# K875 User Manual



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# Safety

### IMPORTANT SAFETY INSTRUCTIONS

- •Read these instructions carefully. Keep these instructions for future reference.
- •Follow all warnings and instructions marked on the product.
- •Do not use this product near water.
- •Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
- 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.
- 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.
- •Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
- •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.
- The socket outlet should be installed near the equipment and should be easily accessible.

### PSE Mark

This device complies with the PSE rules. Operation is subject to the following two conditions: This device may not cause harmful interference.

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

### **Caution on Lithium Batteries**

Danger will explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

# Table of Contents

Safety	2
1. Accessories	4
2. Components	4
2.1. Front View	4
2.2. Rear View	5
2.3. Button Cover View	5
2.4. I/O Function	6
3. Specification	6
4. Installing External Devices	8
4.1. Wall Mount Kit	8
4.2. MSR	10
5. Jumper Setting	11
5.1. Main Board Jumper Setting	11
6. Driver Installation	13
6.1. Driver List	13
6.2. USB 2.0 Driver Installation	14
6.3. VGA Driver Installation	17
6.4. Resistive Touch Driver Installation	19
6.5. SAW Touch Driver Installation	23
6.6. Audio Driver Installation	25
6.7. LAN Driver Installation	27
6.8. Intel (R) PROSet Driver Installation	28
7. BIOS Updating Procedure	29
8. Default BIOS Setting	31

# 1. Accessories



a. Power Cord (1)



b. RJ45-DB9 Converter Cable (4)



c. Driver CD (1)



d. Power Brick (1)

# 2. Components

## 2.1. Front View



### 2.2. Rear View



2.3. Button Cover View



# 2.4. I/O Function



# 3. Specification

System	K875	
Mainboard	B78	
CPU Support	Intel Celeron M1.3GHz; Pentium M1.8GHz;	
Chipset	Intel 852GM and ICH4 FSB 400Mhz	
System Memory	2 x DDR SO-DIMM sockets, up to 2GB	
Graphic Memory	Shared system memory 8~64MB	
BIOS	Phoenix Award BIOS	
LCD Touch Panel		
LCD Size	15" TFT LCD	
Brightness	<b>350 cd</b> /m <sup>2</sup>	
Maximal Resolution	1024 x 768	
Touch Screen Type	Resistive type, SAW type optional	
Storage		
HDD	2.5" Slim HDD bay	
Flash Memory	Optional C.F. slot (either one option between HDD and CF	
	card)	
Expansion		
Mini-PCI Socket	1 x mini-PCI slot	
Wireless LAN		
WLAN module	Optional mini-PCI wireless LAN module support up to IEEE	
	802.11 a/b/g	
Antenna	Main & Auxiliary	
External I/O Ports		

USB	4 ports (V2.0)		
Serial / COM	4 x COM ports RJ-45 connectors (COM1 standard RS-232;		
	COM2 RS232/422/485 selectable by jumper; COM3 &		
	COM4 pin 9 with 5V or 12V power by jumper)		
Parallel	1 x D-sub 25-pin connector		
LAN (10/100)	1 x RJ45		
Cash Drawer	1 x RJ-11 (12V or 24V)		
DC Jack	1 x DC Jack Latch type		
Audio Jack	1 x Line-out, 1 x Line-in		
Speaker			
Speaker	Integrated 2 x 2W speaker		
Internal Interface			
USB	2		
СОМ	2		
2 nd VGA	10-pin (2 x 5) header for CRT		
Control/Indicator			
Power Button	1		
Indicator LED	1 x power LED		
IrDA	1		
Motion Sensor	1		
Volume Control Button	Up & Down		
Brightness Control Button	Up & Down		
Power			
Power Adapter	External DC 19V, 90W		
Peripherals			
MSR	Side mount ISO 3-tracks or JIS I&II module (Optional)		
Scanner	Laser scanner (Optional)		
Web CAM	1.3M Pixel web camera module (Optional)		
Environment			
EMC & Safety	FCC, Class A, CE, LVD		
Operating Temperature	$0^{\circ}$ C ~ $40^{\circ}$ C ( $32^{\circ}$ F ~ $104^{\circ}$ F)		
Storage	$-20^{\circ}\text{C} \sim 60^{\circ}\text{C} (-4^{\circ}\text{F} \sim 140^{\circ}\text{F})$		
Operating Humidity	5% - 95% RH non condensing		
Storage Humidity	5% - 95% RH non condensing		

