N5

ULTRA MINI MOBILE PC

Thanks for purchasing viliv.

Please read the precautions
throughly before using the product.

viliv

Copyright

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Certification

This device has acquired EMC certification for home use (Class B) and is designed not only for use in residential area but anywhere.

Grade B Device
(Broadcast Communication Device for Residential Area)

Registered Trademark

viliv is the registered trademark of Yukyung Technologies Corp.

Windows7, Windows Vista, Windows XP, Windows 2000, Windows CE are the registered trademarks of Microsoft Corporation.

Liability Disclaimer

Infringement of Intellectual Property Rights: Playing, copying or distributing any part or all of any copyrighted contents such as software, music or video with this device may infringe on a third party's legitimate intellectual property rights or violate copyright law. All legal responsibilities for the infringement of copyright or intellectual property rights from the use of this device lie with the user.

Improper Use: The manufacturer of this device is not liable for any damage or improper use and operation by using this device and infringement of copyright and portrait right by user when taking photos In addition, the manufacturer is not liable for bodily injury or property damage that may occur arising from inappropriate use other than operation standards or conditions.

Data Loss: Any audio, video or photo files stored in this device may be deleted due to damage or operational error caused by user's careless handling or unknown failure or when the device undergoes warranty repair. Therefore, the files must be backed up in a separate place.
In these cases, the manufacturer is not liable for the loss or damage of data stored in the device.

Specification Change: The standards, accessories, embedded software and manual contents of this device may be changed without user's prior consent or prior notice to the user.

Contents

Safety Precautions for Use

| ⚠ **Warning** | Please observe the instructions below. Failure to do may cause heating, fire, explosion, etc. |

■ If the battery can be seen to be swollen, there may be imminent danger. Immediately contact the manufacturer or sales representative.

■ Only use an eligible specified charger.

■ Keep the device away from open flames. (Do not put it in a microwave.)

■ Do not leave the device in a car in summer.

■ Do not store or use the device in a hot and wet place like a bathroom.

■ Do not put the device on bedclothes, electric mattress or carpet and use it for a long time.

■ Do not store the device powered on in a closed space.

■ Do not allow metal products, such as a necklace, coil, key or watch, to touch the battery port.

■ Use a lithium secondary battery guaranteed by a portable device manufacturer.

■ Do not disassemble or pierce the device and do not apply excessive strength.

■ Do not apply excessive impact like dropping the device from a high place.

■ Do not expose the device to temperatures of 60℃ or higher.

■ Avoid humidity.

Caution

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

FCC Compliance Information

This device complies with Part 15 of 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.

Information to User

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.

FCC RF Exposure Information

In August 1996 the Federal Communications Commission(FCC) of the United States with its action in Report and order 96-326 adopted an updated safety standard for human exposure the ra-dio frequency electromagnetic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies. The design of 'N5' complies with the FCC guidelines and those international standards. Use only the supplied or an approved antenna. Unauthorized antennas, modifications, or attachments could impair call quality, damage your 'N5', or result in violation of FCC regulations.

'N5' was tested for typical body-wom operation using the optional belt-clip / holster placed touch(0cm) from the body. The use of non-tested accessories or other body-wom operations may not comply with FCC exposure requirements and should be avoided.

Safety Precautions for Use

The precautions below are provided to prevent bodily injury or property damage by using this product correctly.
Please observe the precautions.

Precautions on Power
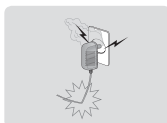
■ Do not touch the power adapter with wet hands.
■ Plug the power cord into an outlet with grounded jack.
■ Be sure the plug goes in all the way and is not loose.
■ Do not use your device if it is damaged, including an exposed or peeled power cord.
■ If lightning occurs nearby or if you are absent for a long time, unplug the plug from the outlet.

