
1 Notes

1.1 Special suggestion

For easy understanding and drawing your attention, we will prompt you in this chapter or latter chapters according to following degrees and special warnings when involved with product safety or information to be concerned, which are shown as follows:

- ◆ [Dangerous] —— indicates high risk, need to keep watching
- ◆ [Waning] —— indicates medi risk, need to keep watching
- ◆ [Note] —— indicates low risk, need to pay attention
- ◆ [Prohibit] —— indicates dangerous operation which need to be forbidden
- ◆ [Remind] —— indicates safety and other aspects need to be concerned

Because provided product safety information in this chapter is not completed, we will lay part of such information in latter chapters of this instruction on demand, wherever the safety information is, you must read carefully.

Likewise, besides notes in the form of special warnings, you should attach the same importance to other contents and explanations in this instruction as the formal.

1.2 Important tips for using this device-be sure to read

This computer subjects to precise product with high technology, please be sure to read below using tips.

Special suggestion

When not using this device, please shut it down, use screensaver or set it to standby or hibernate state. If the LCD display stays at the same screen for a long time, the brightness of this display may be reduced and represents afterimage due to the natural characteristic of liquid crystal.

(1) Maintenance for LCD display:

- Do not place any weight on this device;
- When using a hand bag or knapsack, please be sure that there are no too much stuff in, and you don't increase additional pressure to the positive of this device;
- Do not scratch, twist or hit the surface of LCD display;
- Do not expose the LCD display in high temperature and humidity;
- Do not expose the LCD display direct to sunlight or to high fluorescence.

(2) To prevent the device from overheating, please ensure the radiator vent hole not blocked when operating.

(3) When the system is accessing medium such as external CD-ROM driver, please don't remove the medium, or it may lead to system crash or data corruption.

(4) Please don't remove the hard disk when the system is running, or it causes data loss or corruption. Formatting the hard disk may delete all data in, please backup in advance. For important data, please be sure to backup timely, our company shall assume no liability for the data loss due to formatting.

- (5) To guarantee your device in safe, please ensure the external power be grounded indeed when using it. If you are not intended to use the computer for long, please unplug the attaching plug to avoid system damage caused by short-time overvoltage. Where the device located, the power supply must be stable without interference. If you don't know the local voltage spec, please enquire your dealer or local power company. Out of the consideration for safety, please never break the earth wire of attaching plug. When unplugging the power, it shall avoid pulling out the wire directly, and be sure to unplug it from the plug to ensure safety. Before cleaning the device, please be sure to remember that unplug the attaching plug first. Please do not disassemble the power adapter.
- (6) Please do not use a power adapter that is not special for this device, or the device may be damaged.

1.3 Attention

Suitable group

[Note]

Someone uses this device shall be possessed of certain basic knowledge on computer. And, this device is not suitable for child to operate independently, but must be under the supervision of adult, if necessary.

Working environment

[Dangerous]

To avoid unexpected fault, the computer shall be operating under environment with limited range below:

Item	Range of application	Remark
Temperature for Storage & transport	-20℃-60℃	
Relative humidity for Storage & transport	5%-95%(40℃)	
Atmospheric pressure	86kpa-106kpa	
Adaptive capacity of the power	100-240V, 50HZ±1HZ	
Working humidity	20%-80%	
Working temperature	5℃-40℃	

[Warning]

To avoid harm to device from the environment (moist, dust, food, liquid, direct sunlight), it shall be placed at where ventilated and dry.

To avoid magnetic field interference and damage, please be removed from other home appliances (such as TV, air conditioner).

Please do not splash liquid or other foreign matter into the computer, as it may cause short circuit to its internal components and lead to electric shock or fire.

[Note]

When starting the device at low temperature without restoring, it may lead to irreparable failure, so please ensure this device be restored for over 2 hours under room

temperature before using.

[Warning]

If the device is stored and transported in the environment with temperature lower than 10°C, please place it under room temperature (10°C-40°C) over 2 hours before using, to avoid powering up damage due to excessive low temperature. Please don't energize and start this device during this period to avoid rapid temperature rise which gives rise to frost and condensation that leads to device damage.

