User's Manual

Mega POS MP-3000 Series MP-3365 / MP-3362 15" /12" Fanless POS system

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Safety and Warranty

1. Read these safety instructions carefully.

2. Keep this user's manual for later reference.

3. Disconnect this equipment from any AC outlet before cleaning. Do not use liquid or spray detergents for cleaning. Use a damp cloth.

4. For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.

5. Keep this equipment away from humidity.

6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.

7. The openings on the enclosure are for air convection. Protect the equipment from overheating. DO NOT COVER THE OPENINGS.

8. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.

9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.

10. All cautions and warnings on the equipment should be noted.

11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.

12. Never pour any liquid into an opening. This could cause fire or electrical shock.

13. Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.

14. If any of the following situations arises, get the equipment checked by service personnel:

a. The power cord or plug is damaged.

b. Liquid has penetrated into the equipment.

c. The equipment has been exposed to moisture.

- d. The equipment does not work well, or you cannot get it to work according to the user's manual.
- e. The equipment has been dropped and damaged.

f. The equipment has obvious signs of breakage.

15. DO NOT LEAVE THIS EQUIPMENT IN AN UNCONTROLLED ENVIRONMENT WHERE THE STORAGE TEMPERATURE IS BELOW -20° C (-4°F) OR ABOVE 60° C (140° F). IT MAY DAMAGE THE EQUIPMENT.

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Introduction

Chapter

MP-3365 Introduction

To reach the balance of budget-saving and strong requirement for product quality, MP-3365 is designed with quality-oriented and cost-effective concept. Fanless as it is, MP-3365 provide a decent choice for noise-free environment applications with optimized product reliability.

Main Features:

- The most cost-effective solution with built-in customer display and 12VDC out for 2nd display connection without extra adaptor needed.
- Fanless solution for green and noise-free environment.
- Easy maintenance for system parts, such as HDD, CF, and RAM…etc.
- Sufficient I/O access for various connection requirements.
- Integrated cable cover for supporting pole-type VFD / LCD display.
- Compliant with IP54 front panel standard



MP-3365 w/ cable cover & MCR

A Quick Tour for MP-3365

Before you start, take a moment to become familiar with MP-3365.



MP-3365 Dimension



Rear I/O Panel

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9 1	E <	E OL	Ø
	~ <u> </u>	↔	\mathbf{O}

I/O Port	Connector Type	Description
\bigcirc	Earphone connector	Connect the speakers to this port
¢	USB type A connector	Standard USB connector for external device
(*** ***	DC-in connector	Connect the power adaptor to this port
DC OUT	12V DC-out connector	This DC-out port can sustain the power of the monitor or any other devices which need 12V DC power input.
500	VFD / RJ45 connector	This RJ45 port can be used to attach a VFD customer display or serve as an additional serial port (switching cable provided).
	RJ11 connector	Cash Drawer Connector, 12 V actuation support
0500500	PS2 connector	Connect the keyboard or mouse to this port
100 200	D-SUB 9 connector	The serial ports COM1/COM2 can be used to connect devices such as a printer or a fax/modem.
9	Parallel 25-pin LPT Connector	The standard LPT (D-SUB 25 pin) connector for connecting POS printers or KeyPro solution
	RJ45 connector	Connect MP-3365 to the Ethernet
0	D-Sub 15 Pin Connector	The VGA port is used for connecting LCD or CRT monitors

Packing List

- MP-3365 Main System x 1
- Power Adaptor x 1 / AC Power Cord x 1
- Driver & Manual CD x 1
- COM port switching cable (RJ45 to D-SUB 9 pin) x 1

Optional:

- Pole-type Customer Display
- MCR
- Built-in LCM Customer
 Display Module
- WiFi Wireless Module

Hardware Installation and Upgrading



Chapter

2

Do not remove the rear cover until you have verified that no power is supplied to the system. Power must be switched off and the power cord must be unplugged. Every time you service the system, you should be aware of this.