Precautions on Battery
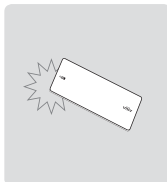
■ Do not apply strong impacts or make a hole with a sharp object.
■ Do not leave the battery in a hot place such as sauna or bathroom or otherwise heat it.
■ Do not let the battery become wet or immersed in liquid.
■ Do not allow children or pets to bite or suck the battery.
■ Keep the battery charging port away from metals.
■ When disposing of the battery, do not burn it or throw it away in domestic trash.
Dispose of the battery at the nearest disposal place for batteries after contacting your local water disposal agency.

Precautions for the Device

■ Avoid exposing to direct sunlight and do not leave in a closed car.
■ Do not leave the device in a dusty place or a humid place such as a bathroom.
■ Keep the device away from credit cards, bankbooks, or a communication ticket.
■ Do not use accessories that are not provided with this device.
■ Do not touch the LCD screen with a sharp object.

Precautions in Use
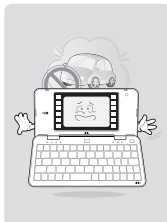
■ Do not listen to music at a high volume for a long time.
■ Do not watch the video for too long a time.
■ Do not apply strong impacts on the LCD.
■ If the device begins to smoke or become deformed by heating, stop using it immediately and contact your nearest Customer Service.
■ Do not use the device in a hospital, on board a plane or while driving.
■ Do not directly put and use the device frame or the power adapter on your bare skin for a long time. The temperature of the station may rise even during normal operation.
If you continue to use the device on your bare skin (in particular, when the adapter is connected), you may feel uncomfortable or receive a burn.

Other Precautions

■ If the device is wet, do NOT turn on the power. Separate the battery and wipe it with a soft dry cloth. After that, contact Customer Service.
■ When cleaning the device, wipe it with a soft dry cloth and do NOT use chemicals, such as benzene or thinner.
■ Do not repair, disassemble or alter in any manner.
■ Do not allow any liquid or foreign materials to get inside the device.
■ Do not drop the device.

Safety Precautions for Use

The device functions vary depending on model.
Read the relevant precautions for the provided function before using the device.

Precautions for the Bluetooth

- Do not attempt to operate the Bluetooth while driving. Accidents caused by such improper handling are the sole responsibility of driver.
- To prevent electromagnetic problems or other dangers, turn off the Bluetooth setting wherever the use of Bluetooth is prohibited.
- If you use a certain medical device, such as a pacemaker or a hearing aid, ask the manufacturer of the relevant device if it is correctly cut off from energy sources before using it. If necessary, you may ask for some assistance from your regular doctor.
- This device satisfies Bluetooth standards 2.0. Some Bluetooth devices may not be fully compatible with this device. For detailed information on compatibility, contact the manufacturer of the relevant device or our Customer Service.
- This wireless equipment may experience electromagnetic interference, so it is not permitted for use by a life-saving service.

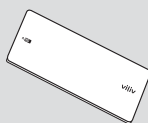WiFi and 3G Modem (or HSDPA, HSUPA) do not operate simultaneously.

Names of Parts

The appearance of the components below may differ from the actual components and some components are subject to change.
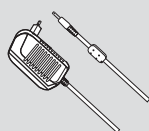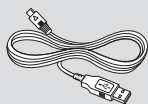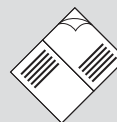
Basic Components

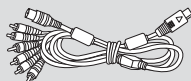|		
Main Body	Battery	Hand strap
AC/DC Power Adapter	USB-link Cable (Professional only)	User's Manual