[Note]

Before using, it shall also confirm if the connection, power utilization and other items for this device all conform to the requirements of instruction.

Movement, transport and storage

[Note]

Be noted to handle with care when moving this device.

When transporting, the product shall be placed into original packing case, which should be stacked according to pictorial markings for handling of packages, and use sealed container for carrying.

When storing, the packing materials shall be put in where out of the reach of child to avoid unsafe condition.

Battery

[Note]

Installation and replacement for lithium battery; only allowed to use the same or equivalent types of replacing battery; improper discard of battery may cause severe pollution to environment, please be sure to cope with the exhausted battery properly to avoid environment pollution.

1.4 Battery using guidance-please be sure to read

Please follow the rules below to use your battery safely.

New battery:

For new battery, if used properly, it may deliver crucial positive effect on the battery lifetime and performance, so please keep the points below in mind when using new battery:

- (1) There may be a little residual electricity in the new battery. When using for the first time, it shall discharge the residual electricity completely, and then connect the device to external power for charging. Moreover, the battery shall continue to be charged for another 2h or more after the device indicating fully charged in the first charge.
- (2) After charged fully, it is necessary to charge again after using up the power of the battery, and it shall follow the first charge for the second and third charge, in order to activate the battery to make better use for the battery in the future.

Battery lifetime

Battery lifetime is counted since rolled off the production line, it means its lifetime is counting down since then, no matter if you are using, its lifetime is decreasing all the time, and thus the service time of the battery will be shorten correspondingly. Generally, the battery lifetime is considered to be around 300~500 times (standard time) of charging/discharging as of service time.

Factors that affect actual service time of battery

When using this device, certain factors may cause battery loss, and even lead to a max service time shorter than the standard value, but this doesn't mean battery itself suffers from quality and performance problems.

The factors that affect actual service time of battery include:

Factor 1: speed of processor Proper installation of Intel chipset driver could enable the system to adjust the speed of processor with Intel "Speed step" technology, so as to prolong the service time of battery in application system.

Factor 2: frequent read from CD, DVD, CD-RW and hard disk Operations such as directly copying the files from the compact disc to the hard disk, watching movies, and CD imprinting may all affect the service time of battery

Factor 3: total number of video memories and internal memories If the system opened many applications, plenty of hard disk space will be occupied for file exchange (virtual memory), which makes the hard disk read and write frequently, hence the service time of battery is shorten.

Factor 4: some applications running in the background will increase the burden on CPU, which leads to reduction of service time It is suggested that close some applications running in the background in common use, and just run several necessary applications.

Factor 5: brightness of the backlight of LCD The lower the brightness of backlight is set, the better it is to the battery lifetime, and it is allowed to use additional software function to adjust the brightness when using this device.

Factor 6: Power Management and Speed Step setting Setting up different power use schemes in Power Management will have impact on battery service time.

Factor 7: battery lifetime The average lifetime of battery is one year, with the accumulation of used time and times, gradual reduction of service time of battery is considered to be normal.

Factor 8: further application for processor and system equipments (for instance, watching DVD movies and playing 3D games) will reduce the remaining available service time.

Factor 9: wireless device and bluetooth device will both accelerate the consumption of battery; while there is no need for the wireless device, you may switch it off to save energy.

Factor 10: temperature of environment for use Excessive high or low using environment temperature will both affect the activity of chemicals in battery core, thereby reduces the service time and lifetime of battery.

What to do if the battery cannot be charged or fully charged?

In case the battery cannot be charged, the charging indicator is not on or the device cannot be started with the battery: please hand over the device to local after-service center to test if caused by battery failure or require replacement.

If the quantity of electricity can not be charged to 100%, the power may be exhausted soon: the battery belongs to consumables with short guarantee term, when approaching

the end of its lifetime, it may occur that the battery in saturation gets dead after only several minutes of service, and you may need to replace this with another one at the moment.

How to keep the battery if it is going to be unused for long time?

Charge or recharge the battery to 40% of its max electricity quantity, then put it in dry place with temperature of 15~25°C, and excessive high or low temperature will both accelerate battery degradation.