2.5" Hard Disk Drive Installation

- 1. Turn off power and remove power cord from the system
- 2. Unscrew the maintenance door at the bottom of the unit





3. Remove the door and flip it over

4. Place HDD kit on the door, fasten it with 4 screws and connect with the SATA cable.



- SATA cable
- 5. Restore the maintenance door to the system.
- 6. Fix the door with the screw.
- 7. Connect the power cord to the system.

Pole-Type VFD Installation

- 1. Remove the plastic cover on the cable cover
 2. Fix the pole stand with screws and place the pole-type customer display to the stand
- 3. Connect the RJ45 or RS-232 (D-Sub 9) cable to the system.

Memory (DDRII RAM) / CPU / DOM Installation



- 2. Install the DDRII RAM or CPU you require
- 3. Restore the top cover

1.

Compact Flash Card (CF) Installation

4. Unscrew and remove the maintenance door



- 5. Install the CF you require
- 6. Restore the maintenance door

MCR Configuration Modification

This option is for users who need to customize the MCR configurations for a particular task. To enter the Configuration Mode, please execute text editor program (such as Microsoft Word, Notepad...etc.) first, and then press [Ctrl] + [Alt] + [F10]. The following menu will appear accordingly.

**** CONFIGURATION MODE **** 1:SET INTERFACE 2:SET MAGNETIC STRING 3:SET STRING EDITING 4:SET BUZZER 5:RESET TO DEFAULT 6:SHOW STATUS 7:SET KEYBOARD CONFIGURATION 0:EXIT SETUP MODE

For detailed instruction, please refer to the MSR212 Programmer's Manual under the path below in the driver CD: Utility\Pos Utility\MCR util\Uniform

Cash Drawer Installation

Before connecting the cash drawer to the **MP-3365**, please make sure the drive voltage and cable pin assignment of the cash drawer matches the definition of the cash drawer port of **MP-3365**. Please refer to the mother board (FEB-7100) manual GPIO part for more information. For programmers, please refer to the folder "Utility" à "Pos Utility" à "Cash Drawer" in the driver CD, where you may find the test programs and DLL Library files for your application.

Plug cash drawer cable into the cash drawer port.



Note: If the cash drawer cannot be detected by the system, please refer to troubleshooting.

Up to two cash drawers may be driven from this port. Driving voltage of the solenoid is DC+12V. I/O port 2F is used for drawer operation. A test program is supplied, for Linux and Windows, source code of which is available on request by software developers.

To test for drawer open, read port **2F**, if bit 0=1 then drawer is open, if bit 0=0 drawer is closed. Before testing the cash drawer function, ensure to initiate the GPIO port first referring to the command sets below:

initGPIO=2e,87,2e,87,2e,07,2f,07,2e,f1

(2e stands for the address while '87', '07', 'f1' stands for the value to the address. All the values here are hexadecimal.)

Chapter 3

Software Installation and Setup

MP-3365 comes with a variety of drivers for different operating systems.

You may find the system CD with all the necessary drivers and utilities.

Please follow this installation sequence.

Driver installation sequence:

Chipset Driver -> VGA Driver -> LAN Driver -> Audio Driver -> Touch Tools

The reason to follow our sequence is that IRQ settings will be changed by Windows XP to non supported values, and you may encounter unnecessary problems later.

Chipset Driver Installation

Chipset Installation Utilities for Windows XP

- 1. Insert the CD into your CD ROM Drive.
- 2. Locate the folder of D:\ MB Manual & Drivers \ MB driver\Chipset\Setup
- 3. Open Setup.exe



4. Click Next.

ntel® Chipset Device Software			
Intel® Chipset Device So License Agreement	oftware		(intel)
You must accept all of the terms of the license program. Do you accept the terms? INTEL SOFTWARE LICENSE AGREEMENT (OE IMPORTANT - READ BEFORE COPYING, INST Do not use or load this software and any ass until you have carefully read the following te Software, you agree to the terms of this Agr install or use the Software. Please Also Note: * If you are an Original Equipment Manufactu (IHV), or Independent Software Vendor (ISV	e agreement in order IM / IHV / ISV Distrib FALLING OR USING. cociated materials (co rms and conditions. reement. If you do n urer (OEM), Indeper (), this complete LICE	to continue the ution & Single U: ollectively, the " By loading or us ot wish to so ag ndent Hardware ENSE AGREEMER	e setup ser) Software") ing the gree, do not Vendor VT applies;
	< Back	Intel® Instal	No lation Framework

