ZEBEX
www.zebex.com

User's Manual

Handheld Terminal

Editorial Record

Version	Date of edited	Page	Content
Ver1.00	2014/05/14		Initial release

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Preface

About This Manual

Thank you for your purchase of the ZEBEX Z-2170 Plus Handheld Terminal. ZEBEX Z-2170 Plus is at the forefront of handheld terminal technology, and this manual will provide the necessary information on the many and varied options available to you.

The Z-2170 Plus is a compact, ergonomic, modular and durable handheld terminal. It is designed for easy upgrade with an integrated WiFi wireless communication, 1D barcode scanner and 2D Imager, solution. The design is complies with IP54 regulations and 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 the information is important and you should observe.

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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-2170 Plus handheld terminal 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 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

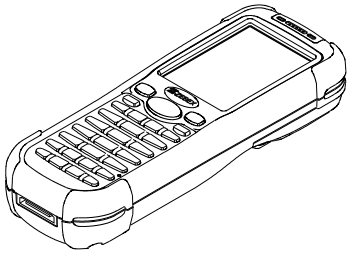
Should any foreign matter ever get into the device, immediately turn off the power and contact your original dealer or an authorized ZEBEX service provider. Continued use creates the danger of fire and electrical shock.

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.

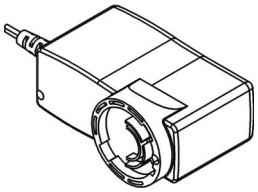
Unpacking

Package Contents



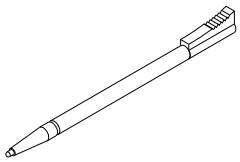
Z-2170 Plus

Handheld Terminal

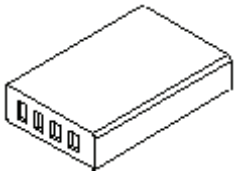


Power Adapter

selection Type: North America/Japan/ Taiwan/Europe

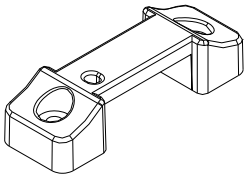


Stylus Pen

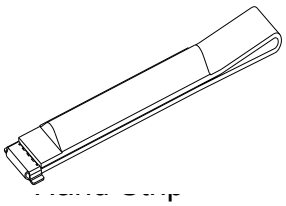


Battery Pack

Sling (for stylus Pen)



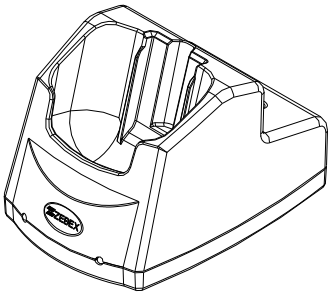
Hand strip Holder



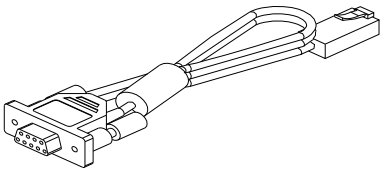
Hand Strip

Optional Parts

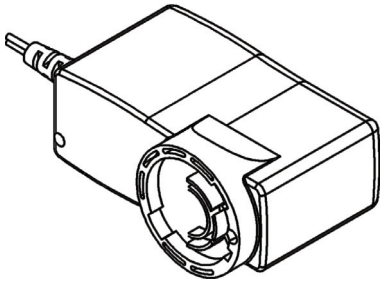
Cradle package



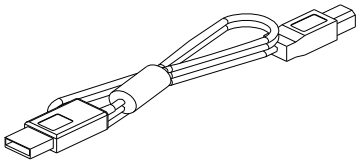
Docking Cradle



RS232 Cable
(Connect from cradle tp PC)

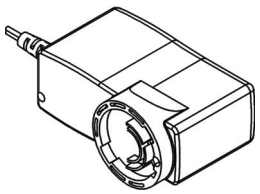


Power Adapter

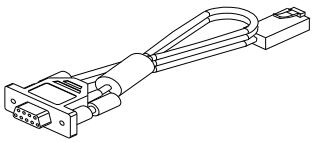


USB cable
(From Cradle to PC USB port)

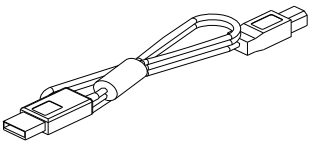
Purchaseable accessories



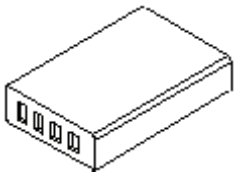
Power Adapter



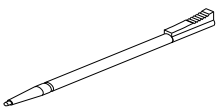
RS232 Cable



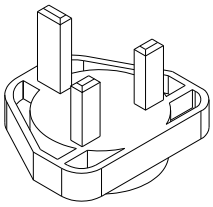
USB cable
(From Cradle to PC USB port)



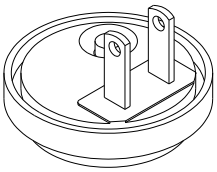
Main Battery



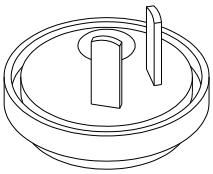
Stylus Pen



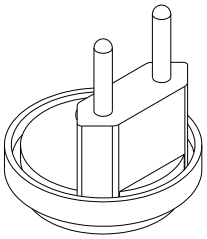
Britain Plug head



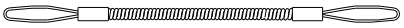
U.S. Plug head



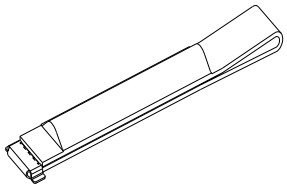
Australia Plug head



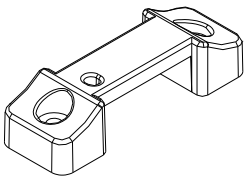
Europe Plug head



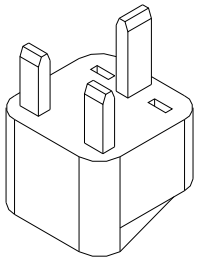
Sling (for stylus Pen)



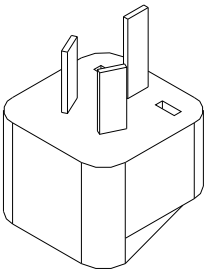
Hand Strip



Hand strip Holder

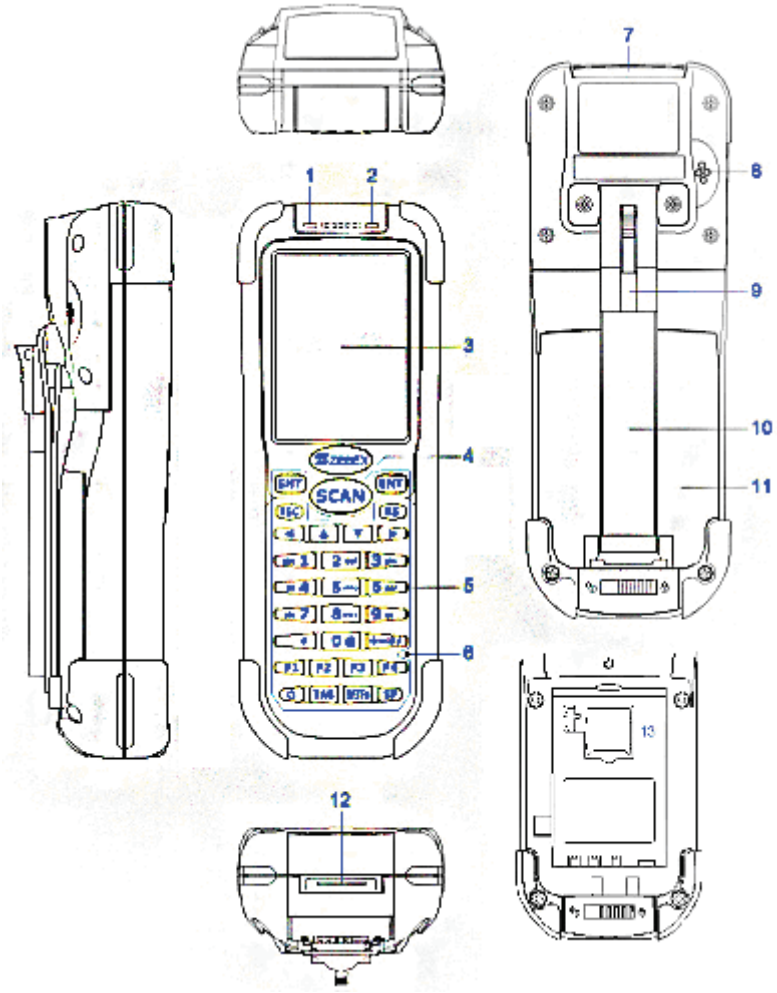


Britain Adapter Head

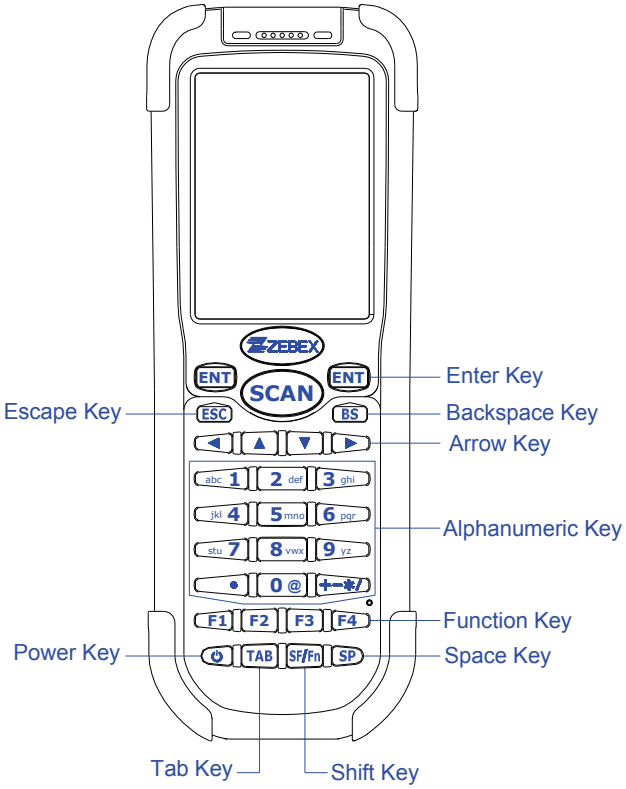


Australia Adapter Head

General Guide



1	LED indicator (Left)	Indicates the status of read barcode : Green for successful read.
2	LED indicator (Right)	Indicates the status of battery charge : Red for battery charging and Green for full.
3	LCD screen	Display various data when a program is being run.
4	Scan button	The trigger of barcode reading.
5	Keypad	A total of 29 keys are provided to the power and other function keys.
6	Reset switch (inside the hole)	Use reset needle (take off the other side of stylus pen cover) to press the RESET switch located inside the
7	Scan windows	Emits a laser for barcode reading.
8	Buzzer	Outputs operation confirmation tones.
9	Stylus pen	For touch screen operation and needle for press RESET switch.
10	Hand strip	Protects the Handheld Terminal from dropping.
11	Battery	Main battery
12	Communication port	Connect to cradle for communication or charging
13	Memory Expansion Slot	MicroSD expansion slot



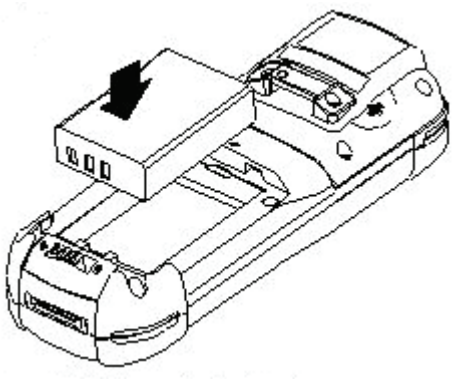
Using the Keypad

ENT	Enter key	Press to confirm entries or commands.
BS	Backspace key	Press to move cursor and deletes the previous character each time.
Arrow	Arrow keys	Press these to move around the screen.
0-9	Alphanumeric keypad	Press to enter numerical or alphabetical data.
F1-F4	Function keys	Press to access function keys 1-4.
SP	Space key	Press to add a space character.
SF/Fn	Shift key	The key is used in combination with other keys to type special characters or perform other function keys. 1. Press after SF/Fn key and press Up key to turn the input method into upper alphabetical. 2. Press after SF/Fn key and press Down key to turn the input method into lower alphabetical. 3. Press after SF/Fn key and press Left or Right key to turn the input method into numerical. 4. Press after SF/Fn key and press F1-F4 key to
TAB	Tab key	Press to add a tab indention.
	Power	1. Press to turn the power on 2. Press to turn the power off and go into the suspend mode.
ESC	Escape key	Press to perform a cancel action.

