

# **TOSHIBA**

TOSHIBA POS Terminal

## **ST-B20 SERIES**

### **Owner's Manual**



**CE Compliance (for EU only)**

This product complies with the requirements of EMC and Low Voltage Directives including their amendments.

**WARNING**

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

**Warnung**

Dies ist ein Klasse A Produkt. In einer örtlichen Umgebung kann dieses Gerät Funkstörungen verursachen.

**ATTENTION**

Ce produit est de classe A. Dans un environnement domestique, il peut causer des interférences radio. Auquel cas, l'utilisateur sera amené à prendre les mesures adéquates.

**Atención**

Este es un producto de la clase A. En ambientes domésticos este producto puede causar radio interferencias en cuyo caso el usuario deberá tomar las medidas oportunas.

**VERWITTIGING**

Dit is een klasse A produkt. Het gebruik hiervan kan radio interferenties veroorzaken die de gebruiker ertoe kunnen dwingen sommige maatregelen te moeten treffen.

**Avviso**

Questo è un apparecchio di Classe A. In un ambiente residenziale questo apparecchio può provocare radiodisturbi. In questo caso può essere richiesto all'utilizzatore di prendere misure adeguate.

Schallemission: unter 70dB (A) nach DIN 45635 (ISO7779)

**FCC Notice**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at this own expense.

Changes or modifications not expressly approved by manufacturer for compliance could void the user's authority to operate the equipment.

Microsoft and Windows are registered trademarks of Microsoft Corporation.

Celeron is a registered trademark of Intel Corporation.

Perchlorate Material - special handling may apply.

See <http://www.dtsc.ca.gov/hazardouswaste/perchlorate/>

-- Note; This is applicable to California, U.S.A only

The ST-B20 does not support the hot plug / hot unplug features of the Powered USB interface.

In case of plugging or unplugging the Powered USB peripherals attached to the ST-B20, you are requested to power off the ST-B20.

## Safety Summary

Personal safety in handling or maintaining the equipment is extremely important. Warnings and Cautions necessary for safe handling are included in this manual. All warnings and cautions contained in this manual should be read and understood before handling or maintaining the equipment.

Do not attempt to effect repairs or modifications to this equipment. If a fault occurs that cannot be rectified using the procedures described in this manual, turn off the power, unplug the machine, then contact your authorized TOSHIBA TEC representative for assistance.

### Meanings of Each Symbol



This symbol indicates warning items (including cautions). Specific warning contents are drawn inside the  $\triangle$  symbol.  
(The symbol on the left indicates a general caution.)



This symbol indicates prohibited actions (prohibited items). Specific prohibited contents are drawn inside or near the  $\bigcirc$  symbol.  
(The symbol on the left indicates "no disassembling".)



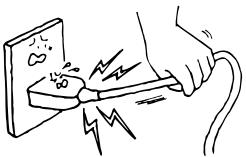
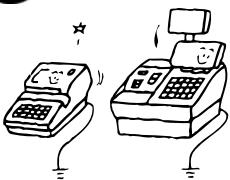
This symbol indicates actions which must be performed. Specific instructions are drawn inside or near the  $\bullet$  symbol.  
(The symbol on the left indicates "disconnect the power cord plug from the outlet".)



### WARNING

This indicates that there is the risk of **death or serious injury** if the machines are improperly handled contrary to this indication.

 <b>Prohibited</b> 	<p>Do not plug in or unplug the power cord plug with wet hands as this may cause <b>electric shock</b>.</p>	 <b>Prohibited</b> 	<p>Any other than the specified AC voltage is prohibited.</p> <p>Do not use voltages other than the voltage (AC) specified on the rating plate, as this may cause <b>fire</b> or <b>electric shock</b>.</p>
 <b>Prohibited</b> 	<p>If the machines share the same outlet with any other electrical appliances which consume large amounts of power, the voltage will fluctuate widely each time these appliances operate. Be sure to provide an exclusive outlet for the machine as this may cause the machines to <b>malfunction</b>.</p>	 <b>Prohibited</b> 	<p>Do not place metal objects or water-filled containers such as flower vases, flower pots or mugs, etc. on top of the machines. If metal objects or spilled liquid enter the machines, this may cause <b>fire</b> or <b>electric shock</b>.</p>
 <b>Prohibited</b> 	<p>Do not insert or drop metal, flammable or other foreign objects into the machines through the ventilation slits, as this may cause <b>fire</b> or <b>electric shock</b>.</p>	 <b>Prohibited</b> 	<p>Do not scratch, damage or modify the power cords. Also, do not place heavy objects on, pull on, or excessively bend the cords, as this may cause <b>fire</b> or <b>electric shock</b>.</p>
 <b>Disconnect the plug.</b> 	<p>If the machines are dropped or their cabinets damaged, first turn off the power switches and disconnect the power cord plugs from the outlet, and then contact your authorized TOSHIBA TEC representative for assistance. Continued use of the machine in that condition may cause <b>fire</b> or <b>electric shock</b>.</p>	 <b>Disconnect the plug.</b> 	<p>Continued use of the machines in an abnormal condition such as when the machines are producing smoke or strange smells may cause <b>fire</b> or <b>electric shock</b>. In these cases, immediately turn off the power switches and disconnect the power cord plugs from the outlet. Then, contact your authorized TOSHIBA TEC representative for assistance.</p>