5. Read the License Agreement and click Yes.



6. Click Next and the drivers for the Intel Chip set will install.



7. Please wait while the setup program processing.



8. When the 'Setup COMPLETE' message appears click Finish to restart your computer.

VGA Driver Installation

945GSE driver installation for Windows XP

- 1. Locate the folder of D:\ MB Manual & Drivers \ MB driver\ VGA\ XP2K\
- 2. Open winxp_14324.exe



1. Select Next to continue.



2. Select Next to continue.



3. Read the License Agreement and click Yes.



4. Click Next to see the setup progress.



5. Select Next to continue.



6. Click Finish to complete the installation procedure and restart the system.

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LAN Driver Installation

LAN Driver Installation for Windows XP

- 1. Locate D:\ MB Manual & Drivers \ MB driver\ LAN\ XP2K\
- 2. Double click Setup.exe.



3. Click Next to continue



4. Click Next to continue

REALTEK GbE & FE Ethernet Setup Status	PCI-E NIC Driver - InstallShield Wizard	×
	The InstallShield Wizard is installing REALTEK GbE & FE Ethernet PCI-E NIC Driver	
InstallShield	Canc	

5. Please wait while processing.

REALTEK GbE & FE Ethernet	PCI-E NIC Driver - InstallShield Wizard
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed REALTEK GbE & FE Ethernet PCI-E NIC Driver. Click Finish to exit the wizard.
InstallShield	

6. Click **Finish** to complete the installation procedure.

Audio Driver Installation

Audio Driver Installation for all Windows Operating Systems

Audio Driver Installation for Windows XP

- 1. Locate D:\ MB Manual & Drivers \ MB driver\ Audio\ XP2K\
- 2. Double click Setup.exe.



3. Click Next to continue.

Found New Hardware Wiz	car d
	Welcome to the Found New Hardware Wizard Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). <u>Read our privacy policy</u>
	Can Windows connect to Windows Update to search for software? Yes, this time only Yes, now and every time I connect a device No, not this time
	Click Next to continue.
	< Back Next > Cancel

4. Click Next to continue.



Click Finish and restart the system.

ELO Touch Tools Installation

ELO Touch Tools Installation for Windows XP

- 1. Locate D:\Utility\Touch Screen\ELO Touch\XP_Vista
- 2. Open SW600650.exe

WinZip Self-Extractor
Welcome to Elo Universal Driver for Windows XP/Windows Vista Installer.
Driver Version 4.8.1 (08-20-2008)
Click OK to continue.
OK

3. Click OK to continue.



4. Click **Unzip** to continue the installation.

To unzip all files i folder press the U	in SW600650.exe to the specified Jnzip button.	Unzip
Unzip to folder:	WinZip Self-Extractor 🛛 🛛	Run WinZip
ystems\Elo Univ	190 file(s) upzinped successfully	Close
🔽 Overwrite file		About
When done	K	Help

5. Click OK to continue.

Elo Touchscreen Setup (Ve	ersion 4.8.1.0)	
BIO TOUCHSYSTEMS	Pick the default language for the Elo Touchscreen Universal Driver package. All Elo touchscreen applications will be displayed in the language selected below.	
	Default	
	Next > Can	:el

6. Pick the default language for the Elo Touchscreen and click Next to continue.

Ele Touchscreen Setup (Ve	ersion 4.8.1.0) Welcome to Elo Touchscreen Setup. This program will install the Elo Serial and US8 touchscreen drivers on your computer. It is strongly recommended that you exit all Windows programs before running this Setup program. Choose Enable PreCalibration to store calibration data in touch-monitors