Why does the power indicator show 95% - 99% of max battery power even the charging indicator is off, is there any problem with the battery?

The factors controlling the charging indicator to switch from on to off is based on if the battery has reached the saturation voltage, when reaching to 95%~99% near-saturation voltage, the voltage will be reduced along with detected voltage difference, and the charging current will be lowered simultaneously, to avoid charging with over current or over voltage to damage the battery.

Low current charging design in the final stage is also able to avoid long hours of high current charging when the client forgetting that the battery is saturated and continuing to plugging it for long. So it is neither the battery charging itself nor the battery charging by the device to blame, because 95%~99% belongs to micro-quantity charging, and it cannot trigger the charging indicator. Please use at ease.

Why the power of a fully charged battery reduced after leaving unused for a few days?

There are internal consumption in all normal chargeable batteries. The ability of lithium battery to store electricity power is realized through the chemical reactions of active lithium ion. When not using, the active components inside the battery will recover to low potential state slowly, in other words, even though the battery is not in use, its electricity power is being reduced constantly, and the decreasing speed of power has close relation with the temperature and humidity surrounding to it. Typically, the temperature is higher, the decreasing speed of the electricity power is higher. Where possible, please charge the battery to 40% and lay it at someplace shady and cool, which may enable the protective circuit of battery in operation during long period of keeping. If put the battery in high temperature after fully charged, it may cause significant damage to this.

This battery can be only used to this device

If replace the battery with unsuitable type, it may result in risk of explosion. Only allowed to use original battery with the same model or battery type with the same grade that recommended and recognized by the factory for replacement.

Please do not take the battery apart.

Please do not expose the battery in fire or water.

To prevent fire, combustion or damage to the battery, please do not make the two poles of the battery contact with metal object.

When dealing with damage or leakage, please pay special attention. In case you contact with battery fluid unexpectedly, please wash with soap and water immediately. If the fluid contacts the eye, please wash the eye with water for 15 minutes and see doctor

as soon as possible.

If in environment with high temperature, please do not charge.

While keeping, please do not expose the battery in high temperature.

1.5 Power Supply

[Dangerous]

You need to use qualified attaching plug and socket. The attaching plug shall be plugged into well grounded power finally, and well grounding is important to your device for normal operation. If you replace the standard power cord without authorization, it may lead to severe consequences, in addition, the power cord shall not be longer than 5m.

Before using the power supply, you should confirm if this power supply conforms to operating requirements for this device by referring to the instruction of attaching plug and socket. Qualified power supply is the basic guarantee to the normal operation of the device, or it may result in severe consequences.

[Dangerous]

Use this device during a thunderstorm may cause damage to the device or even threaten personal safety and damage other property. Therefore, in a thunderstorm, it shall never use this device and must disconnect the network cable, power cord and other conductors that may connect with the external power. When it is thundering, please do not plug/unplug these wires.

[Note]

Carefully check the AC power cord supplied with the device. Please contact related seller if you have any problem.

The power supply used for this device must be complied with safety specifications.

1.6 Safety instruction

- (1) The power jack shall be installed near the device or place at where easy to operate, when plugging/unplugging the power supply, avoid pulling out the wire directly, and be sure to unplug it from the plug to prevent electric shock and ensure safety. Please do not disassemble the power adapter.
- (2) Please do not leave this product near water.
- (3) Please place this device on stable support. This product may fall off due to unstable placement which leads to serious damage.
- (4) Please do not put the wire of this product at someplace with much people to avoid trampling. Do not put anything on the wire.
- (5) Follow all the warning information and marks on the product.
- (6) If you are not intended to use this product for long, please unplug the attaching plug to avoid damage caused by short-time overvoltage.
- (7) Never splash any liquid to this product, as it may result in risk of fire or electric shock.
- (8) Please hand to the qualified professional to deal with for any of the follows:
 - a. The power cord or plug is damaged or worn.
 - b. Splashed with liquid.