Accessories (Optional)
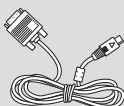
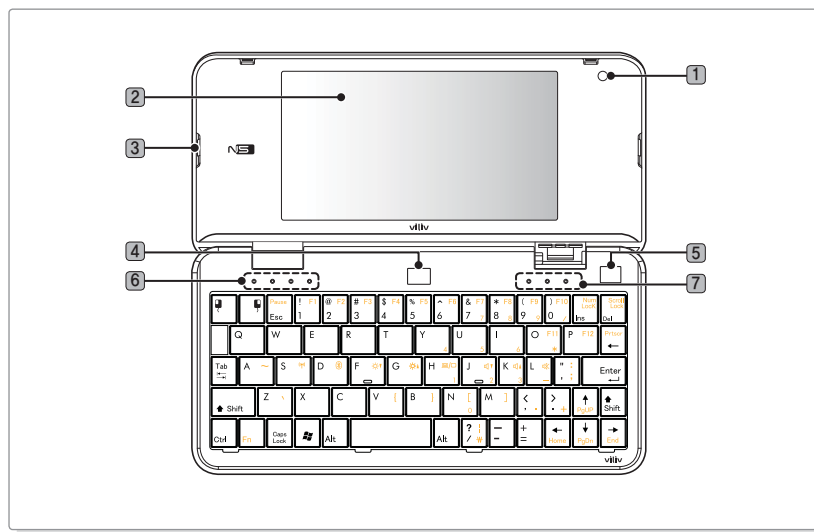|	
D-SUB Cable (Professional only)	AV-out Cable (Professional only)

Notice

Use only certified Viliv cable.

Names of Parts

Front View

[1] **WEBCAM** Equipped with webcam.

[2] **TFT LCD/Touch Screen** Users can operate the device using the touch screen.

[3] **Speaker** Speaker is built in.

[4] **Power Button/Power Lamp** For turning the power on/off, and checking the status of power.

[5] **Optical Joystick** For moving the mouse pointer.

[6] **Operation Status Indicator** **Power Save Mode Indicator/Disk Device Indicator/**
                                    Battery Charging Status Indicator/Wireless LAN Indicator

Power Save Mode Indicator   This light is turned on while the device is in power save mode.
Disk Device Indicator   This light is turned on while the disk drive is being accessed.
Battery Charging Status Indicator   Indicates the battery charging status
Wireless LAN indicator   Indicates the operation status of the wireless LAN device.

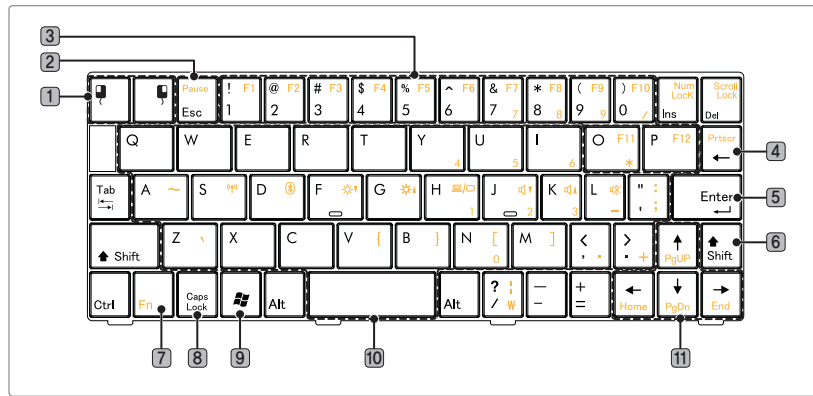[7] **Keyboard Status Indicators** Indicates the status of Num Lock, Caps Lock, and Scroll Lock.

Names of Parts

## Keyboard

The keyboard may be different for each country.

In order to use the orange colored keys on the keyboard, press the keys and the Fn key together.

☐1 **Optical Joystick Key**   Use these keys for left or right mouse click.

☐2 **Esc Key**   It is usually used for terminating or interrupting programs.

☐3 **Function Keys (F1~F12) and Number Keys**   Usages are different depending on the operating system used and application program. Function keys and numbers from 0 to 9.

☐4 **PrtSc Key (Print Screen)**   This key is used for printing the screen or temporarily saving the screen.

☐5 **Enter Key**   Enter key is used to indicate to the computer that one command input is completed, and it is also used for making a new line.

☐6 **Shift Key**   This key is used when entering the character shown on the upper part of each key, upper or lower case of English characters, or hot keys.

☐7 **Fn Key**   This key is used together with function keys.

