StarBoard WT-1

User's Guide

How to Request a User's Guide

When requesting a separate copy of this user's guide, specify WT1-090101.

Read this user's guide and carefully retain it for future reference.
Before using this product, carefully read and fully understand the safety instructions. **Store this User's Guide nearby for ease of reference.**

WT1-090101

Hitachi Software Engineering Co., Ltd.

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Product Assurance Provisions

This product is limited to use in the country where the user bought this product.
For warranty details, refer to Appendix 4.5 at the end of this user's guide.
This first edition of the user's guide (WT1-090101) is for the following products:

StarBoard WT-1(NWT-101, NWT-101R) AH00222

The StarBoard WT-1 incorporates WALTOP's wireless tablet integrated digitizer and 2.4G RF technology.
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Safe Handling

Markings and Symbols

Various markings and symbols are used in this user's guide and on this product, to ensure the safe and correct use of this product and to prevent personal injury and property damage. These symbols and their meanings are as explained below. Understand the information well before reading the body of the user's guide.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

Indicates a potentially hazardous situation which, if not avoided, may could result in minor or moderate injury.

NOTICE

Indicates a potentially hazardous situation which, if not avoided, may could result in damage not related to personal injury property damage. (except personal injury hazardous)

	This symbol draws attention to cautions (including warnings).
	This symbol indicates something prohibited.
	This symbol indicates something that must be done.

Safety Precautions Always comply with them.

⚠ CAUTION

Do not use this product near water.

Electric shock might result.

Do not place a heavy object on the Tablet and USB cable, heat or pull it.

The tablet and USB cable might be damaged, causing fire or electric shock.

Always keep the device more that 6 inches (15.3 centimeters) from the pacemaker.

If you suspect interference, switch odd your device and move the device away.

Be careful about the locations of the USB cable, etc.

The USB cable might trip someone, possibly causing the product to fall, etc., thereby causing injury or product failure. Be careful with their locations.

Do not leave this product or any of its accessories on the floor.

Someone might step on it and break it, or might be injured by tripping on it.

NOTICE

Do not use this product in a location with high temperature or high humidity or leave it in direct sunlight.

The tablet and other parts might be damaged.

Do not dispose the equipment as unsorted municipal waste, but use the return and collection systems available.

Contact your dealer for details.

Careful thought was given to the cautions on this device and in this user's guide. However, unanticipated circumstances might occur. When operating this product, users themselves must exercise caution as well as follow instructions.

⚠ CAUTION

Caution Details	Page
Do not perform unauthorized disassembly of the WT-1. It may pose a risk of injury from fire or electric shock, and may damage the WT-1. Contact a customer service center regarding battery replacement.	P.4-4

NOTICE

Notice Details	Page
Use a computer USB port or the included AC adaptor to charge the tablet. Using other charging devices or AC adaptors for charging will charge the tablet under different conditions, which may pose a risk of overheating or fire.	P.2-1
Be sure to orient the battery correctly. Do not reverse the + and - terminals of the battery, and use only the specified type of battery. Otherwise, it will overheat and fail.	P.2-6
When changing the battery, be careful not to close the pen's rear part too forcefully. If too much force is applied when closing the rear part of the stylus pen, the pen may be damaged.	P.2-6

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1. Introduction

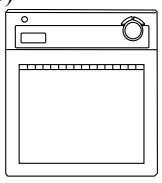
1.1 Parts Check

After unpacking, make sure that all of the following parts are included.

Parts

No.	Name	Qty.
(1)	2.4G RF Tablet	1
(2)	2.4G RF adaptor*	1
(3)	AC adaptor	1
(4)	AC adaptor plug	3
(5)	Stylus pen	1
(6)	AAA alkaline battery	1
(7)	Pen tip replacement pin	1
(8)	Spare pen tips	2
(9)	USB cable	1
(10)	WT-1 Setup Software (CD-ROM) for Windows, Mac	2
(11)	WT-1 Quick Start Guide	1

*In the holder on the back of the tablet.