Dust & Water Resistance	NEMA 3 / IP55 (Front Bezel)
Dimensions (W x D x H)	386 x 330 x 65 mm / 15.2" x 13" x 2.6"
Weight	5.1kg / 11lbs
Mounting	75 mm x 75 mm & 100 mm x 100mm Standard VESA
	mounting holes
OS Support	WinXP Pro, Xpe, WEPOS, Windows NT 4.0 / 2000

• This specification is subject to change without prior notice.

# 4. Installing External Devices

### 4.1. Wall Mount Kit

1. Put the wall mount kit bracket on the rear bezel. Tighten the screws (4).



2. Tighten the screws (4) of the wall mount kit holder on the wall.



3. Hang the system on the wall mount kit holder.



4. Tighten the screw (2).





# 4.2. MSR

1. Remove the screws (3).



2. Slide the MSR cover out and disconnect the cable (1).



## 5. Jumper Setting

### 5.1. Main Board Jumper Setting

### 1. CMOS Operation Mode

Function	JP8
CMOS Normal	⊚N/C
CMOS Reset	1-2

To clear the CMOS:

- 1) Remove AC power from the unit.
- 2) Open the cabinet.
- 3) Change the JP8 jumper setting from N/C to 1-2.
- 4) Wait 1 minute.
- 5) Change the JP8 jumper setting back to N/C.
- 6) Close the cabinet.
- 7) Apply AC power and continue.

### 2. Power Mode Setting

Function	JP6	
ATX Power	©N/C	
AT Power	1-2	

### 3. Cash Drawer Power Setting

Voltage	JP4
+12V	©1-2
Not available	3-4
+24V	5-6

### 4. COM3 – 4 Power Setting

Function	JP3
COM3 PIN10_RI	©1-2
COM3 PIN10_+5V	3-4
COM3 PIN10_+12V	5-6
COM4 PIN10_RI	<b>©</b> 7-8
COM4 PIN10_+5V	9-10
COM4 PIN10_+12V	11-12

### 5. Card Reader Setting

Function	Oucking	On Board
JP11 (1-2)	N/C	1-2
JP11 (3-4)	N/C	3-4

### 6. LCD ID Setting

Panel	Resolution	LVDS			JP7	,	
Number		Bits	Channel	1-2	3-4	5-6	7-8
0	640 x 480	18	Single	SHORT	SHORT	SHORT	SHORT
1	800 x 600	18	Single	SHORT	SHORT	SHORT	OPEN
2	1024 x 768	18	Single	SHORT	SHORT	OPEN	SHORT
3	1280 x 1024	24	Dual	SHORT	SHORT	OPEN	OPEN
4	1024 x 768	24	Single	SHORT	OPEN	SHORT	SHORT
5	800 x 600	24	Single	SHORT	OPEN	SHORT	OPEN

Function	RS232	RS485	RS422
JP9 (1-2)	V		
JP9 (3-4)	V		
JP9 (4-6)		V	
JP9 (5-7)	V		
JP9 (7-8)		V	
JP9 (9-10)			V
JP10 (1-2)	V		
JP10 (3-4)		V	
JP10 (5-6)			V
JP10 (7-8)			V
JP10 (9-10)			V
JP10 (11-12)			V

