



TATUNG WebPAD

TWN-5213CU

User Guide

ViVa1.0



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Messages

Messages are used in this manual to bring important information to your attention. Each type of message is defined as below:

CAUTION! : *Pay Attention! A caution informs you that improper use of equipment or failure to follow safety instructions may cause data loss or damage your equipment.*

WARNING! : *A warning informs you that improper use of equipment or failure to follow safety instructions may cause bodily injury.*

NOTE! : *A note is an advice that helps you to make best use of your TATUNG WebPAD.*

Safety Instructions

The user must read through all safety instructions before using the TATUNG WebPAD (TWN-5213CU). The following information contains concepts that must be fully understood by the user in order to avoid potential hazards that may result in property damage or bodily injury.



CAUTION!

Always use the battery pack that is provided with this WebPAD by TATUNG because other battery packs may have different specifications. Potential hazards and damages may occur to the WebPAD.

Do not expose the battery pack to other metal objects. Store it in a cool and dry place.

Do not use or place the WebPAD near sources of heat or expose it to direct sunlight for an extended period of time.

Do not push or apply force to the TFT screen.

Do not use pen or sharp objects to write on the screen. Always use the stylus to tap or draw on the TFT screen.

Keep the WebPAD away from liquids to avoid accidental damages to the unit.

Avoid exposure to direct lighting. Bright spots may appear on the screen.

WARNING!

Using worn or damaged power cords may result in electric shock or fire.

Avoid keeping one position for long periods of time and also take periodic breaks, in order to prevent any physical discomfort. In addition, take time to exercise your body periodically.

If there is a need for repair or adjustment, always contact an authorized TATUNG service provider for assistance.

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1. Overview

Welcome to TATUNG WebPAD – TWN-5213CU! This wireless WebPAD is designed to provide the ViVa application execution environment to support the customers to build-up a customizable product for different vertical markets. This set demos one example for full Web browsing capabilities, information management, rich multimedia streaming, and e-mail functionalities. Both first-time and experienced users can quickly learn how to operate the TWN-5213CU from this manual.

2. Equipment Checklist.....

Carefully unpack your TWN-5213CU WebPAD from the box. Check to make sure the following accessories are included in the box. If you find any accessory that appears damaged or missing, please contact TATUNG representatives immediately.

- TWN-5213CU WebPAD x 1
- Stylus x 1
- AC Adapter x 1
- AC Power Cord x 1
- Battery Pack x 1

Embedded Accessories

- Backup Battery x1
- RTC Battery x1
- CompactFlash Storage Card 64MB X1
- WLAN Card x 1 (available on standard model)

3. System Specification





CPU	NS Geode SC3200 266MHz with MMX Compatible Instruction Set Support
Memory	128MB On-Board SDRAM
Storage	Support 64MB CompactFlash Card built-in
Display	10.4" TFT, Touch-Screen, 800x600 Resolution
Expansion Slots	Two PCMCIA slot (One built-in WLAN card) One built-in CompactFlash slot (IDE)
Input/Output	One DC-In Power Jack One Standard USB Ports One Stereo Headphone Jack One Microphone Jack and Built-In Microphone One Built-In Speaker
Adapter	INPUT: AC100V~240V, 50/60Hz OUTPUT: DC16V, 2.5A
Battery	Battery Life: 2~3 hours With Full Operation Ability Battery Charging Time: At Least 2.5 Hours
Weight	1.43 kg
Dimension	290mm (W) X 220mm (D) X 30.5 (min.) - 41mm (max.) (H)
LED Indicators	<i>Power LED</i> <i>Battery Charge LED</i> <i>RF Strength LED</i>

4. WebPAD Outlook.....

4.1 Front View of the WebPAD



Function Key

- ➊ Push  to define functions for the hardware buttons. The user can also assign it to launch the application of his/her preference.
- ➋ Push  to switch between the desktop and current display.
- ➌ Push  to launch the SoftKeyboard and Handwriting Pad.
- ➍ Push  to talk (This is reserved for future use). You can also assign it to launch the application of your preference.
- ➎ Direction Key; it is the same with UP/DOWN/LEFT/RIGHT keys.
- ➏ Enter Key
- ➐ Power LED
- ➑ Battery Charge LED
- ➒ RF Strength LED
- ➓ Built-In Microphone
- ➑ Built-In Speaker
- ➒ TFT Touch-Screen: Perform operations and input data by tapping and writing directly on the screen.

Meanings of the TWN-5213CU LED indicators are shown in the following table:

LED Indicator	Power LED	Battery Charge LED	RF LED
LED Color			
OFF	Power off or Suspend Mode	No charging	Signal Strength =0 (No signal)
Green	Power On	Fully charged	Signal Strength =4,5 (Excellent)
Amber	Low Battery <=8%	Charging	Signal Strength =2,3 (Good)
Red	Extremely Low Battery (Auto Suspend) <=4%	--	Signal Strength =1 (Very low)
Blinking Red	--	Charge Error (Or no battery installed)	--

4.2 Top View of the WebPAD



- ❶ Serial Interface (Debug purpose)
- ❷ Reset Button
For cold reset the system.
- ❸ USB Port
USB host
- ❹ PC Card Slot (PCMCIA Type II)
Wireless LAN card and built-In
TATUNG patent-pending antenna
module.

4.3 Left View of the WebPAD



- ❶ PC Card Slot (PCMCIA Type II)
Default is for external Storage Card
- ❷ Headphone Jack
- ❸ Microphone Jack

4.4 Right View of the WebPAD



1 Power Button

(1) Holding down this button for more than 4 seconds will shut down the system.

(2) Pressing and quickly releasing the power button will put the system into suspend mode. Press the power button again to resume operation.

(3) Without the main battery pack, the device cannot be turned on.

NOTE! Even when the device is in critically low-battery state – battery capacity is lower or equal to 4%, the device can still be turned on as long as the AC adapter is plugged in.

NOTE! The power button will be disabled for 7 seconds after the system is resumed from suspend mode.

NOTE! All data kept in RAM will be cleared after the system powers off. When the system is in suspend mode, the data in RAM will be saved.

2 Stylus

Data input and virtually all other operations are performed using a stylus.

3 USB Port

USB Host

4 DC-In Jack

Input for the AC adapter which directly supplies power to the TWN-5213CU.

4.5 Back View of the WebPAD



- ❶ Battery Connector Cover
- ❷ Battery Pack
- ❸ Battery Latch
- ❹ Battery Release Switch
- ❺ IDE CompactFlash Card Slot Cover



- ❶ Backup Battery and RTC Battery Cover
- ❷ Back Stand / Handle

5. Quick-Start Procedure

5.1 Starting TATUNG WebPAD

The TWN-5213CU uses two power sources, battery and AC power.
To operate the device with AC power, perform the following steps:



- (1) Plug one end of the AC Adapter into the DC-In jack and plug the other end into electrical outlet.

