User's Manual EZPPC70-2B-C1G EZPOS70-2B-C1G



Copyrights

©2008 EBN Technology Corp. All rights reserved. The information in this document is subject to change without prior notice in order to improve reliability, design and function and does not represent a commitment on the part of the manufacturer.

This document contains proprietary information protected by copyright. All rights are reserved. No part of this manual may be reproduced by any mechanical, electronic, or other means in any form without prior written permission of the manufacturer.

All trademarks are property of their respective owners

Liability Disclaimer

In no event will the manufacturer be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use the product or documentation, even if advised of the possibility of such damages.

Regulatory Information FCC Notices



This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the Federal Communications Commission (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:

• Increase the separation between the equipment and the 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 or television technician for help.

This device complies with Part 15 (A) of the FCC Rules. Operation is subject to the following two conditions:

1) this device may not cause harmful interference and

 this device must accept any interference received, including interference that may cause undesired operation.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS DEVICE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE DEVICE.

CE Notice

This device complies with **EMC Directive 2004/108/EC** issued by the Commission of the European Community.

Copyrights

WEEE Notice



The WEEE mark applies only to countries within the European Union (EU) and Norway. This appliance is labeled in accordance with European Directive 2002/96/EC concerning waste electrical and electronic equipment (WEEE). The Directive determines the framework for the return and recycling of used appliances as applicable throughout the European Union. This label is applied to various products to indicate that the product is not to be thrown away, but rather reclaimed upon end of life per this Directive.

Contents

Copyrightsi
Liability Disclaimeri
Regulatory Informationi
FCC Noticesi
CE Noticei
WEEE Noticeii
Contentsiii
1. Features:
2. Unpacking the Box
3. Hardware Setup
3.1. Quick Tour
Front View3
Front View4
Back Panel I/O 4
3.2. Peripherals Installation5
Power Adapter5
USB Mouse, USB Keyboard and USB ODD5
LAN Cable5
Cash Drawer5
D-Sub 9 Cable6
MSR Installation 6
3.3. Adjust View Angle (EZPOS Series only)8
3.4. Wall Mount Kit installation (EZPC Series only)9
3.5. Turn on the Device 10
4. Driver and Utility Installation11
4.1. Before the installation11
4.2. Chipset Software Installation11
4.3. VGA Driver Installation 13
4.4. LAN Driver Installation15
4.5. Audio Driver Installation
4.6. Wireless LAN Driver Installation17
5. TouchKit Utility Quick Guide
5.1. Launch Touchscreen V7.3.COM19
5.2. User interface
5.3. Serial Port Information
5.4. Virtual Button Settings
Virtual Button Option
Right Button Function21
Contents

Right Button Automatic Mode	
5.5. Feedback Sound	
Feedback Sound Option	22
Tone	
Duration	
5.6. Screen Calibration	
4 points, mode 1	
4 points, mode 2	
How to Use Event Selector	25
6. I/O Definition	26
6.1. Power Connector	
6.2. Serial Port	
6.3. COM	
6.4. Cash Drawer	
7. Specification	29
-	

Features

- Intel® low power consumption and high performance technology
- Durable ultra-slim & robust die-casting aluminum chassis
- 4 x USB 2.0, 4 x RS-232, Gigabit Ethernet port (RJ-45), cash drawer port (RJ-11) and 1 X parallel port equipped
- Video Module (Optional)
- Wireless LAN supported
- Microsoft Windows series operation system (Windows XP Home Edition, Windows XP Professional Edition and WEPOS) and open-source Linux operation system supported.

Unpacking the Box

Verify that the box contains the following items.



1	Device X 1
2	Wall mount Kit x 1 (EZPPC series only)
3	Power Adaptor X 1
4	Power Cord X 1
5	Driver and utility CD X 1
6	Base Unit (EZPOS series only)
7	D-Sub 9 cable

Hardware Setup

3.1. Quick Tour

Front View



LED Indicator



Back View



Note: For details of I/O ports on the back panel, please refer to <u>Chapter</u> 6 - I/O Definition.