(1)


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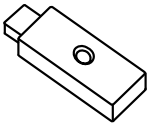

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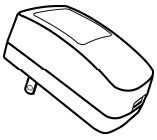

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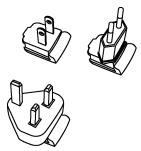

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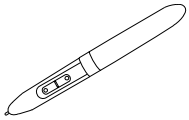

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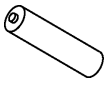
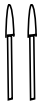
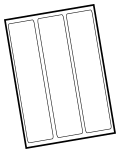


(7)

(8)


(9)

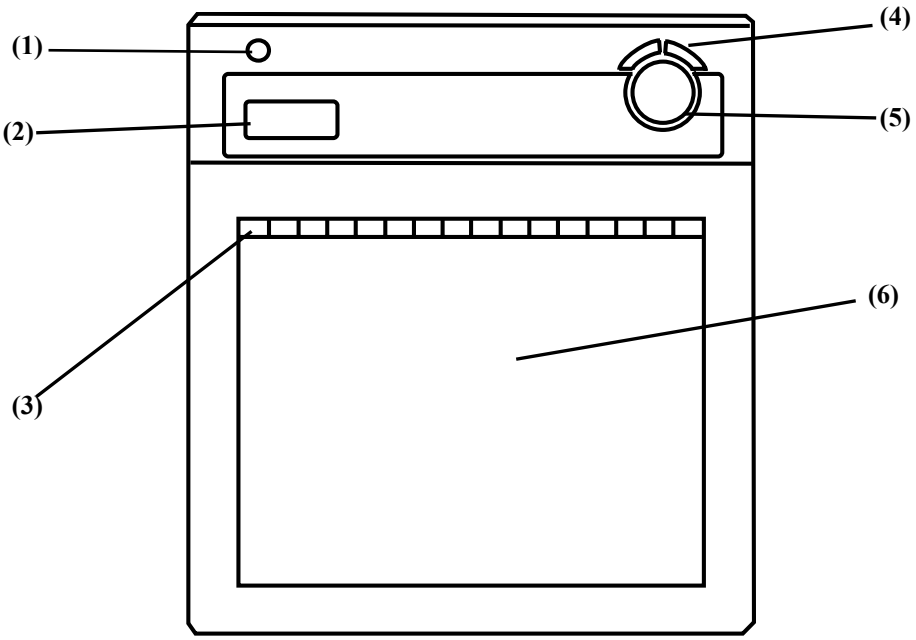
(10)

(11)


1.2 Part Names and Functions

1.2.1 Front Side of the tablet

*Hereafter, the 2.4G RF Tablet is simply referred to as the tablet.



(1) Power button
Keep pressing this button for 3 seconds or longer, turns power to the tablet circuitry on and off.

(2) LCD indicator
LCD indicator that shows the connection status between the tablet and PC, as well as the remaining battery level.(For details on LCD indicator, see '2.1.3 LCD indicator' on page 2-4 of this User's Guide.)

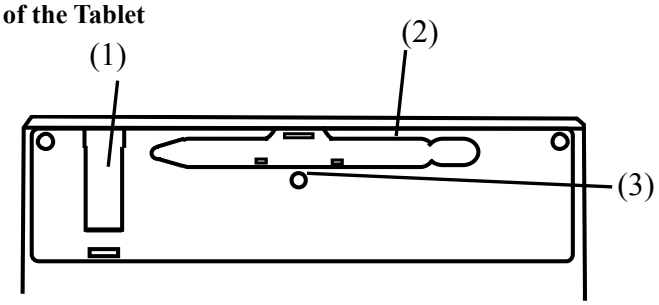
(3) Function area
Sixteen functions can be assigned to this area. (For details on function area initial settings, see '2.1.2 Basic Tablet operation' on page 2-2 of this User's Guide.)

(4) Page up / Page down
For scrolling pages.

(5) Volume control
Volume adjustment is possible by drawing a circle with the pen here.

(6) Tablet active area
Receives text and graphical information entered with the stylus pen, and transmits the data to a PC.

1.2.2 Rear View of the Tablet

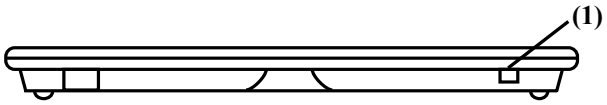


(1) Adaptor holder

(2) Pen holder

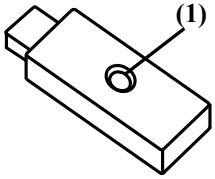
(3) Connecting button
Button to establish a connection
between the tablet and the 2.4G RF adaptor.

1.2.3 Side View of the Tablet



(1) USB port
A USB cable can be connected here when
charging the battery.