(Power Source: 100 - 240 V / 50 or 60 Hz.)



- (2) Turn on the TWN-5213CU using the power button.

- (3) Finish.



To operate the device with the battery pack for the first time, perform the following steps:



(1) Insert a fully charged battery pack into the Battery Slot.



(2) Lock the battery latch.

(3) Finish.

NOTE! The system will not power on if the battery latch is not in the locked position.

5.2 Booting Logo




When the user turns on the TWN-5213CU, there is a booting logo displayed on the screen while the system is loading.

5.3 Booting Options

The TWN-5213CU offers the following booting options via BIOS:



- (1) Special booting from the external PCMCIA Card (DOS) – For maintenance purpose

If the user presses  and ENTER buttons simultaneously, the system will boot from the PCMCIA Card (DOS) and enable legacy USB keyboard support.

- ❗ **NOTE!** This procedure should only be used for maintenance purpose or factory installation.
- ❗ **NOTE!** You may need to try several times if you are not familiar with this procedure.
- ❗ **NOTE!** BIOS supports the legacy USB keyboard initialization without hub. But it will only be enabled after booting from the PCMCIA card.

- (2) Boot from IDE CompactFlash Card (Windows CE.NET)

If none of the button combinations above is pressed, the system will boot from IDE CompactFlash Card and load Windows CE.NET.

5.4 Changing the Image from the CompactFlash Card

The TWN-5213CU offers several image update methods.

Method 1: Replace the system image file (NK.bin) directly from the IDE CompactFlash Card.

NOTE! Always check the TATUNG service and support website for image download request.



(1) Unscrew to release the IDE Compact Flash Card Cover.



(2) Remove the CompactFlash Card by pushing the bar and replace the system image file (NK.bin) directly.

(3) Screw to tighten the cover.

Method 2: Use the software upgrade application to upgrade system image either from the Network or PCMCIA Card on the fly.

NOTE! Software upgrade, please check advanced user configuration (Page 28) for detailed information.

5.5 Using a Storage CompactFlash Card



TWN-5213CU supports both Type I and Type II CompactFlash Cards (3.3V). Users can use a CompactFlash Storage Card to store various files created by the TWN-5213CU. Data stored on a storage card is retained even when you remove the card from or power off the TWN-5213CU, which means a storage card can be used to port data between the device and a computer or other devices.

5.6 ViVa1.0 Shell

TWN-5213CU creates a total different, usability-enhancing experience on the Windows CE.NET platform. Detailed design concepts are described below.



(1) Customizable web-based design desktop.

(2) Task Bar


Right-Side “Start-Menu”:

Optimized Usage for Stylus-Holding from the right-hand side.

Larger space for task bar and icons than standard CE.NET to enhance usability.

(3) Customized desktop and common controls

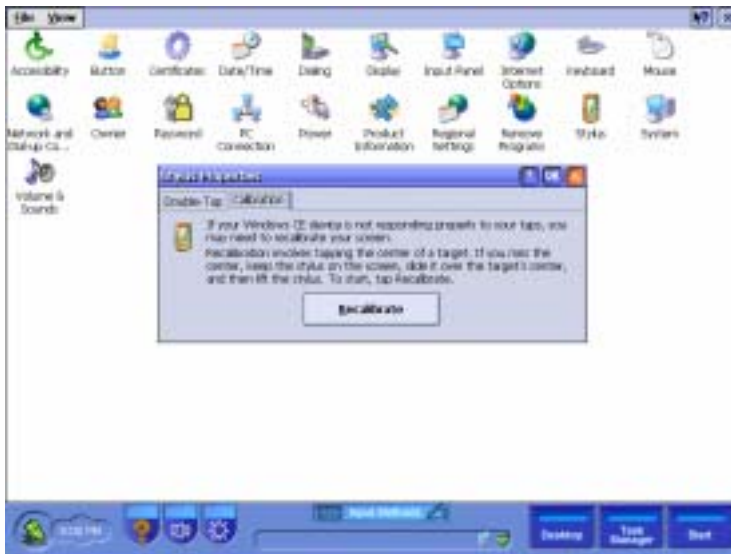
(4) Offer the capability to switch to standard CE Shell Off-Line (For factory setting and SI; Not for End-User)

 **NOTE!** Please check advanced user configuration for detailed information, for Shell switch information.

5.7 Recalibrating the Touch-Screen

If you find that your TWN-5213CU is not responding properly to your taps, you will need to recalibrate your screen. Follow the instructions below.

- (1) Start Menu → Control Panel
- (2) Choose Stylus → Calibration tab → Recalibrate



(3) Screens 1 through 7 of device calibration.



Screen 1



Screen 2



Screen 3



Screen 4



Screen 5



Screen 6



Screen 7

5.8 Network Configuration

TWN-5213CU supports both DHCP and Static IP Function.

The user can choose either one and perform the following steps.

NOTE! Make sure your networking environment provides DHCP or static IP configuration.



(1) When the TWN-5213CU powers on, the start-up process will ask the user to fill in all the network information.

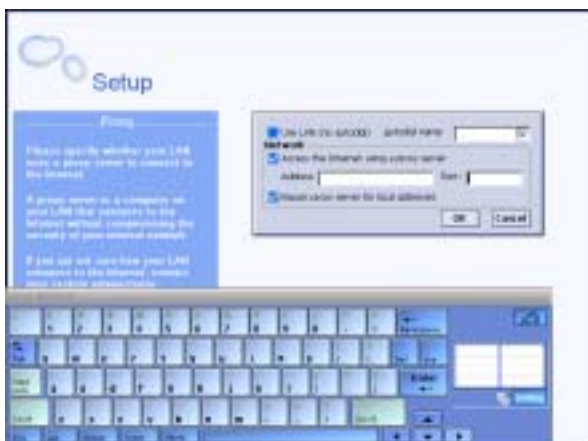
(2) Choose DHCP or Use IP address for basic networking setting.

(3) If the user chooses DHCP and the networking environment supports DHCP functionality, a proper IP address will be automatically assigned to the device.



(4) If the user chooses "Use IP Address", in order to setup the networking, the system will need the user to fill in the IP address, Subnet Mask, Gateway, and DNS information.

(5) For Internet browsing, it will ask the user to fill in the proxy setting if necessary.




(6) Click "OK" button to finish.


5.9 Built-In Storage

The TWN-5213CU comes with two types of built-in memory: Flash Memory and RAM. Flash memory appears on the File Manager under root directory→Temp, and operates as a storage card. To find out how much flash memory capacity is still available, tap Start→Control Panel→System→Memory→Storage Memory.

5.10 Defining the Function Keys

The TWN-5213CU offers different methods of button setting for the user to configure the four hardware buttons. Choose and follow one of the methods below.