### 7. COM2 RS232 / 485 / 422 Setting

Note: OPEN SHORT



# 6. Driver Installation

# 6.1. Driver List

Folder/File	File Description
<cd>:\COMMON\INTEL\USB 20</cd>	USB 2.0 Driver
<cd>:\COMMON\INTEL\VGA\i85x</cd>	VGA Driver
<cd>:\COMMON\Elo_Touch</cd>	SAW Touch Driver
<cd>COMMON\POS_Touch</cd>	Resistive Touch Driver
<cd>:\COMMON\Ac97_codec\Realtek\AL</cd>	Audio Driver
C202A	
<pre><cd>:\COMMON\Lan_driver\R8139_810x</cd></pre>	10/100Mb LAN Driver
<cd>:\COMMON\Wireless_LAN\802.11g\I</cd>	Intel (R) PROSet Driver
ntel\Win2K_XP	

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

## 6.2. USB 2.0 Driver Installation

### **OS** Requirements

OS	USB 2.0 requirements
Windows XP	USB 2.0 drivers are provided in <u>Service Pack 1</u> (SP1) for Windows XP, which is available through <u>Windows Update</u> .
Windows 2000	USB 2.0 drivers are available through <u>Windows Update</u> or Service Pack 4.
Windows 98SE/Me	USB 2.0 drivers are available on the Intel developer site.
Windows 98 (Retail)	Developers and OEMs should contact <u>Orange Ware</u> . For end-users, if your device does not ship with Windows 98 drivers, contact your device or system manufacturer. If USB 2.0 drivers are not available, your device will operate at USB 1.1 speeds
Linux	USB 2.0 support is available in <u>kernel 2.4.19</u> or later development kernels, or in the 2.4.19 or later production kernel. <u>More information</u> .



a. Right click My Computer on the windows desktop and select "properties"



b. Select "Hardware"→ "Device Manager" on system properties.



c. Select "Other Devices" → "Universal Serial Bus (USB) Controller" → "Properties" on Device Manager.



d. Select "Device"  $\rightarrow$  "Update Driver...".



e. Click the "Next" button on the welcome window.



f. Select "Search for a suitable..." and click the "Next" button on the Install Hardware Device Drivers window.

Upgrade	Device Driver Wizard	x
	Insert the manufacturer's installation disk into the drive selected, and then click OK.	ОК
		Cancel
	Copy manufacturer's files from:	
	F:\Common\INTEL\USB20\Win2K	Browse
15		

h. Press "Browse" to select driver and then click the "OK" button to next page.



 g. Select "Specify a location" and click the "Next" button on the Locate Driver Files window.



i. Click the "Next" button on Driver Files Search Results window.



j. Click the "Finish" button to complete this process.



k. Finished.

# 6.3. VGA Driver Installation



a. Double click "win2k\_xp147" on the My Computer window.



b. Click the "Next" button on the Welcome window.



c. Click the "Next" button on the Welcome window.



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



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

### 6.4. Resistive Touch Driver Installation





- a. Double click "Setup" on the My Computer
- b. Click the "OK" button on the Welcome window.



c. Click "Yes" button on the License

hoose Destination Location Select folder where Setup will install files.	(	1	NEZ.
Setup will install TouchUtility in your comp	outer.		
- Destination Folder			
Destination Folder C:\Program Files\TouchUtility			Biowse

d. Click "Next" button on the Choose Agreement window. Destination Location window.

Select Program Folder Please select a program folder		120
Setup will add program icons to the Progra	m Folder listed below. You ma	y type a new folder
Program Folders:	rs list. Llick Next to continue.	
TouchUtility		
Existing Folders:		
Accessories		A
Administrative Tools		
CyberLink PowerDVD		
Final Reality		
KS64		
MonitorTest Nero		~
allShield		

e. Click the "Next" button on the Select

InstallShield Wizard Complete Setup has finished installing TouchUtility on your computer.

f. Click the "Finish" button on the Program Folder window. InstallShield Wizard Complete window.