7. Check "Install serial Touchscreen Drivers" And click Next.



8. Read the "License Agreement" and click Yes if you accept it.

Elo Touchscreen Setup (V	ersion 4.8.1.0)
E TOUCHSYSTEMS	Select the COM ports to use with Elo serial touchscreens. Check the Auto-detection box if you want Setup to auto-detect COM ports currently connected to Elo devices. During Auto-detection, Setup will send data to each port which may temporarily interfere with some types of serial devices. Click Next to continue.
	< Back Next > Cancel

9. Select "Auto-detect Elo touchscreens" and click Next.

	your touchmonitors. All COM ports reported by your system are listed.
TOUCHSYSTEMS	COM1 COM2 COM3 COM4 COM5 COM5
AR	Once you have selected a COM port, click Next to continue the installation.

 Select the COM port for the touch monitor. It is recommended that you select COM3 for the touch screen, as this port is internally configured for touch operation. And click Next to continue.

Elo Touchscreen Setup (Ve	You have selected the COM ports listed below to use with your touchmonitor.	
TOUCHSYSTEMS	Click Next to complete the installation or click Back to change your selections.	

11. Make sure the COM port listed is the one you chose for your touch monitor. Press **Next** to continue.

Elo Touchscreen Setup (Version 4.8.1.0)
Installing Elo Touchscreen drivers and components Installing Ilo Touchscreen drivers and components Installing

12. Wait until the ELO Touch Tools installation finished.

Elo Touchscreen Setup (Ve	rsion 4.8.1.0) Even of the second sec
DIALD	 Calibrate Elo Touchscreen monitors. View Readme.
ARG	Click Finish to exit Setup.
	< Back Finish

13. Select "Calibrate ELO Touchscreen monitors" and click Finish.



14. Start calibrating the touchscreen by touch the targets showed on the screen.

Touth the scrien. Does the cursor follow your finger?	

15. If the cursor is working fine, click **M** to finish the setting; if not, click **M** to calibrate the screen again.

 Turn off computer
 Image: Computer

 Image: Stand By
 Image: Computer

 Image: Stand By
 Image: Computer

 Image: Computer
 Image: Computer

 <tr

IT MAY BE NECESSARY TO RESTART YOUR COMPUTER TO UTILIZE YOUR TOUCHSCREEN FEATURES.

16. Click Restart to reboot your computer again.

ELO Control Panel

This section explains the different options in the ELO control Panel.

General tab

The general tab allows you to:

- Change the COM port your touch screen is set to.
- Calibrate the touch screen with the Align button.

o Telochscreen Proper General Mode Sound F	ties 🕜 🕑
	Video alignment enables the computer to convert fourtherness coordinates into image coordinates. Align the touchacreen whenever you: * Initially initial the touchacreen drivers. * Orlange the touchmonitor or touchacreen andware. * Rootca the cursor inn't lined up with your finger.
94	Align

Mode tab

The Buttons tab allows you to:

- Adjust all mouse emulation controls.
- Change cursor properties
- Enable or disable right mouse button utility.



Sound tab

The Sound tab allows you to:

• To change sound properties for ELO touch tools.

sound	Properties 1 About		
Low Low	Tone	- #	
Short	Duration	Long	
	Fourth here to test beep so	und	

Properties tab

The Diagnostics tab allows you to:

• View Controller Information.



About tab

The About tab displays Information about ELO Touch systems



Fuji TouchKit Tools Installation

Fujitsu TouchKit Installation for Windows XP

- 1. Locate D:\Utility\TouchScreen\TouchKit(Fujitsu)\Windows 2000 XP\
- 2. Select the relevant folder for the operating system that you are using.
- 3. Open Setup.exe



4. Click Next



5. Click Next



6. Click Next



7. Click OK to close the pop-up dialog.



8. Click "Support Multi-Monitor System" and then Next to continue.

	- Contraction of the second
includ Nex.	JouchKit
Serap will learnal Touch/Lit in the Iolishing ha To and all to this folder, olick Next. To metall folder.	ider to a different folder, click Browse and select another .
Destination Folder E.VFlogram FleckTouchfuit	Вронил.
	en install Flox. Setup well install Tauch/Kit in the Iokowing for Te install to this folder, click Need. Te install folder. Destination Folder. E. VPaggan Flort Touch La