☐8 **Caps Lock Key**   English characters will be in upper case when entered with Caps Lock light on. Pressing this key one more time will turn off the light. This key has no effect when entering Korean.

☐9 **Windows Key**   It is a Start Menu button provided by Microsoft Windows, and pressing the button will display Start Menu.

☐10 **Text Keys**   Includes text entry keys, space key for entering space, and keys for other special symbols.

☐11 **Cursor Moving Keys**   These are to move the cursor while using programs.
   Edit Keys   PgUP/Home/PgDn/End   Keys for moving pages while using programs.

Names of Parts

Left / Right View
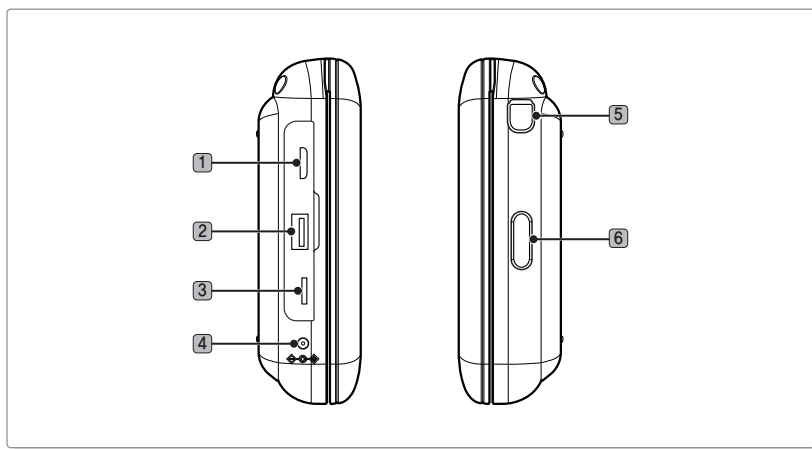
1 **Multi I/O Port**   Used for external video output (component video, composite video, and S-video). (Professional only)

2 **USB HOST Port**   For connecting to external devices with USB port.

3 **MicroSD Port**   This port is for using Micro SD memory device.

4 **Power Adapter Port**   For connecting power adapter or charging the battery.

5 **Antenna**   This antenna is for watching DMB. (Professional only)

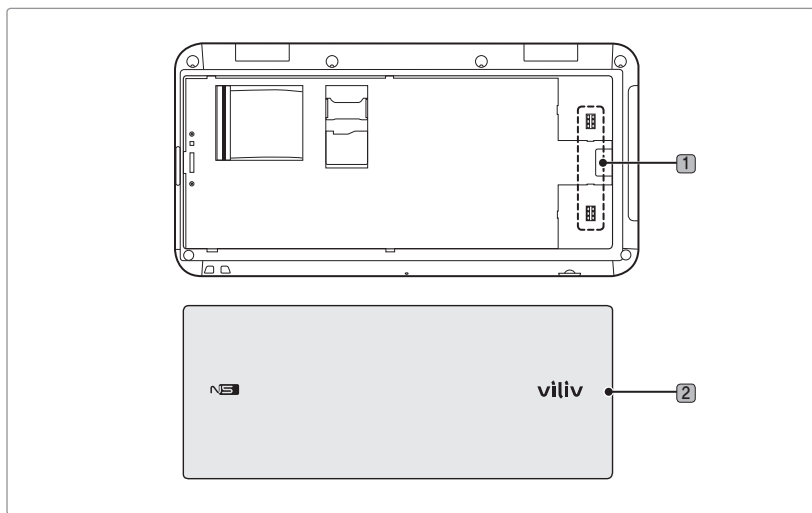6 **Battery Removal Button**   Press this button to remove the battery.

Names of Parts

Lower Side
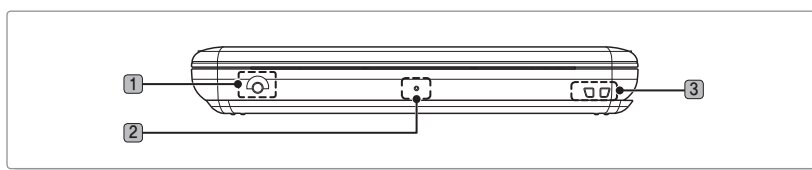
1 **Earphone Port** For connecting earphone

2 **Built-in Microphone** Internal microphone is built in.