Method 1: Press  to define functions for the hardware buttons. (The user can also assign it to launch the application of his/her preference)

Method 2: Press  to launch push-to-talk button. (This is reserved for future use.) The user can also assign it to launch the application of his or her preference.

Method 3: Press the Button icon in the Control Panel to setup the button configuration.



5.11 Using the Input Method

TWN-5213CU provides an integrated input method of SoftKeyboard and Handwriting Pad for data input. The user can access the SoftKeyboard by either pressing the Input Methods icon on the desktop or pushing hardware button .



5.12 How to Reset the TWN-5213CU

The TWN-5213CU offers two ways of resetting the device: Cold Boot (Reset) and Warm Boot (Reset).

Cold Boot

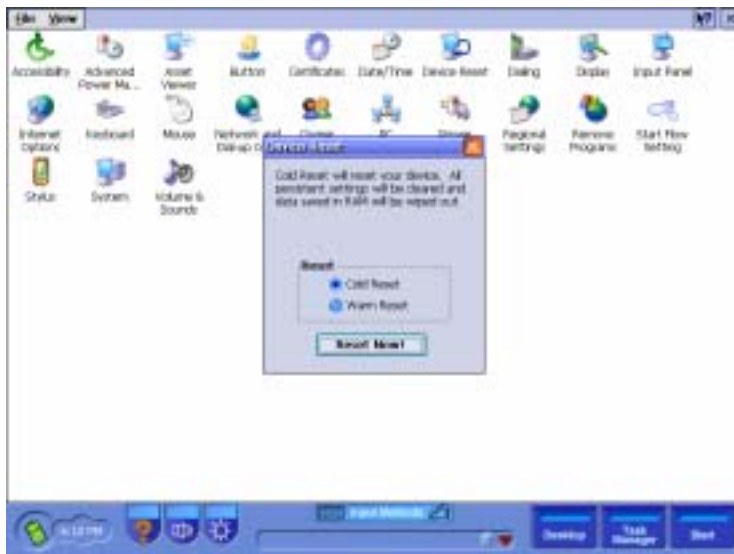
[Method 1]



The reset button is located on top of the TWN-5213CU.

Because cold boot will wipe out all data in the object stored, remember to back up your data.

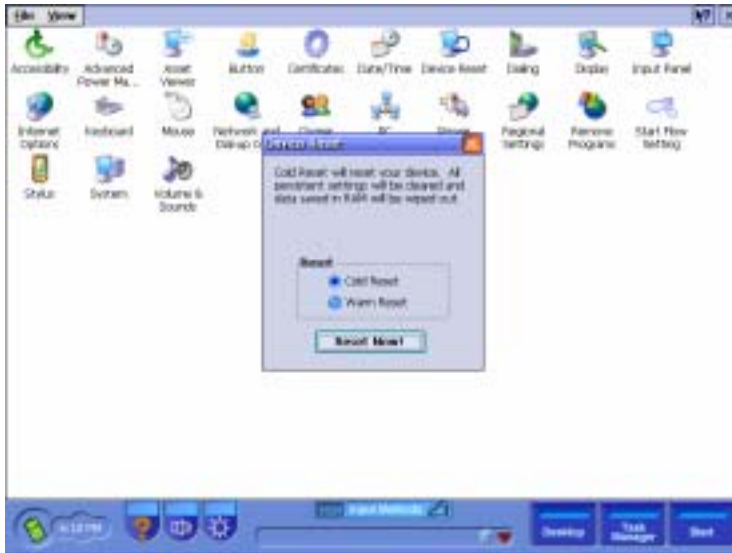
[Method 2]



You can choose to perform a system cold boot from the Control Panel → Device Reset Applet → Cold Reset.

Warm Boot

Warm boot will keep all data (system registry) in the RAM.



You can choose to perform a system warm reset from the control panel → device reset applet → warm reset

Step 2: Choose “Upgrade from Host” from the system upgrade dialog box.



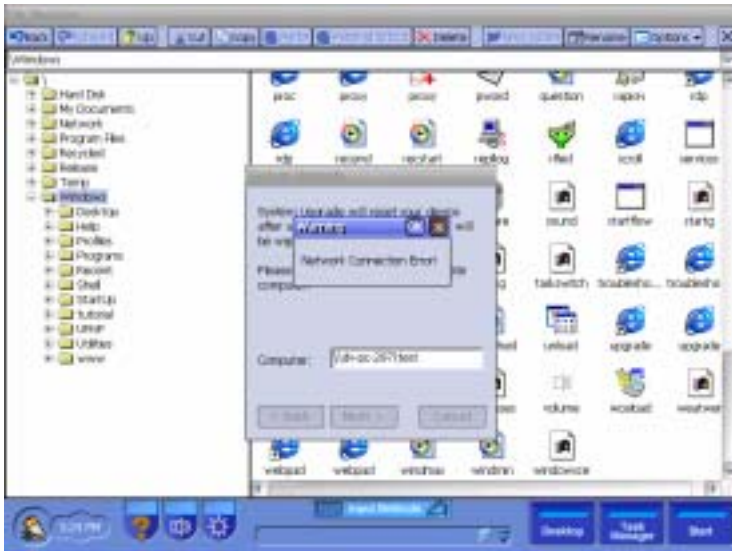
Step 3: Fill in the host computer directory including the folder with the system image file (NK.bin), then press “Next” to continue.



Step 4: After pressing the “Next” button, the system will display a warning message asking the user “The system upgrade will update your system image now. Do you want to continue?”. Click “Yes” to continue.



Step 5: Network connection error message

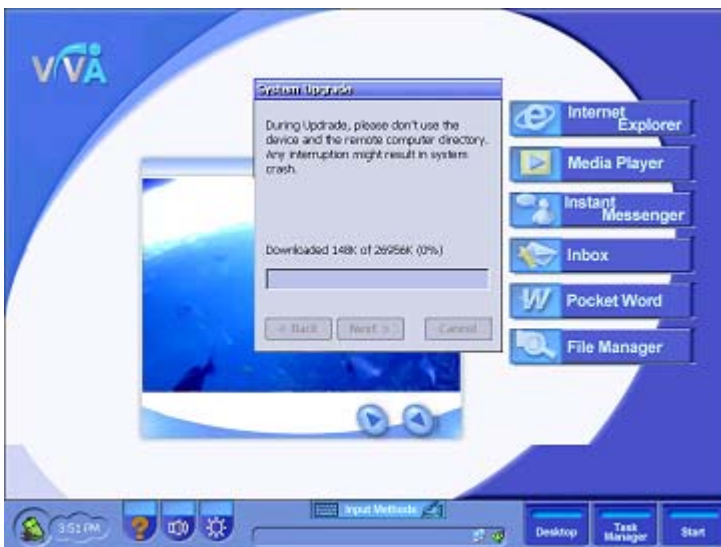


NOTE! The remote host device should make the image folder to be shared. Otherwise, it will display a network connection error message.