 <p>Disconnect the plug.</p> 	<p>If foreign objects (metal fragments, water, liquids) enter the machines, first turn off the power switches and disconnect the power cord plugs from the outlet, and then contact your authorized TOSHIBA TEC representative for assistance. Continued use of the machine in that condition may cause <b>fire or electric shock</b>.</p>	 <p>Disconnect the plug.</p> 	<p>When unplugging the power cords, be sure to hold and pull on the plug portion. Pulling on the cord portion may cut or expose the internal wires and cause <b>fire or electric shock</b>.</p>
 <p>Connect a grounding wire.</p> 	<p>Ensure that the equipment is properly grounded. Extension cables should also be grounded. <b>Fire or electric shock</b> could occur on improperly grounded equipment.</p>	 <p>No disassembling.</p> 	<p>Do not remove covers, repair or modify the machine by yourself. You may be <b>injured</b> by high voltage, very hot parts or sharp edges inside the machine. Unauthorized modification is prohibited.</p>
 <p>Prohibited</p> 	<p>Do not use a spray cleaner containing flammable gas for cleaning this product, as this may cause a <b>fire</b>.</p>	 <p>Prohibited</p> 	<p>Care must be taken not to injure yourself with the printer paper cutter.</p>



## CAUTION

This indicates that there is the risk of personal **Injury or damage** to objects if the machines are improperly handled contrary to this indication.

### Precautions

The following precautions will help to ensure that this machine will continue to function correctly.

- Try to avoid locations that have the following adverse conditions:
 

* Temperatures out of the specification	* Direct sunlight	* High humidity
* Shared power source	* Excessive vibration	* Dust/Gas
- Do not subject the machine to sudden shocks.
- Do not press the keys too hard. Keys will operate correctly if they are touched lightly.
- Clean the cover and keyboard, etc. by wiping with a dry cloth or a cloth soaked with detergent and wrung out thoroughly. Never use thinner or other volatile solvent for cleaning.
- At the end of the day, turn the power OFF, then clean and inspect the exterior of the machine.
- Try to avoid using this equipment on the same power supply as high voltage equipment or equipment likely to cause mains interference.
- USE ONLY TOSHIBA TEC SPECIFIED consumables.
- DO NOT STORE the consumables where they might be exposed to direct sunlight, high temperatures, high humidity, dust, or gas.
- When moving the machine, take hold of the drawer and lift the machine.
- Do not place heavy objects on top of the machines, as these items may become unbalanced and fall causing **injury**.
- Do not block the ventilation slits of the machines, as this will cause heat to build up inside the machines and may cause **fire**.
- Do not lean against the machine. It may fall on you and could cause **injury**.
- Place the machine on a stable and level surface.

### Request Regarding Maintenance

- Utilize our maintenance services.

After purchasing the machine, contact your authorized TOSHIBA TEC representative for assistance once a year to have the inside of the machine cleaned. Otherwise, dust will build up inside the machines and may cause a **fire** or a **malfunction**. Cleaning is particularly effective before humid rainy seasons.

- Our preventive maintenance service performs the periodic checks and other work required to maintain the quality and performance of the machines, preventing accidents beforehand.  
For details, please consult your authorized TOSHIBA TEC representative for assistance.
- Using insecticides and other chemicals  
Do not expose the machines to insecticides or other volatile solvents. This will cause the cabinet or other parts to deteriorate or cause the paint to peel.