1.2.4 2.4G RF Adaptor



(1) Connecting buttonButton to establish a connection
between the tablet and the 2.4G RF adaptor.

2. Usage Procedures

This section describes the basic procedures for using StarBoard.

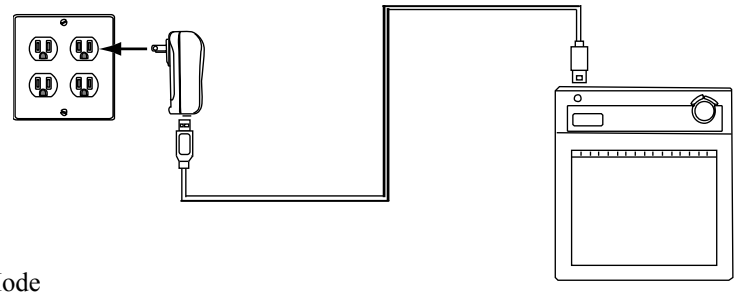
2.1 How to use tablet

This section describes how to use the tablet.

NOTICE
Use a computer USB port or the included AC adaptor to charge the tablet. Using other charging devices or AC adaptors for charging will charge the tablet under different conditions, which may pose a risk of overheating or fire.

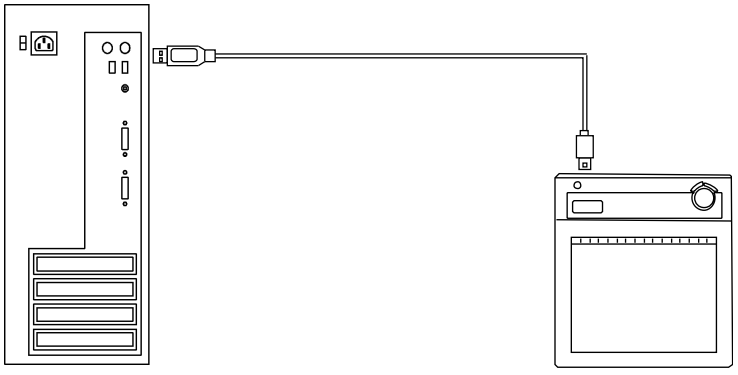
2.1.1 Charging the battery in the tablet

The tablet contains Li-ion battery. When the battery is drained, charge the battery as described below. Note that battery life is approximately 16 hours under normal usage. Charging the tablet takes approximately 2 hours.



AC adaptor Mode

Connect the tablet and the AC adaptor with the USB cable, and then plug the AC adaptor into an electrical outlet.



PC Mode

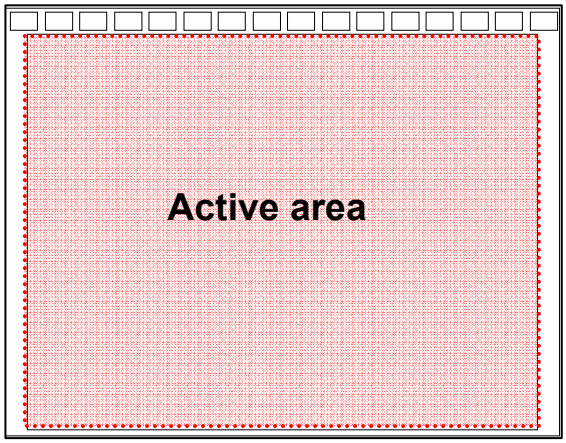
Turn on the PC. Connect the tablet to the PC with the USB cable.

When charging the tablet from a PC, unplug any other USB devices from the port before connecting the tablet. If other devices are connected, use another port or charge the tablet in AC adaptor mode.

2.1.2 Basic Tablet operation

(1) Tablet active area

Tablet active area is inside of the rectangle outlined on the tablet. The active area and the display resolution should automatically correspond. If they do not suit, please reboot the PC.



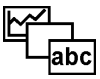
(2) Function area

There are 16 function areas on top of the tablet active area. You can assign applications, documents or URL to these. To assign the function, use 'Macro Key Manager'.

For details on Macro Key Manager, refer to the electronic manual in the included software.

When using StarBoard Software, do not install Macro Key Manager.