- c. Crenched or splashed with water.
 - d. You have followed the operation instruction, but this product is still not normally working.
 - e. The housing has ever dropped or damaged.
 - f. Represent obvious damage.
- (9) It may cause permanent damage to the product if not using or storing within regulated temperature range.
- (10) Please do not use the power adapter near water or other liquid. Never splash liquid to the power adapter.

Remark: all the figures in this manual are schematic diagram and only for reference, the product shall be subject to the material one.

2 Product overview

2.1 Introduction

(**Remark:** below are all schematic diagrams, the product shall be subject to the material one)

Overall effect drawing:



(Picture shall be subject to actual device)

2.2 Indicator

Your device is equipped with two kinds of LED indicators for providing useful information regarding computer condition

Indicator name	Function
Charging indicator	Often On - charging indication Flash - Low voltage warning Off - full charged

WIFI indicator	Will be on when the wireless WIFI enabled
Power indicator	Often On - start state Flash - system in standby mode

2.3 Unpacking and checking

Please unpack and take out the device and other accessories with care, if there is any damage or missing, please contact the dealer immediately.

Please keep original packing materials.

It contains following accessories generally (for details please refer to the packing list)

- (1) Computer
- (2) Power adapter
- (3) User manual
- (4) Driver CD
- (5) Battery
- (6) Protective leather cover

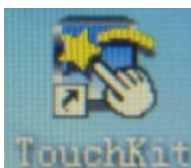
3 Use your computer

3.1 Basic configuration

CPU	Intel atom Z515
Chipset	US15W
LCD	5" TFT Touch Screen (800×480)
Memory	DDR2 /1G/667MHz
Graphics	Intel GMA500
Storage	8G/16G/32G SSD
Internet Connection	Wireless LAN 802.11b/g
Camera	Webcam 0.3 Mega Pixel
USB interface	USB interface 2.0×2
Input	DC12V/2A
Size	160mm×95 mm×22 mm
Weight	350g


3.2 Use the touch kit

When the system enters into desktop interface in normal operation, the touch kit is available by default, and you may use it by finger touch directly. If great bias for click range found, you may relocate the home position of touch point accurately through screen calibration, in order to deliver better touch effect after the calibration.



Touch kit calibration software icon

3.3 Use the on-screen keyboard

When enter into the system, click the desktop  icon, then it will pop up a keyboard with keys on the screen, which can be minimized to the taskbar for next use, you are allowed to add this software to system start-up, and it will start the screen keyboard every time entering into the system.

4 Basic knowledge on use

4.1 Start using computer

This chapter will guide you to use this device from starting/closing to some basic operations as well as the use of accessories.

External power

This device is powered by the external AV power or internal battery pack. When you start this device for the first time, it is recommended that use the external power.

【Note】 Please use the power adapter supplied with the device, using other adapter may cause damage to the computer.

Please confirm whether the device is in off state.

Plug DC power cord of the power adapter into the power interface of the device.

Plug the other end of the power adapter into the AC power socket, and then you can start your computer.

【Note】 To remove the power adapter, please disconnect the AV power of the adapter, and then unplug the DC power plug into the machine, or it may cause the device and adapter damaged due to the impact of external voltage. When removing the plug, please don't pull the wire, and it shall unplug it with holding the plug by your hands.

Starting/closing of device

Starting

Please first confirm whether the device has been connected to the power adapter or installed with the battery pack. Press the power key for about 2s.

Stopping using computer

When you finish work, you can stop the device or let it enter the standby mode:

Mode	Method	Method of starting or using again
Close	Close by following the closing procedure of the operating system or pressing the power key for	Use the power key

	1s to enter the closing procedure of the system. When the computer cannot make response to user operation (including normal closing action) due to conflict of the system resource, you can press the power key directly to close it forcedly, with method: press the power key for 4s above, until the computer is off, but the data or file not saved will be lost.	
Standby	Enter the standby status under Windows.	Use the power key

This product conforms to the following normative documents:

GB4943 *Safety of Information Technology Equipment*

GB9254 *Information Technology Equipment—Radio Disturbance Characteristics—Limits and Methods of Measurement*

GB17625.1 *Electromagnetic Compatibility—Limits—Limits for Harmonic Current Emissions (Equipment Input Currents ≤ 16A per Phase)*

GB/T9813 *General Specification for Microcomputers*

FCC part 15

4.2 Display screen

This device uses 16 million colors TFT liquid crystal, with 800*480 resolution supported, and it makes you enjoy the extraordinary vision feel.