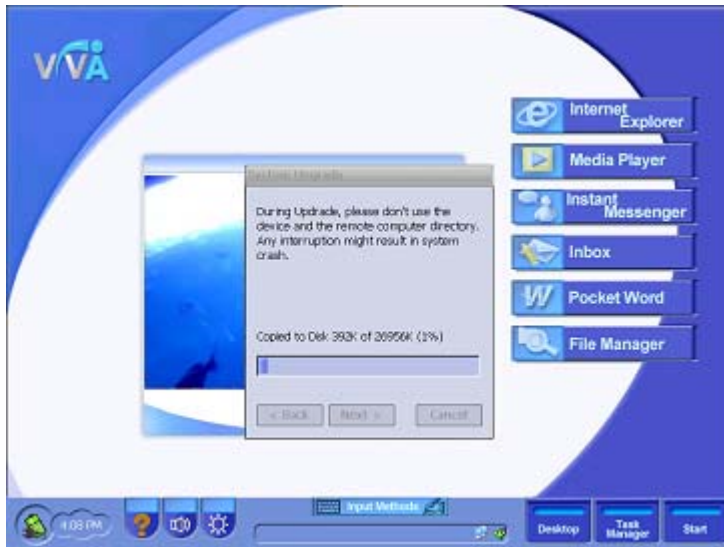
Step 6: A remote logon window will pop-up and ask the user to fill in the username, password, and domain information, then press the OK button. The “Windows CE networking” dialog will pop-up. Press the “OK” button after fill in all the information.



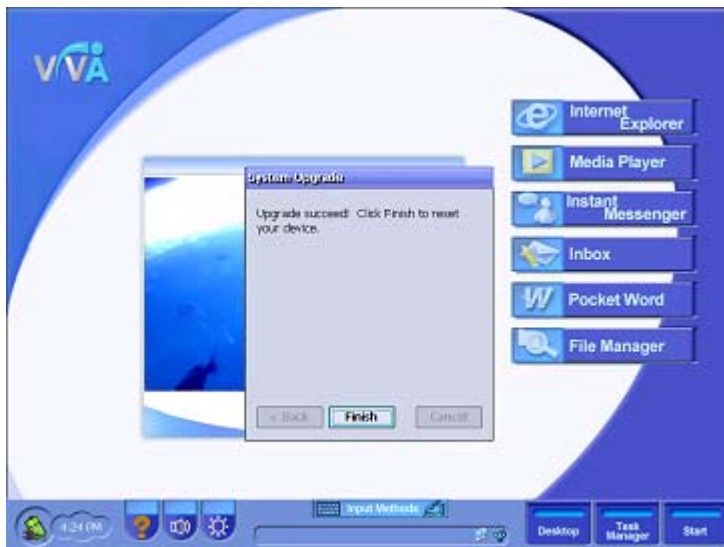
Step 7: If all the information is correct, it will start to copy the system image file (NK.bin) from the host device to the RAM of the TWN-5213CU.



Step 8: Once the downloading onto the RAM process is complete, it will start to copy the system image file (NK.bin) from the RAM to the CompactFlash card of TWN-5213CU.



Step 9: Click "Finish" to complete the system upgrade.



[6.1.2] Upgrading from the CompactFlash Card

When the user chooses to upgrade from the CompactFlash card, the user has to confirm if the CompactFlash card has the system image file (NK.bin). Otherwise, the message “No compact flash card found.” error message will pop-up.




It will replace the system image file (NK.bin) from the Storage Card to the IDE CompactFlash Card, which will boot up the system.



6.2 Customizable Desktop

Using TATUNG ViVa Application Execution Environment (AEE) technology, solution providers can easily customize this environment with different levels. One critical feature of AEE technology is customizable desktop, which is designed by HTML and Jscript Web technologies. It provides the capability for system integrators to reconfigure the system desktop by adding new web-design without rebuild new image.

 **NOTE!** Please check with TATUNG representatives for more information about customization of the application environment.

6.3 Auto-Launching Function

TWN-5213CU provides an opportunity for SI companies to automatically launch any application from the first system boot up. The user should create a new folder and name it as Startup. Then, copy and paste the file(s) he/she wishes to be executed in the startup directory. When the system boots up, it will launch the files automatically.

7. Software Applications.....

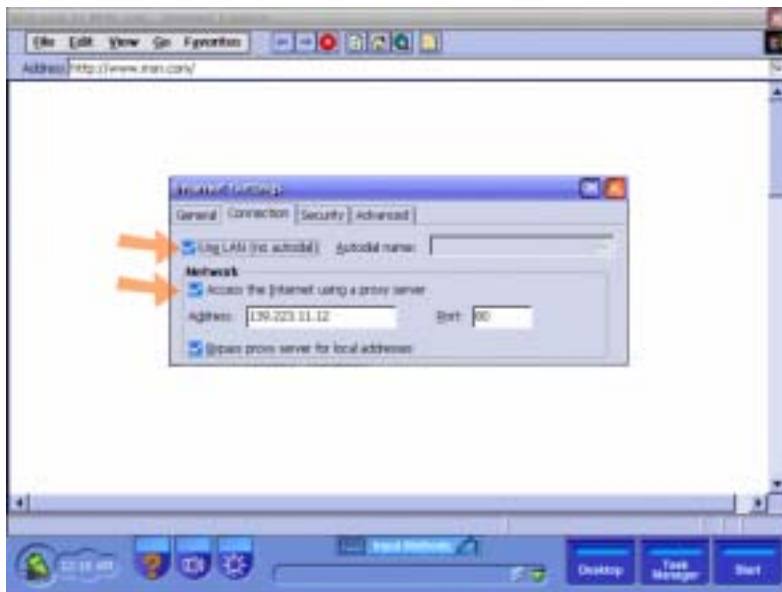
Software applications are available to be purchased from Microsoft and third parties that support the Windows CE.NET operating system. You can download *.cab files for your installation. For details on commercially available software applications, contact your local retailer or visit the Microsoft website at <http://www.microsoft.com>

NOTE! Some applications written for Windows CE 3.0 or Windows CE 2.11 may not be run on the TWN-5213CU. Users should check for compatibility before using the applications.

