gen. for special data collection.

g. Built-in Laser scanner as input device.

h. Built-in Real Time Clock for time-stamp.

i. Tone controllable buzzer.

j. A lithium back-up battery for memory protection.

k. Low-battery detecting circuit and low-power warning device.

l. RS-232C communication port.

m. BT connection.

Note:

a. The **FREETASK** is a built-in simple Data Base system with which you can define your own storage structure for data collection operation.
b. Win Task Gen. is a Windows based utility program with which you can design the procedure for specified tasks and execute designed tasks on the data terminal.

Firmware features

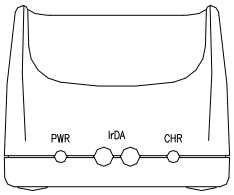
a. Supports most of the popular barcode symbols.
b. Ability to discriminate among barcodes
c. Programmable auto-power-off time
d. The uploading or downloading can be fully controlled by the computer.
e. Easy user-defined FREETASK, able to assign as many as 16 fields
f. Ability to execute as many as 8 TASK

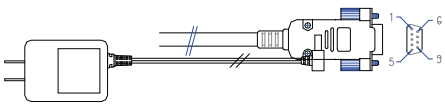
Development Software features

a. Windows 95/98/NT based WinTask Gen.
b. Able to remotely program all functions as long as the terminal (including the decoder) is connected to PC via the cradle.
c. Ability to upload data to PC
d. The FREETASK may be downloaded (from PC) to the terminal
e. In addition to the FREETASK, as many as 8 TASKs may be downloaded to the terminal
f. Ability to edit TASK to execute specified data collecting tasks.

Cradle features

a. A special recharging circuit ensures recharging effects and security of the lithium Ion battery during recharging.
b. Able to communicate with PC using a widely used RS-232 or USB interface as shown in Fig 6.





CRD-21 DB-9 connector & power jack

Fig 6

Note:

There are 2 LEDs and 2 holes at the front bottom of the **CRD-21** as shown in Fig 6. The 2 LEDs are located on the left and right, whereas the two holes in the middle. The LED on the left is illuminated when power is on, and will not be illuminated if the power adaptor is not connected to the AC output, or the 9VDC jack is not inserted into the

RS-232 connector. The LED on the right is illuminated when a battery is put in the back slot of the cradle for recharge. It will remain illuminated as long as recharging is going on until a full charge is achieved. It flashes intermittently, however, when the battery slot is empty, indicating that the cradle is detecting the presence of the battery. The LED at the upper-right corner of the terminal is illuminated when the terminal is placed on the cradle for a recharge, and will be off when a full recharge is achieved.

Prerequisites

Skills Required

The following skills are required by developers aiming to develop application software for the ZEBEX Z-2121 series.

- Good knowledge of one or more of the following:
  * C language

Specifications

SYSTEM	
Processor	***ST*** 32-bit processor with Flash Area 256/512KB
Memory	SRAM - 2MB
LCD Display	FSTN 96x49 dot (6Lx16C) , with Backlight LCD
Keypad	26 Keys without backlight
Audio	1 X Mono Buzzer
POWER	
Main battery	830mAh (Lithium-ion)
Backup battery	(3.0V, 25mAH Li-ion rechargeable battery) 2 weeks – data and RTC define by remove main battery keep time
Input Device	
Barcode scanner	SE-955 1D barcode Laser scanne engine
Indicator	
Power & Charging	1 X LED Two color , Red for charging Green Good Read
Bluetooth	N/A
Vibration	Yes
Interface	
Cradle - RS-232	With RS-232 cable (Full Function)
Terminal – USB Cable	Detect – USB cable function (Power by PC USB power detect or Travel Charge)
Radio	
Bluetooth	Bluetooth 2.0 compliance , CLASS I , DISTANCE=10~100M
Physical	
Dimensions	134.9(L) x 23.6(W) x 48(H) mm
Weight	125g
Color	Dark Gray
Environmental	
Rugged	(Resistance to fall impact : 1.0M in height)
Operating temperature	0℃~ 50℃
Storage temperature	-10℃~ 60℃
Humidity	95% non-condensing
Regulatory	
Safety regulation	FCC, CE, CE RF , RoHS, FCC RF , LVD

Start to operate the Z-2121

Scanning Data

1. Insert a fully charged battery.
2. Press the "**Power"** key. After the display appears, press "**M2**" key to enter the System Menu.
3. Then Press "**1**" to enter the "**Run Task**" menu.
4. Press "**SCAN**" to do barcode scanning and data collecting.

System Menu

Below steps show how to access system menu to make various system configurations such as communication profile and data/time format.

Press the "**Power"** key. Fig 1 appears showing the firmware version, memory status, and the date and time. Press **M2** to go to the System Menu as shown in Fig 2.