【Note】 To extend the battery's lifetime, adjust the brightness to the minimum under the precondition that it can watch comfortably, and thus the internal light source can use little power.

4.3 Network card

This device uses USB Ethernet card with 100Mbps to perform the connection in the Wired LAN, first insert the USB Ethernet card into the USB interface of this device, install the USB Ethernet drive according to the requirements of your operating system, insert one end of LAN cable into RJ45 end of the USB card, and you can accomplish the on-line data transmission.

4.4 Wireless network

This device has the built-in wireless network card WIFI, and it is enabled at default

when the device is started every time.

5 Installation of driver and use instructions

This chapter describes how to install the driver with the supplied CD.

Your device has been supplied with the driver CD when shipped. The CD contains the drivers corresponding to the devices. This chapter will guide you how to install these drivers.

This computer supports Windows XP system. Please install the drivers in the order of installation: (Select different path to install according to your installed operating system)

Note: this device has no Modem and so it doesn't need to install, please skip it.

Directory Name	Drive Name	Description
Chipset	Chipset Driver	Be sure to install this driver first, then it can ensure the functions of other drivers.
VGA	Display Driver	Ensure the complete functions of VGA display, to make you set the screen's resolution and richer color.
Audio	Audio Driver	Make you use and set the computer's audit effect function.
WLAN+Bluetooth	Wireless Network and Bluetooth Driver	

6 Troubleshooting

This chapter describes how to resolve general hardware and software problems.

Your device has been conducted the full test before being shipped out, and validated to be compliance with the specifications of system requirements. However, improper operation or negligence during transportation may cause some problem.

This chapter provides the references and identification information for the general hardware and software problems that may occur during your use.

When you have problem, you can handle it by trying to follow the instructions in this chapter first. If the problem persists, please consult your dealer for the service information.

6.1 Sound

No sound

- Please double-click the speaker icon on the bottom right corner of the task bar, and confirm whether the volume of the speaker has been turned off.

- Most of sound problems are related with the software. If the sound of your computer is normal before, the possible reason is that the software is set wrongly.

Unable to record

Please double-click the speaker icon on the bottom right corner of the task bar, and confirm whether the volume of the microphone has been turned off or it is set to the lowest volume.

(1). Press 「Options」, and select 「Properties」.

(2). Select 「Input Volume of Microphone」 and press 「OK」 button, and the recording volume console will pop up.

Note: For the setting method, please see Readme file under the sound card drive.

6.2 Hard disk

Running speed of hard disk too slow

- If your hard disk has been used for long time, too many and disordered files will result in many disk fragments. Please go to Start>Program>Accessories>System Tools>Disk Defragment to perform the cleaning up of the disk. This operation may take some time.
- Your hard disk has been attacked by virus.

File damaged

Please perform the primary scanning of 「Scandisk」 to check the disk. Double click[My Computer], right click C:, select [Properties], and right click [Start Checking] in the error-checking status of [Tool] tag to perform the disk scanning.

6.3 Problem in display

When system is started, black screen

- Please confirm that the device is in 「Standby」 mode. The display will be switched off to save energy in this mode.
- Please use the function software to increase the brightness of the screen.

Screen not easy to read

- Please use the function software to increase the brightness of the screen.
- Adjust the resolution of the display screen to obtain the best display effect.

Screen flicker

This is very normal for seeing the screen flickering for several times when starting or stopping it.

Afterimage

LCD display screen may have the afterimage when switching between screens, especially after displaying static screen for long time.

What is afterimage?

There is no afterimage when using the LCD display screen under normal conditions.

The definition for normal conditions is that display the continuously changing screens in the regulated environment. If display the static screen for long time, it may cause the charging discrepancy of pixel electrodes, such discrepancy will result in the charges accumulated on the electrodes in some areas and affect the arrangement of liquid crystal molecules, therefore, the previous screen will remain onto the new screen. Afterimage exists in all display products including LCD, and it doesn't mean the product has bad quality.