Getting Started

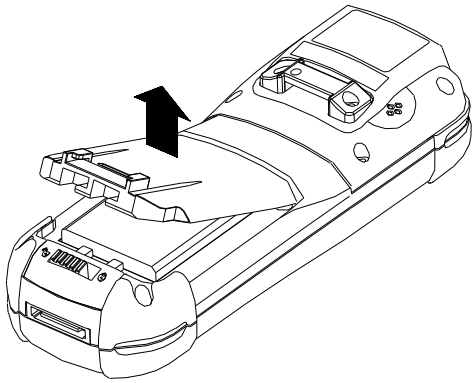
Inserting the Battery

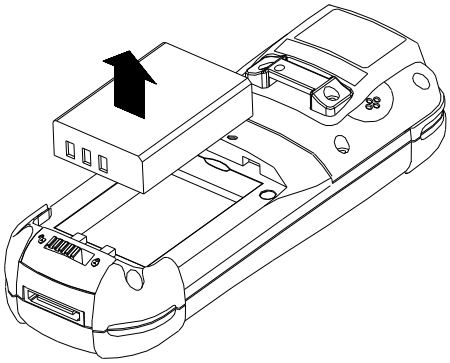
Insert the battery pack as shown and make sure it is aligned correctly.



Remove the Battery

Push the side lock to unlock the lid and remove the battery pack.

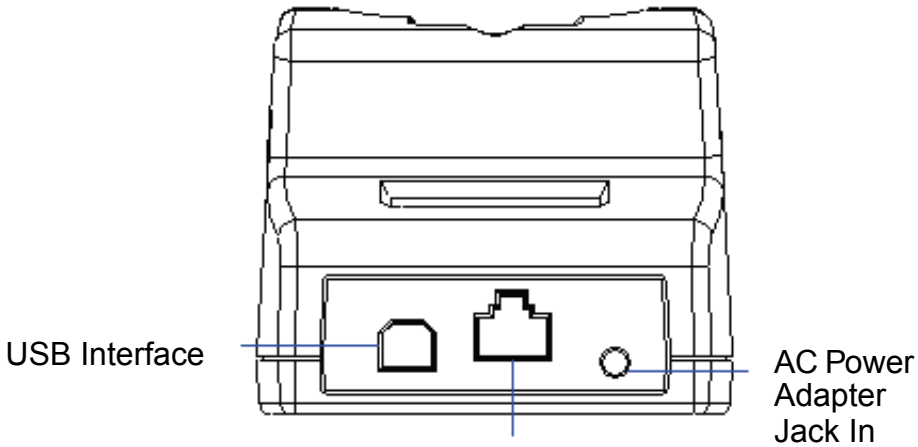




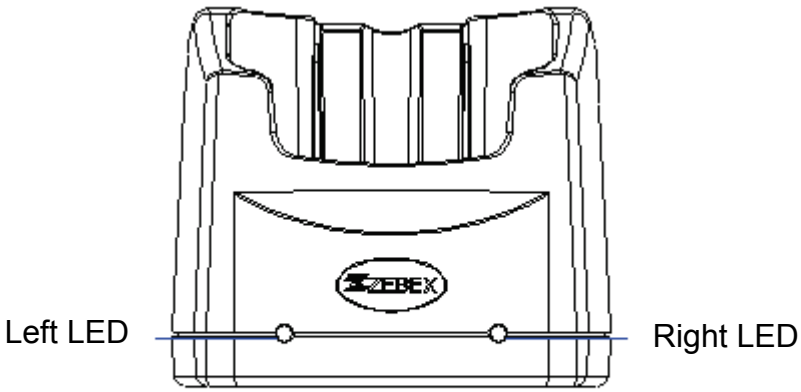
Charging the Battery

The Li-ion rechargeable battery can be charged while inserted in the recharging slot of the cradle.

Charging by cradle



Cradle - rear view

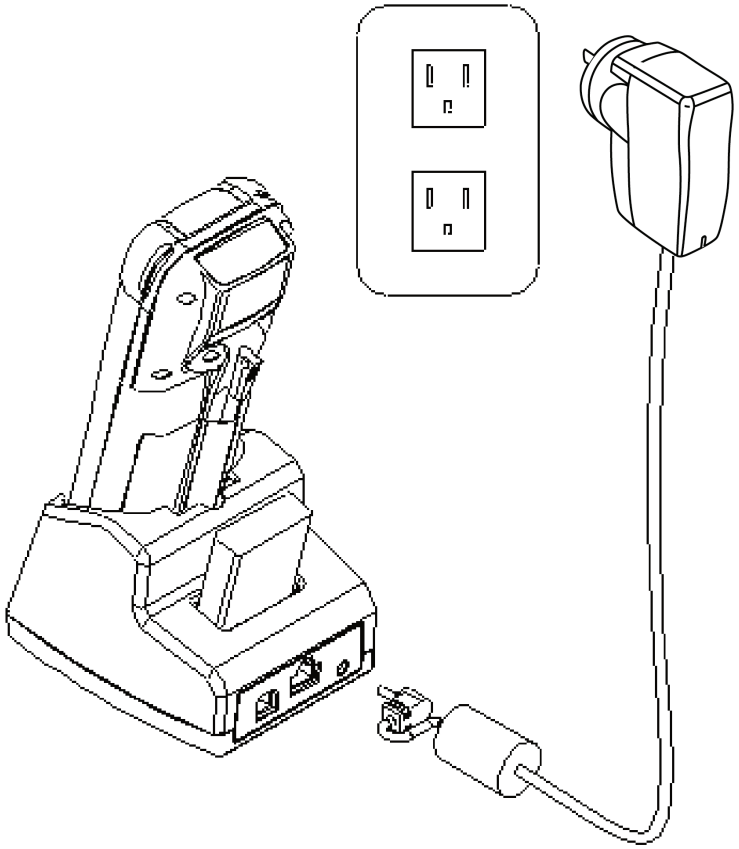


Cradle-front view

Cradle LEDs

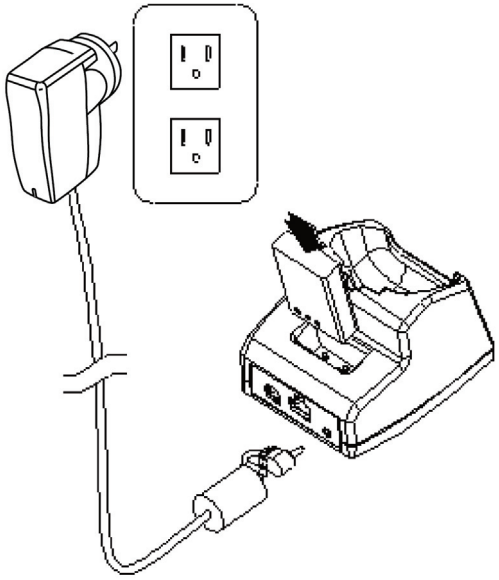
Left LED - The LED lit when a battery is inserted into the rear battery slot of the cradle for recharge. It remains lit until the charge is complete.

Right LED - The LED lit when the cradle is connected to AC power.



Charging the battery in the cradle

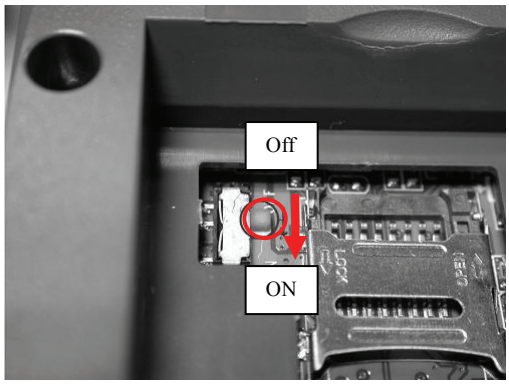
Insert the battery into the compartment at the rear of the cradle.



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.
- When charging the battery for the first time, be sure to turn the switch to the ON position as illustrated below to turn on the backup battery and avoid the low battery message on the screen.

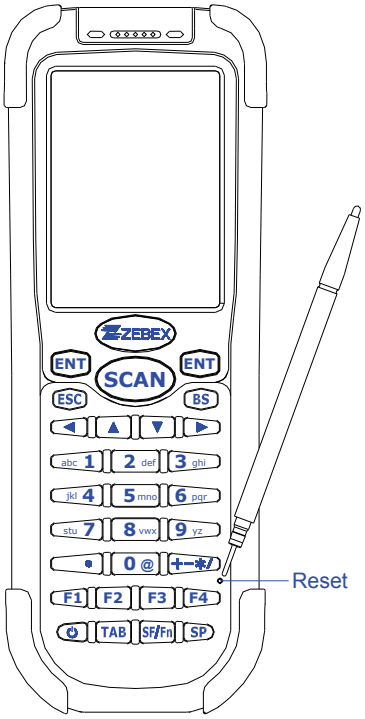


System Reset

Using the Warm reset function

Warm reset function allows you to return the device to the default settings, wile not wiping all data from the memory.

Insert the needle into the reset hole as shown and press down gently, to reset the device.



Using the Cold reset function

Cool reset function allows you to return the device to the factory settings, wile wiping all data from the memory.

Press down and hold the power key for 8 seconds to cold reset the device.

WARNING

Cold reset will erase ALL pre-configured data on the scanner. Check carefully to make sure you have uploaded all important files to your PC before proceeding with the reset.

PC System Requirements

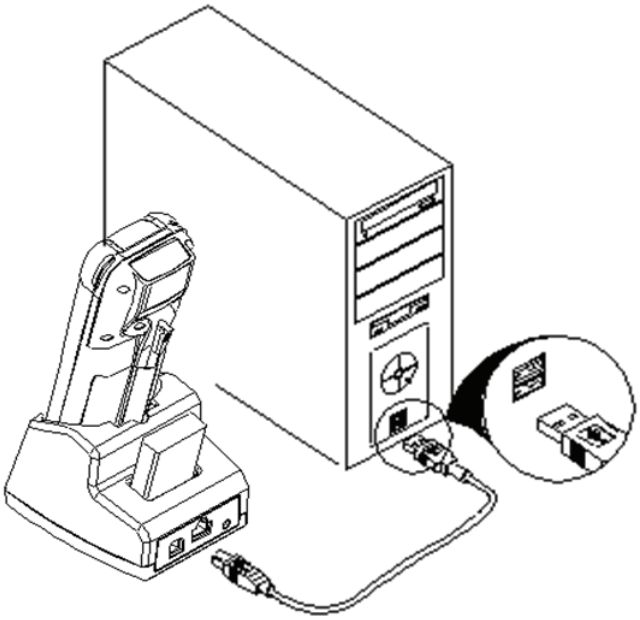
Windows XP Operating System
256 MB RAM
2 GB free HDD space
USB ports communication Interface
WLAN transmitter (optional)
Bluetooth transmitter/receiver (optional)

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.



About The Product

The Z-2170 Plus is a compact, ergonomic and durable portable data terminal. It is designed with an integrated wireless communication and 1D laser barcode scanner, touch screen and 29-keys keypad. The design is ideal for the mobile worker as it simple and easy to use anywhere along a supply chain. It complies with IP54 regulations.

The Z-2170 Plus features a Ti AM3715 ARM Cortex-A8 (1GHz) with Windows CE.NET version 6.0 operation system. This combination delivers high performance, low power consumption and the diversity of a wireless networking platform. Compared with other systems currently available on the market, Z-2170 Plus is the most cost-effective to offering optimum performance.

Features

- Pocket size design
- Microsoft Windows CE.NET 6.0 operating system
- 2.4” TFT color display with touch pane
- Micro SD I/O Slot for extra storage or Wireless solution with IEEE802.11b/g
- Easy system control tools – PowerPack, saving time and cost for software development

Prerequisites

Skills Required

The following skills are required by developers aiming to develop application software for the ZEBEX Z-2170 Plus.

● Windows programming
● Good knowledge of one or more of the following:
* Visual C++
* Visual Basic .NET
* Visual studio .NET
* Visual C#
* Active Server Pages and web programming

The following skills or experiences are also desirable.

