User Manual

Bedside Terminal Hardware System



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Safety

IMPORTANT SAFETY INSTRUCTIONS

- 1. To disconnect the machine from the electrial power supply, turn off the power switch and remove the power cord plug from the wall socket. The wall socket must be easily accessible and in close proximity to the machine.
- 2. Read these instructions carefully. Save these instructions for future reference.
- 3. Follow all warnings and instructions marked on the product.
- 4. Do not use this product near water.
- 5. Do not place this product on an unstable cart,stand,or table.The product may fall, causing serious damage to the product.

- 6. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
- 7. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- 8. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
- 9. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

CE MARK

This device complies with the requirements of the EEC directive 2004/108/EC with regard to "Electromagnetic compatibility" and 2006/95/EC "Low Voltage Directive".

FCC

UL

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.
- (2) This device must accept any interference received, including interference that may cause undesired operation.



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

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help

CAUTION ON LITHIUM BATTERIES

There is a danger of explosion if the battery is replaced incorrectly. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.



Battery Caution

Risk of explosion if battery is replaced by an incorrectly type. Dispose of used battery according to the local disposal instructions.



Safety Caution

Note: To comply with IEC60950-1 Clause 2.5 (limited power sources, L.P.S) related legislation, peripherals shall be 4.7.3.2 "Materials for fire enclosure" compliant.

4.7.3.2 Materials for fire enclosures

For MOVABLE EQUIPMENT having a total mass not exceeding 18kg.the material of a FIRE ENCLOSURE, in the thinnest significant wall thickness used, shall be of V-1 CLASS MATERIAL or shall pass the test of Clause A.2.

For MOVABLE EQUIPMENT having a total mass exceeding 18kg and for all STATIONARY EQUIPMENT, the material of a FIRE

ENCLOSURE, in the thinnest significant wall thickness used, shall be of 5VB CLASS MATERIAL or shall pass the test of Clause A.1

LEGISLATION AND WEEE SYMBOL

2002/96/EC Waste Electrical and Electronic Equipment Directive on the treatment, collection, recycling and disposal of electric and electronic devices and their components.



The crossed dustbin symbol on the device means that it should not be disposed of with other household wastes at the end of its working life. Instead, the device should be taken to the waste collection centers for activation of the treatment, collection, recycling and disposal procedure.

To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract.

This product should not be mixed with other commercial wastes for disposal.

Revision History

Changes to the original user manual are listed below:

Version	Date	Description
1.0	June 2011	Initial release

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Item Checklist

1

Take the system unit out of the carton. Remove the unit from the carton by holding it by the foam inserts. The following contents should be found in the carton:

1-1 Standard Items



Driver CD



Manual



Power Adapter



Power Cable





Phone Module



2-1 Front View



Number	Description
1	Build-in camera
2	Build-in Microphone
3	TV Key pad (power, volume, channel, and nurse call button)
4	Smart card reader slot
5	Phone set holder

2-2 Rear View



Number	Description
1	Speakers
2	VESA Holes
3	Rear I/O (from left to right: RJ48, USBx2, DC-IN, Display port , LAN Connector)
4	HDD door
5	MSR Slot (Option)

2-3 I/O View



Number	Description
1	LAN (RJ45)
2	USB x 2
3	SCSI Connector
4	USB x 1
5	Phone Jack (RJ11)
6	Audio Line-out
7	Audio Line-in
8	Audio MIC-IN
9	RFID sensor

3 Driver Installation

3-1 Driver List

C43 Driver List

Folder/File	File Description
<cd>:\ K936_C43.htm</cd>	Driver List
<cd>:\COMMON\INTEL\Chipset\i9xx</cd>	Chipset Driver
<cd>:\COMMON\INTEL\VGA\GMA3150</cd>	VGA Driver
<cd>:\COMMON\Audio\Realtek_HD_Codec-AEC_enable</cd>	Audio driver with AEC enable
<cd>:\COMMON\ POS_Touch</cd>	POSTouch Driver
<cd>:\COMMON\Lan_driver\Intel</cd>	10/100/1000Mb LAN Driver

-The following procedures are for Windows 2000/XP, other platforms are similar.