Hardware Installation		Note to reboot
	The software you are installing for this hardware: TouchUtility RS232 Touch Panel	Click <ok> to reboot, then plug your touch device on your device.</ok>
	has not passed Windows Logo testing to verify its compatibility with Windows XP. [Tell me why this testing is important.] Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.	<ul> <li>Yes, I want to restart my computer now</li> <li>No, I will restart my computer later.</li> </ul>
	Continue Anyway STOP Installation	ОК

- g. Click the "Continue Anyway" button on
- h. Click the "OK" button and restart your the Hardware Installation window system.



i. After the computer restarted, select"Programs →TouchUtility→Scan RS232 Touch Device".



j. Automatically scan serial port for touch.



 k. Select "Programs→TouchUtility →TouchUtility".



1. Click "Scale / Offset" on the POSTouch Utility window.



m. Calibrate three red flash points.

ieneral	Settings	Parameter	Tools	Device	
Active	RS232_DEVIC	Έ4	Relea	se COM port and Exit	
No	Device			Dispaly Number	
1 1	RS232_DEVICE4			No. #1	
					-
				child consider 22	
	Firmware Version	n: A32111			
	DriverVersion ·	3.0.0.4	API Veri	2.2.0-12(NT)	

 n. Select "Device→9Pts Calibration" on the POSTouch Utility window.



o. Calibrate nine red flash points. Then, click"Exit" on the POSTouch Utility window.

# 6.5. SAW Touch Driver Installation



c. Click "sw500930" on the My computer window.



e. Click the "Unzip" button on the WinZip Self-Extractor window.



d. Click the "OK" button on the Welcome window.

Elo TouchSystems Setup (V	/ersion 4.20)
<b>ED</b> TOUCHSYSTEMS	Welcome to Elo Touchscreen Setup. This program will install the Elo USB and Serial touchscreen drivers on your computer. It is strongly recomended that you exit all Windows programs before running this Setup program. Install Serial Touchscreen Drivers Install USB Touchscreen Drivers
	< Back Next > Cancel

f. Select "Install Serial Touchscreen Drivers" and then click the "Next" button on the Welcome window.



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



h. Click the "Next" button on the on the "Select the COM ports…" window.

Elo TouchSystems Setup (V	ersion 4.20)	×
ēlo	Choose the COM ports from the list below to use with your touchmonitors. All COM ports reported by your system are listed.	
TOUCHSYSTEMS		
Mara	Соме	
ARI	Once you have selected a COM port, click Next to continue the installation.	
	< Back Next > Cancel	

i. Select "COM5" and click the "Next" button on the Choose the COM ports... window.



k. Click the "Finish" button on the Setup Complete window.



j. Click the "Next" button on the You have selected the COM ports...window.



l. Click the "Yes" button and restart your system.



p. After the computer restarted, click "Align" on the Elo Touchscreen Properties window.

# Touch torgets from position of normal use

q. Calibrate three red points.

### 6.6. Audio Driver Installation





- a. Click "A3.71" on the My Computer window.
- b. Double click "wdm\_a371" on the My Computer window.



c. Click "Next" button on the Realtek AC'97 Audio Setup window.



e. Click "Finish" button on the Realtek AC'97 Audio Setup window.



d. Click "Yes" button on the Digital Signature Not Found window.

6.7. LAN Driver Installation



a. Double click the "Setup" on the "My Computer" window.



b. Click the "Finish" button on the "Maintenance complete" window.



c. Click the "OK" button and restart your system.

## 6.8. Intel (R) PROSet Driver Installation



 a. Select "Autorun Intel Corporation" on the "My Computer" window.



b. Select "Install Software" on the "Intel (R) PROSet/Wireless Installer" window.



c. Select "I accept the terms in the license agreement" and click the "Next" button on the "Intel (R) PROSet/Wireless Installer" window.

河 Intel(R) PROSe	DSet/Wireless Installer		
int <sub>e</sub> l.	Intel®	<sup>®</sup> PROSet/Wireless	
	Please choo	se a setup type:	
	Typical	Installs Intel PROSet/Wireless core and support components for Intel PRO/Wireless adapters installed in this computer. The Intel(R) PRO/Wireless adapter is not required for core component installation.	
	Custom	Choose which software features to install and where to install them. Recommended for advanced users.	
		Next Cancel	

 d. Select "Typical" and click the "Next" button on the "Intel (R) PROSet/Wireless Installer" window.

