Cover

Mobile Internet Device

X70 EX

Quick Start Guide

User's Manual

This guide may be changed for product improvement without prior notice.

Cover 1



Thanks for purchasing viliv.

Please read the precautions thoroughly before using the product.

Cover 2

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.

Registered Trademark

viliv is the registered trademark of Yukyung Technologies Corp.

Windows 2000, Windows XP and 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.

FCC 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 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 con-nected.
- Consult the dealer or an experienced radio/TV technician for help.

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 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

Body-worn Operation

This device has been tested for body-worn operation and meets FCC RF exposure guidelines. Body-worn operation is restricted to accessories that maintain a minimum of 1.5cm separation to the body and do not contain metallic components. Use of any other body-worn accessories may not compliance with FCC RF exposure guidelines. For more information about RF exposure, please visit the FCC website an www.fcc.gov

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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 use headphones/earphones while driving, walking or using public transport.
- 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.

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. (For a portable battery for computer.)
- 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. (For a portable battery for computer.)
- Do not 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.
- · Avoid humidity.

CAUTION

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

- When initially operating this device, it is recommended you warm it up for over 15 minutes under a clear open sky and open area.
- If the vehicle equipped with this device is not used for 7 days or longer, the data storage recharger inside the GPS may be discharged and require warming up time of over 15 minutes.
- GPS signals are high frequencies around 1575 MHz so they may be affected by bad weather, such as rain and fog, and electromagnetic interference and the reception rate of the GPS may deteriorate.
- When the GPS receiver is under an elevated road, inside a tunnel, in a densely built-up area or near a high-voltage line, it is difficult to receive radio waves so GPS reception may fail.
- The GPS receiver may not work normally in some vehicles with UV coating, sun-block coating or electromagnetic interference.

- The operational temperature of the GPS receiver is between 0 °C and 50 °C. Problems may occur in midsummer or severe winter so maintain an appropriate temperature.
- On some roads running parallel to a driveway or an elevated road, the information on speed limits or dangerous sections for speeding may not be accurate.

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 inhibited.
- 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.

Precautions for Navigation

• Placing the device where it blocks the driver's view or is within the driver's operation range for driving may cause an accident.

Adjust the volume to an appropriate level so that it does not disturb while driving.

- Fix the device rack onto the windshield securely so that it will not fall or move while driving.
- If the rack is attached onto the windshield for a long time, its adhesion may become weak and it may fall. Therefore, if you are not going to use the device for a long time, separate it and keep in a safe place.
- Do not disassemble and attach it inside a vehicle in any manner.

To do so may affect the electrical system and GPS reception sensitivity and lead to a fire.

• Do not separate the cigar jack from the vehicle while using the device. To do so may cause a malfunction.

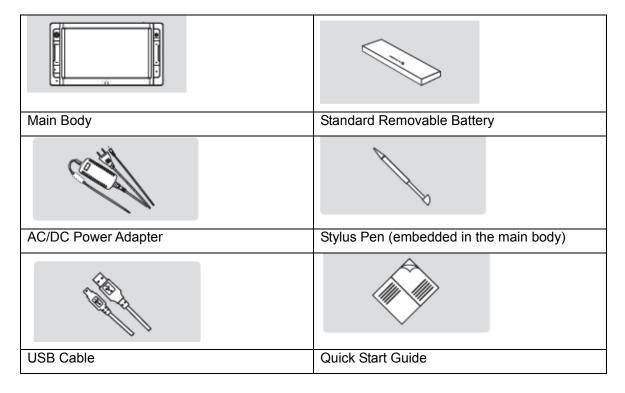
• Set the device up where it does not block the driver's view or is not in the way of the airbag's operation.

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Names of Parts

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

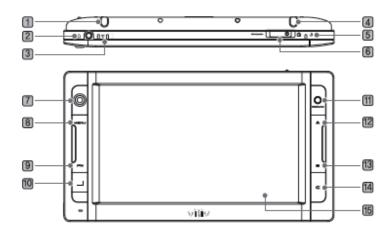
Basic Components



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Names of Parts

Top/Front Side



- 1. Stylus Pen: Stores a stylus pen.
- 2. Earphones Port: Connects earphones.
- 3. Operation Indicator: WLAN: Indicates the status of the WLAN equipment operation.

HDD Indicator: Turns on when accessing the HDD.