Fig 1

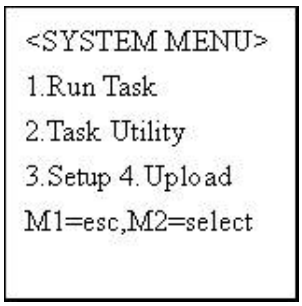


Fig 2

In Fig 2 System Menu is shown:

- Press 1 enter into Run Task function.
- Press 2 enter into Task Utility function.
- Press 3 enter into Setup function.
- Press 4 enter into Upload function.

Run Task

After clicking on Run Task, you start to collect data.

Fig 3

In Fig 3 press **SCAN** to read barcode data, and the vibration will shake once when **SCAN** key is pressed.

If want to revise the barcode data, please press **F6** to show on the data and key in the number, or can press **F4** to delete the data or number. And then press **F1** back Fig 3.

Task Utility

We provide a set of task related utilities to enhance the functionality of our data collector. In this menu, you can view/delete record/task and set the data format of the task.

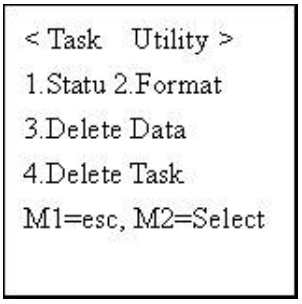


Fig 4

In Fig 4 is shown for Task Utility function, the following is the description of each function:

- Press 1 enter into File Status function.
- Press 2 enter into Format function.
- Press 3 enter into Delete Data function.
- Press 4 enter into Delete Task function.

File Status Function

This gives you a brief look of how many records are there which are stored in the device.

Fig 5

In Fig 5 the data record is shown. Press **M1** can leave the screen.

Format Function

This allows you to change the data format of the build-in freetask which came with the device, not your custom procedure task.

Fig 6

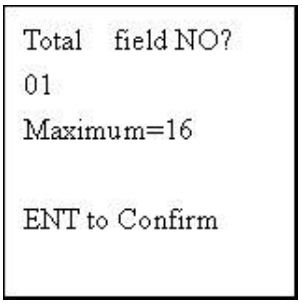


Fig 7

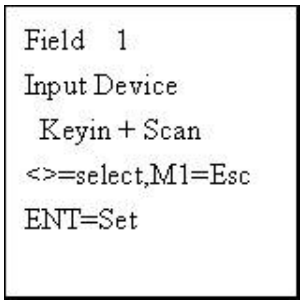


Fig 8

Fig 9

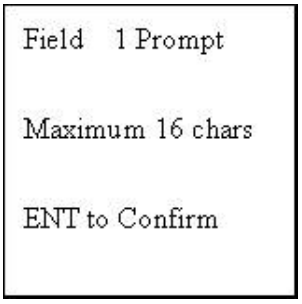


Fig 10

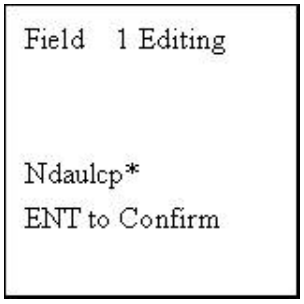


Fig 11

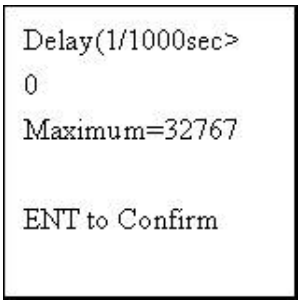


Fig 12

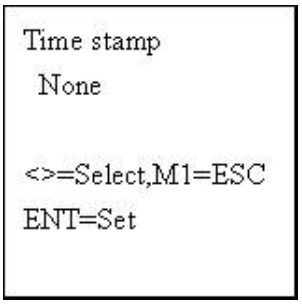


Fig 13

In Fig 6 press any key to go to the next screen.

In Fig 7 total field is shown, enter the number from 1 to 16, after confirmed press E to enter into Fig 8.

In Fig 8 input device setting is shown, press ◄ or ► to adjust Scan only, Keyin + Scan, Keyin Only. After confirmed press E to enter into Fig 9.

In Fig 9 field length is shown. Enter the field length from 1 to 32. After confirmed press E to enter into Fig 10.

In Fig 10 prompt is shown. Enter the message for the prompt. After confirmed press E to enter into Fig 11.

In Fig 11 field editing is shown. See the chart below to enter ndaulcp to set the format. After confirmed press E to enter into Fig 12.

In Fig 12 delay is shown. Enter the number to set the delay. After confirmed press E to enter into Fig 13.

In Fig 13 time stamp is shown. Press ◀ or ▶ to adjust None, Short, Long. After confirmed press E to exit.

Delete Data Function

This gives you the option to delete scanned data from ANY tasks that are stored in the device; both build-in freetask and custom procedure task.