Intel(R) Pr	o Installer	
	Install default components?	
	OK	Cancel

e. Click the "OK" button on the "Intel (R) Pro Installer" window.

Wireless LAN adapter driver			0.00	us
	~	Installed	~	God
🖃 Intel PROSet/Wireless	~	Installed	~	Goo
Intel Wireless Troubleshooter	~	Installed	~	Goo
Intel Smart Wireless Solutions	~	Installed	~	Goo
🗐 Single Sign On	×	Not Present	~	Goo
💷 Pre-Logon Connect	×	Not Present	~	Goo
Administrator Tool	×	Not Present	~	Goo

f. Click the "OK" button on the "Intel (R) PROSet/Wireless Installer" window.

# 7. BIOS Updating Procedure

### Introduction

This chapter discusses procedures on how to update the terminal BIOS by using the CD-ROM drive. The software is distributed on bootable CD-ROM media.

Since the K875 does not have an internal CD-ROM drive, the terminal supports the following external CD-ROM drive.

• Teac USB CD-ROM Drive

## **BIOS Update**

# Connecting an External USB CD-ROM Drive

1. Connect the external USB CD-ROM drive to a USB connector on the terminal.



- 2. Connect the Power Supply to the DC Power connector on the CD-ROM and to an AC outlet.
- 3. Apply power to the CD-ROM drive (switch on the back).

### **Updating Procedures**

- 1. Connect a PS/2 Keyboard to the terminal.
- 2. Apply power to the terminal.
- 3. Press [DEL] during boot to enter Setup.
- 4. At the Setup Utility menu, select Advanced BIOS Features.
- 5. Set the First Boot Device.
  - Select USB-CDROM.
- 6. Press [Esc] to return to the Setup Utility menu.
- 7. Select Save and Exit Setup.

- 8. Insert the media containing the BIOS update software.
- 9. Follow the screen prompts on the client to update the BIOS. You can select two methods to run the update program.
  - Automatic BIOS Update update process runs unattended

**Note**: You will see a prompt for terminal model and serial number information if the program detects invalid information in the current BIOS, or if you are replacing the processor board, in which case there is not model/serial number information in the BIOS. **Important**: Model/Serial Number is mandatory.

• Interactive BIOS Update – permits you to input/replace the model/serial number information that is stored in the BIOS.

**Note**: Model/Serial number data that is currently stored in the BIOS is displayed during power up.

- 10. You should see a green window, indicating a successful update.
- Disconnect the keyboard and remove the media before the system reboots.
   Note: If the keyboard is disconnected while the terminal is powered on the MSR will no longer function. You must power cycle (cold boot) the terminal to reset the MSR function.

### 8. Default BIOS Setting

### Entering Setup

- 1. Connect an alphanumeric USB keyboard to the terminal.
- 2. Apply power to the terminal.
- 3. At the prompt at the bottom of the screen press

[Del] to enter setup.

### **BIOS Default Values**

### Standard CMOS Features

System Date	(variable)
System Time	(variable)
Video	[EGA/VGA]
Halt On	[All , But Keyboard]

# Advanced BIOS Feature

Quick Power On Self Test	[Enabled]
First Boot Device	[USB-FDD]
Second Boot Device	[HDD-0]
Third Boot Device	[CDROM]
Boot Other Device	[Disabled]
Boot Up NumLock Status	[On]
Typematic Rate Setting	[Enabled]
Typematic Rate (Chars / Sec)	[30]
Typematic Delay (Msec)	[250]
Security Option	[Setup]
APIC Mode	[Disabled]
* MPS Version Control For OS 1.4	
HDD S.M.A.R.T. Capability	[Disabled]
Advanced Chipset Features	
DRAM Data Integrity Mode	[Non-ECC]
AGP Aperture Size (MB)	[64]
On-Chip VGA	[Enabled]
On-Chip Frame Buffer Size	[32MB]
Integrated Peripherals	
Onboard LAN Boot ROM	[Disabled]
OnChip IDE Device	
OnChip Primary PCI ID	[Enabled]
IDE Primary Master PIO	[Auto]
IDE Primary Slave PIO	[Auto]
Primary IDE Max. UDMA	[Auto]
IDE Primary Master UDMA	[Auto]
IDE Primary Slave UDMA	[Auto]
On-Chip Secondary PCI IDE	[Enabled]
IDE Secondary Master PIO	[Auto]
IDE Secondary Slave PIO	[Auto]
Secondary IDE Max. UDMA UDMA 66	
IDE Secondary Master UDMA	[Auto]
IDE Secondary Slave UDMA	[Auto]