- 4. 3G modem Built-In Antenna.
- 5. Charger Indicator: Indicates the status of Battery Charger.
- 6. Power/Hold Switch: Provides Power On/Off and key input locking functions.
- 7. Jog Dial: It is used to move in Up (\uparrow) /Down (\downarrow) /Left (\leftarrow) /Right (\rightarrow) direction on screen.
- 8. Menu Button: Moves to main menu.
- 9.FN: BIOS Mode: F8 (Advance Win XP Mode)

Win XP Mode: F10

- 10. Virtual Keyboard: Activates viliv virtual keyboard.
- 11. WEBCAM: Equipped with a web camera
- 12. A: BIOS Mode: ESC

Win XP Mode: OK (Left mouse button)

13. B: BIOS Mode: F11 (Popup board)

Win XP Mode: Right mouse button

14. C: BIOS Mode: F10 (Recovery)

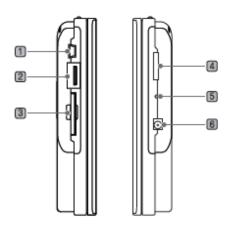
Win XP Mode: User-defined mode

15. TFT LCD/Touch Screen: The user can operate the device on the touch screen.

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Names of Parts

Left/Right View



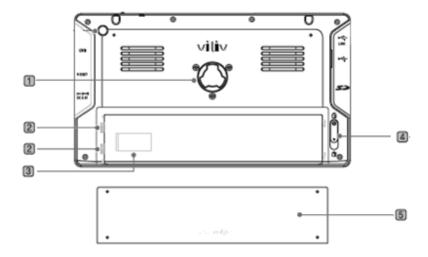
- 1. USB Data Link: It is used to connect a terminal computer. (* For connection method, refer to Detailed Manual.)
- 2. USB Port: It is used to connect another external device with a USB cable.
- 3. SD Card Slot: It is used to insert an SD/SDHC card.
- 4. Multi I/O port: It is used with external video out (Component, composite and S-Video) and to connect an extension I/O pack.
- 5. RESET: If you press this button with a pointed object, the device restarts.
- 6. Power Adapter Port: It is used to charge a battery or connect a power adapter for the use of the device.

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Names of Parts

The figure below shows the rear side of the main body without the battery. (Refer to Page 15

for Separating/Attaching battery.)



- 1. Rack Connection: It is used to connect a device rack.
- 2. Battery Charging Port: Connection part of battery terminal
- 4. Separating/Attaching Battery: Push the battery downward to separate the battery, as shown in the figure above.
- 5. Battery

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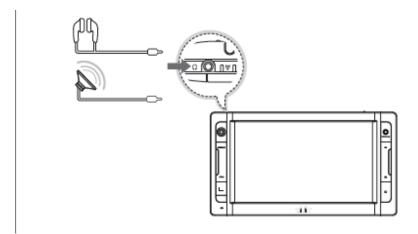
Installation and Cable Connection

The connections of external devices may vary in accordance with products.

Some equipment, such as home theater and connection target TV, may need an extension cable.

Earphones Connection

Earphones are connected to the left port of the station.



Notice

To connect external speakers, connect the speakers with standard 3.5 PHY stereo cable to the earphone jack.

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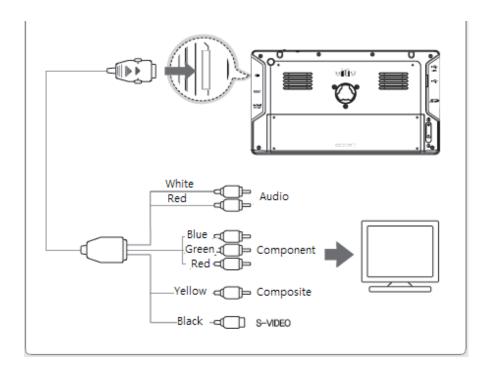
Installation and Cable Connection

The connections of external devices may vary in accordance with products.

Some equipment, such as home theater and connection target TV, may need an extension cable.

Multi I/O port

This port is used to connect a digital TV.

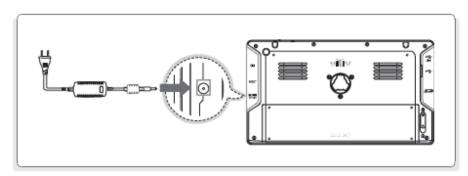


Installation and Cable Connection

The connections of external devices may vary in accordance with products.

Power Connection (Charging Adaptor)

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



Notice

Power Status Indicator: Power Off/Standby Mode/Max. Power Saving Mode

While charging: Red / Fully charged: Blue

Power On Mode

While charging: Red / Fully charged: Blue

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Installation and Cable Connection

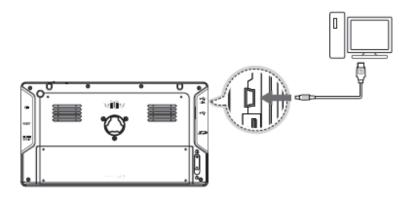
The connections of external devices may vary in accordance with products.