## **TABLE OF CONTENTS**

	Page
<b>1. INTRODUCTION-----</b>	<b>1- 1</b>
1.1    Accessories-----	1- 1
<b>2. APPEARANCE-----</b>	<b>2- 1</b>
<b>3. CONNECTORS -----</b>	<b>3- 1</b>
<b>4. INSTALLATION PROCEDURE-----</b>	<b>4- 1</b>
4.1    Environment for Installation-----	4- 1
4.2    Attaching the Cable Cover -----	4- 2
4.3    Replacing the Attachment Screws for the Front Bezel -----	4- 2
<b>5. HOW TO LOCK/UNLOCK THE FRONT PANEL-----</b>	<b>5- 1</b>
<b>6. GENERAL MAINTENANCE -----</b>	<b>6- 1</b>
6.1    Cleaning -----	6- 1
<b>7. TROUBLESHOOTING -----</b>	<b>7- 1</b>
<b>8. SPECIFICATIONS -----</b>	<b>8- 1</b>
8.1    Basic Specifications -----	8- 1
8.2    Options-----	8- 2
8.3    Internal Options-----	8- 4

**CAUTION!**

1. *This manual may not be copied in whole or in part without prior written permission of TOSHIBA TEC.*
2. *The contents of this manual may be changed without notification.*

# 1. INTRODUCTION

Thank you for choosing the TOSHIBA POS Terminal. This POS Terminal contains all the high performance register function necessary for a POS Terminal and enables the user oriented system configuration. By adopting a high-speed CPU, Memory with large capacity, this POS Terminal flexibly accepts the modification corresponding to the future system environment as the user expects. This manual describes the functions and handling of this POS terminal and should be read carefully to help gain maximum performance and life from your POS terminal. For most queries please refer to this manual and keep it safe for future reference.

## 1.1 Accessories

Confirm that all the following accessories are contained in the carton. If any accessories are missing or damaged, contact your TOSHIBA TEC service representative.

Cable Cover (1 pc.)



Front Panel Key (2 pcs.)



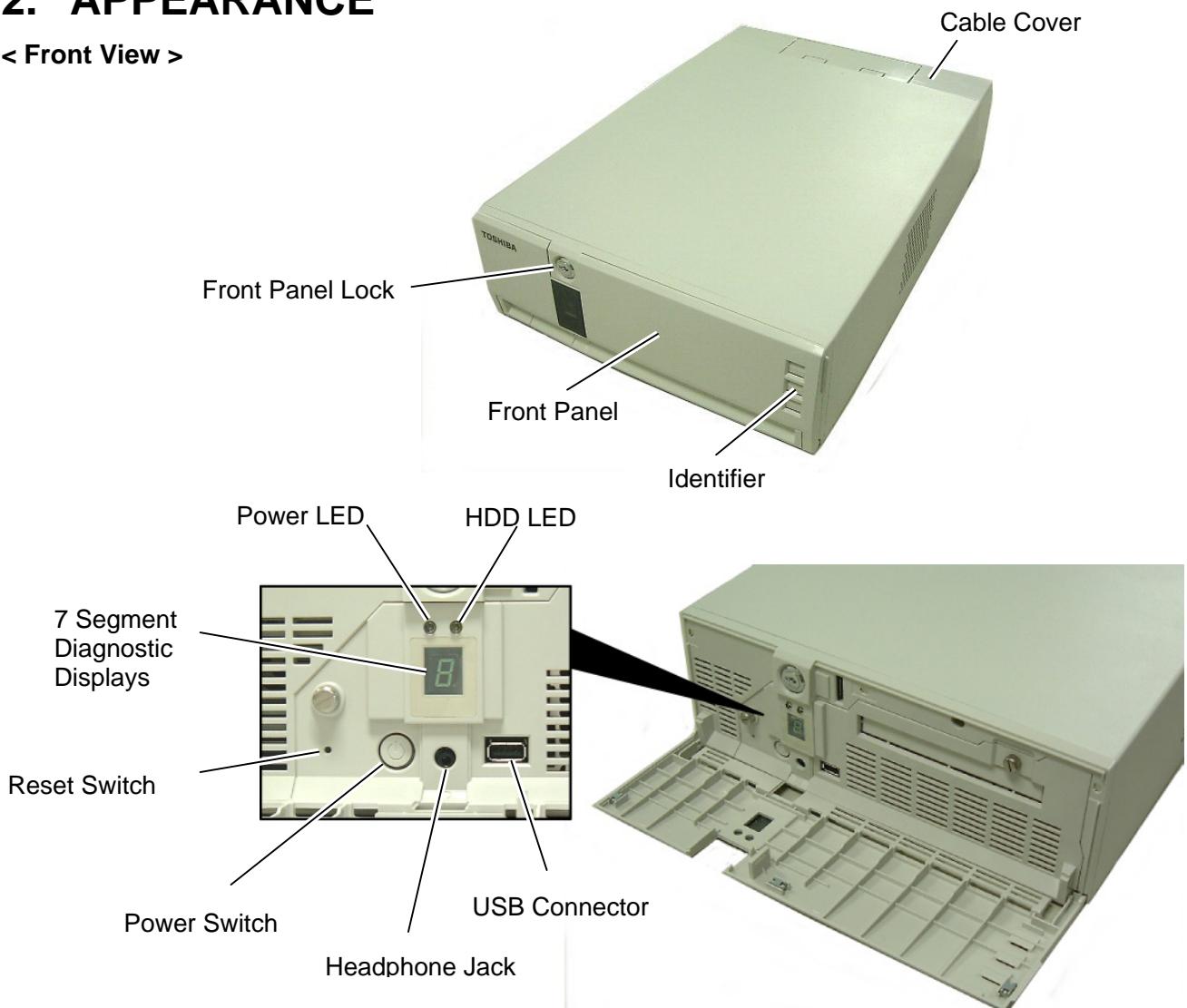
DSM-3x12 Screw (2 pcs.)  
(Used to secure the Front Bezel)