3.2. Peripherals Installation

Power Adapter

Connect the 4-pin output jack of the adapter to the **DC 19V** jack on the back panel of the device.



USB Mouse, USB Keyboard and USB ODD

Connect your USB Mouse, USB Keyboard and USB ODD to **USB** ports on the back panel of the device.



LAN Cable

Connect one end of RJ-45 LAN cable to the **LAN** port on the back panel of the device, another end to your internet device.



Cash Drawer Connect one end of RJ-11 cable to the **Cash Drawer** port on the back panel of the device, another end to your cash drawer.



D-Sub 9 Cable

1. Connect the female connector of the D-Sub 9 cable to the **COM** port on the back panel of the device in the correct orient.



MSR Installation

6

1. Remove the two plastic covers from the device as shown below.



2. Loosen the six screws and open the chassis as shown below.



3. Pass the MSR cable through the hole of the chassis as shown below.



4. Plug the MSR to the connector in the correct orient.



5. Tighten the four screws of the MSR assembly as shown below.



6. Close the back panel and tighten the four screws on the back panel.



7. Finished.



3.3. Adjust View Angle (EZPOS Series only)

Adjust the device to the proper view angle.



3.4. Wall Mount Kit installation (EZPC Series only)

1. Separate the wall mount kit.



2. Align the screw holes of the wall mount kit to the holes of the device and tighten the four screws.



3.5. Turn on the Device

- 1. Make sure all peripherals are connected properly.
- 2. Press and hold the power switch until the power indicator on the front panel glow green.





Driver and Utility Installation

4.1. Before the installation

All installation procedures described below are based on Microsoft Windows XP.

1. Connect an external USB CDROM drive to the USB port and insert the driver CD and turn on the device. The program autoruns and displays the **DRIVER BANK** screen.

2. Click the proper product item.



4.2. Chipset Software Installation

1. Click INTEL Chipset Driver.



2. Click Next.



- 3.1. Click Next.
- 3.2. Read the License Agreement carefully and click Yes.



4. Click Next.

Readme Information	
Readme.txt	
xwaxaxaxaxaxaxaxaxaxaxaxaxaxaxaxaxaxaxa	
 Product: Intel(R) Chipset Software Installation Utility Release: Production Version Version: 6.3.0.1007 Target Chipsett: Intel(R) E8500 Date: November 24, 2004 	
NOTE: For the list of supported chipsets, please refer to the Release Notes	
	5
InstallShield	

- 5.1. Select restart your computer right now or later.
- 5.2. Click Finish.