Fig 14

In Fig 14 press **M2** to select YES or NO for deleting data downloaded from PC. After confirmed press E to leave the screen.

Delete Task Function

This allows you to delete any custom procedure task that was transfer to the device. You are not able to remove the build-in freetask using this function.

Fig 15

In Fig 15 press **M2** to select YES or NO for deleting task downloaded from PC. After confirmed press E to leave the screen.

Setup Menu

This is where you change the system configurations. Configurations are categorized into Basic, System, and Barcode.

Fig 16

In Fig 16 Setup Menu shown:

- Press 1 enter into Basic Setup function.
- Press 2 enter into System Setup function.
- Press 3 enter into Barcode Setup function.

Basic Setup Function

Here you can set some of the basic device settings such as BackLit & LCD, Beep & Vibrator, and Auto Power Off).

Fig 17

In Fig 17 Basic Setup is shown:

- Press 1 enter into Back Light & LCD setting
- Press 2 enter into Beep and Vibrator setting
- Press 3 enter into Auto Power off setting

Back Light Function

This allows you to set back light on/off. You will see an increase in battery life if you decide to switch off the back light.

Fig 18

In Fig 18 press ◀ or ▶ to switch ON or OFF the LCD back light. After confirmed press E to leave the screen.

LCD Contrast Function

This allows you to set the LCD Contrast Ratio. (Initial value=45 where minimum value=40, maximum value=60)

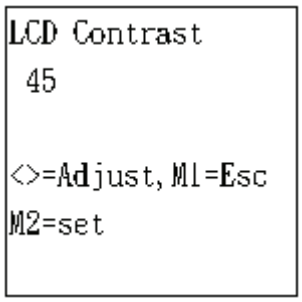


Fig 19

In Fig 19 LCD contrast is shown with the default set to 45. Press ◀ or ▶ to adjust the contrast, after confirmed press E to leave the screen.

Beep Volume Function

This allows you to change the system beep volume. Options are: Loud, Medium, Low, and Quiet (mute).

Fig 20

In Fig 20 Beep Volume is shown with the default set to Loud. Press ◀ or ▶ to adjust Quite, Low or Medium, after confirmed press E to leave the screen.

Vibrator Function

Here you can switch on/off the vibrator when a successfully scan is registered.

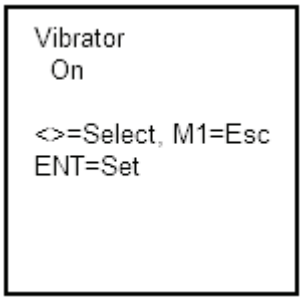


Fig 20-1

In Fig 20-1 Vibrator can be turn ON/OFF.
Press ◀ or ▶ to set On or Off. After confirmed press E to leave the screen.

Auto Power Off Function

Here you can control how long the device should remain turn-on before turning itself off to preserve battery life. Options are 10 min, 15 min, 20 min, 30 min, and disable. When choosing disable, the device will remain turn-on until you manually turn it off. Shorter battery life may result.

Fig 21

In Fig 21 Auto Power Off function is shown with the default set to 10mins. Press ◀ or ▶ to adjust 15mins, 20mins, 30mins or Disable. After confirmed press E to leave the screen.

System Setup Function

In System Setup menu, you can change various system related configurations.

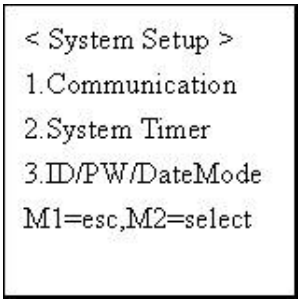


Fig 22

In Fig 22 System Setup function is shown:

- Press 1 enter into Communication function test.
- Press 2 enter into System Timer function test.
- Press 3 enter into ID/PW/Data Mode function test.

Communication Function

Here you can change the communication parameter. This will be the communication method use to communicate with external devices such as host PCs.

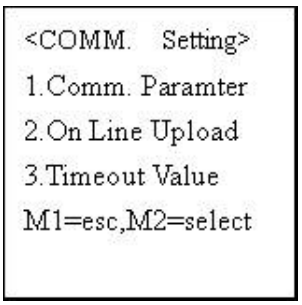


Fig 23

In Fig 23 is shown for System Setup function, the following is the description of each function:

- Press 1 enter into Comm. Parameter.
- Press 2 enter into OnLine Upload.
- Press 3 enter into Timeout Value.

Comm. Parameter Function

Here you can change the communication profile of the device. Depend on the environment; you can set it as RS232, USB, and BT (Bluetooth).