USB Data Link Connection

A USB cable is connected to the USB Data Link port on the right side of the station.

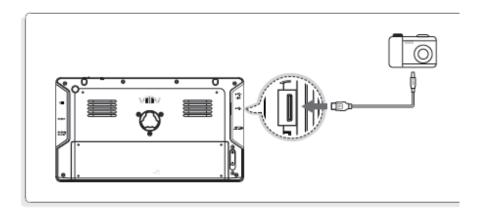
Notice

Since this function is for advanced users, read the Detailed Manual thoroughly before use.



USB Connection

This is used for the connection of external devices, such as digital camera, external HDD, etc.



Installation and Cable Connection

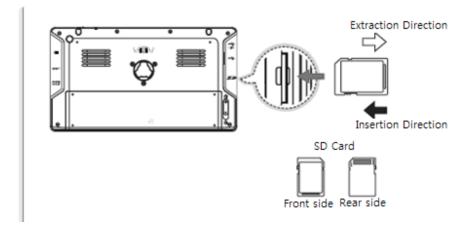
Inserting/Extracting an SD Memory Card

How to insert \uparrow : Let the front of an SD memory card face the SD memory slot and then push it in the arrow direction until a click sound is heard.

(If, however, you push the SD memory with too much force, the memory may be damaged.)

How to extract ↓: Since this device adopts a one-touch method, you may gently press on the end of the SD memory to extract it automatically.

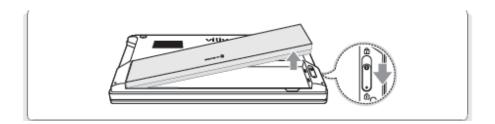
(Pull out the SD memory card slightly protruded.)



Separating/Attaching Battery

Separating Battery

Depress the Battery Separation/Lock button on the rear of the station in direction as shown in the figure. Slightly push the battery up in the battery separation groove and then separate the battery.

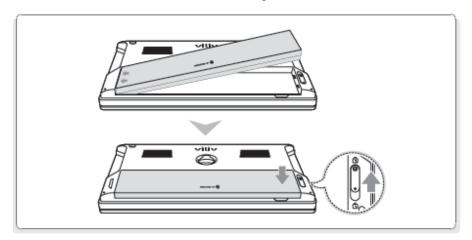


Notice

- 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.

Attaching Battery

Align the battery in the groove as shown in the figure below and then press it until it is closely attached to the main body. Push up the Battery Separation/Lock button on the rear of the station in direction as shown in the figure below.



Notice

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

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Separating/Attaching Battery

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Basic Operation

Turning the Power On/Off



Turning the power on

To turn the power on, move the Power button on the top of the station to the left.



Turning the power off

If Windows OS is running, turn the power off with the Turn the Power menu on the Start menu. If the system is stopped during the operation, move the Power button on the right side to the left side and hold the button for over 4 seconds to turn the power off.

- Since the file that your are working on is closed without saving, it is better not to use this function.

Setting/Cancelling Hold Function



Hold Setting

Move the Hold button on the top of the station to the right.

○ Once the lock function is set, the screen touch function and all of the button functions are not available.

Cancelling the Hold Mode

Move the Hold button on the top of the station to the left.

○ Once the hold function is cancelled, the screen touch function and all of the button functions are available.

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Basic Operation

Jog and Function Buttons

The Jog key has different functions in accordance with the program functions. Refer to the Detailed Manual for the description of functions.

	$ Up\uparrow/Down\downarrow/Left\leftarrow/Right \rightarrow Move \\ (\bigcirc \bigwedge \bigcirc \bigwedge \bigcirc \bigwedge \bigcirc _{i}) $
	This is the button to move in Up (↑)/Down
	(↓)/Left (←)/Right (→) direction on screen.
	Selection (Center key of the direction keys)
	Enter button
MENU	MENU
	It is used to move to the main menu.
A	MENU + A
MENU + B	
	Brightness adjustment (Up)
	MENU + B
	Brightness adjustment (Down)
	MENU + C
	Windows + U
FN	FN
	BIOS Mode - F8 (Advanced Win XP Mode) /
	Win XP Mode - F10
A	FN + A
FN + B	Volume adjustment (Up)
	volume adjustinent (Op)

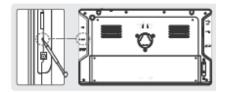
	FN + B
	Volume adjustment (Down)
	Virtual Keyboard
	Virtual keyboard is activated.
	ICON
	BIOS Mode - DEL (Install) / Win XP Mode -
	Windows + H (soft Keyboard)
A	Α
	BIOS Mode - ESC / Win XP Mode - OK (Left
	Mouse Button)
B	В
	BIOS Mode - F11 (Popup Board) / Win XP
	Mode – Right Mouse Button
c	С
	BIOS Mode - F10 (Recovery) / Win XP Mode
	User-Defined Mode
+Jog Key	Pivot
	Pivot Function

Basic Operation

Resetting

Use this function when the device stops during operation and the touch screen and the buttons

of the station are not working.