3-2 Chipset Driver Installation

Function	OS	Note
Chipset	Windows	Installation Guide
Intel SATA AHCI	Windows XP driver	Vser manual
	WinXP	Installation Guide
	WinXP (64bit)	
	Vista	
VGA	Vista (64bit)	
	Win7	
	Win7 (64bit)	
	Linux	
		2



- a. Click "Windows" in the Driver List menu of K936 C43 and then doule-click "v9.1.1"
- b. Double-click "infinsts911_autol.exe" on the My computer window.







d. Click the "Yes" button on the License Agreement window.



e. Click the "Next" button on the Readme Information window.



f. Click the "Finish" button and restart your system.

3-3 VGA Driver Installation

Function	OS	Note
<u>Chipset</u>	Windows	Installation Guide
Intel SATA AHCI	Windows XP driver	🔀 <u>User manual</u>
	WinXP	Kanaliation Guide
	WinXP (64bit)	
	<u>Vista</u>	
VGA	<u>Vista (64bit)</u>	
	Win7	
	Win7 (64bit)	
	Linux	
· · · · · ·	r	1



- a. Click "WinXP" of "VGA" section in the Driver List menu and then double-click "v14.37.50.4.5260"
- b. Double-click "winxp.exe" on the My computer window..



c. Click the "Next" button on the Intel(R) Chipset Graphics Driver Software-Install Shield(R) Wizard dialog.

Intel® Graphics Media Accelerator Driver	
Intel® Graphics Media Accelerator Driver	(intel)
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Welcome to the Setup Program	
This setup program will install the Intel® Graphics Media Accelerator Driver onto is strongly recommended that you exit all programs before continuing. Click Nex	this computer. It t to continue.
$ec{ec{ec{v}}}$ Automatically run WinSAT and enable the Windows Aero desktop theme (if s	upported).
< Back	<u>C</u> ancel
Intel® Insta	allation Framework

d. Click the "Next" button on the Intel(R) Graphics Media Accelerator Driver dialog.



 e. Click the "Yes" button on the Intel(R) Graphics Media Accelerator Driver dialog.



g. Click "Next" button on the Intel(R) Graphics Media Accelerator Driver dialog.



 f. Click "Next" button on the Intel(R) Graphics Media Accelerator Driver dialog.



h. Select "Yes, I want to restart my computer now" and click the "Finish" button on the Intel(R) Graphics Media Accelerator Driver dialog.

For WinXP and POSReady 2009 upgrade

VGA Opgrade		
• <u>VGA</u>	WinXP	For WinXP & POSReady 2009

a. Click "WinXP" of "VGA" section in the Driver List menu.



b. Click the "Next" button on the Software Update Installation Wizard dialog.



c. Click "I Agree" and click "Next" button on the Software Update Installation Wizard dialog.

Ð	Completing the Security Update for Windows XP (KB2506223) Installation Wizard	
	You have successfully completed the KB2506223 Setup Wizard.	
	To apply the changes, the wizard has to restart Windows. To restart Windows automatically, click Finish. If you want to restart later, select the Do not restart now check box, and then click Finish.	
	C Do not restart now	
	K Back Finish Cancel	

d. Click the "Finish" button on the Software Update Installation Wizard dialog to restart your system.

3-4 Audio Driver Installation

Audio Realtek HD Codec with AEC enable	 Default enable AEC function <u>User's manual</u>
--	---

a. Click "Windows" of the "Audio" section in the Driver List menu.



b. Double-click R254+AEC" on the My Computer window.



c. Double-click "Setup.exe" on the My Computer window.



d. Click "Next" button on the Realtek Audio Setup window.



e. Click "Finish" button on the Realtek Audio Setup window.

3-5 10/100/1000Mb LAN Driver Installation

1000Mb LAN	DOS	
	<u>Windows</u>	
Intel	Windows(64bit)	
	<u>Linux</u>	
V15.6		

a. In the "intel" section, click on "Windows" and click on "Alpha"

b. Double-click "v15.6"



nstallShield Wizard	
	Maintenance Complete InstallShield Wizard has finished performing maintenance operations on RTLSetup for Realtek. RTL8139/810x Family NIC 3.00.
	Kalack Finish Cancel

c. Double-click Setup.exe

d. Click the Finish button on the Maintenance Complete window.



e. Click the OK button and restart your system.