**NOTE:** The power cord is not included in the carton. Please prepare it separately from a local dealer.

## 2. APPEARANCE

< Front View >



(1) Power Switch

This is the switch to turn the power of the POS terminal ON or OFF. The Power LED is illuminated when turning the power on.

**NOTE:** This switch is a standby switch in the safety standard. It does not fully turn off the POS terminal.

(2) Power LED (Blue)

This is the LED to indicate the power ON/OFF status of the POS terminal. Blue LED is illuminated when turning the power ON.

(3) HDD LED (Orange)

This is the LED to indicate the HDD status of the POS terminal. Orange LED is illuminated during the access to the Hard Disk Drive.

(4) Front Panel Lock

This is the lock of the front panel. To lock the front panel, insert the front panel key to the front panel lock, and then turn it clockwise. To unlock the front panel, turn the front panel key counter clockwise.

(5) Headphone Jack

This is used to connect to the headphone.

- (6) USB Connector  
Connector for the USB (Universal Serial Bus) interfaces conforming to USB V2.0/1.1. A USB Mouse, USB keyboard, etc. can be connected to this connector.
- (7) Reset Switch  
Pressing this switch when the POS terminal hangs up resets the unit.

**CAUTION!**

*Do not press the Reset Switch unnecessarily. Doing so may cause an error.*

- (8) 7 Segment Diagnostic Displays  
The operating condition of the POS terminal is displayed on the 7-segment display.

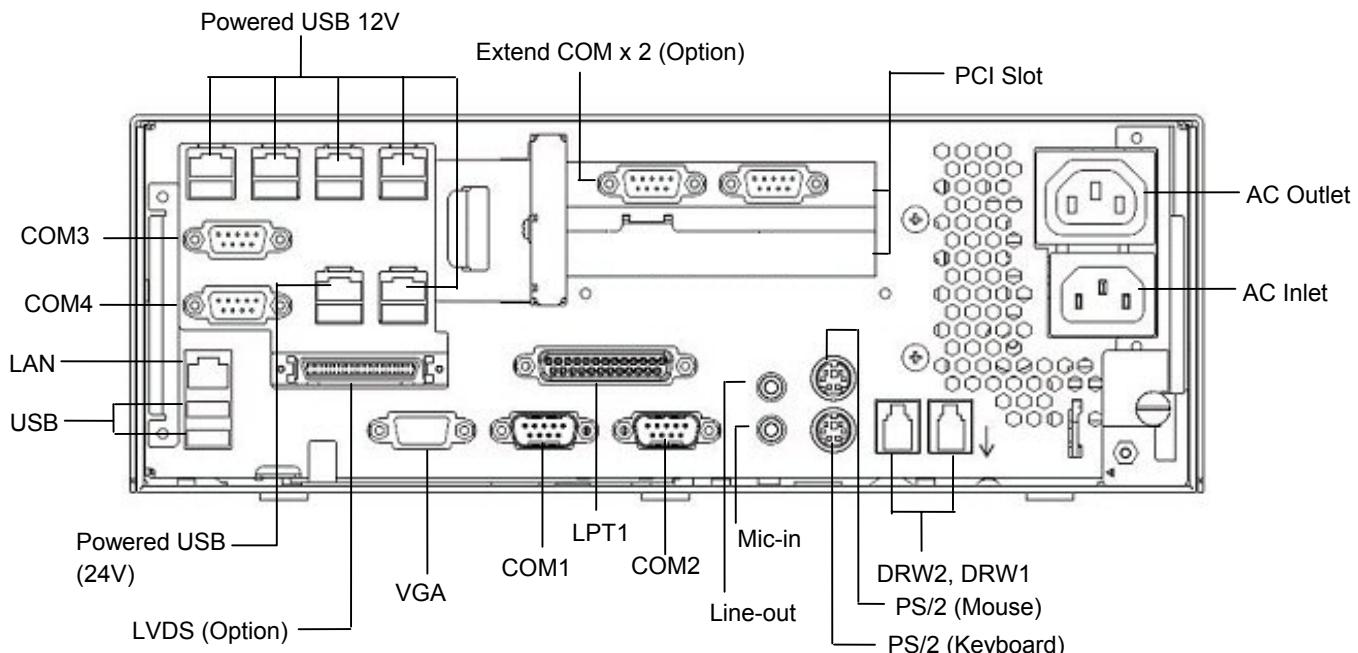
7 Segment Display	Detecting Conditions
— (Underbar)	Normal Conditions 1 * (See <b>NOTE</b> ) (Initial Power Cable Plugging)
"NO SYMBOL" (Segments all off)	Normal Conditions 2 (Power ON - OS Operating - Shut Down)
— (Underbar)	Detecting "Unexpected Power Failure"
· (Dot Segment Blinking)	"S1" Mode
1	Memory Error (Before Starting the Display) Memory Error (After Starting the Display)
2	BIOS Checksum Error
3	RTC Error
4	Option ROM Error (VGA BIOS)
H (Heat)	CPU Temperature over the Threshold (Threshold : 95 degrees)
F (Fan)	Fan Rotation Speed Slow Down (Threshold : 500rpm or less)
P (Power)	Power Voltage Out of Range Error (Threshold : +/- 10%)
d (disk)	Disk Error
L (small capital "L")	BIOS not working properly