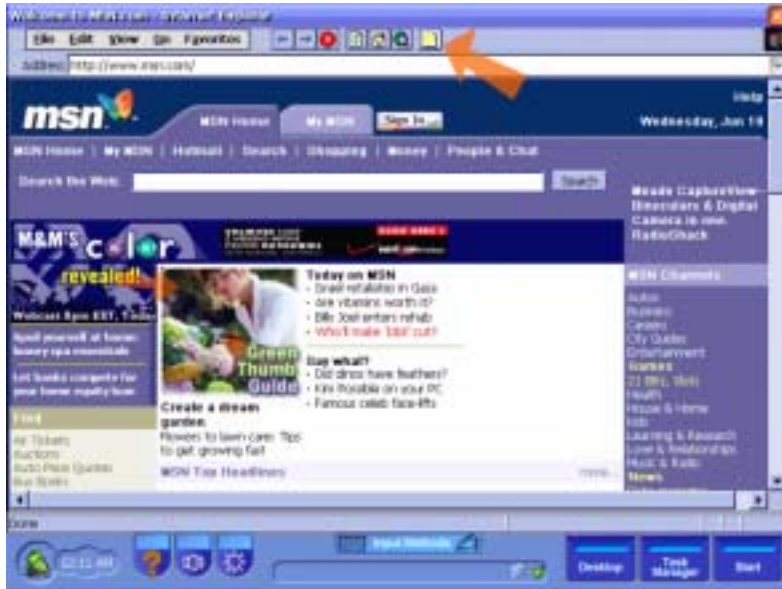
7.1 Internet Explorer

Before starting to use Internet Explorer, users should create the connection with an Internet service provider (ISP) or network. For proxy and LAN setting, please go to View→Internet Options→Connection and check the “Use LAN (no autodial)” and “Access the Internet using a proxy server” checkboxes.


NOTE! Check with your ISP for detailed networking information (IP address, Proxy setting)

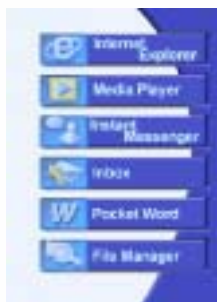


For the Internet Explorer application, we provide a patent-pending scroll locker technology (located on top of the toolbar) to help you go through a large content Web page by dragging the entire screen instead of clicking and dragging the scrollbar. It will be more convenient for users when browsing web pages.




(1) Launch Internet Explorer

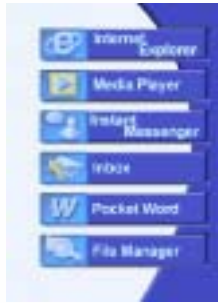
To launch Windows Internet Explorer, tap  and then tap Internet Explorer or click on the icon of Internet Explorer on the desktop.



7.2 Windows Media Player

Using Microsoft's Windows Media Player to play digital audio and video files that are stored on the storage card of the unit or on the network.

To launch Windows Media Player, tap  and then tap Media Player or click the icon of Media Player on the desktop.




7.3 Pocket Word

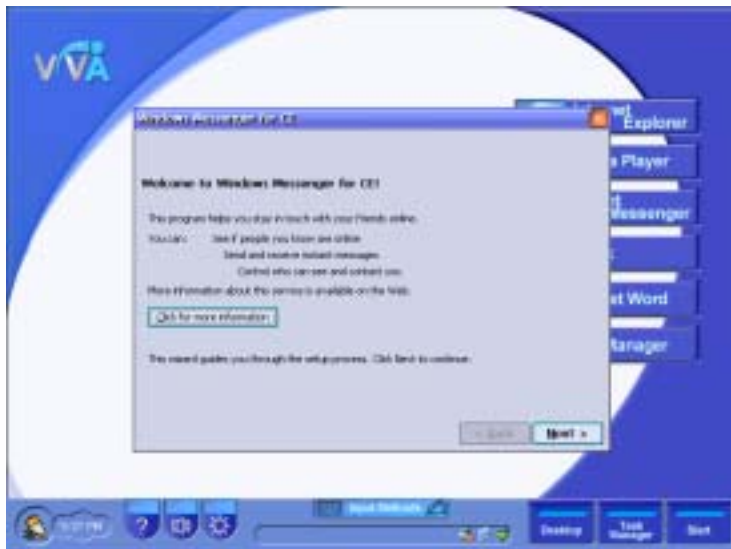
Pocket Word works with Microsoft Word on your desktop computer to give you easy access to copies of your documents. You can create new documents on the TWN-5213CU or you can copy documents from your desktop computer to your device. It is recommended to synchronize documents between your desktop computer and your WebPAD so that you always have the most up-to-date content in both locations.

7.4 MSN Messenger

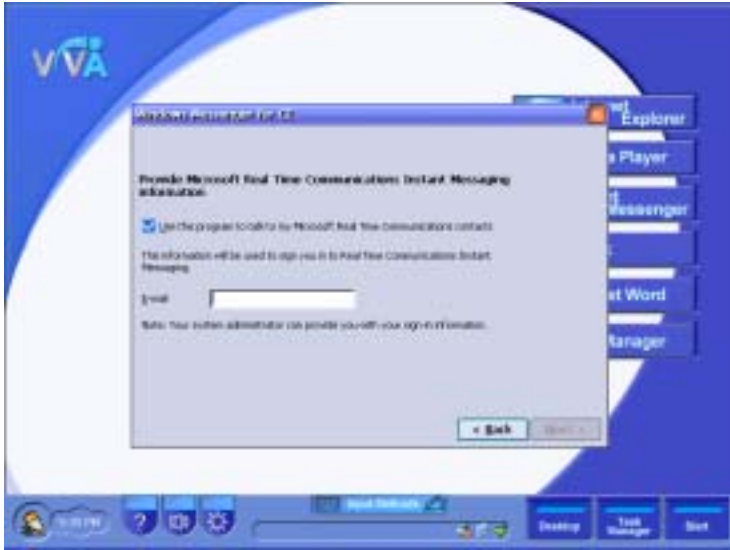
MSN Messenger on the TWN-5213CU is an instant messaging program which allows you know who is online, send and receive message conversation with groups of contacts. To use MSN Messenger, you must first obtain a Microsoft Passport account to use. If you have a Hotmail or MSN account, you already have a Microsoft Passport account.

To launch MSN Messenger, tap  then tap Messenger or click the icon of Instant Messenger on the desktop. The following provides steps to setup your Instant Messenger service:

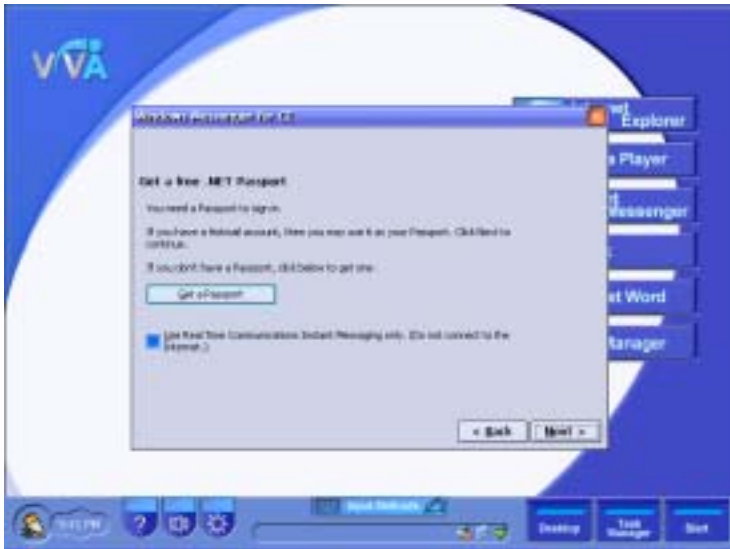
Step 1: Double-click on the Instant Messenger icon on the desktop and click “Next” to setup the Messenger Passport.