3 **Hand Strap Loop**

Rear View

The figure below shows the rear side of the main body without the battery. (Refer to Page 17~18 for Separating/Attaching battery.)
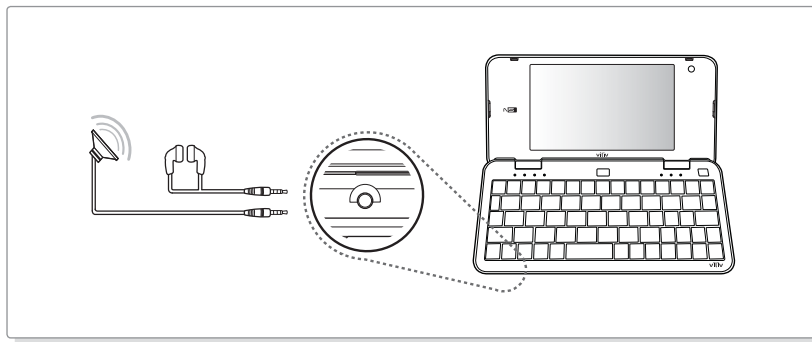

1 **Battery Charging Port** Connection part of battery terminal.

2 **Battery**

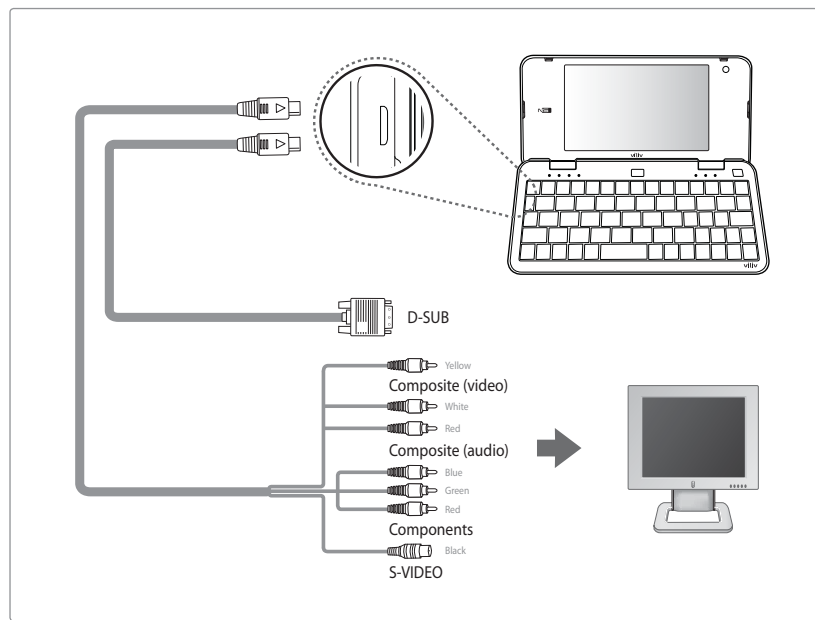# Installation and Cable Connection

Connecting Earphone

Insert the earphone to the earphone port on the lower side of the handset.

Installation and Cable Connection

Multi-IO Port AV-OUT, D-SUB (Optional)

For connecting TV or monitor. (Professional only)

D-SUB

Yellow
Composite (video)
White
Red
Composite (audio)
Blue
Green
Red
Components
Black
S-VIDEO

Notice

Using excessive force during insertion may damage connectors or cables.