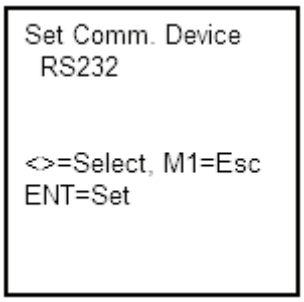


Fig 23-1

In Fig 23-1, you can adjust communication profile for the device. Press ◀ or ▶ to adjust RS232, USB, BT. After confirmed press E to leave the screen.

RS232

Here you can configure the device to use RS-232 as communication profile. Under most condition, you should accept the default settings.

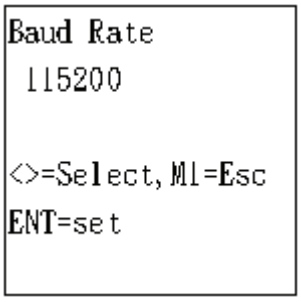


Fig 24

Fig 25

Fig 26

Fig 27

In Fig 24 Baud Rate is shown for speed setup. Press ◀ or ▶ to adjust 115200, 57600, 38400, 19200, 9600, 4800, 2400 or 1200, after confirmed press E to enter into Fig 25.

In Fig 25 Parity Check is shown. Press ◀ or ▶ to adjust even, odd, mark or space. After confirmed press E to enter into Fig 26.

In Fig 26 data bit setup is shown. After confirmed press E to enter into Fig 27.

In Fig 27 you can setup stop data bit, after confirmed press E then press **M1** to exit.

USB

Set the device to use USB as communication profile.

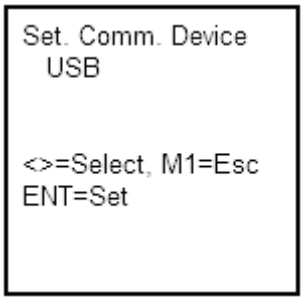
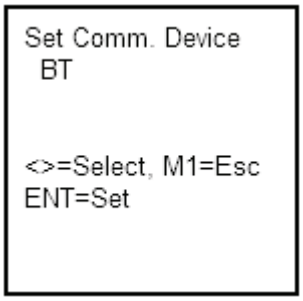


Fig 27-1

In Fig 27-1, you can set the communication profile to USB
Press E to confirm and leave the screen.

BT

Set the device to use Bluetooth communication profile. After selecting BT, you will be prompt to start the initial paring process using SPP connection. You can start the pairing process under either Master or Slave mode.



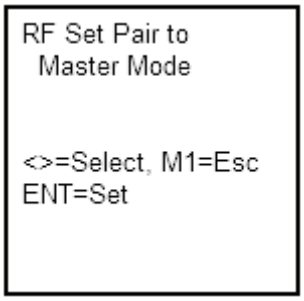


Fig 27-2 Fig 27-3

In Fig 27-2, you can set the communication profile to Bluetooth
Press E to confirm and continue with BT (SPP) setting

In Fig 27.2, you can adjust the SPP Bluetooth paring Mode.
Press ◀ or ▶ to adjust Master Mode or Slave Mode. After confirmed press E to continue.

BT-Master Mode

Here you start the initial paring process under Master mode. To complete the pairing, you will need 1) the Bluetooth hardware address of the host device, 2) the pairing PIN. The Bluetooth hardware address of the host device, please consult with your system manufacturer. For PIN number, you may assign your own, unique PIN number, or accept the default PIN, which is 12345678.

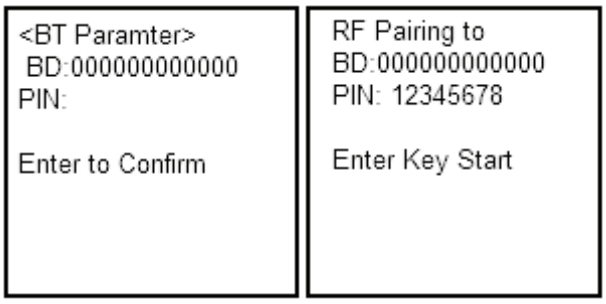


Fig 27-4 Fig 27-5

In Fig 27-4, enter the BT MAC address of the host device.
You can enter your own pairing PIN, or accept the default PIN, which is 12345678. Press E to confirm.

In Fig 27-5, confirm all the settings and press E to start the pairing process.

BT-Slave Mode

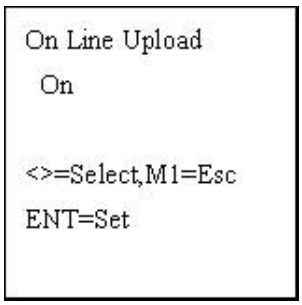
Here you start the pairing process as slave mode. Under slave mode, you do not have to provide the Bluetooth hardware address of the host device. Host device will need to initiate the pairing request. Once the BT connection has been terminated, the host device will need to initiate the pairing again. As for pairing PIN, use your custom PIN or accept the default 12345678.