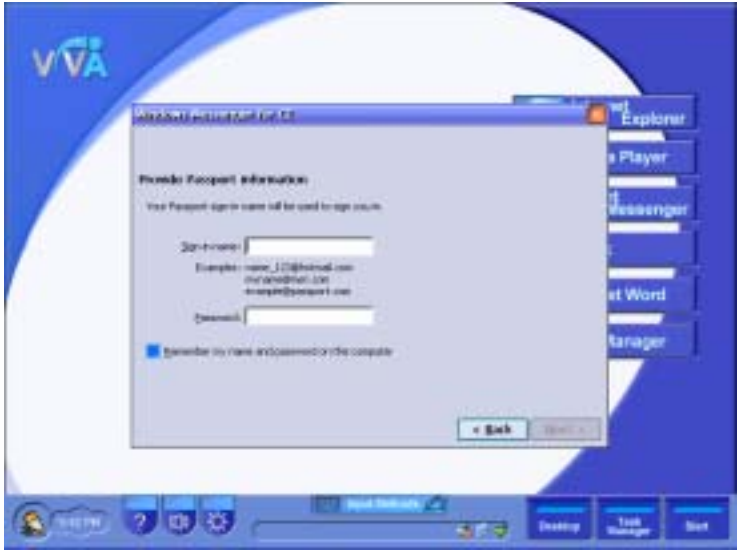
Step 2: Use your Hotmail or MSN account as your passport to register MSN Messenger.



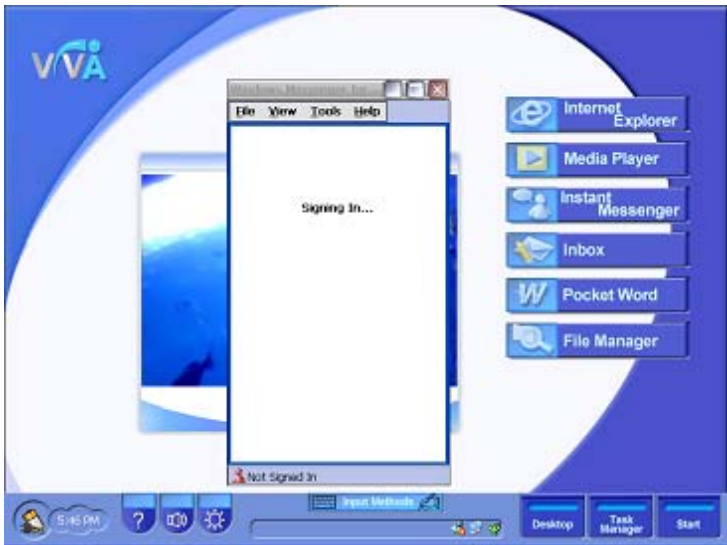
Step 3: Get a .NET Passport



Step 4: Get a .NET Passport by filling in passport name and password.



Step 5: Finish.



7.5 Remote Desktop Connection

Make sure you have a terminal server (Windows 2000 server or Windows XP professional edition) which supports the Terminal Service. Please also make sure TWN-5213CU and the server are both connecting to the access point, and the network is working properly.

❗ NOTE! Current application execution environment is not optimized for RDP connection such as input methods and buttons. Please contact TATUNG representatives for specific version if your application domain is for RDP area.

❗ NOTE! For access point network setup, please refer to Wireless Access Point user guide.



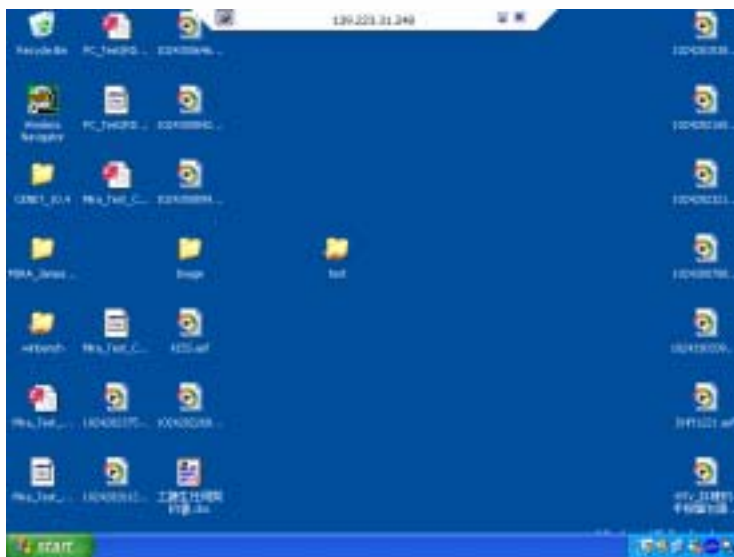
Step 1: Launch Remote Desktop Connection from the Start Menu



Step 2: Fill in the host computer name or IP address, and click "Connect".




Step 3: After pressing the connect button, filling in proper username and password and click “OK” button.




Step 4: During the RDP session, the user can utilize all the applications on the device host from WebPAD.

7.6 Input Method

In addition to external USB keyboard and mouse input methods, TWN-5213CU also provides other methods of data input, so users can choose and change the input method at any time.


To access the SoftKeyboard, click on the  input method icon from the center of the system tray. Once the input method is selected, the user can touch the relevant key as they need.

 **NOTE!** The TWN-5213CU integrates SoftKeyboard and Handwriting Pad so that the user may use both input methods simultaneously.




7.7 Utilities


Tatung WebPAD comes with a variety of utilities which will help the users to have better and more convenient system configurations based on their requirements.