9. Click Next

uch Mitt	
eloct Program Felder Pleare select a grogram folder	TouchKit
	Setup will add program icone to the Program Folder Isted Balow, 'Yourney type a new Yolder mane or select one has the existing folders ldt. Click Newt to continue. Program Folder Fourthy Existing Folders: Accessorie Administrative Tools Game Rediek Snagt 7 Startup
<u> </u>	clast Neth a

10. Click Next

ruchKit		
Setup Statuw	Touchkit	
Touchiel in cont	puting your new softwate installation	
Information ? Touch Cor	roller Pound in COM3. Add this controller now ?	

11. Click Yes

Cancel

-14

S Touchkit	Turn off computer
Installed Touchscreen Controllers	Stand By Tu Diff
Add	

12. Click **OK** and turn off the computer to restart your system again.

After the system finish rebooting follow the directions to calibrate the Touch screen.

TouchKit Control Panel

This section explains the different options in the TouchKit control Panel.

General tab

The general tab allows you to:

• Manage the touch screen controller you installed.

Edge Lompen	sation	Hardware	About
General	Setting	Tools	Display
Installed Touch	nscreen Controlle	15	
Serial Controller			

Tools tab

The tools tab allows you to:

• Calibrate the touch screen with the **4 Points Calibration** button.

Euge Compensation	Hardware	About
General	Setting Tools	Display
Linearization Curve		
4 Points Calibration	Do 4 points alignment to match	display.
Clear and Calibrate	Clear linearization parameter an	id do 4 points
	alignment.	
Linearization	Do 9 points linearization for bet linearity.	ter touchscree
Linearization	Do 9 points linearization for bet linearity.	ter touchscree
Linearization Draw Test	Do 9 points linearization for bet linearity. Do draw test to verify the touch	ter touchscree n accuracy.

Wireless LAN Driver Installation

Wireless LAN Driver Installation for all Windows Operating Systems (Optional)

- 1. Open D:\Wireless LAN folder
- 2. Run Setup.EXE

InstallShield Wizard		×
E.	Welcome to the InstallShield Wizard for Wireless LAN USB	
	The InstallShield® Wizard will install Wireless LAN USB on your computer. To continue, click Next.	
	< Back Next > Cancel	

3. Click Next

InstallShield Wizard	×
Choose Destination Location Select folder where Setup will install files.	
Setup will install Wireless LAN USB in the following folder.	
To install to this folder, click Next. To install to a different folder, click Browse another folder.	and select
Destination Folder C:\Program Files\WLAN Inc\Wireless LAN Utility	Browse
Back Next >	Cancel

4. Click Next

Chapter 4

Specifications

MP-3365 Specifications

System Configuration		
CPU (On Board)	INTEL ATOM N270 (1.6GHz with 512K L2 cache)	
Chipset	Intel 945GSE + ICH7	
Memory	- One 240-pin Long-DIMM DDRII socket up to 1GB per channel	
VGA controller	GMA950 Integrated in 945GSE, shares system memory up to 224MB	
Primary LCD Panel	15" TFT LCD Panel (1024x768).	
Primary Touch Panel	15" with 5-wire Resistive Touch Panel	
Storage	Internal 2.5" Serial ATA 160GB hard disk drive as default Support type II Compact Flash™ Disk. IDE interface	
Speaker	Integrated 2W x 2 stereo system speakers	
Power	150 watts external power adaptor	
I/O Port		
	3 User available COM ports (COM1, COM2, COM5).	
	2 System assigned COM ports (COM3 & COM4).	
Serial Port	Ø COM3 for primary touch screen.	
	Ø COM4 for built-in LCM customer display	
	1 Reserved (COM6).	
Enhanced Parallel Port	Support EPP/SPP/ECP	
USB port	6 USB 2.0 ports (1*Internal, 5*External)	