**NOTE:**

After "Power ON - OS Operating - Shut Down" procedure (Normal Condition2), "\_"(underbar) symbol will be off.

When the underbar illuminates during the Normal Condition2, it indicates that a power failure occurred. (The power failure in a short period of time could not be detected.)

## 3. CONNECTORS



Connector	Description
AC Inlet	A connector for the AC inlet
AC Outlet	A connector to supply AC power to the CRT. AC power is output in synchronization with the ON/OFF status of the POS terminal.
PS/2 (Mouse, Keyboard)	Mini-DIN 6-pin female type connector Connector for the PS/2 type mouse, Connector for the PS/2 type keyboard
Powered USB 24V (Red) Powered USB 12V (Green) General 5V USB	Connector for the USB (Universal Serial Bus) interface USB V2.0/1.1 and UHCI (conforming to Universal Hub Controller Interface V2.0/1.1) <b>NOTE:</b> <i>The powered USB sockets, which are 5 ports of 12V USB and 1 port of 24V USB. The lower part of these sockets, the USB connector on the front side, and the two USB connectors on the rear side can be used as general 5V USB connectors.</i> <i>The Powered USB ports are meant for connection to peripherals listed in the Options page or equivalent.</i> <i>The maximum load current for 12V Powered USB is 1.5 A. Up to 2 channels can be used. The maximum external load current for 12V Powered USB is 3.5 A.</i> <i>For the 12V Powered USB port, while the lower 5V USB port is being used, the upper 12V port shall not be connected.</i>
LAN	Modular type connector for the 10/100/1000 Base T Ethernet LAN interface.
DRW1, DRW2	A 24V type drawer is connectable.
VGA	A 15-pin VGA connector – Analog
COM1, 2	D-sub 9-pin male type connector (without power supply) A slot scanner, modem, serial Interface type scale, EFT, etc. are connectable.
COM3, 4	D-sub 9-pin female type connector (with +5V, +12V output) A line display unit or RS-232C type hand scanner is connectable. <b>NOTE:</b> <i>COM4 cannot be used when the touch panel TFT is connected to the POS terminal.</i>
LVDS (Option)	Expandable LCD 50-pin interface – Digital COM5 for MSR in LVDS connector COM6 for Touch panel in LVDS connector Expandable LCD 26-pin interface – Digital COM2 for Touch panel in LVDS connector

Connector	Description
Extend COM x2 (Option)	D-sub 9-pin female type connector (with +5V, +12V output) A line display unit or RS-232C type hand scanner is connectable.
LPT1	D-sub 25-pin female connector Printer, etc. having a Centronics interface or equivalent are connectable.
Line-out	Used for connecting an external speaker via the stereo mini jack terminal
Mic-in	Used for connecting a monophonic microphone via the mono mini jack terminal
PCI slot	Available only when the optional kit is installed. Powered COM option card can be expanded as COM7 and COM8. The maximum load current for 12V on two PCI slots is 1 A.
Headphone Jack	Used for connecting a headphone via the stereo mini jack terminal.