4.3. VGA Driver Installation

1. Click Graphic Driver.



2. Click VGA Driver for WIN2K/XP.



3. Click Next.



3.1. After files extracted, click Next on the welcome screen.

4. Read the License Agreement carefully and click **Yes**, and then the installation starts.

Please read the following license agreement carefully. Press the Page Down key to view the rest of the agreement.		License Agreement
INTEL SOFTWARE LICENSE AGREEMENT (DEM / IHV / ISV Distribution & Single User) INTEL SOFTWARE LICENSE AGREEMENT (DEM / IHV / ISV Distribution & Single User) INTEL SOFTWARE USERS (DEFORE COPYING, INSTALLING OR USING, DO not use or load this otherase and any associated materials (Dolestively, the "Software") user or load this otherase and any associated materials (Dolestively, Conditions, By loading or using the Software, you agree to the terms of this Agreement, If you do not with to to agree, do not initial or use the Software. Please Also Note: "If you are an Original Equipment Manufacturer (IDEM), Independent Hardware Vendor (ISV), this complete LICENSE AGREEMENT applies: You must accept all of the terms of the license agreement in order to continue the expression to you accept the terms?	int _e l.	Please read the following license agreement carefully. Press the Page Down key to view the rest of the agreement.
IMPORTANT - FEAD BEFORE COPYING, INSTALLING OF USING. Do not use or load this software and any associated materials (collectively, the "Software" (runt) you have catefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not winh to so agree, do not intailed use the Software. Please Alex Note: "If you are an Obiginal Equipment Manufacturer (DEM), Independent Hardware Vandor (INV) or Independent Software Vendor (ISV), this complete LICENSE AGREEMENT apples: You must accept all of the terms of the license agreement in order to continue the software program. Day was cereft the terms?		INTEL SOFTWARE LICENSE AGREEMENT (DEM / IHV / ISV Distribution &
Please Also Note: 1'If you are an Original Equipment Manufacturer (OEM), Independent Hardware Vendor (IHV), or Independent Software Vendor (ISV), this complete UECHYSE AGREEMENT applies: You must accept all of the terms of the license agreement in order to continue the setup program. Doya accept the terms?		IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING. Do not use or load this softwaee and ary associated materials (collective), the "Software" unit jou have calledly read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not within to a gree, do not initial or use the Software.
You must accept all of the terms of the license agreement in order to continue the setup program. Do you accept the terms?		Please Also Note: "If you are an Diginal Equipment Manufacturer (DEM), Independent Hardware Vendor (IHV), or Independent Software Vendor (ISV), this complete LICENSE AGREEMENT applies;
		You must accept all of the terms of the license agreement in order to continue the setup program. Do you accept the terms?

- 5.1. Select restart your computer right now or later.
- 5.2. Click Finish.



4.4. LAN Driver Installation

1. Click RTL81x0 LAN Driver.



On the welcome screen, click Next.

Click Install to begin the installation.





3. Click Finish.



4.5. Audio Driver Installation

1. Click AC'97 Audio Driver.



2. Configures new software installation.

Realtek AC'97 Audio Setup (5.27)
Setup Status	
	Realtek AC97 Audio is configuring your new software installation.
	C:\WINDOWS\TempVAloxwdmû cat
InstallStilled	Cancel

3. Click Configure Anyway.



4. AC'97 drivers begins to install.



- 5.1. Select restart your computer right now or later.
- 5.2. Click Finish.



4.6. Wireless LAN Driver Installation

1. Click Wireless Lan Driver.



2. On the welcome screen, click $\ensuremath{\textit{Next}}$, and then the installation begins.



Broadcom 802.11 Network Adapte	er Setup is performing t	he requested (operations.
	21%		
nstallShiald			

- 3.1. Select restart your computer right now or later.
- 3.2. Click Finish.



TouchKit Utility Quick Guide

5.1. Launch Touchscreen V7.3.COM

1. Under Microsoft Windows XP, click "**start**" menu and select "**Programs**", under "**Touchscreen V7.3.COM**" menu, click "**Touchscreen Control Panel V7.3.COM**", the control panel of the program shows.

5.2. User interface



а	Serial Port	Display serial port information of the system.
b	Virtual Button	Open the virtual button setting dialogue box.
С	Feedback Sound	Open the feedback sound setting dialogue box.
d	Power Save	Open the power down timer adjustment dialogue box
е	Calibration	Switch to calibration screen.
f	Calibration Mode Menu	Select the calibration by clicking this drop-down list.
g	Support	Display technical support information.
h	Exit	Exit the program.
i	Event Selector	Enable right mouse button function.
		The default of this selector is with the left mouse button
		selected on. For details about event selector settings,
		please see "How to Use Event Selector" of Section 5.2.

5.3. Serial Port Information

Click **Serial Port** button, the serial port information shows. Click **OK** to back to the control panel.