Installation and Cable Connection
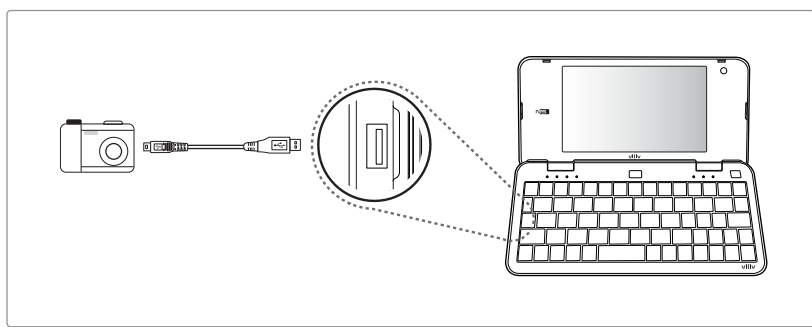
Multi I/O Port USB Link

Connect the USB link cable to the multi-IO port on the left side of the handset. (Professional only)
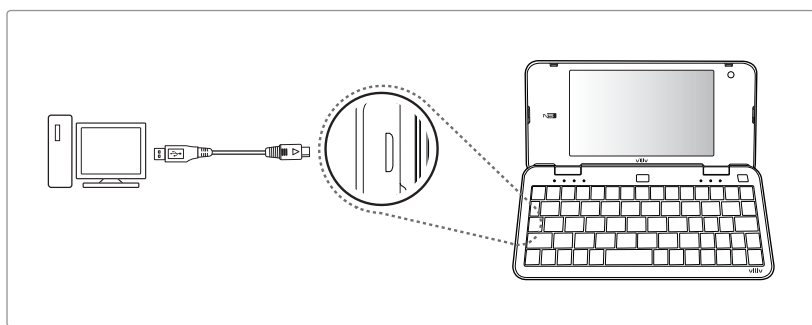
USB HOST Connection
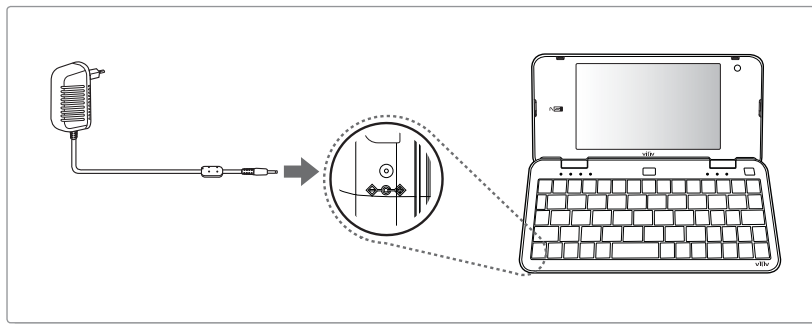
This is used for the connection of external devices, such as digital camera, external HDD, etc.

Installation and Cable Connection

Power Connection (Charging Adaptor)

The charger is connected to the power adapter terminal on the left side of the station.

Notice

Battery charging status indicator

While charging (using AC adaptor) ☞ Red: charging / Blue: fully charged

Installation and Cable Connection

Inserting · Extracting MicroSD Memory Card

How to Insert ⬆ : Align the front face of the MicroSD memory card toward the MicroSD memory slot and push it in until you hear a clicking sound. (Do not use excessive force as it could damage the MicroSD memory card)

How to Extract ⬇ : Press the tip of the MicroSD memory card gently and it will be removed automatically as it is a one-touch removal type. (Pull out the slightly extracted MicroSD memory card completely in the direction of the arrow)