Cash drawer port	RJ11 Cash drawer port,12V actuation.	
Keyboard Port	One PS/2 keyboard port.	
LAN Port	10/100/1000Mbps Ethernet Controller, Realtek RTL8111C	
VGA Port	Standard D-SUB 15 Pin VGA Port	
Audio Port	Integrated Sound Blaster compatible, AC97 Audio Codec. (Realtek ALC662)/Built-in stereo speakers	
Optional Features		
Customer display	 Ø Built-in LCM module Ø Pole-type VFD customer display Ø Pole-type LCD customer display 	
MSR	External Magnetic Stripe Card Reader track 1/2/3	
Wireless	Ø Internal WiFi Module(USB)	
Power Consumption	on	
Power consumption	20 – 30W (Standard system while running programs and accessing HDD).	
Operating tempera	ture	
Operating temperature	0 °C ~ 40 °C	

Chapter 5



Please note that the following troubleshooting guide is designed for people with strong computer hardware knowledge such as System Administrators and Engineers.

Touch Panel Does Not Work

- A) Check CMOS settings, COM3 needs to be "Enabled".
- B) Check if there are no conflicts between COM3 and any other devices.
- **C)** Check if the ELO driver or the TouchKit driver has been properly installed. Or try to reinstall again (Please refer to the ELO driver installation or the TouchKit driver).
- D) Check if the ELO controller or the TouchKit driver on COM3 has been detected during the ELO driver or the TouchKit driver installation. If yes, then check if the flat cable from the ELO touch screen or the TOUCHKIT touch screen has been properly connected to the ELO controller or the TouchKit controller (Attention: Pin1 mark should be on the same side as the ELO controller).
- E) Check if the ELO controller Green LED is blinking?

If no, there is no DC+5V support for the ELO controller from the motherboard.

F) Touch screen controller could be defective or the touch panel could be defective.

ELO Touch Panel Cannot Calibrate Correctly

- A) Please replace the ELO controller, and re-calibrate. If this works, change back to the original ELO controller, and re-calibrate.
- **B)** If the ELO touch panel still cannot calibrate correctly after changing to a new ELO controller, the touch panel may be not installed properly or it could be defective.

Cannot Detect HDD

- A) SATA cable is not connected properly to main board or it could be defective.
- B) HDD power cable is not connected properly to the main board or it could be defective.
- C) Check CMOS setup, set SATA HDD to Auto Detect.
- D) On-board SATA port could be defective.

PS/2 Keyboard Is Not Functioning Normally

- A) Make sure the keyboard is properly connected to the PS/2 keyboard port before the system is powered up. If the keyboard is connected after Windows2000 has been booted, the keyboard will not work.
- **B)** Check that the LED on the keyboard goes on then off after power on. If yes, the keyboard is getting power correctly.
- **C)** The main board could be defective.

LAN Is Not Functioning Properly

- A) Check if the LAN driver is installed properly.
- B) Check if there are any IRQ conflicts.
- C) Check if the RJ45 cable is properly connected.
- D) The on-board LAN chip could be defective.

COM1, COM2, COM5 Are Not Functioning Properly

- A) Check if the I/O ports are enabled in the CMOS setup.
- B) Check if there are any IRQ conflicts.
- C) The main board or I/O cable could be defective.

Cash Drawer Port Is Not Functioning Properly

- A) Make sure the pin assignment matches between the cash drawer and the RJ11 cash drawer port.
- B) Verify if the digit I/O port address and bit are correct.
- C) The main board could be defective.

USB Device Is Not Functioning Properly

- A) Ensure that the USB controller is "enabled" in the CMOS setup.
- **B)** Ensure that the USB Legacy is "enabled" in the CMOS setup. (Windows 2000 \vdot Window XP Professional)
- C) Ensure that the USB Legacy is "Disabled" in the CMOS setup. (Embedded OS: Windows XP Embedded \circ Window CE. NET \circ Linux RedHat 9)