TouchScreen Control Panel #TS-COM	
Welcome TouchScreen Control Panel Version 7.3.COM	
Serial Port Information C COM1, BasePort=03F8h, IRQ=4 C COM2, BasePort=02F8h, IRQ=3 C COM3, BasePort=03E8h, IRQ=4 C COM4, BasePort=02E8h, IRQ=3 C COM5, BasePort=02D8h, IRQ=11 C COM6, BasePort=02D0h, IRQ=10 *TSCOM C COM7Unabled (code=250) C COM9Unabled (code=250) C COM9Unabled (code=250)	

5.4. Virtual Button Settings

Click Virtual Button button, the dialogue box shows:

TouchScreen Control Panel #TS-COM	A
Welcome TouchScreen Control Panel Versio	n 7.3.COM
Virtual Button Option C Stream Mode C Lift Off Mode C Touch Down Mode C Drag Drop Mode Right Button Automatic Mode Toggle On 1 Sec. Toggle O	Right Button Function C Disable (Off) C Enable (On) Manual Mode ff 1 Sec. Beep On
<u>C</u> ancel <u>D</u> K	

The selected option will be in black.

Virtual Button Option

Under Virtual Button Option group box, there are four options:

Stream Mode

Under this mode, all mouse button simulation will be disabled.

Lift off Mode

Under **Lift off Mode**, tapping and holding on the screen equals pressing and holding on the left button of the mouse.

<u>'Touch Down Mode</u>

Under **Touch Down Mode**, one single-tapping equals one left mouse clicking.

Drag Drop Mode

Drag Drop mode allows you to select an object on the screen by tapping, and then slide the selected object to a new location on the screen, the selected object will be dropped on the new location by releasing the touch.

The selected option will be in black.

Right Button Function

Disabled (Off)

Select this option, the event selector

[•]Enable (On)

Select this option, the event selector the left-bottom corner of the screen.



Æ

will be disabled and disappear.

will be enabled and show on

Automatic Mode/Manual Mode Drop-down List

If the Drag Drop Mode under **Virtual Button Option** group box is select, the drop-down menu below the **Enable (On)** option will be enabled.

Automatic Mode

- Select this option, the Right Button Function will switch to automatic

mode and the event selector is will be disabled and disappear.

- Select this option, the Right Button Function will switch to manual

mode and the event selector is will be enabled and show on the left-bottom corner of the screen.

- Options under **Right Button Automatic Mode** will be enabled when **Manual Mode** is selected.

The selected option will be in black.

Right Button Automatic Mode

Toggle On 0.5 💌 Sec.

Toggle On time is the duration between the tapping on the screen and that the right mouse button is "virtually" pressed and held.

Release the tapping from screen after toggle-on, the pop-up menu shows.

The minimize value is 0.5 and maximum value is 5.

Toggle Off 4 💽 Sec.

This option defines how long the right button function will be off.

The minimize value is 0.5 and maximum value is 5.

Beep On 💌

Click the drop-down menu to select **On** or **Off** to enable or disable the beep sound effect for toggle-on and toggle off.

5.5. Feedback Sound

Click Feedback Sound button, the dialogue box shows:

TouchScreen Control Panel #TS-COM	
Welcome TouchScreen Control Panel Version 7.3.C	ом
Feedback Sound Option C Silence (No Sound) C Touch Down Only C Lift Off Only C Both Touch Down & Lift Off	Tone I defined a constraint of the second s
<u>C</u> ancel <u>D</u> K	Apply

Feedback Sound Option Silence (No Sound) No any sound effect.

Touch Down Only

When this option is selected, there will be one "beep" sound when tapping on the screen.

Lift Off Only

When this option is selected, there will be one "beep" sound when releasing from the screen.

Both Touch Down & Lift Off

When this option is selected, there will be one "beep" sound when tapping on the screen and releasing from the screen.

Tone

Drag the bar to adjust the frequency of the sound effect. The minimize value is 200 and maximum value is 5000.

Duration

Drag the bar to adjust how long the "Beep" sound will be. The minimize value is 10 and maximum value is 50.

The selected option will be in black.