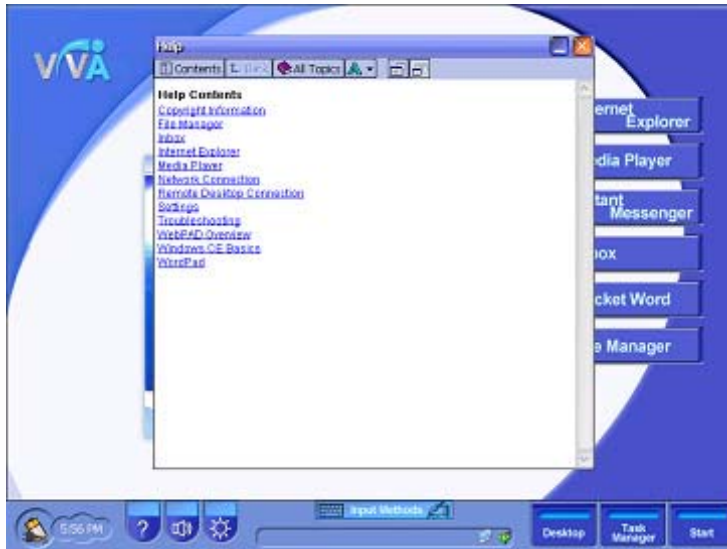
Click on the  Brightness icon on the left system tray to adjust the brightness of the TFT screen.





Click on the  Volume icon on the left system tray to adjust the volume of WebPAD speaker.

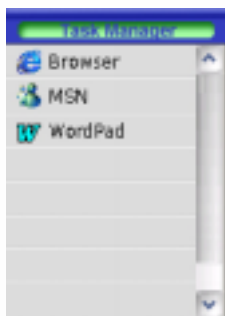



Click on the  Question Mark icon on the left system tray to bring up WebPAD help instructions.

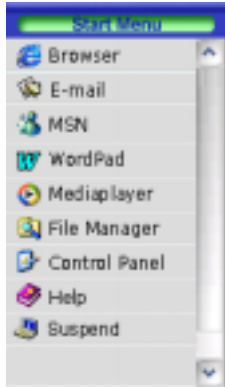



Click on the  Battery and Time icon on the left system tray to display the remaining battery power. The time displayed in the icon can only be changed from the Control Panel.

Click on the  Task Manager icon on the right system tray and it will launch the Task Manager, which allows the user to switch between open applications.



Click on the  Start icon on the right system tray to launch the Start Menu.



Click on the  Desktop icon on the right system tray to switch between the desktop and current display.

8. Restrictions.....

This section describes the current status of firmware and OS image on this platform and it is subject to change without notice.

1. The image was built with Windows CE 4.0 RTM and with TATUNG ViVa 1.0 application execution environment.
2. Direct boot is supported and the image is loaded only from IDE CompactFlash Card and easily upgrade the OS image from host PC or external storage card.
3. A fully charged battery can last for two hours under full operation.
4. 802.11b WLAN coverage limitation: Outdoor – 90 meters (LOS); Indoor office environment – 35 meters.
5. The average image upgrade (CF card upgrade) takes approximately 10 minutes; FTP upgrade takes 20 minutes. When performing an image upgrade, please make sure that the WebPAD is using AC power at all times.
6. We do not currently have voice-recording feature.
7. When the user utilizes Ad hoc mode to connect to the Internet, make sure the name of the NIC does not exceed 10 characters.
8. During the time the system resumes from idle mode, USB mouse and keyboard events are not supported. Currently, the user can only resume operation from idle mode through the touch screen and hardware buttons.
9. Playing of video clips on Media Player will hinder overall handwriting recognition performance.
10. When the user quickly plugs and unplugs the PCMCIA storage card repeatedly, sometimes the storage card becomes undetectable. Close File Manager, remove and reinsert the storage card will resolve the problem.
11. When pushing the power button to resume the system from suspend mode, there is a 7 second lag time, so the user will not be able to immediately suspend the system again via the power button.
12. The system supports Java plug-in, but for Java-intensive webpages, longer time will be needed to download the webpage.
13. When the system is in RDP mode, the user will experience less than optimal audio and video performance.
14. When the system is in RDP mode, the function of hardware button mapping will not work properly.
15. The browser does not support XML, Flash, or special JavaScript authored webpages. Therefore, when viewing such webpages, the contents will not be displayed correctly.
16. While the system is accessing the PCMCIA storage card, abrupt removal will damage the PCMCIA card. Please make sure all data transactions are fully completed or stopped before removing the PCMCIA card.

9. Troubleshooting

When experiencing operational problems, please check the following guide for system troubleshooting; if the problems remain unsolved, contacting your service provider for system support.

Battery Operation Problems	Action
Main battery is low.	<ul style="list-style-type: none"> ▪ Replace or recharge the battery as soon as possible. ▪ Plug the AC-DC adapter in and continue to use the TWN-5213CU. ▪ When main battery is discharged, the RAM data will be preserved by the backup battery. If the backup battery is low, the data will be totally lost. Please backup the data regularly.
Battery appear to be damaged or has reached the end of its service life.	<ul style="list-style-type: none"> ▪ Purchase a new battery.
Auto turn off TWN-5213CU	<ul style="list-style-type: none"> ▪ Check to see if the battery power is too low or out of power. ▪ Check to see if the system is in the suspend mode. ▪ Use the stylus to tap on the screen to check if the display activates. ▪ Replace a charged battery or plug in the AC-DC adapter to charge the battery.
TWN-5213CU cannot be turned on when not connected to AC power.	<ul style="list-style-type: none"> ▪ Make sure the battery pack is inserted. ▪ Make sure the battery switch is in the lock position. ▪ The battery power may be too low to run your WebPAD, try to connect to AC power.
Display Related Problems	Action
Screen appear to be dark	<ul style="list-style-type: none"> ▪ Prolonged exposure to direct sunlight may cause your TWN-5213CU screen to temporarily darken. This is normal for LCD screens and is not permanent.
Screen appear to be blank	<ul style="list-style-type: none"> ▪ Adjust the LCD display brightness by using the brightness control or restart the TWN-5213CU.

System Operation Problems	Action
The touch screen is out of calibration.	<ul style="list-style-type: none"> ▪ Adjust the touch screen to respond more accurately to screen taps by running the recalibration from control panel/stylus.
TWN-5213CU locks up or runs slowly.	<ul style="list-style-type: none"> ▪ Close applications that are not in use. ▪ Try to reset the system by switching power off and on. ▪ If resetting the unit does not solve the problem, perform a cold reset for memory initialization.
The touch screen is damaged.	<ul style="list-style-type: none"> ▪ Contact your service provider.
TWN-5213CU runs out of memory	<ul style="list-style-type: none"> ▪ To allocate the TWN-5213CU storage and program memory management by doing a cold boot. (memory initialization)
To return TWN-5213CU to the factory setting	<ul style="list-style-type: none"> ▪ To perform the TWN-5213CU a cold boot from control panel device reset applet. ▪ To remove the main and backup batteries, wait for 5 minutes, and then reinsert them.
To turn off sounds of TWN-5213CU	<ul style="list-style-type: none"> ▪ The TWN-5213CU produces sounds, such as warnings, appointments, screen taps, and hardware-button presses. ▪ Try to optimize the battery life by running the setting applet and disable the volume and notifications functions.
Network Connection Problem	Action
Network connection problems	<ul style="list-style-type: none"> ▪ Make sure the access point is firmly seated and connected to proper network jack while performing network infrastructure mode. ▪ Make sure the user has provided necessary server information. ▪ Make sure the Wired Equivalent Privacy (WEP), a security protocol for WLAN, is enabled and the keys are accepted on both client and host devices while exercising ad hoc mode (peer-to-peer connection). ▪ The user can judge the system wireless status by checking the RF indicator. ▪ Make sure you have an Ethernet card that is compatible with the TWN-5213CU while establishing wired network connection.