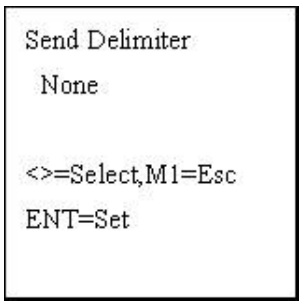
Fig 27-6

In Fig 27-6, Press E to confirm and start the pairing process.

Online Upload Function

Here you can enable/disable, and set related configuration for Online Upload. Under Online Upload, the device functions like a Bluetooth scanner where the scanned data are sent to host device without saving them to memory. Only Bluetooth communication method is available under Online Upload. However, you can choose between HID or SPP.





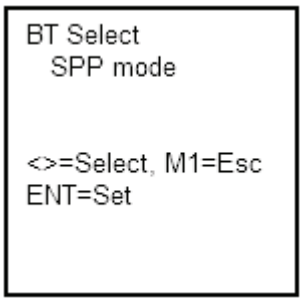


Fig 28 Fig 29 Fig 30

In Fig 28 Online Upload function is shown for data upload to PC. Press ◀ or ▶ to adjust On or Off. After confirmed press E to enter Fig 29.

In Fig 29 Send Delimiter is shown. Press , ◀ or ▶ to adjust None, (,), (;), Space, CRLF, CR, or LF. After confirmed press E to enter Fig 30.

In, Fig 30 BT mode selection are shown. Press ◀ or ▶ to adjust between SPP, HID or Off. After confirmed press E to continue.

SPP Mode

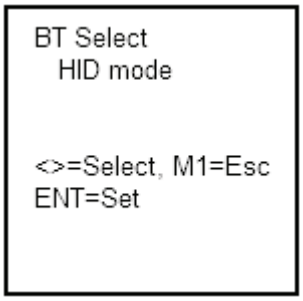
Here you can set the device to transmit online using SPP BT profile. If you complete the initial pairing process, you will be automatically. When using SPP, you will need an application running on the host device (such as Hyper Terminal) to receive data sending out by the terminal.

Fig.30-1

In, Fig 30-1, Z-2121 is trying to connect to PC using SPP profile in Master Mode. After confirmed press E to continue.

HID Mode

Here you can set the device to sent data using Bluetooth HID mode.



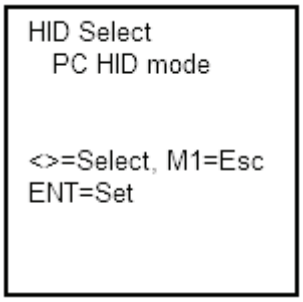


Fig. 30-2 Fig. 30-3

In, Fig 30-2, Z-2121 is trying to connect to PC using HID profile in Master Mode. After confirmed press E to continue.

In, Fig 30-3, HID selection are shown. Press , ◀ or ▶ to select between PC HID mode or IPAD HID mode. After confirmed press E to continue.

Fig. 30-3

In, Fig 30-1, Z-2121BTV2 is waiting for Bluetooth connection..Now go to iOS device / computer and turn on the Bluetooth to search. After confirmed press E to continue, or press Clr to exit the process.

Timeout Value Function

Here you can specify the waited time before host device respond with "Communication error" error message when using WinTaskGen. You DO NOT need to make any modification of this function unless you are instructed to do so.

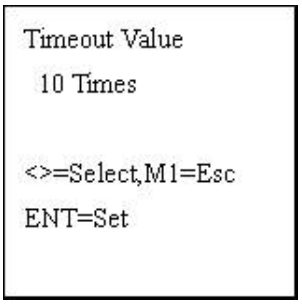


Fig 31

In Fig 31 you can set up the Timoeout Value. Press ◀ or ▶ to adjust 10 Times, 20 Times, 50 Times, 100 Times, or Normal. After confirmed press E to exit.

System Timer Function

Here you can set the format of system time/date accordingly.

Fig 32

Fig 33

In Fig 32 is shown to set up the date, press number t key to adjust the number, after confirmed press E to enter into Fig 33.

In Fig 33 is shown to set up the time, press number t key to adjust the number, after confirmed press E to leave the screen.

ID/PW/Date Mode Function

Fig 34

In Fig 34 ID/password screen is showing:

- Press 1 enter into Device ID function test.
- Press 2 enter into Password function test.
- Press 3 enter into Date Mode function test.

Device ID Function

Here you can change the Device ID of your data terminal. This Device ID is NOT the same as Bluetooth device ID when connecting to host device via Bluetooth communication profile. It is to be use only with WinTaskGen to distinguish between data terminals if you have multiple terminals connected to the same host device.

Fig 35

Fig 36

In Fig 35 is shown to set up the Device ID, after confirmed press E to enter into Fig 36, and press the number, after confirmed press E to leave the screen.