3-6 POSTouch Driver Installation

Touch Screen	DOS	
POS Touch	Windows	Installation Guide
	Linux	Installation Guide

a. In the "Touch Screen auto..." section, click "Windows".



c. "FT Touch Auto Install" program will detect what touch type and interface being installed on the system.



e. Select "I agree ... " and click "Next".



b. Click "Install Touch Driver" on "FT Touch Auto Install V1.0.4.1" window to detect the touch type in your system.

	Welcome Welcome to the initialler for Touch/Utility 3.3.1.37 · FH_WHQI It is strongly recommended that you exit all Windows program before continuing with this initialiation. If you have any other programs running, please click Cancel, close the programs, and run this setup again. Dtherwise, click Next to continue.
--	--

d. Click "Next".



f. Select the installation folder for the touch utility driver and click "Next".



g. Select the shortcut folder for the touch utility driver and click "Next".



h. Click "Next".

eady to Insta	
rou are now re-	ady to install TouchUtility 3.3.1.30- FH
he installer no	w has enough information to install TouchUtility on your computer.
The following se	attings will be used:
nstall folder:	C:\Program Files\TouchUtility
Shortcut folder:	TouchUtility
Please click Ne	xt to proceed with the installation.

i. Click "Next".



j. The computer is installing the touch driver



k. Click "Continue Anyway" button.



I. The serial ports are scanned for a touch device. The Touch panel is on COM5.



m. Click "Finish".



n. Click "OK" to restart the computer and finish the touch utility installation.



o. The computer has restarted. Click on the "Start" button, select "Programs", then select "Touchutility".

POSTouch [Version: 3.3.1.30]	
General Settings Parameter Tools Device	ź. Exit
POSTOURT	
	5
Touch Utility	
	18.

p. Select the Device tab.

POSTouch	[Version : 3.3.1.30]	
General	Settings Parameter Tools Device Exit	
Active:	RS232_DEVICE0 Firmware Version: A32111 Driver Version: 32.2.3 API Version: 32.2.3	
	No Device Dispaty Numb RS232_DEVICE0 No. #1	
	Image: Spoints Image: Spoints <th image:<="" td=""></th>	

q. Click on the 3 points or the 9 points calibration button.



r. Follow the instructions on the screen to do the calibration of the touch panel



s. Touch anywhere on the screen to save the calibration.

4 System Assembly

4-1 HDD Replacement



- Find the HDD door at the rear right side of the system and loosen the screws(x2)
- b. To replace the HDD, push the HDD outwards as picture shown.

5 Peripheral Installation

5-1 Phone Set Installation



- a. Loosen the screws(x2) to open the cable cover.
- b. Slide the phone module into the phone set holder and connect the phone cable to the connector on the phone module.
- c. Connect the other end of the phone cable to the connector on the system.

5-2 Arm Installation



- a. Connect the cables to the system
- b. Tighten the screws(monitor screwx4)

Note: Only use concrete walls to fix the Arm (and wall box) to.

5-3 MSR Installation



- a. Connect the MSR cable to connector to the on system side.
- b. Fasten screws(x2) to secure the module.

6 Specification

Model	K936	
Motherboard	C43 V1.0	
CPU	Intel pineview D525 1.8G L2 1M, Dual core	
Core Logic	CPU with Graphic built-in + ICH 8M	
System Memory	2 x DDR3 DIMM up to 4GB FSB800Mhz	
Graphic Memory	Intel GMA 3150 share system memory 256MB	
LAN controller / phy	Intel WG82583V / Intel WG82567V	
Audio controller	Realtek ALC 662-GR HD codec	
I/O controller	Winbond W83627UHG	
BIOS	AMI	
LVDS Interface	Mstar TSUMU18ER-1	
Touch controller	Idealtek local touch (RS232)	
Touch	True flat- 5 wire-RS232 / DMR-USB	
Watch Dog Timer	Hardware WDT	
2nd VGA	Display port connector	
Display size	15.6"	
Resolution	1366 X768	
Brightness	250 nits	
Storage		
HDD	1x 2.5" SATA HDD, pSSD	
Expansion		
Mini PCIe	2 x PCI-e full size slot for video decoder card / RCA module	
Buttom I / O		
Power button	1	
Handset	1xRJ11(4 pin)	
Remote	1x SCSI 26pin,	
USB	3 (USB 2.0)	
LAN (2nd LAN)	1xRJ45 (with 100/1000,LED indicator)	
Reset button	1, button can be pressed by probe	
MIC-in	1(Auto-detect, GPIO), in external IO	
Line-out	2(Auto-detect, GPIO), in external IO	
Vertical I / O		
Power	DC Jack	
USB	2 (USB 2.0)	
LAN	1 x RJ 45 (with 100/1000)	
2nd Display	1 x Display port	
Nurse call	1 x RJ 48	
Membrane		