If you have installed StarBoard Software, you can use these keys in StarBoard Software.
The default setting is as follows;

Symbol	Description	Symbol	Description
	Hides/displays the StarBoard Software Toolbar.		Select Marker Pen.
	Add a new blank page.		Switch to PC Operation.
	Show previous page.		Select Eraser.
	Show next page.		Select Clear
	Hides/displays the Topic List.		Select
	Select Solid Pen. Black.		Select Exit
	Select Solid Pen. Red.		Programable1
	Select Solid Pen. Blue.		Programable2

2.1.3 LCD indicator

LCD indicate the current condition of the tablet.

	Power on	Displayed when the tablet is on.
	Active mode	Lit: Displayed when the pen is in use.
		Off: The tablet automatically enters power-saving mode after about 3 seconds when the pen is away from the active area or there is no activity.
	Communication status	Displayed when the 2.4G RF adaptor detects input.
	Connection status	Displayed when communication with the 2.4G RF adaptor is possible.
	Pen down	Flashing: Flashes when the pen is within range of input.
		Lit: Lit when the pen is in contact with the active area.
	Battery level	Flashing: Flashes when the tablet is charging.
		Lit: Indicates the remaining tablet battery power, in 4 levels.
	Tablet number	Numbers are assigned in the order of successful pairing.
	Volume	--> + Volume up
		- <-- Volume down

2.2 Using the Stylus Pen

This section describes how to use the Stylus pen.

2.2.1 Basic Stylus Pen Operations

The stylus pen can be used in the same way as a mouse. Under the stylus pen's default settings, the pen tip button is set to correspond to the left mouse button. When Windows is open, the pen tip button may be used to perform the following mouse actions.

- Clicking

  Tap the pen tip against the tablet operating area with a suitable amount of pressure and then release it quickly.
- Double-clicking

  Double tap the pen tip against the tablet operating area with a suitable amount of pressure and then release it.
- Dragging

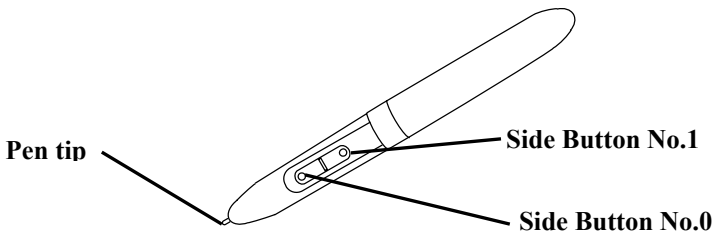
  Press the pen tip against the tablet operating area with a suitable amount of pressure and then move the pen while keeping it pressed against the tablet operating area (without releasing it from the tablet operating area).

The pen can be angled at up to 30° from vertical but it may not work correctly, if the pen is tilted at an angle greater than 30° .

2.2.2 Stylus pen Settings

The stylus pen has one pen tip button, and two side buttons. Mouse actions can be assigned to these three buttons. The default button settings are summarized in the following table.

Button	User action	Corresponding mouse action
Pen tip	Press the pen tip against the tablet operating area	Mouse left-click
Side Button No.0	Press the button with the pen tip very slightly above the tablet operating area (5 mm or less)	Mouse left double-click
Side Button No.1	Same as above	Mouse right-click

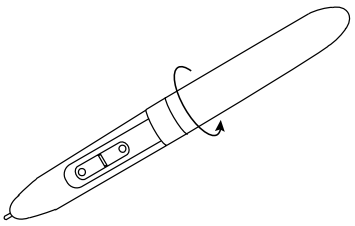


2.2.3 Changing the battery in the Stylus pen

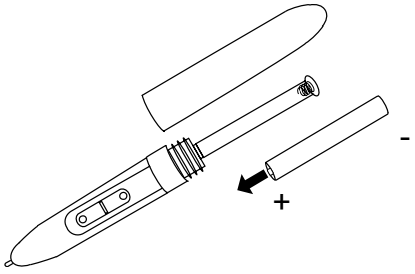
The stylus pen contains a single AAA alkaline battery. If the pen begins to operate erratically (e.g., if pen input is cut off), change the battery as described below. Note that battery life is approximately 1680 hours under normal usage.

NOTICE
Be sure to orient the battery correctly. Do not reverse the + and - terminals of the battery, and use only the specified type of battery. Otherwise, it will overheat and fail.
When changing the battery, be careful not to close the pen's rear part too forcefully. If too much force is applied when closing the rear part of the stylus pen, the pen may be damaged.