## 4. INSTALLATION PROCEDURE

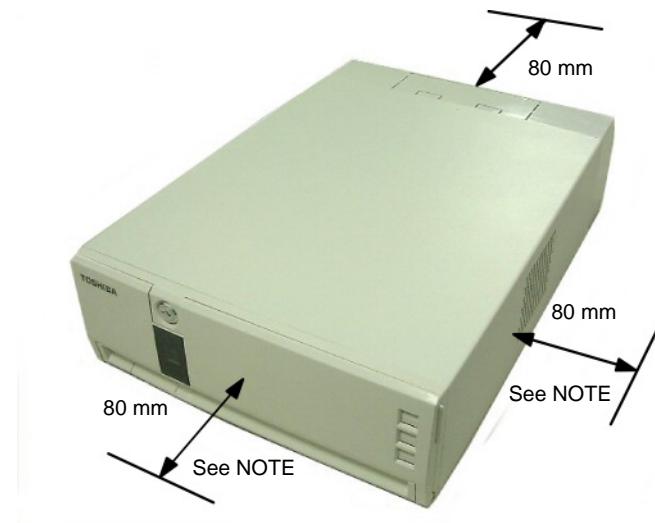
### 4.1 Environment for Installation

**CAUTION!**

When installing the POS terminal, take the following precautions. Failure to do this may cause fire, electric shock, or injury.

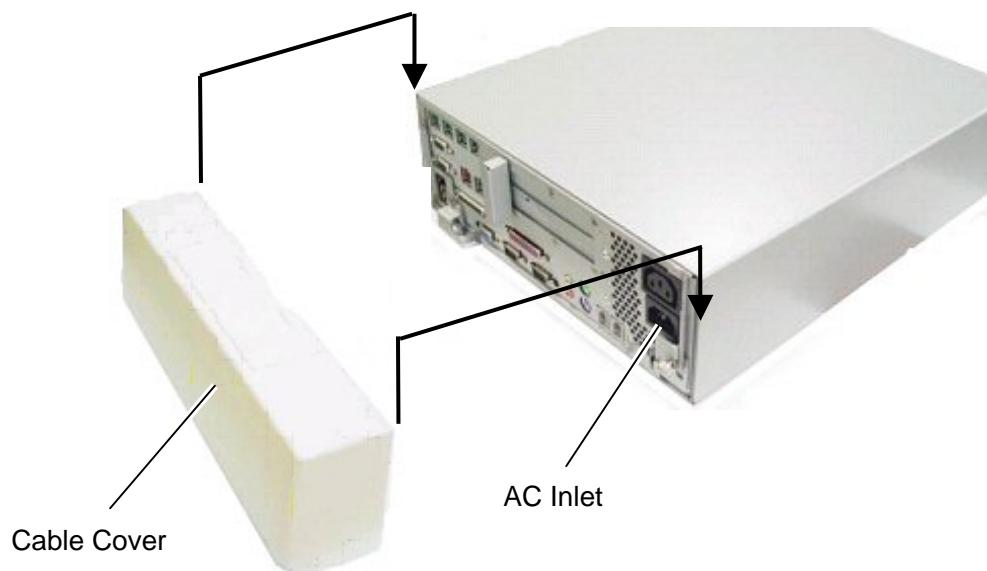
1. Avoid locations where it is subject to the following:
  - Direct sunlight
  - High temperature, high humidity
  - Rapid change in temperature
  - Excessive vibration
  - Dust
2. Keep away from any devices that emit magnetism or electromagnetic wave.
3. Keep away from flame or moisture.
4. Be sure to place the POS terminal on a level and stable surface.

1. Place the POS terminal on a level surface.
2. Provide a space of minimum 80 mm to the right, front and rear of the POS terminal for proper cooling. (The unit has air vents on the front, rear, right and a fan. Spaces should be provided to prevent the air vents in the main unit from being closed and the airflow from being obstructed.)