● Windows CE devices
● IE 6.0 ActiveSync
● Some networking experience

Specifications

Model	Z-2170 Plus
System	Windows CE 6.0
CPU	Ti AM3715 ARM Cortex-A8 1GHz
Memory	512 MB flash ROM/512 MB flash RAM
LCD Display	2.4" QVGA, TFT (240 x 320)
Audio	One speaker output, AC97 Codec with speaker output and touch panel control Internal Microphone input
Operating System	
Main Battery	3.7V 2,200mAH Li-ion rechargeable battery
Backup Battery	One rechargeable Li-ion backup battery
Vibrator	Only Barcode Scan OK
Scan Engine	1D engine or 2D Imager
Light Source	650 nm visible Laser Diode
Scan Rate	100 scans per second
Print Contrast	30% @ UPC/EAN 100%
Decoding Capability	
Barcode Symbologies	UPC/ EAN/ JAN, Code 128/EAN 128, Code 39, Code 93, Interleaved 2 of 5, Discrete 2 of 5, Codabar, MSI/Plessey
Card Slots	1 x Micro SD I/O card
Communications / Interfaces	RS-232, USB 2.0
WLAN	802.11 b/g/n
Bluetooth	BT 2.1+EDR
Dimensions	(L) 162 mm x (W) 60.0 mmx (H) 37.3 mm
Weight	Approx. 280 g (battery included)
Environmental	
Operating Temp.	0°C ~ 50°C
Storage Temp	-20°C ~ 60°C
Operating Humidity	5% ~ 95% (non-condensing)
Drop Durability	Withstand 1.5M drop to concrete
Environmental Sealing	IP54 rated sealing
Regulatory Approvals	CE & FCC Part 15B
Cradle	Single slot USB / RS-232 charging cradle with spare battery slot
Software &Development	IE6.0 / Active sync / Update from Micro-SD card / PowerPack Utility / Support Software SDK

Using Barcode Scanner

Scanning Barcodes

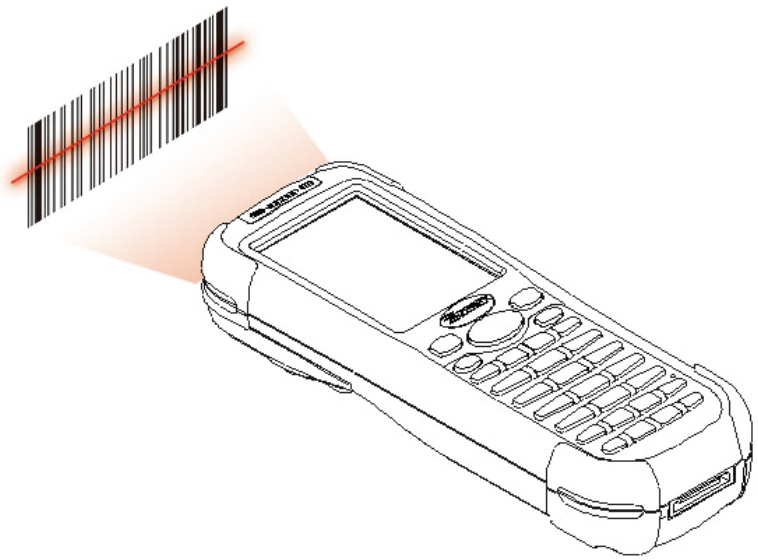
The Z-2170 Plus is a highly versatile tool that can scan a wide range of barcodes but it is imperative that it is used in the correct manner.

To scan a barcode:

1. Hold the Z-2170 Plus horizontally and point it directly at the barcode you wish to scan.

2. Once in the correct position, press the **SCAN** button.

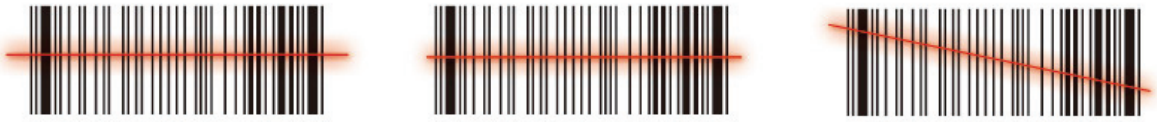
An audible alarm is heard and the barcode digits will appear on the LCD screen if the scan is successful.



Barcode Scanning Position

This device can read from 30 to 180mm distance.

1. Position the laser scanner close to the barcode when scanning small barcodes. And position it is a distance from the barcode when scanning large barcodes
2. The reader can be detected by a red beam.



Band Scanning Position

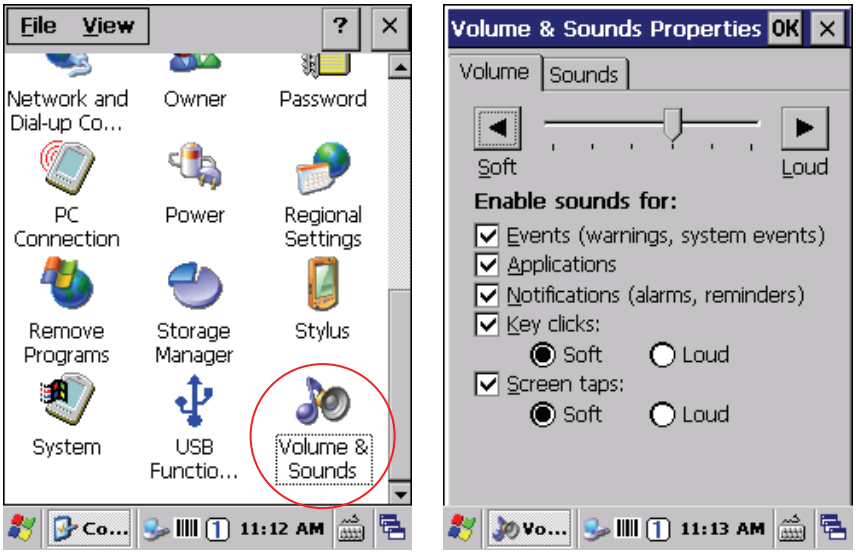
Make sure that the bars enter the laser beam when scanning large barcodes.

Scanning operations may fail if the laser beam are positioned incorrectly as below.

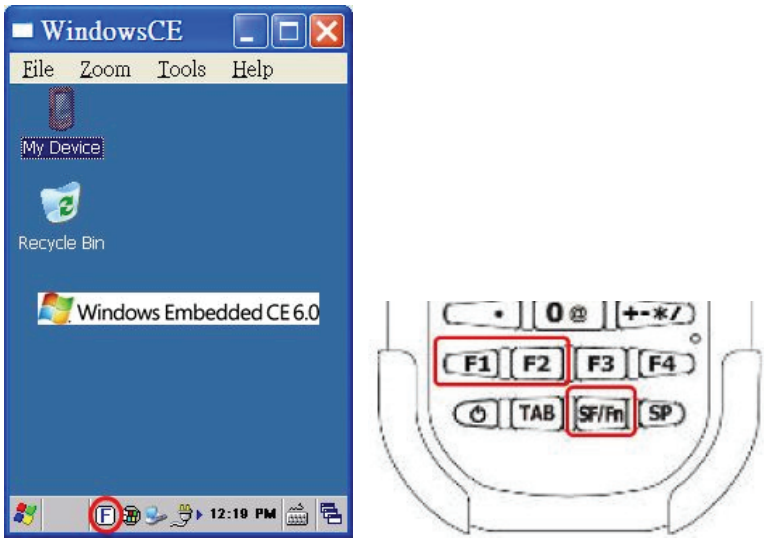
Caution: Never look directly into the laser or shine the laser into the eyes.

Volume Control

To set the volume, go to Control Panel and click on Volume and Sound.



Or press [SF/Fn] on the keypad; press F1 for volume up or F2 for volume down.



Using the Zebex PowerPack

"PowerPack" designed by Zebex provides an easy to use system management tool. It saves users time and effort in developing applications.

The PowerPack management tool is included in each of our WinCE product. It is free of charge and offers useful functions without any programming skills from the users.

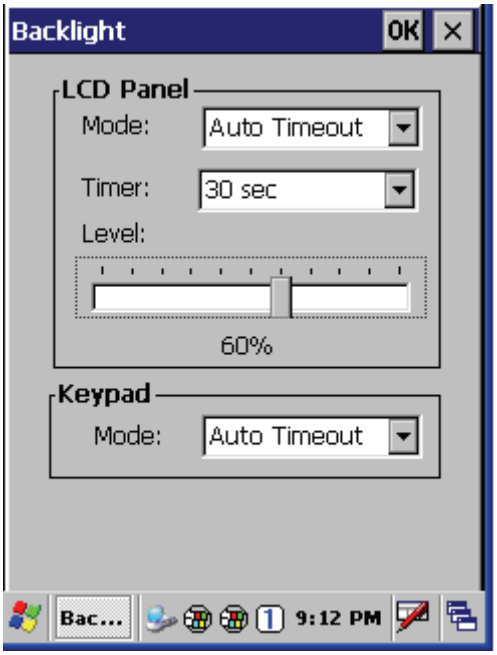
To access PowerPack, follow below path from the home screen:
Start >> Programs and choose "PowerPack"

Backlight

This application is for setting the LCD panel and key pad bakclight. It allows operators to set the duration or to turn it on or off.

The Backlight settings screen include 2 parts:

- LCD Panel
- Keypad

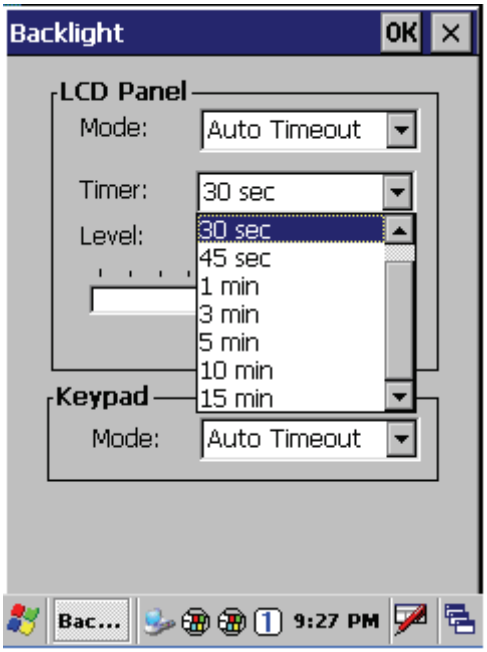


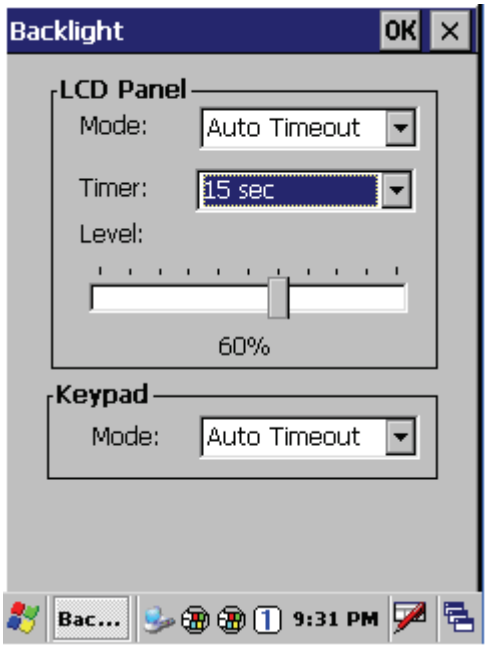
The LCD Panel setting:

- Auto Timeout: This function is used to turn off the LCD backlight automatically after certain period of inactivity. You can set the Auto off time from 15 sec to 15 min using the Timer setup as illustrated below.

- Always ON: This function is used to set the backlight to always on until the system goes into suspend mode.

- Always OFF: This function is used to set the backlight to always off.





The Keypad Backlight setting:

- Auto Mode: This function is used to set the keypad backlight to auto off after certain period of inactivity. The interval of the time for auto off is fixed on 5 seconds.

- Always ON: This function is used to set the keypad backlight to always on until the system into suspend mode.

- Always OFF: This function is used to set the backlight to always off.

Calculator

This calculator function allows operators to add, subtract, multiply, and divide that simply provide basic logistic function in our daily basis.

The upper zone of the display area displays the memory content, and the lower zone is key pad.

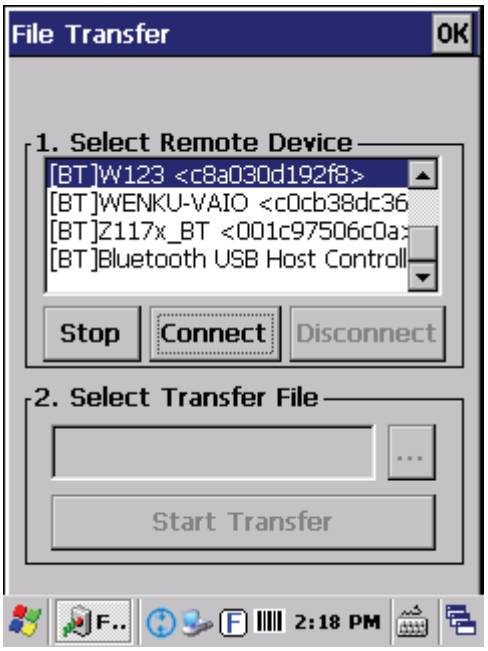
Button description:

MC : Clear buffer of memory.
MR : Got the value of buffer.
MS : Storage the value to buffer.
M+ : Append the value to the buffer.
CE : Clear the display area to “0”, but keep the value in buffer.
C : Clear the display and the buffer of memory.
+/- : Change the value sign form Plus to Minus or Minus to Plus.
0~9 : Numeric key.
/ : Division function.
∗ : Multiplication function.
— : Subtraction function.
+ : Addition function.
. : A decimal point of dot.
= :To be equal to, The amount.