Password Function

Here you can setup a password to prevent unauthorized access to Setup Menu. Once the enable, user will be prompt to enter the correct password before accessing the Setup Menu and deleting any data/task from the terminal as a form of protection and user access control.

Fig 37

Fig 38

In Fig 37 is shown to set up password, after setup press E to leave the screen, If there is no setting will enter into Fig 38 automatically, please press E to leave the screen.

Date Mode Function

Here you can set the format of system date accordingly.

Fig 39

In Fig 39 is shown to set Date Mode. Press ◀ or ▶ to adjust MM/DD/YY, DD/MM/YY, or MM/DD/YYYY. After setup press E to leave the screen.

Barcode Setup Function

Here you can adjust the barcode decoding configuration. Unless you are experiencing scanning issues, modification to this section should be performed by your solution provider / system integrator.

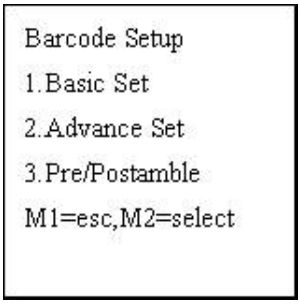


Fig 40

In Fig 40 is shown for Barcode Setup function, the following is the description of each function:

- Press 1 enter into Basic Set function test.
- Press 2 enter into Advance Set function test.
- Press 3 enter into Pre/Postamble function test.

Basic Set Function

Here you can enable various barcode decoding settings of the terminal in this section. You can enable/disable each individual barcode type, or enter advance setting menu to further fine tune the detail settings within each barcode type.

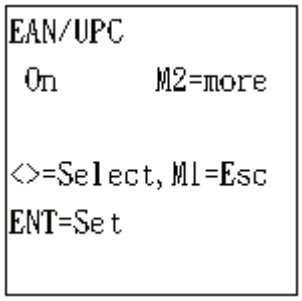


Fig 41

In Fig 41 is shown for Basic Set function, can adjust the barcode type like Code 39, F ASCII 39, Codabar, ITF25, Code 128 and Code 93, after confirmed press E to leave the screen.

Advance Set Function

Here contain the advance settings for each individual barcode type. Adjust these setting only if you are instructed to do so.

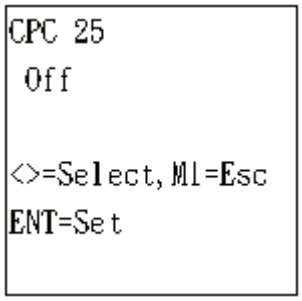


Fig 42

In Fig 42 is shown for Advance Set function, can adjust EAN to ISBN/ISSN, EAN-13 digits, EAN-8 digits, IATA code or Codabare ST/SP, after confirmed press E to leave the screen.

Pre/Postamble Function

Sometimes you want to add certain character at the beginning or end of a barcode for identification purpose. Here you can manually enable / disable and specify the character you wish to add in additional to the regular barcode content.

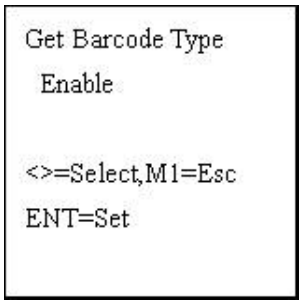


Fig 43

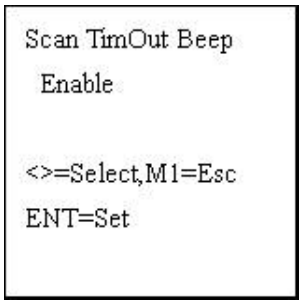


Fig 44

Fig 45

In Fig 43 press ◀ or ▶ to adjust Enable or Disable for Get Barcode Type. After setup press E to enter into Fig 44.

In Fig 44 press ◀ or ▶ to adjust Scan Timeout Beep. After setup press E to enter into Fig 45.

In Fig 45 Pre/Postamble setup is shown. Enter the necessary parameters and press E to leave the screen.

Upload Menu

Unless you are using Online Scanning mode, you will need to upload the scanned data onto a host device at some point. Here you can upload data and set the delimiter (separator) between each field / record. The communicator use during the upload will be same as the communication method selected in Setting >> System Setting >> Communication >> Comm. Paramter.

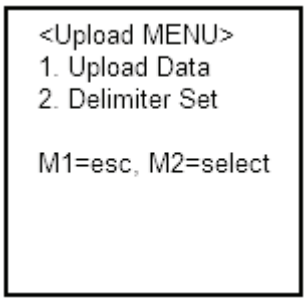


Fig 46

- Press 1 enter into Upload Data function.
- Press 2 enter into Delimiter Set function.

Upload Data Function

The method use in "Upload Data" is determined by the communication method set in "Communication" menu. You can upload the data using Bluetooth, USB, or RS232.