Insertion Direction ➡

Rear Side

Extraction Direction ⬅

MicroSD Memory Card

Front Side   Rear Side
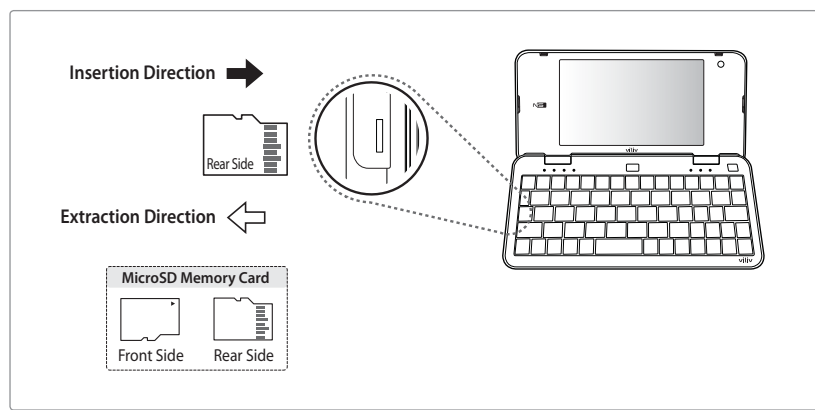
Separating · Attaching Battery
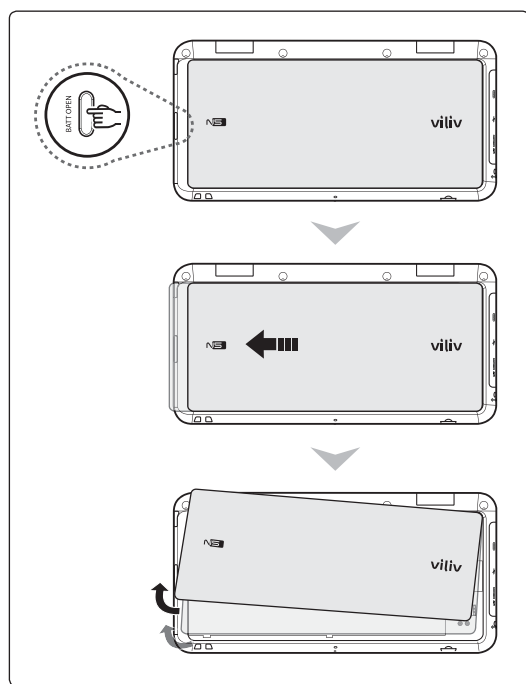
Separating Battery

How to Remove the Battery

Press the Battery Open button on the right side of the handset

Push the button in the direction of the arrow.

Hold the tip of the battery and lift it up.

Notice

Separate the charger after turning the power of the station off.
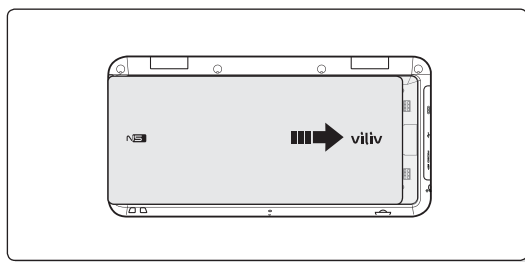If not, you may receive an electric shock by a short circuit in the battery power part.

Separating · Attaching Battery

Attaching Battery

How to Insert the Battery

Push the battery in the direction of the arrow.

🖈 **Notice**

If the battery is misaligned with the groove and you attempt to mount the battery, the device may be damaged.

Basic Operation

Turning the Power On/Off

Turning the Power On

Depress the power button for about two seconds to turn on the power.

▷ The LCD screen turns on and the main screen is displayed.

Turning the Power Off

Use the **Shutdown** menu in the Start Menu to turn off the device while Windows is running.

If the system locks up while using the device, depress the power button on the left for a long duration while the device is on to turn the power off.

▷ Avoid turning off by using the button as the working files may not be saved.

▷ Turning off the power with the button works depending on the power option configuration of Windows.
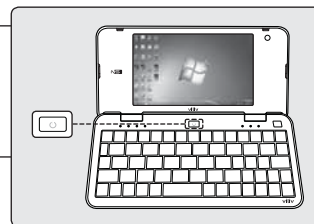
Touch Screen

Touch

Touch the desired location on LCD screen.

▷ Touching one location for a long time has the same effect as a right click.

Double Touch

It has the same effect as a double-click of a PC mouse. Touch the desired location twice consecutively.

Drag

Touch the desired location, move to the desired location while holding the finger on the screen, and release at the final destination.