Power button	1xpower button(GPIO)	
Channel adjustment	1xChannel up, 1xChanngel down(GPIO)	
Volume	1xvolume up, 1xvolume down(GPIO)	
Nurse call	1x Nurse call (GPIO)	
Certificate		
EMC & Safety	FCC Class B, CE, LVD / UL 60950 / UL 60601	
Environment		
Operating Temperature	0°C ~ 35°C (32°F ~ 104°F)	
Storage Temperature	-20°C ~ 55°C (-4°F ~ 140°F)	
Operating Humidity	20% - 80% RH non condensing	
Storage Humidity	20% - 85% RH non condensing	
Weight	4 kg (without handset / cradle)	
Communication & peripherals		
Build in Microphone	In left side of Web cam with GPIO	
TV Tuner (Analog RCA,optional)	RCA connector	
Smart IC card reader	Comply with ISO 7816-1,2,3,T=1 and T=0 protocol	
RFID module	Internal USB connection	
MSR (optional)	3 track (PS2)	
	Handset module	
	Cradle, mechanical switch	
Webcam	1.3M web cam(USB) with web cam door	
Bedside light	blue color	
Video decoder card	mini PCIe video decorder card	
2D scanner(Optional)	2D scanner	
Operating System		
	Windows® XP Professional, Windows Embedded POSReady	
OS Support	2009, Windows XP Embedded, Windows XP Professional	
	for Embedded, Windows 7, Linux	

7 Jumper Settings

7-1 C43 V1.0 motherboard

7-1-1 Motherboard Layout



7-1-2 Connectors & Functions

Connector	Function
CN3	USB Port For Web Cam
CN4	Speaker & MIC
CN5	Cradle
CN6	Speaker
CN7	Audio Jack (Line out & MIC)
CN9	Inverter
CN10	Build-In MIC
CN12	Nurse Call Button
CN14	Membrane
CN15	30P All-In-One (Membrane, 2D scanner, RFID, Smart card, Audio
0147	
CN20	
CN21	
CN22	
CN23	PS/2 Keyboard
CN24	
CN25	
CIN26	
CN20	
CN29/30	
CN32/25	
CN32/35	
CN33	
CN34 CN26	
CN27	
CN30	LISB Dort For Smort Cord
CN39	
D 141 0	
RJ45_3	

RJ45_4	LAN1
RJ48_3	Nurse Call
SATA1/2	SATA
SCSI_3	Remote Control
USB3	USB3
USB4	USB1, USB2 of HUB
USB5	USB1, USB2
JP3	Touch
JP4	Inverter Selection
JP6	LCD ID Setting
JP7	MCU Power Button
JP8	Power Mode Setting
JP9	MCU Mode Setting
JP10	System Reset
JP11	CMOS Operation Mode

7-1-3 Jumper Setting

Inverter Selection

Function	JP4 (1-2) (3-4) (5-6)
▲CCFL	1 3 5 0 0 2 4 6
LED	1 3 5 0 0 2 4 6

System Indicator

Function	JP5
	(1-2) (3-4) (5-6) (7-8)
▲ Disable	1 3 5 7
Enable	1 3 5 7 0 0 0 0 2 4 6 8

MCU Power Button

Function	JP7 (1-2)
Disable	1 □ 2
▲ Enable	1 • 2

Power Mode Setting

Function	JP8 (1-2)
ATX Power	1 □ 2
▲AT Power	1 • 2

MCU Mode Setting

Function	JP9 (1-2)
▲Normal	1 □ 2
ISP Debug	1 - 2

System Reset

Function	JP10 (1-2)
▲System Normal	1 □ 2
System Reset	1 • 2

CMOS Operation Mode

Function	JP11 (1-2)
▲CMOS Normal	1 □ 2
CMOS Reset	1 2

▲ = Manufacturer Default Setting

Note:





SHORT