File Transfer

File Transfer is a simple file transferring tool. It lets users transfer files to another device via Bluetooth. OBEX agreement which is used by cell phone and Notebook PC is also used here so you can transfer files to cell phone or Notebook PC, or perform file transfer between two terminals using this application.

File Transfer is capable to auto-search devices with Bluetooth communication, so all devices within valid range will be listed in window of “1. Select Remote Device”.



Function Instructions:

Select Remote Device
All devices with Bluetooth Communication functions are listed on the display.

- Query: For searching usable devices.
- Stop: Stop searching.
- Connect: For connecting with one device.
- Disconnect**:** For disconnecting with current devices.

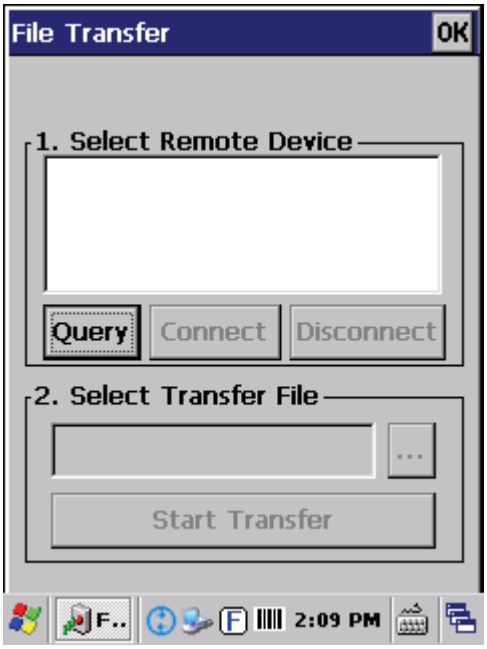
Select Transfer File
Select file need to be transferred, press  button for selecting file.
Start Transfer: Start transferring file to targeted devices.

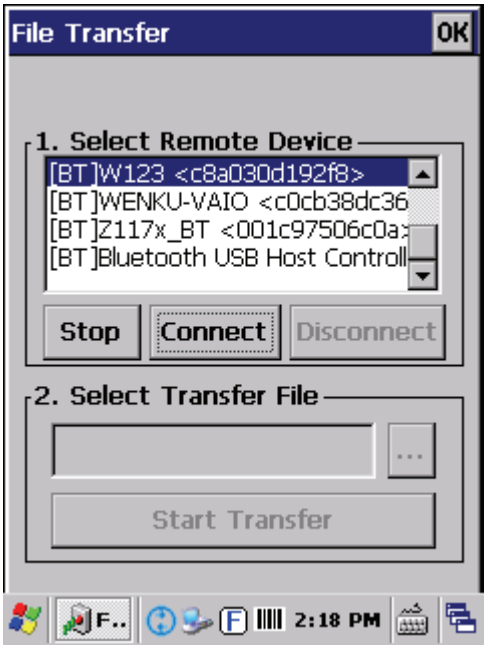
Ex. File Transfer By Using Bluetooth

File Transfer by Bluetooth:

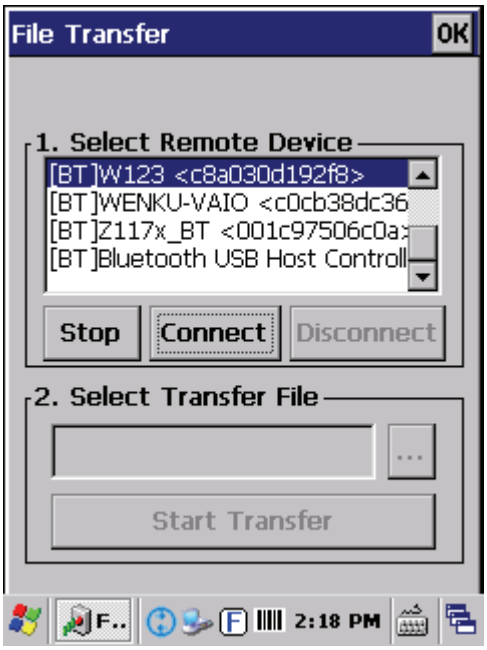
Make sure Bluetooth devices are activated, Bluetooth Communication Devices can be activated under Switch Function within PowerPack software utilities.

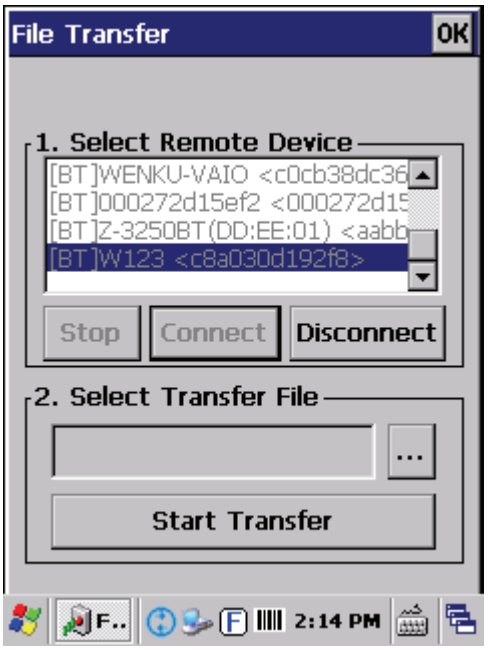
Select “Query“ for searching Bluetooth devices, below window will pop up on display.



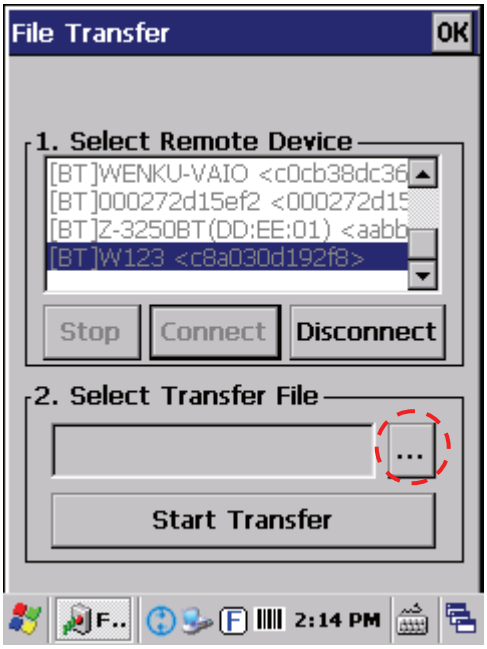


1. Select Bluetooth devices for receiving file, select “Connect” for connecting with devices, or select “Disconnect” to disconnect with current devices.

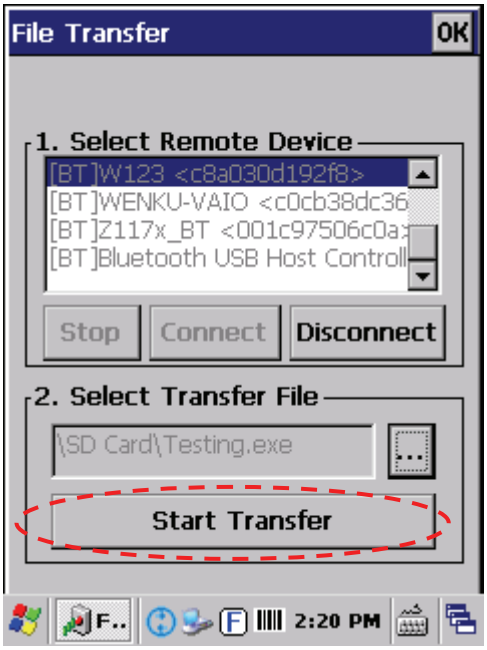




2. Click ” … ” button to select the file need to be transferred, then click ”OK ” button to confirm.



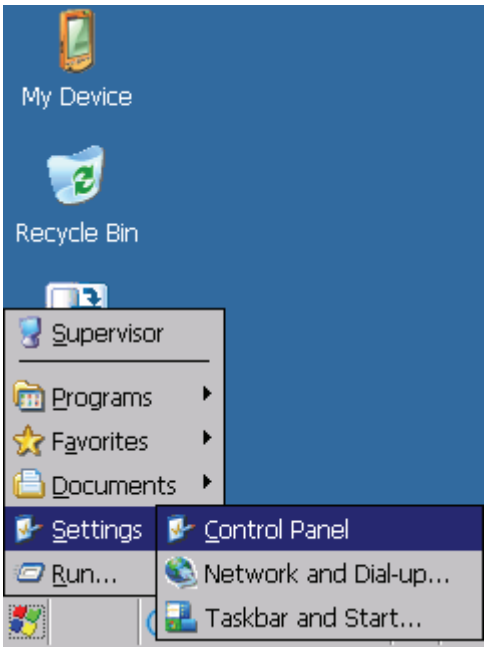
3. Select “Start Transfer” button to start file transferring.

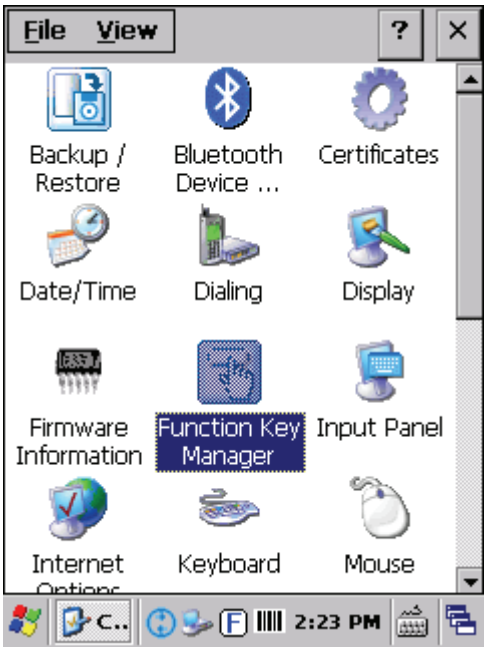


Function Key Manager

This application utility provides an easier way to configure the function keys for your device. Through this application you can set the keys to instantly start programs like Window Media Player, Calculator, or any application program you wish including windows system function such as increasing or decreasing the volume or adjusting the brightness of your LCD panel.

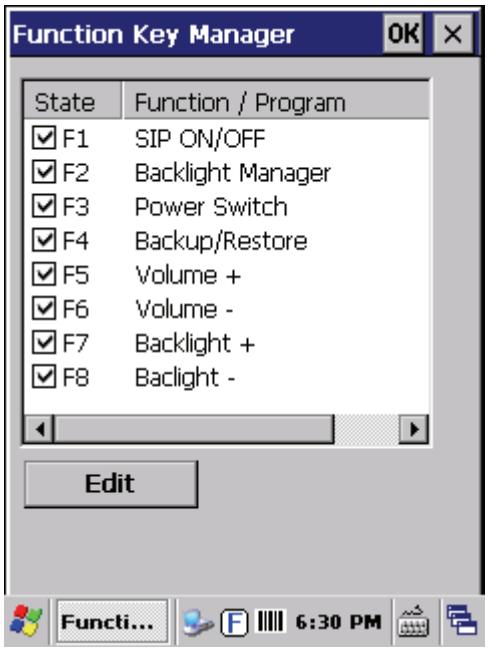
You can find this application from “\settings\control Panel\”.



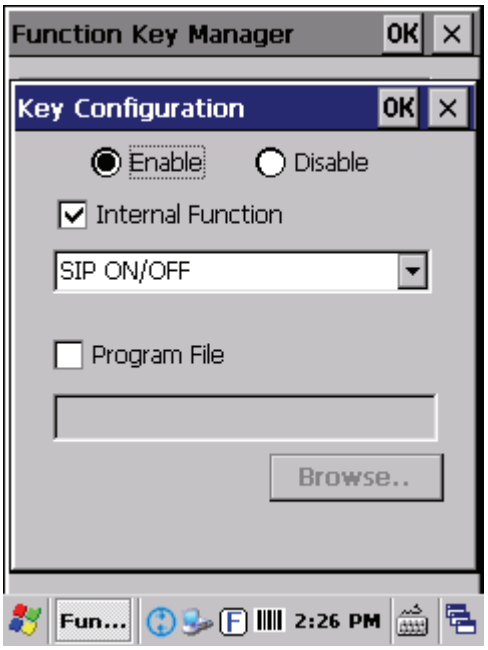


Program provides eight different function keys (F1~F8) for the setting. Default settings are shown as below:

F1: SIP ON/OFF
F2: Backlight Manager
F3: Power Switch
F4: Backup/Restore
F5: Volume +
F6: Volume -
F7: Backlight +
F8: Backlight -



Function Key Manager Set Up Instruction



Enable/ Disable : Enable or Disable Function Key.