▷ It has the same effect as the drag function with a PC mouse.
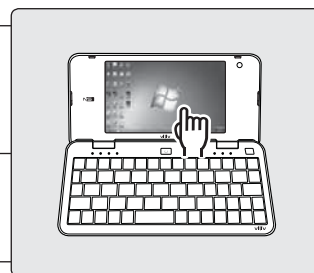
Basic Operation

Set Up for viliv Manager

viliv Manager is executed by double touching vilivManager on the screen.

1	**Wireless LAN Power** Activate the wireless LAN.	
2	**Bluetooth Power** Activate the Bluetooth function.	
3	**Camera Power** Activate the webcam.	
4	**Modem Power** Activate the Modem function.	
5	**Optional Setting (Professional only)** Speaker OFF: To turn on/off the internal speaker while using AV-OUT	
6	**System Information** To check the product information.	
7	**Config** Configure the environment settings.	

viliv Manager

Device
❶ Wifi
❷ Bluetooth
❸ Camera
❹ Modem

❺ Optional Setting
☐ Speaker OFF

❻ System Info   ❼ Config
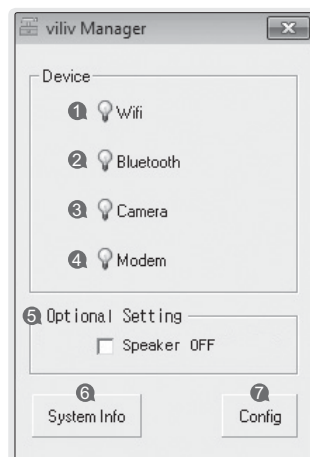
WiFi and 3G Modem (or HSDPA, HSUPA) do not operate simultaneously.

Recovery Solution (AMI Rescue) Guide

As an image-based OS recovery solution, it recovers to the initial status of shipment from factory when HDD of user cannot be booted from OS or it has problems.

Way to Use Recovery Solution (AMI Rescue)

1 **Execution of Recovery Solution (AMI Rescue)**

If viliv logo appears when booting the system (BIOS POST), press the F10 key 1-2 times.

▷ As the logo disappears, Pre-Boot Menu window appears.

◆ In order to use F10 key in N5, press F10 key while pressing the Fn key on the lower right side of the keyboard.

2 **Pre-Boot Menu**

When selecting Normal Boot, booting proceeds to Windows. For recovering OS, select AMI Rescue and click Launch Service.

▷ AMI Rescue Lite-Wizard appears.

3 **AMI Rescue Lite-Wizard**

When clicking **Restore OS** button, a message that confirms the recovery of OS is displayed. If you press **Yes (Y)**, it starts the recovery of OS.

If the process of OS recovery is completed, a message that confirms the successful recovery is displayed.
(Partition 0 on disk 0 was successfully restored.)

If you press **OK** button, the system is booted again automatically.

▷ Now, if you boot to Windows, OS will be in the initial status of shipment from factory.

Notice

When recovering OS, recover by connecting battery adaptor.
Since data is deleted in case of recovery, make sure to back up the data beforehand.
Please wait for 20 sec when black screen is showing to prepare boot up the Windows 7.
It will take more time for Windows 7 users.

Specifications

The specifications below may be changed for enhancement of product performance without prior notice.

General Specifications

Product Name	N5
CPU & Chipset	Intel® Atom™ 1.33 (Z520) + SCH US15W
LCD	4.8-type WSVGA (1024 x 600) / Touch Panel
RAM	1GB
Storage	SSD 32GB
LAN	IEEE 802.11b/g
WWLAN (Optional)	WiMAX, HSDPA
Bluetooth	Bluetooth Ver2.0 + EDR
Connector	Earphone Port x1, USB x1, Multi I/O (USB Link, D-sub, AV-out) x1 (Professional only), MicroSD Slot x1
Audio	Internal speakers
Battery	Lithium Polymer (Removable) Voltage 3.7V Capacity : 4250mAh
Camera	Webcam Built in
Dimension	172 (W) x 86.5 (H) x 25.5 (T) mm
OS	MicroSoft Windows
Operation Temperature	0℃ ~ 40℃

Memo

Memo