5.6. Screen Calibration

1. Click the drop menu next to the Calibration button to select calibration mode.

4 points, mode 1 – rectangular four-point calibration
4 points, mode 2 – rhombic four-point calibration

2. Click Calibration button to enter the calibration screen.

4 points, mode 1

a. The the mark shows on the Left-up corner.

b. Follow the instruction in green to touch the center of Cross Mark.

c. When the instruction turns into yellow, releasing the tapping from the screen.

d. Follow the instruction in green to touch the center of Cross Mark.

e. Repeat Step 2 – Step4 to finish the calibration procedure.



4 points, mode 2

a. The \square mark shows in the middle of the length of the screen.

b. Follow the instruction in green to touch the center of Cross Mark.

c. When the instruction turns into yellow, releasing the tapping from the screen.

d. Follow the instruction in green to touch the center of Cross Mark.

e. Repeat Step 2 – Step4 to finish the calibration procedure.



3. When the calibration procedure is completed, the message shows:



To save the new calibration, click **Yes**, to restore the old calibration, click **No**.

How to Use Event Selector
1. On the desktop of Windows, click 🖾 icon.
2. 🖾 icon change to 🗠.
3. Now the tapping is simulating right mouse button clicking.
4. After one tap on the screen icon change to
4. Alter one tap on the screen, in the hange to include the screen in the screen is the screen in the screen is th
5. The tapping resumes to left mouse button clicking.

I/O Definition

Please refer the detailed technical information about all I/O ports as followings.

6.1. Power Connector



PIN	Description	PIN	Description
1	+19V	3	GROUND
2	+19V	4	GROUND

6.2. Serial Port



COM 1/2/3

COM Port 1/2/3/4			
PIN	Description	PIN	Description
1	DCD	6	DSR
2	RXD	7	RTS
3	TXD	8	CTS
4	DTR	9	RI / 5V /12V
5	GND	10	NC

6.3. COM Port



PS2/COM					
PIN	Description	PIN	Description	PIN	Description
1	GND	6	N.C	11	СТЅ
2	+5V	7	N.C	12	RTS
3	RXD	8	N.C	13	DSR
4	TXD	9	RI / 5V /12V	14	DCD
5	N.C	10	DTR	15	N.C

6.4. Cash Drawer



Connector

PIN	Description	PIN	Description
1	GND	4	12V
-+2	D_OUT	5	NC
3	D_IN	6	GND

Cash Drawer Control

Status	Address	Value
Open	280H	Bit 4 = 0
Close	280H	Bit 4 = 1
Read Status	281H	Bit 0 = 0/1



Main Board	
CPU	Intel [®] Ultra Low Voltage Celeron M 1GHz w/o L2 cache
Chipset	Intel 852GM + ICH4
System Memory	SO-DIMM DDR266, 128MB up to 1GB
Thermal Solution	Fan-less
OS	Microsoft Windows XP Professional, XPE, WEPOS, Windows CE, Linux
Storage Device	
HDD	1 x SATA , 2.5" HDD Drive Bay
Compact Flash	1 x Slot, Type II
I/O Ports	
Serial	6 x RS-232 COM2/3: RS-232, DB-9, male, Pin9 w/ RI/5V/12V Selectable by BIOS COM4: Internal Pin Header for MSR COM5: 15Pin Header or DB9 COM6: Internal for Touch Panel
Parallel	1 x DB25 ECP/EPP/SPP
USB	4 x USB 2.0
LAN	1 x RJ45, Gigabit Ethernet
Cash Drawer	1 x RJ11 (12V)
Audio	AC'97 2.0 Compliant, 2W Speaker x 2
Expansion	1 x Mini PCI, optional wireless LAN module
Others	
Power Supply	External Adapter, 135W, 19VDC input
Color	Black
Material	Die-Casting Aluminum
Compliance	FCC / CE / WEEE / RoHS
Weight	Approx. PPC:6Kg / POS:7.5Kg
Dimension	256(W) x 55(D) x 313(H) mm
Operation Temperature	$5^{\circ} \sim 40^{\circ}$ C,
Storage Temperature	-20° ~ 60°C,
Storage Humidity	20 – 85% RH, non-condensing