10. Hardware Compatibility List.....

Hardware Type	Company Name	Product Name	Compatibility
Input / Keyboard	Generic keyboard	Generic keyboard [USB]	compatible
	Genius	Genius keyboard [USB]	compatible
	Microsoft	Internet Keyboard Pro [USB]	compatible
	Microsoft	Natural Keyboard [USB]	compatible
	Microsoft	Natural Keyboard Pro [USB]	compatible
Input / Pointing Drawing	Microsoft	IntelliMouse [USB]	compatible
	Logitech	Wheel Mouse Optical [USB]	compatible
Modem / Analog	Pretec	CompactModem 56K [CF]	compatible
Miscellaneous / Serial Adapter	Socket	Serial I/O PC Card [PCMCIA]	compatible
Miscellaneous/PCMCIA Add-on Adapter	Sandisk	CompactFlash PC Card Adapter [PCMCIA]	compatible
	Pretec	CompactFlash PC Card Adapter [PCMCIA]	compatible
	IBM	Microdriver PC Card Adapter [PCMCIA]	compatible
Network / Ethernet	AboCom	CompactFlash Size Ethernet LAN Card [CF]	compatible
	Billionton	10/100 Base Fast Ethernet [PCMCIA]	compatible
Network / Wireless	Cisco Systems	340 Series Wireless LAN Adapter [PCMCIA]	compatible
	Cisco Systems	350 Series Wireless LAN Adapter [PCMCIA]	compatible
	Bromax	11Mbps Wireless LAN Module [PCMCIA]	compatible
Storage / Flash Memory	Hagiwara	CompactFlash Card [CF]	compatible
	SanDisk	CF Series CF Card [CF]	compatible

11. Support and Service

Website

You can obtain product information of Tatung WebPAD from our website (<http://www.tatungwebpad.com>).

This online service is provided free of charge; you pay only for telephone charges and Internet service fees.

12. Warranty

Warranty

Important: This is your hardware product warranty statement.

Read it carefully.

Warranty terms may be different in your country; contact Authorized Tatung Sales and Service office for detail product warranty information.

One-Year Limited Hardware Warranty

Tatung warrants this hardware product, against defects in material and workmanship for a period of one year from receipt by the original end-user purchaser.

If Tatung receives notice of the above-defined defects during the warranty period, Tatung will either, at its option, repair or replace products that prove to be defective.

Should Tatung be unable to repair or replace the product within a reasonable amount of time, the customer's alternate exclusive remedy shall be a refund of the purchase price upon return of the product.

Limitation of Warranty

The above warranty shall not apply to defects resulting from: misuses; unauthorized modification; opening for any reason except to perform an official upgrade using an proper tools/kit; operation or storage outside the environmental specifications for the product; the battery, or damage caused by this battery; in-transit damage; improper maintenance; physical damage to the unit, such as a cracked or broken screen or defect resulting from use of improper software, accessories, media, supplies, consumables, or such items not designed for use with the product.

Tatung makes no other express warranty, whether written or oral, with respect to this product. Any implied warranty of merchantability or fitness for a particular purpose is limited to the one-year duration of this written warranty.

Some customers do not have limitations on how long an implied warranty lasts, so the above limitation or exclusion may not apply to you. This warranty gives your specific legal rights, and you may also have other rights that vary from customer to customer.



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Tatung Software Product Limited Warranty

Important: This Tatung Software Limited Warranty shall cover all software that is provided to you, the customer, as part of the Tatung product, including any operation system software. Any third party software supplier's warranty terms that may be found on-line or in any documentation or other materials contained in the product packaging shall supersede the Tatung Software Product Limited Warranty with regard to that third party software.

Ninety-Day Limited Software Warranty

Tatung warrants for a period of 90 days from the date of purchase that the software product will execute its programming instructions when all files are properly installed. Tatung does not warrant that the software will be uninterrupted or error free. In the event that this software product fails to execute its programming instructions during the warranty period, your remedy shall be replacement or refund only. Return the media to Tatung for replacement. Should Tatung be unable to replace the media within a reasonable amount of time, Tatung shall refund the purchase price upon return of the product and all copies.

Removable Media (If Supplied)

Tatung warrants the removable media, if supplied, upon which this product is recorded to be free from defects in material and workmanship under normal use for a period of 90 days from the date of purchase. In the event the media proves to be defective during the warranty period, your remedy shall be replacement or refund only. Return the media to Tatung for replacement. Should Tatung be unable to replace the media within a reasonable amount of time, Tatung shall refund the purchase price upon return of the product and



destruction of all other non-removable media copies of the software product.

Notice of Warranty Claims

You must notify Tatung in writing of any warranty claim not later than 30 days after the expiration of the warranty period.

Limitation of Warranty

Tatung makes no other express warranty, whether written or oral, with respect to this product.

Any implied warranty of merchantability of fitness for a particular purpose is limited to the 90-day duration of this written warranty.

Limitation of Liability and Remedies

The Remedies provided above are your sole and exclusive remedies. In no event shall Tatung be liable for any direct, indirect, special, incidental, or consequential damages (including lost profit), whether based on warranty, contract, tort, or any other legal theory.

In no case shall Tatung's liability exceed the purchase price for the software and/or product. The limitations set forth above will apply regardless of whether you accept the software.



13. Regulatory and Safety Notices

Declaration of Conformity

Model Number: TWN-5213CU

Trade Name: TATUNG CO.

Responsible Party: TATUNG CO.

Address: 22 Chung-Shan N. Rd. Sec. 3, Taipei, Taiwan 104, R.O.C.






Telephone number: + 886-2-2586-7714

This device complies with the following Certifications,

UL 60950

FCC Part 15

TUV-GSCE

 WebPAD Model: TWN-5213CU Input: DC 16V $\overline{\text{---}}$ 2.5A	 TUV Rheinland	 geprüfte Sicherheit	 FCC CE	 C LISTED ITE E132236 US
<p>This device complies with part15 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. Made In Taiwan</p>				



13.1 Federal Communication Commission Interference Statement

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

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

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

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.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.