**NOTE:** Do not block the ventilation of the fan. Fan is provided on these sides.

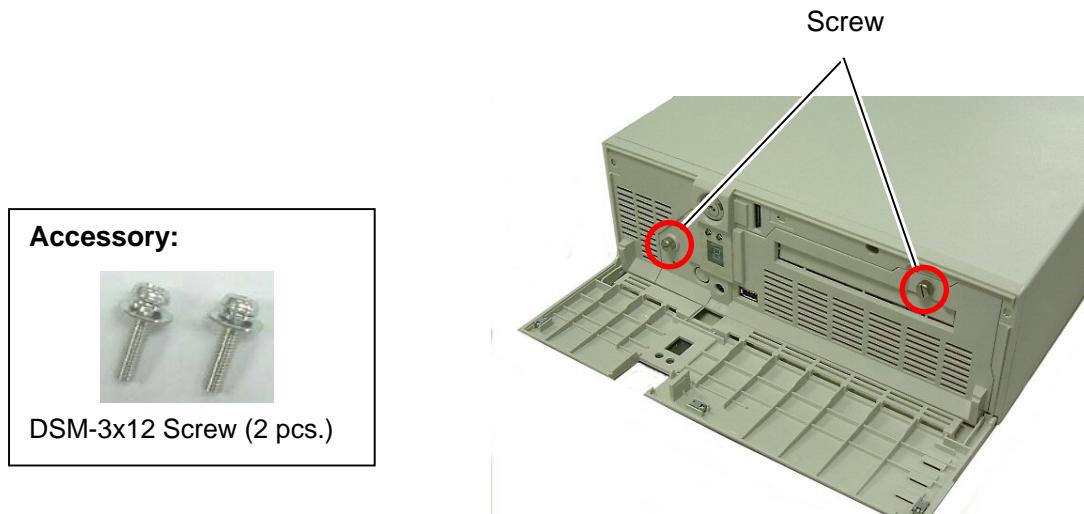
- ## 4.2 Connecting the AC Plug and Cables
1. Fully insert the Power Cord Plug into the AC Inlet and the cables into the connectors on the rear side of the POS terminal.
  2. Hold both sides of the cable cover by hands, and then fit into the POS terminal as indicated by the arrows below.



**NOTE:** The Power cord is not included in the carton. Please prepare it separately from local dealer.

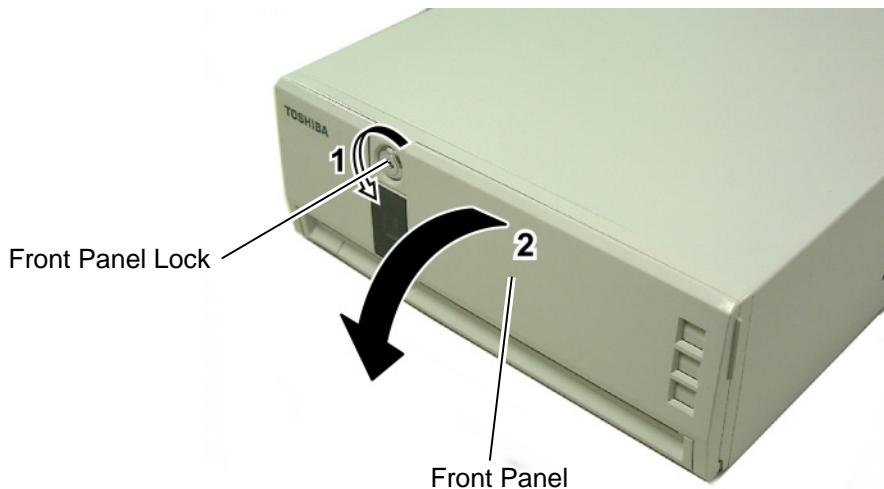
## 4.3 Replacing the Attachment Screws for the Front Bezel

It is possible to replace the attachment screws for the front bezel with those requiring a screwdriver. In this case, use the provided DSM-3x12 screws.



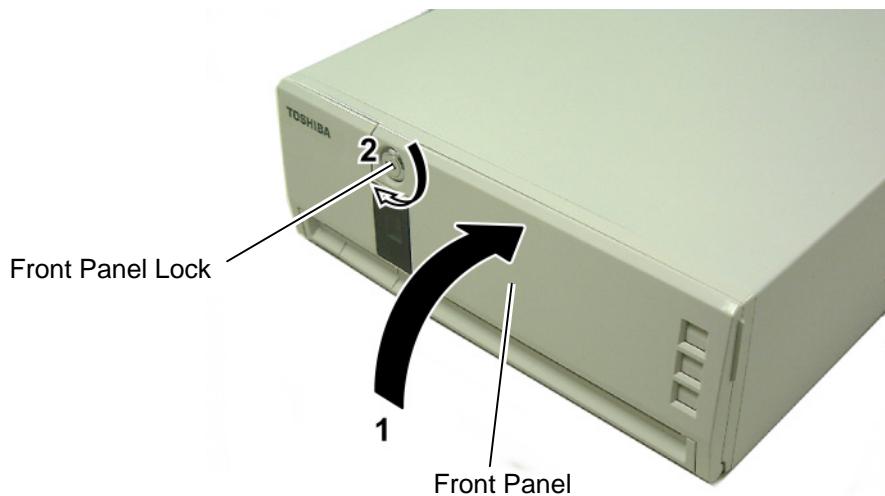
## 5. HOW TO LOCK/UNLOCK THE FRONT PANEL

<< How to unlock the front panel >>



1. Insert the front panel key into the front panel lock, and turn it counterclockwise to unlock the front panel.
2. Gently open the front panel holding it by hand.