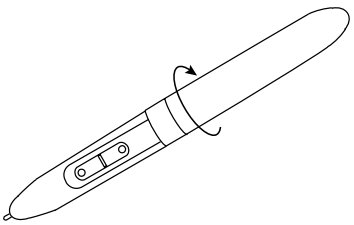
(1) Turn the stylus pen grip to separate the two halves.



(2) Remove the AAA alkaline battery contained in the grip, and insert a new cell with the positive end facing the pen tip.



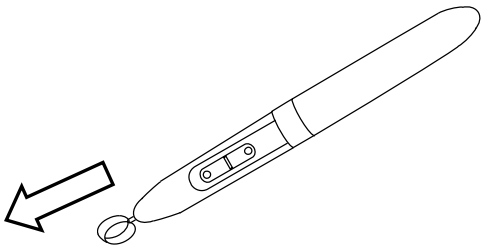
(3) Put the stylus pen back together.



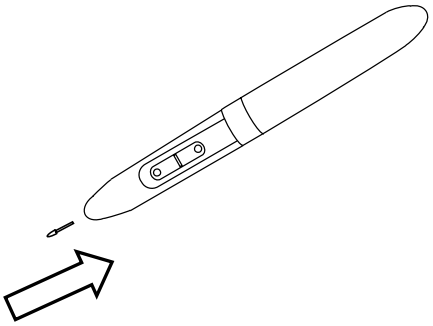
2.2.4 Replacing the Stylus pen Tip

When the stylus pen tip wears down and becomes too short, replace it as described below.

(1) Using the special pin set, remove the stylus pen tip.



(2) Insert a new pen tip into the stylus pen.



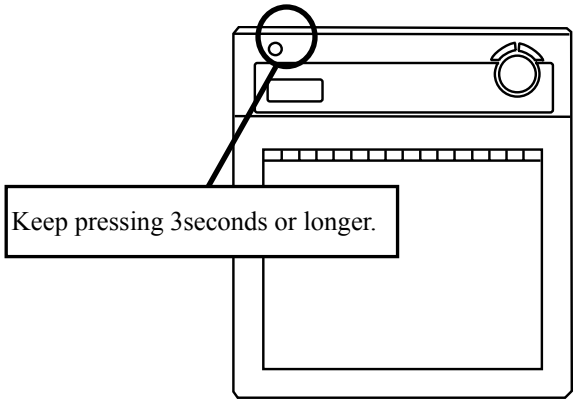
3. Start to use

3.1 Setup Hardware

Before starting installation, tablet and stylus pen needs to be ready.

(1) Insert a battery to the stylus pen.

(2) Turn on the tablet.



3.2 Setup Software

3.2.1 For Windows User

Setup is not necessary when using StarBoard Software 8.11 or later.
In this case, do not install the included setup software.
Use either StarBoard Software or the setup software.

(1) Insert 'WT-1 Setup Software for Windows' CD to your PC.

(2) Click 'Macro Key Manager'. Installation will start automatically.

(3) After the installation, select 'Yes, I want to restart my computer now' and then click 'Finish'.

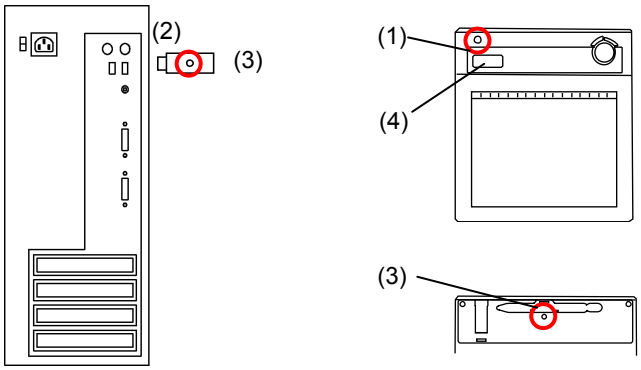
3.2.2 For Mac User

(1) Insert 'WT-1 Setup Software for Mac' CD to your PC.

(2) Double-click 'Pen Pad Tablet Driver' to install Pen Pad Driver.

3.3 How to connect WT-1

If you would like to use WT-1 in the case which needs to connect in wireless, please connect WT-1 and PC as follows. Perform pairing the first time you use the WT-1 or in case of communication problems with the 2.4G RF adaptor. Press the connection buttons on the back of the tablet and on the 2.4G RF adaptor.