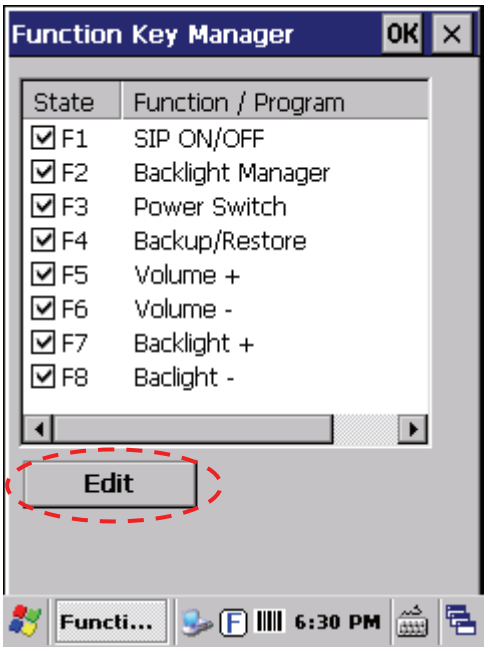
Internal Function :

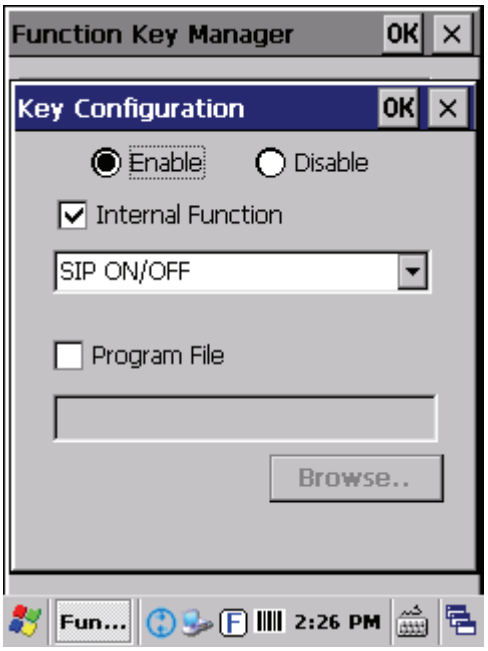
- SIP ON/OFF
- Backlight Manager
- Power Switch
- Stylus Calibration
- Wi-Fi ON/OFF
- Bluetooth ON/OFF
- Backup/Restore
- Volume +
- Volume –
- Backlight +
- Backlight –
- Cut
- Copy
- Paste

Program File : Install application program according to demand, this function can be used for setting up auto-execution.

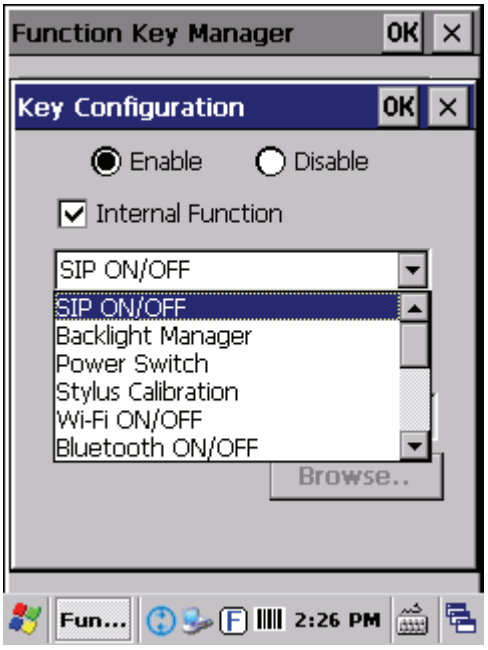
Edit Internal Function items:

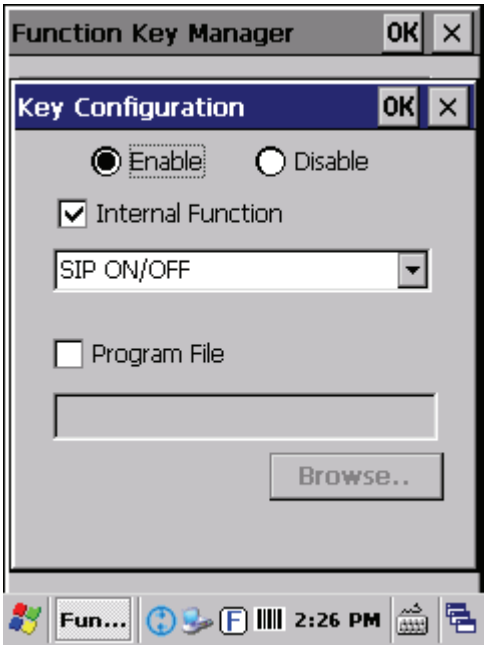
1. Select the item to be modified by clicking the ”Edit” button to enter the configuration window as below:





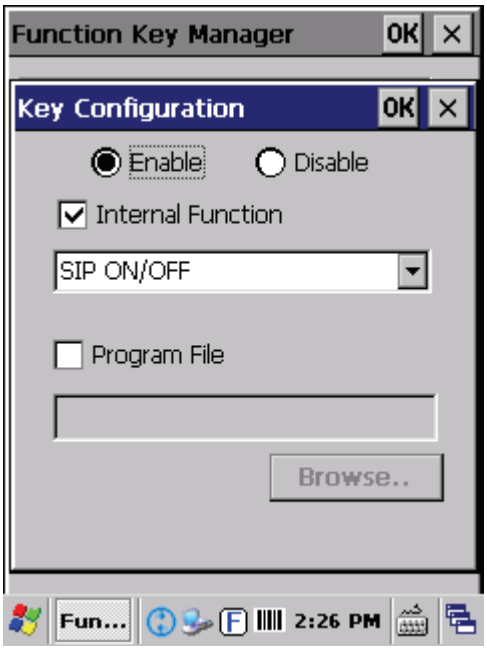
2. Select a new functional item and select “OK” to complete setting.

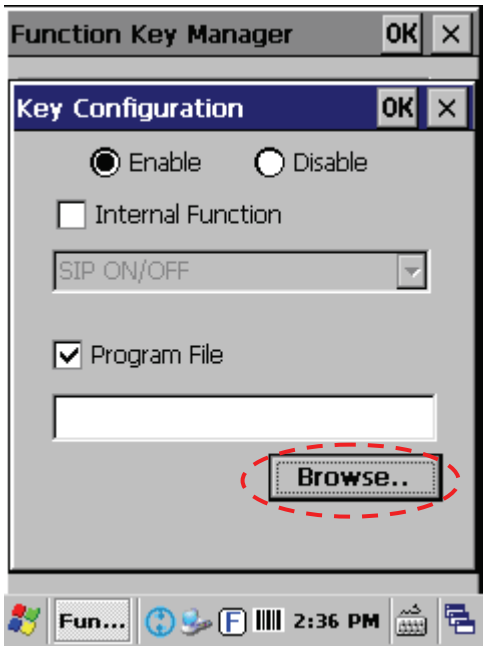




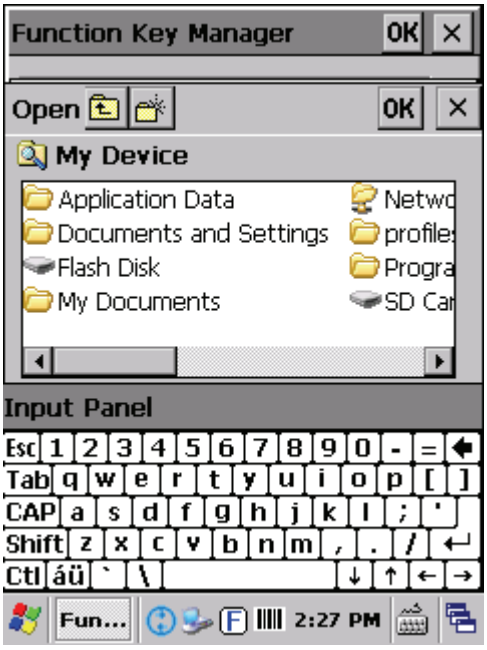
Edit application software for auto-execution:

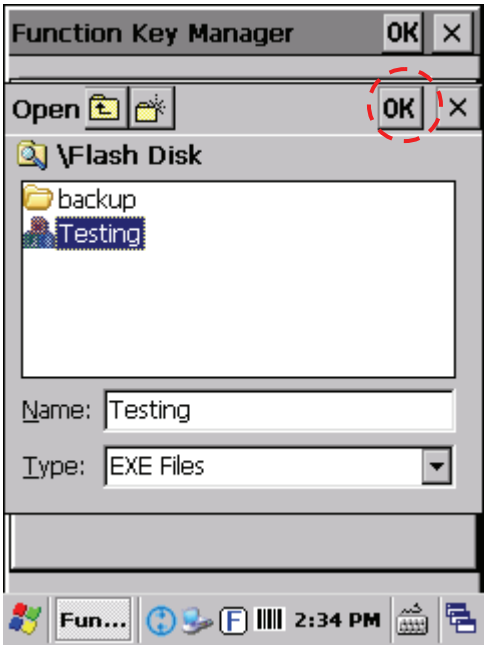
1. Select Program File checkbox and click “Browse” to browse files.



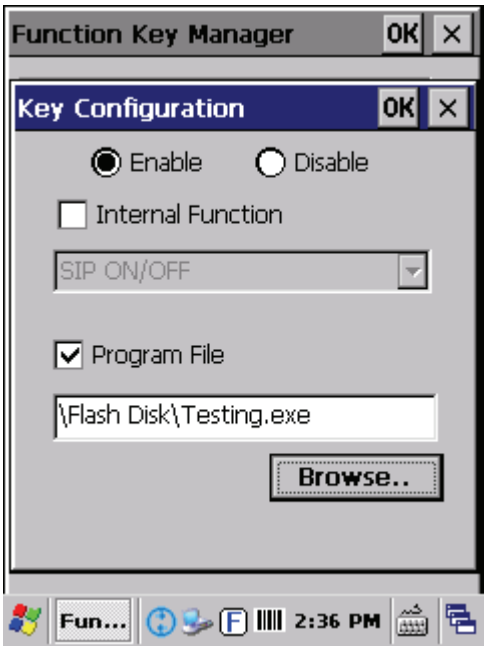


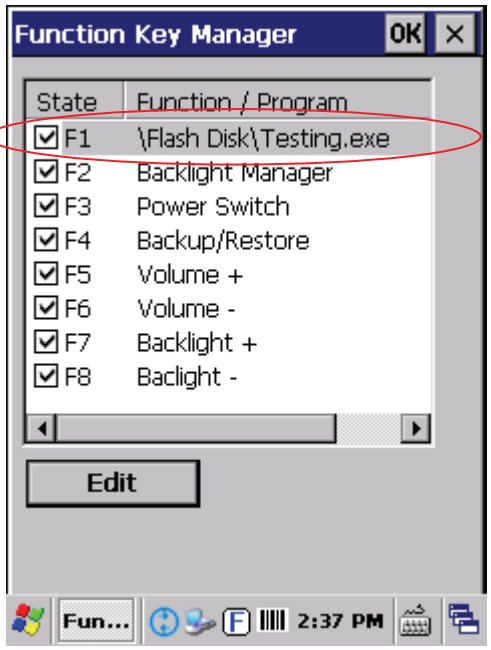
2. Select the software required for auto-execution, then select “OK” to complete the selecting process.