Onboard Device	
USB Controller	[Enabled]
USB 2.0 Controller	[Enabled]
AC97 Audio	[Auto]
SuperIO Device	
Serial Port 1	[3F8]
Serial Port 1 Use IRQ	[IRQ4]
Serial Port 2	[2F8]
Serial Port 2 Use IRQ	[IRQ3]
UART Mode Select	[Normal]
RxD, TxD Active	[Hi , Lo]
IR Transmission Delay	[Enabled]
UR2 Duplex Mode	[Half]
Use IR Pins	[IR-Rx2Tx2]
Parallel Port 1	[378/IRQ7]
Parallel Port Mode	[SPP]
EPP Mode Select	[EPP1.7]
ECP Mode Use DMA	[3]
Serial Port 3	[3E8]
Serial Port 3 USE IRQ	[IRQ10]
Serial Port 4	[2E8]
Serial Port 4 USE IRQ	IRQ10
Serial Port 5	[4F8]
Serial Port 5 USE IRQ	IRQ10
Serial Port 2 Use IRQ	[IRQ3]
UART Mode Select	[Normal]
RxD, TxD Active	[Hi , Lo]
IR Transmission Delay	[Enabled]
UR2 Duplex Mode	[Half]
Use IR Pins	[IR-Rx2Tx2]
Parallel Port 1	[378 / IRQ7]
Parallel Port Mode	[SPP]
EPP Mode Select	[EPP1.7]
ECP Mode Use DMA	[3]
Serial Port 3	[3E8]
Serial Port 3 Use IRQ	[IRQ10]
Serial Port 4	[2E8]

X Serial Port 4 USE IRQ	IRQ10
Serial Port 5	[4F8]
X Serial Port 5 USE IRQ	IRQ10
Serial Port 6	[4E8]
Serial Port 6 Use IRQ	[IRQ10]
Serial Port 3-6 IRQ Share	[Enabled]

# Power Management Setup

Power – Supply Type	[ATX]
Power On Control	[Press Enter]
Soft-Off by PWR-BTTN	[Delay 4 Sec.]
PWRON After PWR-Fail	[Off]
Power On by PCI PME/LAN	[Disabled]
Power On by Ring	[Disabled]
Resume by Alarm	[Disabled]
ACPI Function	[Enabled]
Power Management	[User Define]
Video Off Method	[Blank Screen]
Video Off In Suspend	[Yes]
Suspend Type	[Stop Grant]
MODEM Use IRQ	[NA]
Suspend Mode	[Disabled]
HDD Power Down	[Disabled]
Primary IDE 0	[Disabled]
Primary IDE 1	[Disabled]
Secondary IDE 0	[Disabled]
Secondary IDE 1	[Disabled]
FDD, COM, LPT Port	[Disabled]
PCI PIRQ	[Disabled]

# PnP/PCI Configurations

PNP OS Installed	[No]
Reset Configuration Data	[Disabled]
Resources Controlled By	[Auto(ESCD)]
X IRQ Resources	Press Enter
INT Pin 1 Assignment	[Auto]
INT Pin 2 Assignment	[Auto]
INT Pin 3 Assignment	[Auto]
INT Pin 4 Assignment	[Auto]
INT Pin 5 Assignment	[Auto]
INT Pin 6 Assignment	[Auto]
INT Pin 7 Assignment	[Auto]
INT Pin 8 Assignment	[Auto]