To make better protection for the display screen, it is recommended that use the screen protection program or let the device be in the standby status when not used for long time.

Dead spot on screen

There are some image spots on the LCD often and it cannot display some colors normally (i.e. dead spot) due to the restrictions of LCD manufacturing technics, and this is very normal, please use it without hesitation. For details, please see Chinese national standard GB/T9813-2000.

The following is the content related with the national standard:

LCD dead spot can accept the standard

Perform test under the following conditions:

Ambient temperature: 20°C~25°C

Light: 300 lx~700 lx

Visual distance: 35cm

Visual angle: at 90° between line of sight and surface of screen

(1) White spot is tested in the full-black screen, and black spot is tested in the full-white screen.

(2) R indicates red, G indicates green and B indicates blue.

$R+B+G \leq$ indicates total less than or equal to acceptable number.

R, G, B \leq indicates number of every image spot less than acceptable number.

(3) Definition for continuous spots

Three-spot continuous:



Two-spot continuous:



Neglected under the following situations:



The requirements on screen dead spot are different, depending on the screen size.

Computer screen with size less than 21.3cm

White spot Two-spot continuous ≤ 0 pair; three-spot continuous or above ≤ 0 ;
 $R+B+G \leq 6$; total less than 6 is acceptable number

Black spot Two-spot continuous ≤ 1 pair; three-spot continuous or above ≤ 0 ;
 $R+B+G \leq 8$; R, G, B ≤ 5 ; total less than 8 is acceptable number

6.4 Problem in memory

The operating system sent the error message “Memory Insufficient” during job.

- This is often for the software or others related with Windows.
- Please close the unnecessary application software, and then restart it.

Appendix Product Specification

Use Intel (R) latest mobile calculation technology

CPU

Support Intel Atom Z515, CPU

Chipset

US15W

ROM BIOS

AMI

System memory

Side port memory 1GB DDR2

Screen

5"LCD colored liquid crystal display screen

Display controller

Intel integrated GMA500

Memory medium

Half 1.8"mini PATA interface electronic hard disk.

Sound effect

One earphone output jack

I/O connection interface

One earphone plug holes;
Two USB2.0 interfaces;
One micro SD card reader;
One DC-IN socket;
One SIM card holder

Wireless network

Built-in 802.11b/g WALN card

Camera

Built-in camera with 300,000 pixels

Bluetooth

Built-in 2.0 Bluetooth

Battery

Intelligent Li battery with about 3h of service time. The actual service time depends on the battery status and concrete use situation.

Test conditions for service time of the battery:

- 1) System: Windows XP Professional
- 2) Computer BatteryMark 4.01
- 3) Power Management: adjust power-using scheme to maximum battery mode.
- 4) Ambient temperature: room temperature..
- 5) Screen Brightness: adjust it to be darker.

- 6) Close some functions, and remove all the external devices.
- 7) Perform the virus detection for the system before testing, and then run the test after no virus.

For the work with big power consumption, the actual service time of the battery will be less than the above tested time.

Instructions on battery:

This time is the tested data by BatteryMark under the maximum battery mode at room temperature, and the concrete working time of the battery may be affected by the following factors: times of charge/discharge of battery, operating system, computer configuration, brightness setting of liquid crystal display screen, application (especially video play, such as play DVD), setting of power management and used functions, these may increase the power consumption of the computer and thus affect the service time of the battery. The system may run in full load due to some computer virus, and it may also reduce the service time.

The service lifetime for general battery is limited, the effect and service time of the battery may be reduced after being used for many times, and such battery loss is normal. If your battery is at the end of its lifetime, you can select to purchase the battery from the original manufacturer.

Dimension

About 160mm(W) x95mm(H)x22 mm(D)

Weight

About 350g (including battery)

Note: the indicated weight is just the basic system weight and only for the reference, and the actual weight may vary from the configuration.

Note: As the computer specification and configuration are updated at high frequency, they are subject to change without any notice, and the configuration of computer purchased by user shall prevail.

FCC WARNNING

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

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

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help