Gently press the Reset button on the side of the station with the stylus pen.

Touch Screen



Touch

Press and release a desired point on the LCD screen with the touch pen.

Double Touch

It provides the same function as double-click operation by a mouse of a PC. Double-touch a desired point on the LCD screen.

Drag

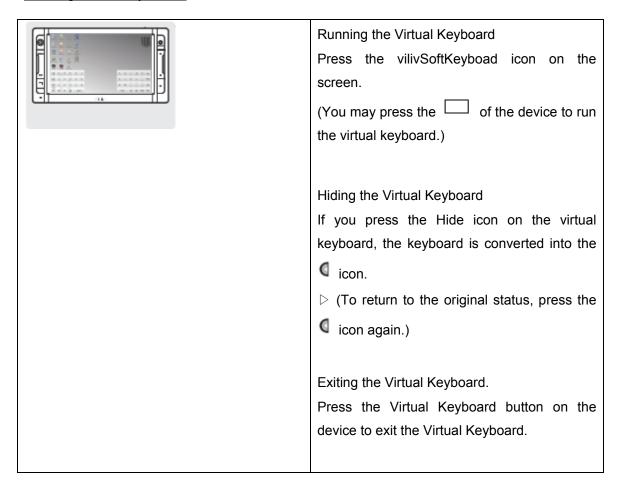
Keep the touch pen pressed on a desired point, drag the pen to another point on the screen and then release the pen at the final point.

 $\, \triangleright \,$ It provides the same function as double-click operation by a mouse of a PC.

Right mouse button

If you press a desired point with the touch pen (over 2 seconds), it performs the right mouse function.

Running Virtual Keyboard



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FAQ

The table below describes problems that you may encounter while using viliv and their solutions.

Check the following before contacting Customer Service.

Q	The power does not come on, and nothing appears on the LCD table.
	Check the power is connected. If not, check the charge status of the battery. If the battery is fully discharged, recharge the battery for more than 10 minutes.

Q	The power or the LCD screen automatically turned off while using the device.	
Α	If the power is not connected, check the charge status of the battery.	
	Check the power is connected.	
Q	The buttons do not work.	
A	Check if the Hold switch is set. Release the lock setting by the Hold switch.	
Q	Video caption does not appear.	
Α	If a video caption format is SMI, the caption file must have the same file name as the	
	video file to be played and its extension name must be SMI or smi. For a video with long	
	file name and split into several files, rename the file names in numerical order.	
	If, for example, the file name of a video file is 'The file name of this video is too long',	
	the following files must be in the directory:	
	The file name of this video is too long1.avi	
	The file name of this video is too long1.smi	
	The file name of this video is too long2.avi	
	The file name of this video is too long2.smi	
Q	There is no sound when playing video/audio.	
Α	Check the earphones are correctly connected.	
	Check the Volume button if the volume is set to '0'.	
	If the volume is set too low, you may not hear the sound.	
Q	When connecting a PC through the USB link, virtual CD drive (EasySuite) is not	
	recognized.	
Α	Check the device is powered on. The CD drive is not recognized with the device	

powered off.

Check the cable connection is correct.

Check battery remaining amount. If the battery remaining amount is not sufficient, the CD drive is not recognized or data may not be moved.

Check the USB link mode setting. (For detailed setting, refer to Detailed Manual.)

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Specifications

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

General Specifications

Product Name	X70 EX
CPU & Chipset	Intel® AtomTM 1.33(Z520) GHz + SCH
	US15W
LCD	7-type WSVGA(1024 x 600) / Touch panel
RAM	1GB
Storage(Optional)	SSD 16GB / 32GB / 64GB / 128GB
WWAN (Optional)	Wimax: HSDPA
LAN	IEEE 802.11b/g
Bluetooth	Bluetooth Ver2.0+EDR
GPS (Optional)	SiRF Star 3
Connector	Audio x 1, USBX1, USD(LINK) X 1, SD/SDHC
	Slot x1
Audio	Stereo speakers
Battery	Lithium Polymer (Removable)
	Voltage: 7.4V
	Capacity: 4,100mAh
Dimension	210 (W) x 117(H) x 22.5(T) mm
Camera	1.3 Mega pixel

OS	Windows XP Home Edition
Operation Temperature	0℃ ~40℃

E-mail: help@myviliv.com