Bluetooth Upload (SPP)

Fig 47

Fig 48

Fig 49

In Fig 47 RF Connect screen is shown. This screen only appears for Bluetooth connection. Please wait for connection to be made or press CLR to exit.

In Fig 48 upload Free Task is shown. Press ◀ or ▶ to adjust Y or N to upload Free Task. After confirmed press E to go to Fig 47.

In Fig 49 upload screen is shown. Press E to begin uploading data.

Bluetooth Upload (USB)

Fig. 49-1

In Fig 49-1 upload screen is shown. Press E to begin uploading data.

Delimiter Set Function

Delimiter is the symbol used between each field and at the end of each record. Without it, all data will be mesh together, making it unusable. Here you can choose the character you want to add between each data field, and the action to take after each line of record. You can also decide whether to send the header of task file or not.

Fig 50

Fig 51

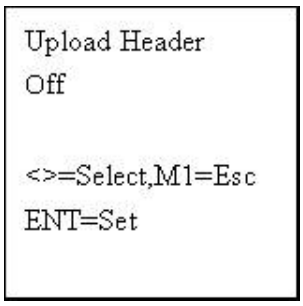


Fig 52

In Fig 50 Field Delimiter setup is shown. The default is (,); press ◀ or ▶ to adjust ; , Space or None. After confirmed press E to go to Fig 51.

In Fig 51 Record Delimiter set up is shown. The default is (,); press ◀ or ▶ to adjust CR, LF, or None. After confirmed press E to go to Fig 52.

In Fig 52 Upload Header setup is shown. Press ◀ or ▶ to adjust Off or On. After confirmed press E to leave the screen.

Connecting Bluetooth to PC

1. Install and run Bluetooth USB Adaptor driver. Plug in the Bluetooth USB adapter to your PC to begin connection.

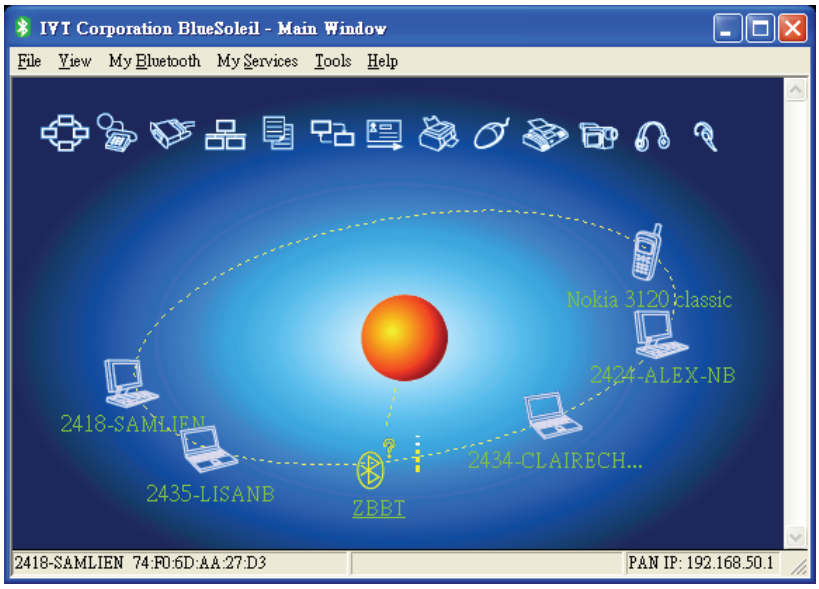


Fig 1

2. In Fig 1, a list of Bluetooth devices are shown on the screen. Z-2121 will appear as “ZBBT”. Double click “ZBBT“ to make the connection. Fig 2 appears prompting for password.

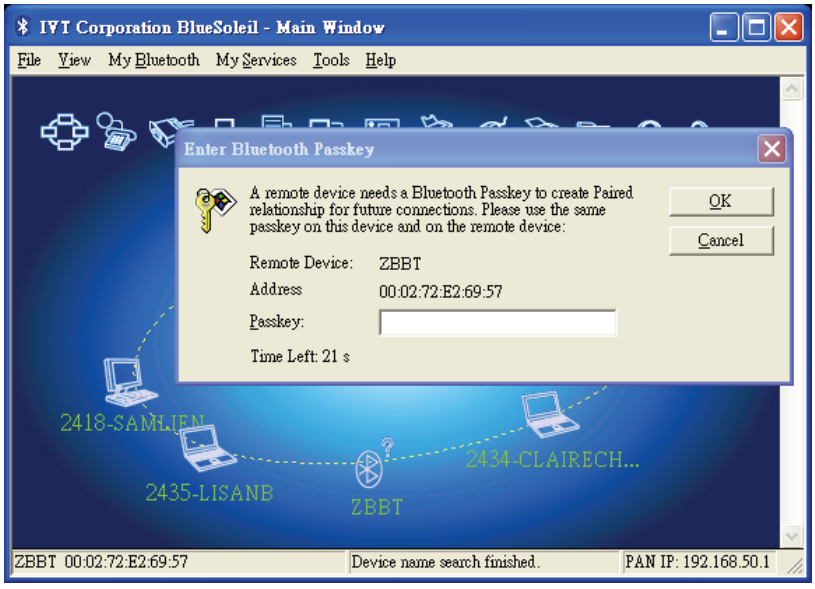


Fig 2

3. Enter the password for Bluetooth connection. Please see the Upload/Upload Device section for instructions on setting Bluetooth password. Click OK after you enter the password. Fig 3 appears.