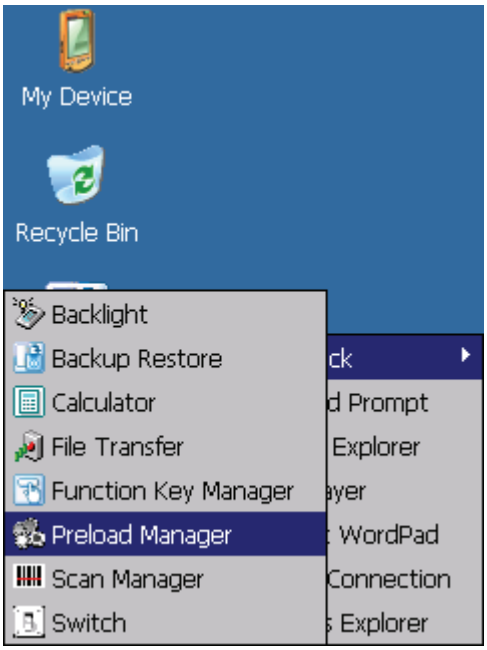
3. The selected program will appear in the column. Select ”OK“ to complete the editing process. When Function Key Manager reappears on the display, the function key is updated with the new program.

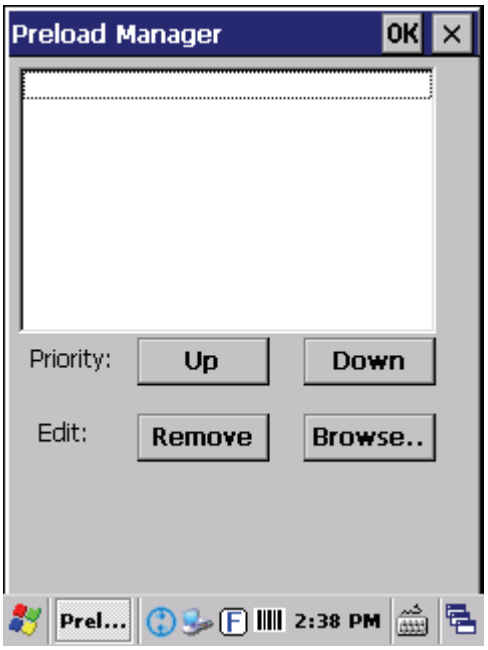




Preload Manager

The Preload Manager is an auto execution program for starting programs at system boot.





Preload Manager has 2 main functions: Priority and Edit.

Priority: Providing “UP”and “DOWN” two selections for adjusting priority on the lists.

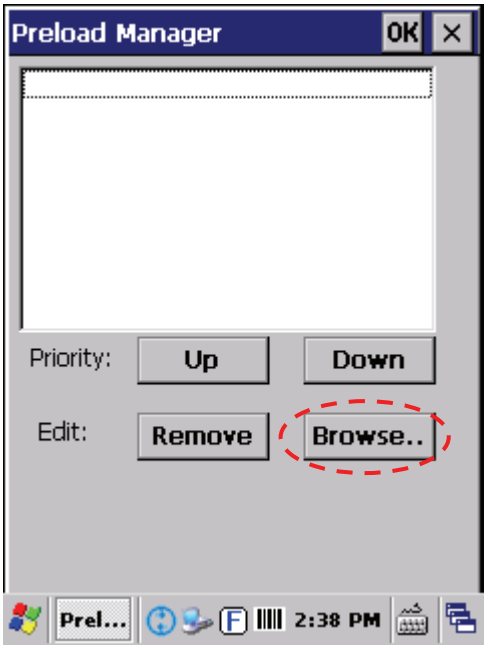
Edit: Providing ”Remove“ and “Browse..” two functionalities, below are instructions:

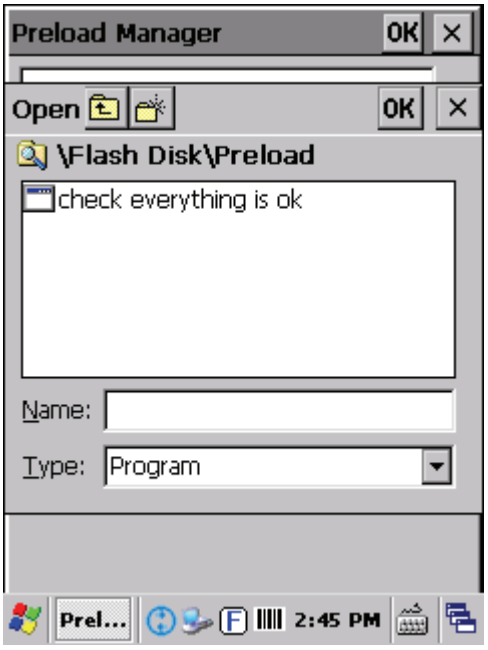
- Remove: Deleting selected functionalities.
- Browse: Selecting program for preloading, files can be selected from window by clicking Browse buttons.

Preload Operation

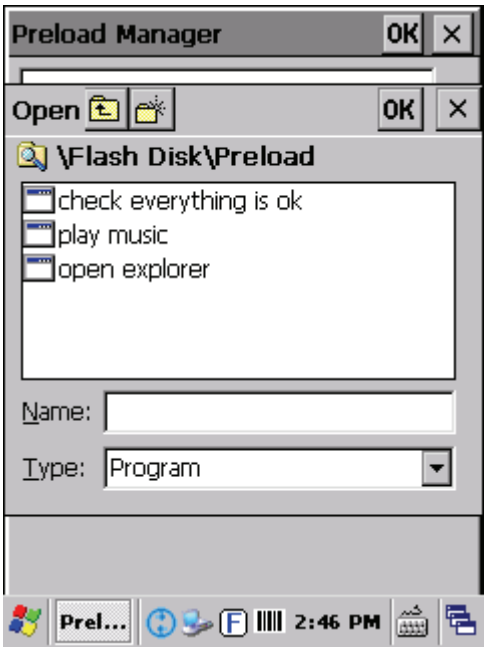
Selected Program:

1. By clicking ”Browse..”, below menu will appear, select preload program by using folder. Programs can be selected more than once.





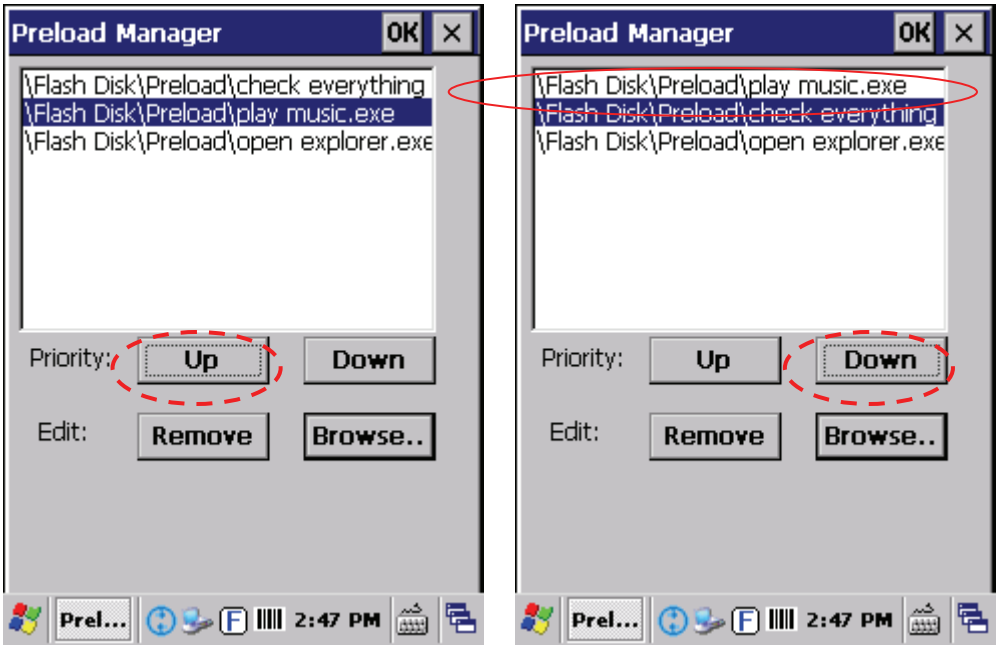
2. Confirming file by clicking “OK” will get back to Preload Manager main page. Then complete its process.

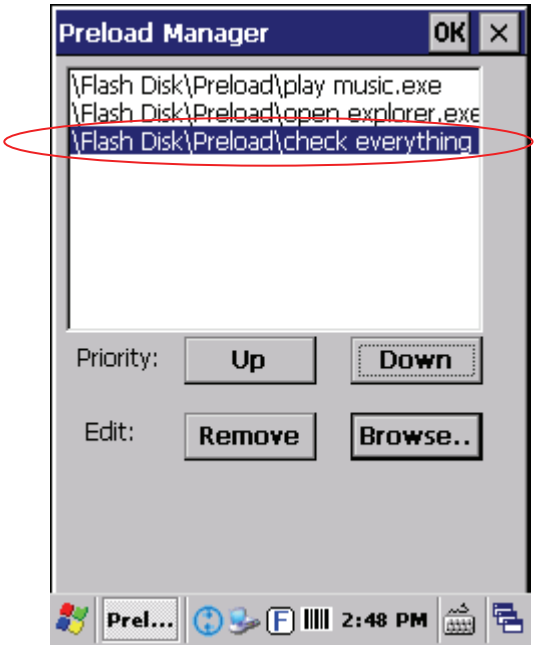


Reset preload priority:

If the preload priority need to be set up to (1)play music -> (2)open explorer -> (3)check everything, please follow steps listed below:

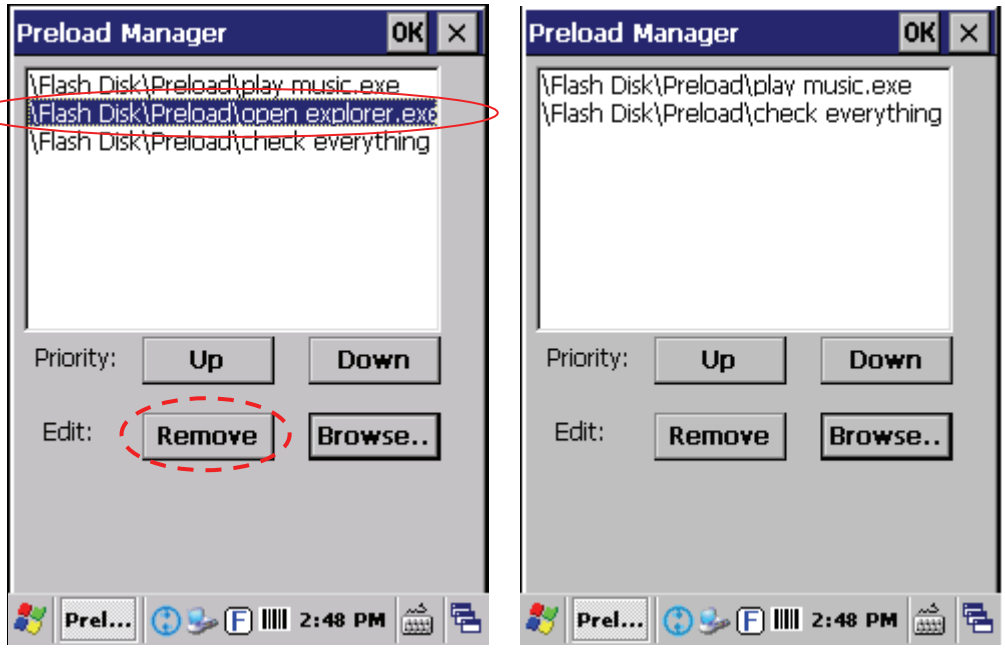
1. Select by clicking play music.exe program and click ”Up” button to move up the music.exe.
2. Then select by clicking check everything program and click “Down” button to move down check everything program.





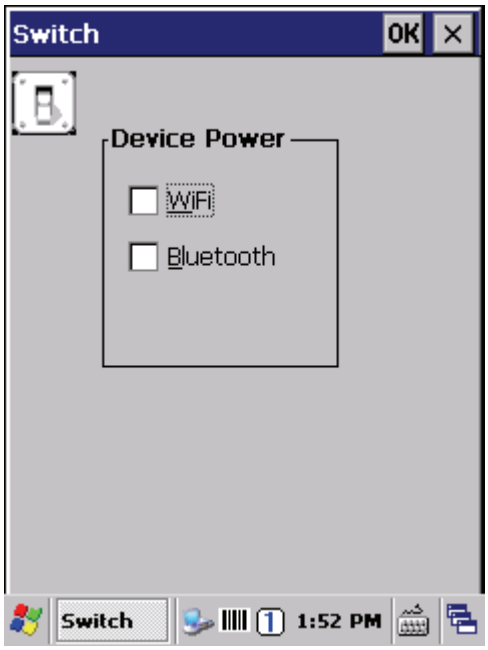
Remove a program:

In order to remove “open explorer” program, select by clicking program, then select “Remove” by clicking on button to finish command.