To Connect

(1) Turn the Tablet on.

(2) Connect the 2.4G RF adaptor to the PC.

(3) Press the connecting buttons on the back of the tablet and on the 2.4G RF adaptor at the same time. (While the LED indicator is flashing, press the connecting button on the back of the tablet.)

(4) When pairing is successful, a number is displayed on the LCD indicator.

Connecting environment

- The receiving quality of the tablet may be influenced by environment. The best environment for the tablet is where no other cordless products are functioning, such as microwave ovens.
- Cement walls and wooden walls absorb radio wave and decrease receiving quality. Open space without barriers is the best environment for the tablet.

4. Appendix

4.1 Troubleshooting

First, check adjustments and handling methods and check for poor cable connections. Those are often the causes of problems when nothing is actually broken.

Connection problems

In this case	Check this	And do this
WT-1 does not work.	Is the 2.4G RF adaptor connected to the PC properly?	If it is connected properly, LED light on. Otherwise, please unplug and replug the 2.4G RF adaptor.
	Was system setup done in the proper order?	Setup system in proper order. (For details on how to setup the system, see '3. Start to use' on page 3-1 of this User's Guide.)
	Software may be damaged or did not install correctly.	Uninstall the related software, and then reinstall. (For details on how to setup the system, see '3.2. Setup Software' on page 3-1 of this User's Guide.)
	Are there any wireless devices located nearby WT-1 such as cordless phone, video transmitters, or radio transmitters?	2.4G RF uses 2.4GHz unlicensed ISM band. Other wireless devices may caused unstable connection. So use the WT-1 away from other wireless devices.
	Are there any electronic devices located nearby WT-1 such as microwave ovens or radio transmitters that emit electromagnetic noise?	This product is susceptible to electromagnetic noise, so use the StarBoard away from devices that emit noise.
	Were the batteries full-charged?	If the battery is not charged enough, WT-1 may not work properly. Charge the batteries.
	Other	Contact technical support.
WT-1 is not charged.	Is the USB cable connected properly?	Check connection of USB cable.
	Other	Contact technical support.

Stylus pen-related problems

In this case	Check this	And do this
Stylus pen does not operate.	Is battery worn out?	Replace stylus pen battery. (For details on how to change the battery, see "2.2.3 Changing the Battery in the Stylus pen" on page 2-6 of this User's Guide.)
	Is pen tip worn down?	Check if the pen tip is worn down or is too short. (For details on how to replace the stylus pen tip, see "2.2.4 Replacing the Stylus pen Tip" on page 2-7 of this User's Guide.)
	Other	Restart Windows and StarBoard Software.
		Contact technical support.

StarBoard Software-related problems

In this case	Check this	And do this
Stylus pen does not operate under installing StarBoard Software.	Is the connection OK?	Check the connection from the StarBoard Software. (See the 'StarBoard Software user's guide'.)

4.2 System Specifications

Item		Specification
Product name		StarBoard WT-1
Model No		StarBoard WT-1(NWT-101, NWT-101R), AH00222
Tablet characteristics	Input system	Electromagnetic induction
	Interface	2.4GHz RF
	Active area size	203.2mm(W) x 152.4mm(H) (8 x 6 inches)
	External dimensions	278mm (W) x 265mm (H) x 23mm (D)
	Function button(s)	16
	Power supply	Li-ion battery 3.7V, 700mAh
	Battery use time	16 hours (Continuous use) *1
	Battery Cycle life	Approximately 400cycles*2*3
	Battery charging time	Approximately 2 hours
	Weight	590g
	Pen	Stylus pen (Uses one AAA alkaline battery; battery life: approximately 1680 hours*3)
2.4G RF adaptor	Interface	USB 1.1
	RF range	Up to 10m (limited condition)*4
	Power supply	USB bus power
	Physical Dimensions	20.00mm (W) x 9.4mm (H) x 47.8mm (D)
	Weight	10g
AC adaptor		Input : AC100~240V, 47Hz~63Hz, 0.15A Output : 5VDC, 0.5A
Environmental conditions	Temperature	During use:+10～+35℃, in storage:-20～+60℃
	Humidity	During use:20～80%(no condensation), In storage:20～95%(no condensation)
Safety Standard approvals		CE, FCC class B
OS Required		Windows 2000/XP/Vista, Mac 10.4 above available
Software Required		(Macro Key Manager) Version 3.35 or higher (Pen Pad Tablet Driver) Version 1.69 or higher (StarBoard Software) Version 8.11 or higher

*1 Estimate based on usage within cycle life.