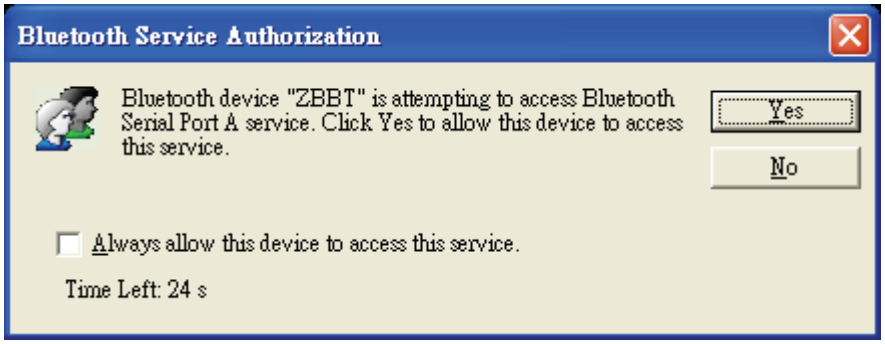


Fig 3

4. Click Yes in Fig 3 to allow connection. A message appears as shown in Fig 4 notifying the COM port used.

5. To receive data on PC, use a program such as the Hyper Terminal with the appropriate COM port settings to connect the PC to the data collector. Please see the System Setup/Communication section for more details.

Bootloader Function Quick Start Guide

	Please note that once you entered the Bootloader function you must complete the update and/or the reset before you can exit the function. All data stored on the device will be lost.

Firmware update

Please download and install the latest firmware and firmware update tool from the ZEBEX website before you begin.

1. Press **F1** + **F2** + **PW** when the device is off to enable the Bootloader function as shown in Fig 1.

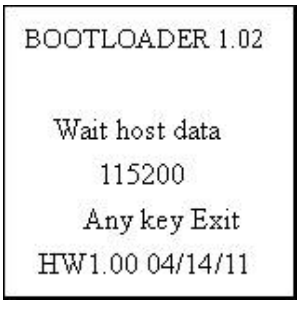


Fig 1

2. Connect the device to PC and run the firmware update tool on your PC to begin update. Fig 2 appears on PC.

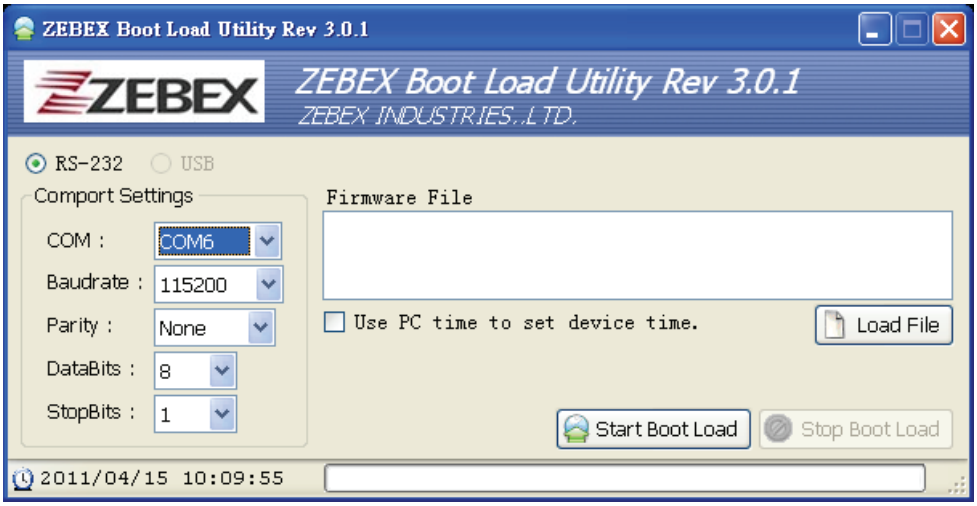


Fig 2

3. Select the appropriate settings and file and click “Start Boot Load” to begin update. For more details, please download and see the firmware update manual from online.

4. The reset screen appears as shown in Fig 3. Press M2 to select Y and press E to rest the device.

Fig 3

<< MEMO >>