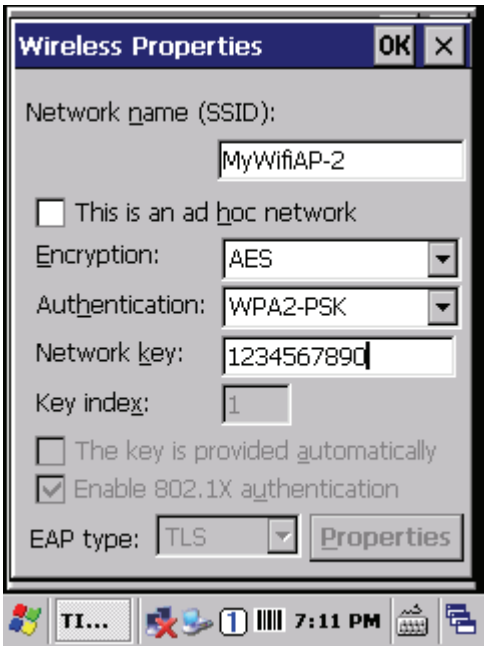


Switch

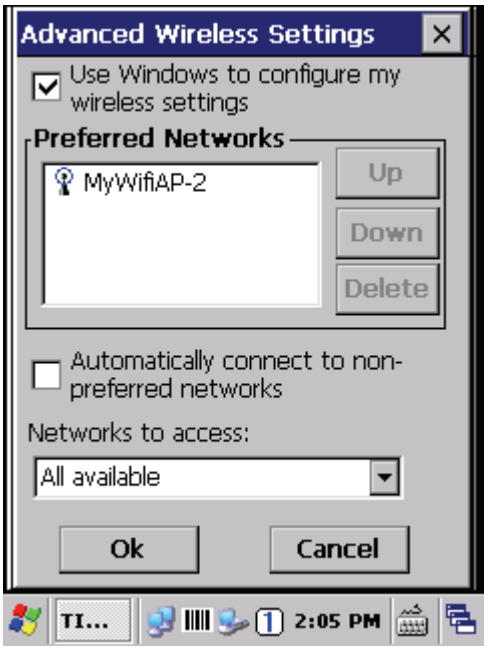
The WiFi and Bluetooth switch utility. To turn these functions on or off, simply tick the check box of the functions.



Wireless configuration window appears when the WiFi selection is ticked. A list of SSID will appear automatically after scanning. Select a SSID from the list and hit “Connect” to enter the Wireless Properties screen. Select the network type and enter the passkey then select “OK” to connect to the network.

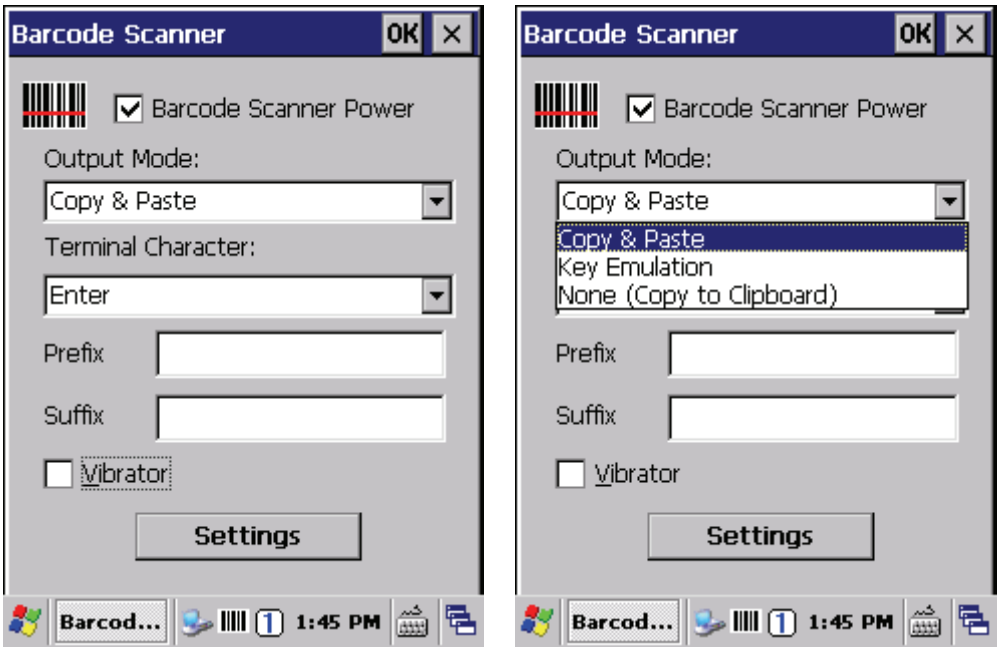


You may also select “Advanced” tab to setup your preferred networks. To manage your preferred networks, select Up or Down to change their priorities or select delete to delete the network.



Scan Manager

The Scan Manager program is a barcode reader set up program, it offers you an easy way to enable or disable the barcode scanner, and also offer you to set up each barcode symbolic properties.

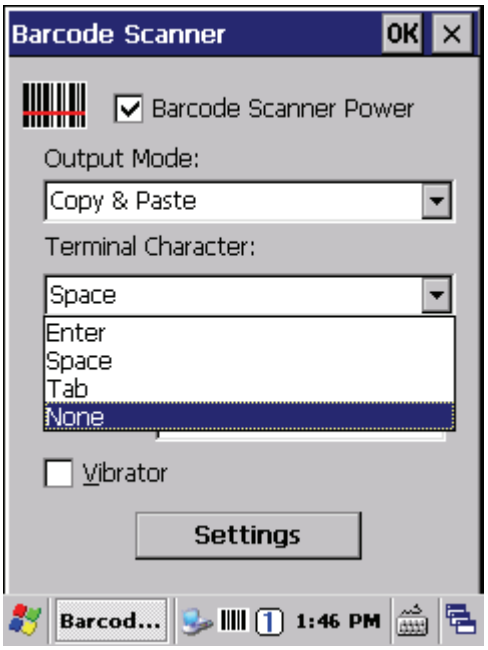


Below are instructions of functions on main page:

Output Mode: provides three output methods such as Copy & Paste / Key Emulation / None (Copy to Clipboard).

- Copy & Paste: Copy and paste the barcode information into application that need to execute data as input. (ex. WordPad)
- Key Emulation: Transfer barcode information via Key Emulation to executed software's edit window. Key Emulation function can also be used for barcode scanning under conditions of Terminal Emulation, Command Prompt and some other program without touch panel. Read data will be transferred to application program.
- None (copy to clipboard): Function provide required barcode information to application program, after this function was activated, scanner will read barcode information and save data into clipboard.

Terminal Character: Set the terminator control code with barcode data. It offers “Enter”, “Space”, “Tab”, and “None” for selections. Terminator control code will be sent every time when barcode was read.

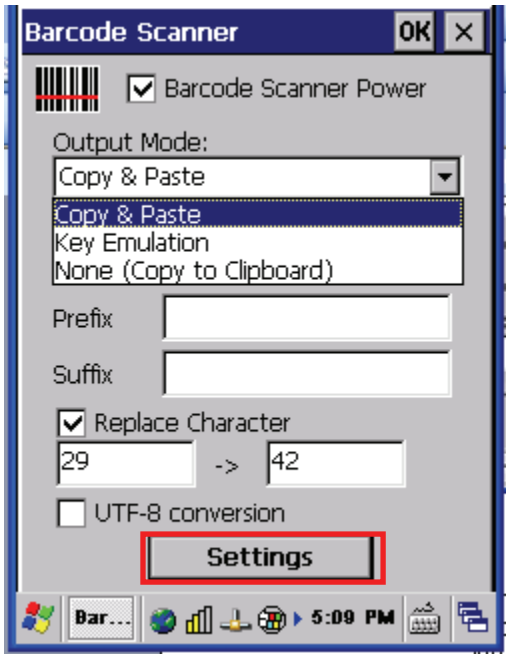


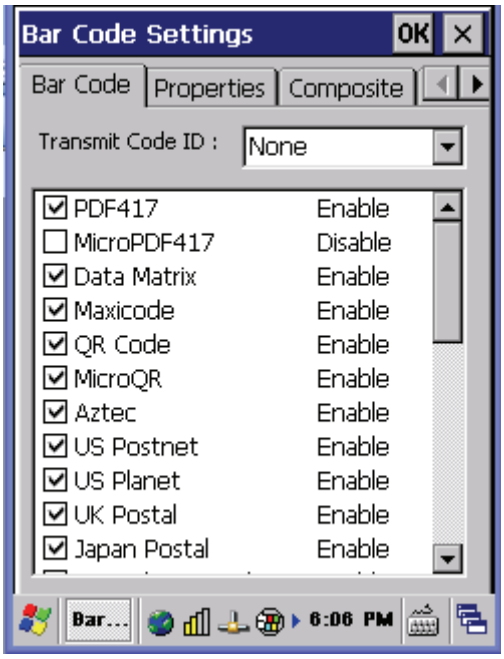
Suffix: Set the suffix character with barcode data.

Prefix: Set the preamble character with barcode data.

Vibrator: Select to switch to the vibrator mode.

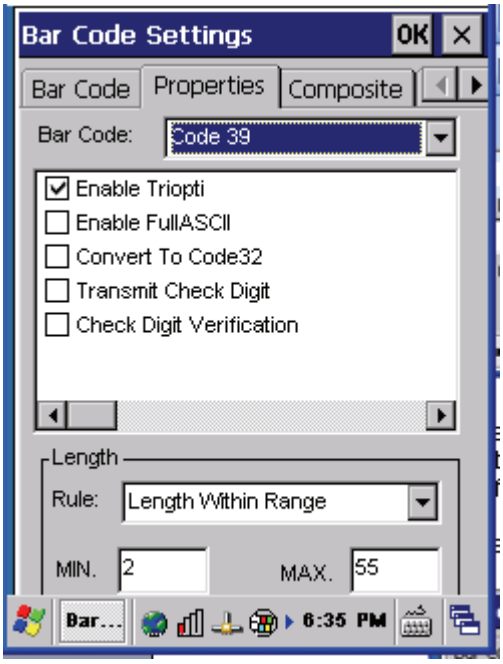
Settings: To set the barcode parameter value of each kind of barcode for barcode scanner. Press the "Setting" button in the application to start the barcode setting.

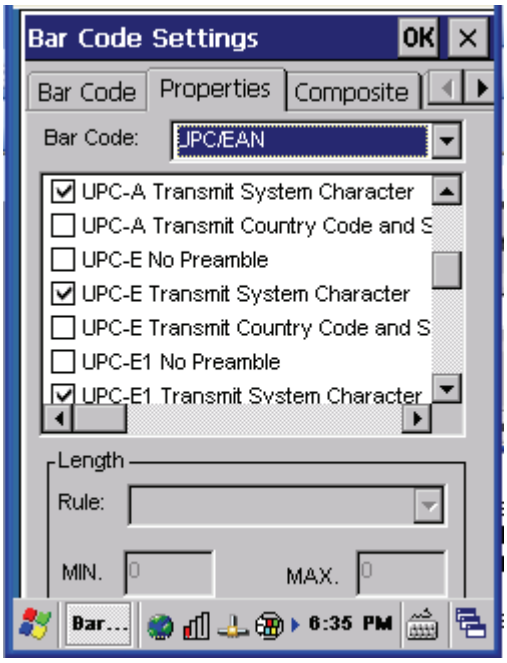




To check the barcode type selection for enable the type of barcode for read, press the "Properties" tab on top to see the barcode parameter value of each kind of barcode.