*2 After the battery is recharged approximately 400 times, it will retain only 80% of the original capacity after a full charge.

*3 Battery life varies depending on the temperature and humidity of the usage environment.

*4 Distance varies depending on the usage environment.

4.3 Battery Replacement

The built-in lithium-ion (Li-ion) battery has a useful life of approximately two years. Continuing to use the battery after this period poses a risk of battery overheating, rupture, or fire.
If you notice something unusual when charging or using the battery (such as unusual odors, overheating, discoloration, or deformation), discontinue use and request service.
Li-ion batteries are generally not affected by the so-called battery memory effect from repeated use and recharging, and it is claimed that they last longer than other rechargeable batteries.
For this reason, no clear values for the useful life (in terms of cycles of use and recharging) are defined. However, battery capacity does decline after repeated use and recharging. The point at which batteries can only be charged to about 80% of the original capacity is defined as their cycle life. The cycle life of the tablet battery is approximately 400 charges.
Although you can continue to use the battery after this point, if the battery only lasts for about 8 hours after a full charge, the battery has reached the end of its useful life. Request replacement at this time.

⚠ CAUTION

Do not perform unauthorized disassembly of the WT-1. It may pose a risk of injury from fire or electric shock, and may damage the WT-1. Contact a customer service center regarding battery replacement.

4.4 Replaceable Parts

(1) AAA alkaline battery
(2) Spare pen tip

For details on obtaining them, contact your dealer or a support centre.

4.5 Provisions of Product Warranty

1. During the free warranty service period, if a malfunction occurs during normal use, the malfunction will be corrected without charge, according to the provisions of the warranty. Furthermore, if the customer registration card accompanying the warranty is not returned to our company, the customer information will not be registered, so free repairs might be unavailable. After receiving this product, please immediately fill out and return this customer registration card.

2. The warranty coverage is as listed in the following table:

Product Name	Part Name	Warranty Coverage
StarBoard	2.4G RF Tablet	+
	Stylus pen	+
2.4G RF adaptor		+
AC adaptor		+
AC adaptor plug		+
Replacement tip for Stylus pen		–
Other parts		–

Legend: + Covered by warranty (excluding wear and physical damage)
– Not covered by warranty

3. Please refer to the warranty about this product's warranty service period.

4. Even during the warranty period, there will be a repair charge in the following cases:
   (1)If the registration card accompanying the warranty is not returned to our company.
   (2)If the warranty is not presented.
   (3)If specified fields on the registration card accompanying the warranty are not completed, or if the wording has been changed without authorisation.
   (4)The warranty applies only to the original purchasers. (It does not apply to a third party to whom the customer resold this product.)
   (5)In the event of a malfunction or damage resulting from the customer's improper handling (e.g., a fall, impact, etc., caused by the customer during transportation or movement).
   (6)In the event of problems resulting from handling contrary to the handling and precautions mentioned in this user's guide.
   (7)In the event of failure or damage resulting from abnormal voltages, pollution or other natural disasters (e.g., fire, earthquake, lightning).
   (8)In the event of a malfunction in this product caused by the connection to this product of equipment other than the equipment specified by our company.
   (9)In the event that there is no abnormality in this product, but a defect in a part other

than this product was detected or remedied.

(10)In the event of ordinary wear and tear, wear, deterioration, etc., of consumables, even during normal use.

5. If this product malfunctions, review the contents of this user's guide. If the problems remain irreparable, contact technical support. Technical support will determine whether or not the product must be repaired, so please contact them. If the customer sends the product to our company without RMA (Return Merchandise Authorisation) number, it might not be covered by warranty.

6. As a rule, the customer is responsible for shipping charges required to send all or part of the product for repair, etc. Our company will assume responsibility for the return shipping to the customer.

7. This warranty does not cover labour fees for repair-associated equipment assembly or disassembly.

8. Incidental damage caused by the failure of this product (e.g., loss of profit that should have resulted from the use of this product) is outside the scope of this warranty.

9. The aforementioned provisions define this warranty, and they supersede those of all express or implied warranties that include legal defect liability.