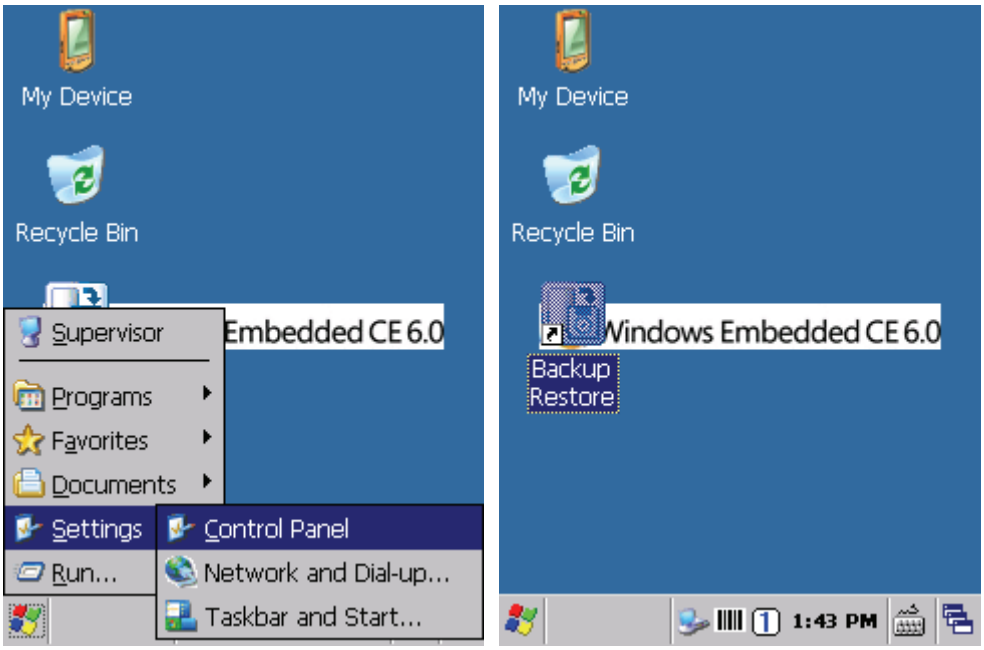
The default values of EAN/UPC code and Code39:



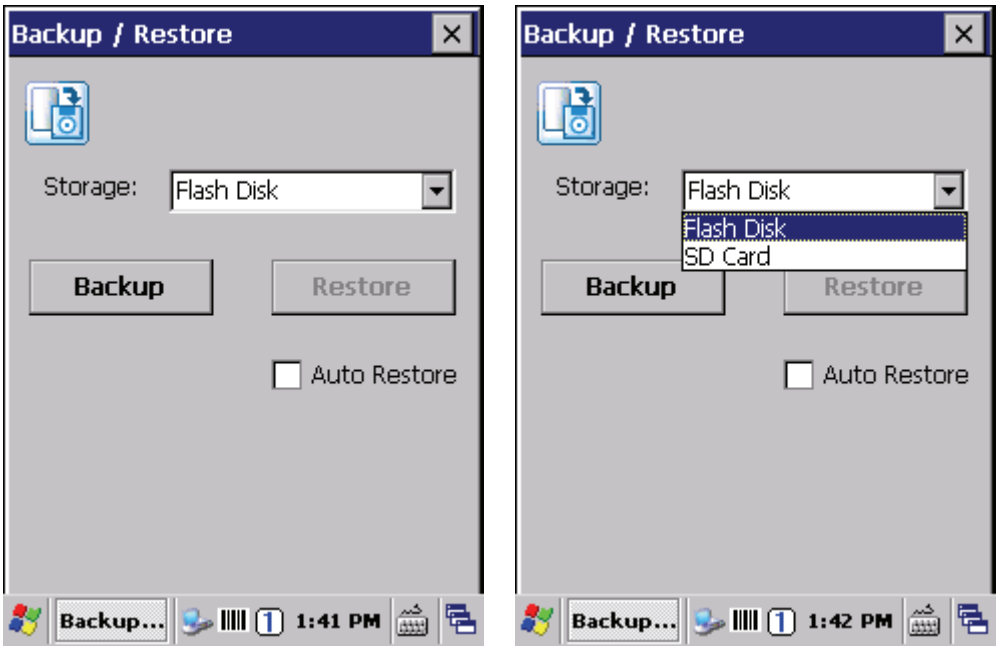


Backup/Restore

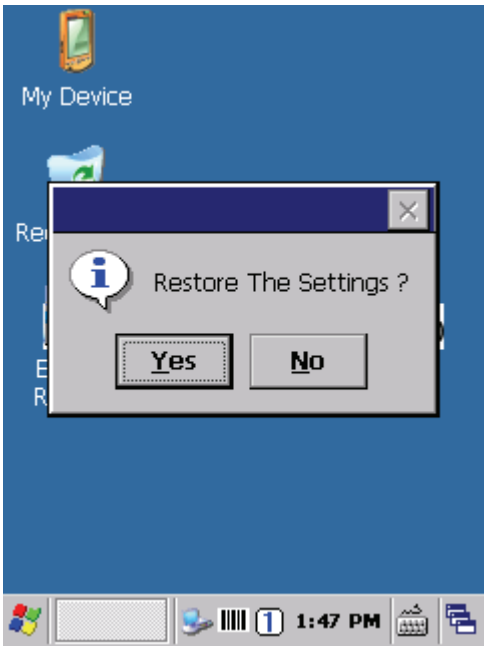
You can find this application at the desktop or from Control Panel, Backup/Restore.



This application provides you an easy way to backup or restore the device setting using Flash Disk and storage card. Flash Disk can be used when there is no storage card. When a SD Card is installed into the device, the program will detect it automatically and make the SD Card selection available.



- Backup: Select the storage for saving the data then select ”Backup” to proceed with the backup. Display will restore when backup is finished.
- Restore: To restore your settings, press the “Restore” button.



NOTES

- Barcode settings are not backed up by this function. To back up your barcode settings please use barcode setting->Export/Import Setting.
- Backup time may vary depending on the size of data you have on the device.
- When restoring system, you must select “Yes” to warm boot the device to complete the process.

Federal Communication Commission Interference Statement

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 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.

15.21

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

15.19

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.

FCC RF Radiation Exposure Statement:

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter, except in accordance with FCC multi-transmitter RF exposure procedures.
2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

Europe - EU Declaration of Conformity CE 0560

This device complies with the essential requirements of the R&TTE Directive 1999/5/ EC with essential test suites as per standards:

EN 300 328:

Electromagnetic compatibility and Radio Spectrum Matters (ERM); Wideband transmission systems; Data transmission equipment operating in the 2.4 GHz ISM band and using spread spectrum modulation techniques

EN 301 489-17:

Electromagnetic compatibility and Radio Spectrum Matters (ERM); Electro Magnetic Compatibility (EMC) standard for radio equipment and services;
Part 17: Specific conditions for 2.4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment

EN 60950-1:

Safety of information technology equipment, including electrical business equipment

EN 62311:

Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz – 300 GHz)

Translated Statements of Compliance

Hereby, declares that this product is in compliance with the essential require-ments and other relevant provisions of Directive 1999/5/EC.

Language	EN title
Czech	Elektromagnetická kompatibilita a rádiové spektrum (ERM) – Širokopásmové přenosové systémy – Zařízení pro přenos dat pracující v pásmu ISM 2,4 GHz a používající techniky širokopásmové modulace – Harmonizovaná EN pokrývající základní požadavky článku 3.2 Směrnice R&TTE
Danish	Elektromagnetisk kompatibilitet og Radiospektrum Anliggender (ERM); Bredbåndstransmissionssystemer; Datatransmissionsudstyr, som anvender frekvenser i 2,5 GHz ISM båndet og som anvender bredbåndsmodulation; Harmoniseret EN, som dækker de væsentlige krav i R&TTE direktivets artikel 3.2
Dutch	
English	Electromagnetic compatibility and Radio Spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques
Estonian	Elektromagnetilise ühilduvuse ja raadiospektri küsimused (ERM); Lairiba edastussüsteemid; Lairiba edastussüsteemid; 2,4 GHz TTM raadiosagedusalas töötavad andmeedastusseadmed, mis kasutavad lairibamodulatsiooni tehnoloogiat; Harmoneeritud EN R&TTE direktiivi artikli 3.2 põhinõuete alusel
Finnish	Elektromagneettinen yhteensopivuus ja radiospektriasiat (ERM); Laajakaistasiirtojärjestelmät; datasiirtolaitteet, jotka toimivat 2,4 GHz ISM-kaistalla ja käyttävät laajakaistamodulaatiotekniikkaa; Yhdenmukaistettu standardi (EN), joka kattaa R&TTE-direktiivin artiklan 3.2 mukaiset olennaiset vaatimukset
French	Télécommunications - CEM et spectre radioélectrique (ERM) - Système de transmission de données à large bande - Caractéristiques techniques et conditions d'essai des matériels de transmission de données fonctionnant dans la bande ISM à 2,4 GHz et utilisant des techniques de modulation à étalement du spectre - Norme harmonisée couvrant les exigences essentielles de l'article 3.2 de la Directive R&TTE
German	Elektromagnetische Verträglichkeit und Funkspektrumangelegenheiten (ERM) - Breitband-Übertragungssysteme - Datenübertragungsgeräte, die im 2,4-GHz-ISM-Band arbeiten und Bandspreiz-Modulationstechniken verwenden - Harmonisierte EN, die wesentliche Anforderungen nach Artikel 3.2 der R&TTE-Richtlinie enthält
Hungarian	Elektromágneses összeférhetőségi és rádióspektrumügyek (ERM). Széles sávú átviteli rendszerek. A 2,4 GHz-es ISM-sávban működő, széles sávú modulációt alkalmazó adatátviteli berendezések. Az R&TTE-irányelv 3.2. cikkelyének alapvető követelményeit tartalmazó, harmonizált európai szabvány
Icelandic	Þættir sem varða rafsegulsviðssamhæfi og fjarskiptatíðni (ERM); Breiðbandssendikerfi; Gagnasendingarbúnaður sem starfar á 2,4 GHz ISM-tíðnisviði og notar breiðbanssendikerfi; Samræmdur Evrópustaðall um grunnkröfur skv. 2. mgr. 3. gr. í tilskipun 1999/5/EC um fjarskiptabúnað og endabúnað til fjarskipta
Italian	Compatibilità elettromagnetica e Questioni relative allo spettro delle radiofrequenze (ERM); sistemi di trasmissione a banda larga; apparecchiature di trasmissione dati che operano nella banda da 2,4 GHz ISM e che utilizzano tecniche di modulazione ad ampio spettro; Norma Europea armonizzata relativa ai requisiti essenziali dell'articolo 3.2 della direttiva R&TTE
Latvian	Elektromagnētiskā saderība un radiofrekvenču spektra jautājumi (ERM). Platjoslas pārraides sistēmas. Datu pārraides iekārtas, kas darbojas 2,4 GHz ISM joslā un izmanto platjoslas modulācijas paņēmienu. 2.daļa: Harmonizēts Eiropas standarts (EN), kas atbilst R&TTE Direktīvas 3.2 punkta būtiskām prasībām
Lithuanian	Elektromagnetinio suderinamumo ir radijo dažnių spektro dalykai. Plačiajuostės perdavimo sistemos. Duomenų perdavimo įrenginiai, veikiantys 2,4 GHz PMM dažnių juostoje ir naudojantys išplėstojo spektro moduliavimo būdus. Darnusis Europos standartas, apimantis esminius reikalavimus pagal 1999/5/EC* direktyvos 3.2 straipsnį
Maltese	Kompatibilità elettromanjetika u materji relatati ma' spettru radjofoniku (ERM); Sistemi ta" Trasmissjoni fuq Frekwenzi Wesgħin; Tagħmir għat-trasmissjoni ta" data li jopera fuq frekwenza 2,4 GHz ISM bl-użu ta" tekniki ta" modulazzjoni wesgħin; EN armonizzat li jkopri rekwiżiti essenzjali taħt l-artiklu 3.2 tad-Direttiva R&TTE
Norwegian	Elektromagnetisk kompatibilitet og Radiospektrum spørsmål (ERM); Bredbåndsoverførings system; Data overføringsutstyr som opererer i 2,4 GHz ISM båndet og som benytter bredbånds modulasjons teknikk; Harmonisert EN som dekker de vesentligste krav i R&TTE direktivets artikkel 3.2
Polish	
Portuguese	Assuntos de Espectro Radioeléctrico e Compatibilidade Electromagnética (ERM); Sistemas de transmissão em banda larga; Equipamentos de transmissão de dados operando na faixa ISM dos 2,4 GHz e utilizando técnicas de modulação por espalhamento espectral; EN Harmonizada cobrindo os requisitos essenciais no âmbito do artigo 3º, nº 2, da Directiva R&TTE
Slovak	Elektromagnetická kompatibilita a záležitosti rádiového spektra (ERM). Širokopásmové prenosové systémy. Zariadenia na prenos dát pracujúce v pásme ISM 2,4 GHz a využívajúce metódy širokopásmovej modulácie. Harmonizovaná EN vzťahujúca sa na základné požiadavky podľa článku 3.2 smernice R&TTE
Slovenian	Elektromagnetna združljivost in zadeve v zvezi z radijskim spektrom (ERM) – Širokopasovni prenosni sistemi – Oprema za prenos podatkov v frekvenčnem pasu 2,4 GHz ISM, ki uporablja širokopasovne modulacijske tehnike – Harmonizirani EN, ki zajema bistvene zahteve člena 3.2 direktive R&TTE
Spanish	
Swedish	Elektromagnetisk kompatibilitet och radiospektrumfrågor (ERM); Bredbandiga transmissionssystem; datatransmissionsutrustning som arbetar i ISM-bandet 2,4 GHz och som använder bandspridningsteknik; Harmoniserad EN omfattande väsentliga krav enligt artikel 3.2 i R&TTE-direktivet