<< How to lock the front panel >>



1. Gently close the front panel.
2. Turn the front panel key clockwise to lock the front panel.

## 6. GENERAL MAINTENANCE

### 6.1 Cleaning

#### **WARNING!**

1. Be sure to disconnect the power cord prior to performing any maintenance.
2. Do not pour water directly on the POS Terminal or wipe it with a soaked cloth, as this may cause fire, electric shock, or machine failure.

#### **CAUTION!**

Never use an organic solvent like thinners or benzene for cleaning. Using such solvents may discolor the covers.

To help retain the high quality and performance of your POS Terminal, it should be cleaned regularly. The greater the usage on the POS Terminal, the more frequent the cleaning. (i.e. low usage = weekly; high usage = daily)

- **Cleaning the Covers**

Wipe the covers with a soft dry cloth or soft cloth slightly moistened with mild detergent. After using detergent for cleaning, be sure to wipe it off with a slightly moistened cloth.

## 7. TROUBLESHOOTING

### **WARNING!**

*If you cannot solve a problem with the following solutions, do not attempt to repair it by yourself. Turn the power off, unplug the POS Terminal, then contact the nearest TOSHIBA TEC service representative for assistance.*

Symptom	Check point	Solution
The power does not turn on.	<ul style="list-style-type: none"><li>• Is the power cord plugged in correctly?</li><li>• Is the power supplied to the AC outlet?</li><li>• Has the circuit breaker blown?</li></ul>	<ul style="list-style-type: none"><li>• Plug in correctly.</li><li>• If it is not a power failure, check for the power supply to the AC outlet with another electric appliance. When the power is not supplied, contact your nearest power company.</li><li>• Check the circuit breaker.</li></ul>

## 8. SPECIFICATIONS

### 8.1 Basic Specifications

Item	Description
CPU	Intel Celeron M 440 (1.86GHz)
Chipset	945GME
BIOS ROM	1MB Flash ROM
Memory	512MB DDR2 SODIMM 2 slots (2GB x 2 max. up to 4GB)
Hard Disk Drive	2,5" SATA 1, 2 (80GB or more) - mutually available 2,5" Hard Disk Drive Max. 2 units of 2.5" Hard Disk Drive can be connected. RAID 1 (Mirroring) functionality is supported.* * In case of using RAID 1 functionality, 2 Hard Disk Drives are required to install.
CD/DVD Drive (Option)	1 drive (local purchase is required - integrated)
U-SSD Interface	Supported
Floppy Disk Drive (Option)	USB interface type (local purchase is required - external)
Display Interface	VGA x 1 channel (on-board, standard)
Expansion LCD Interface (Option)	LVDS (digital) x 1
LAN Interface	10/100/1000 Base T Ethernet, RJ-45 modular connector (with LED)
Sound Generator	AC97 interface, LINE OUT x 1 (rear), MIC IN x 1 (rear), Headphone x 1 (front)
Speaker	Beep speaker is supported.
Interface	RS232C x 4 (non-powered x 2, powered x 2) Parallel x 1 Powered USB x 6 (24V powered x 1, 12V powered x 5) USB x 3 (front x 1, rear x 2) PS/2 x 2 (keyboard x 1, mouse x 1) PCI (half size slot) x 2 Drawer x 2 (24V type TOSHIBA interface)
AC Output Voltage	AC 100V-127V / 200V-240V +10%, -10% 50 / 60Hz 2.0A - 1.0A
Operating Temperature	5°C to 40°C
Relative Humidity	10% to 80%RH (no condensation)
Input Voltage	AC 100V-127V / 200V-240V +10%, -10% 50 / 60Hz 5.0A - 2.4A
Cabinet Color	FW2 (Fair White2), CB (Cool Black)
Weight	8.8Kg (with 1 HDD, without packing materials)
Dimensions	315 mm (W) x 466 mm (D) x 112.5mm (H) (including the rubber feet and cable cover)
Support OS	Windows (XP Professional SP3, VISTA Business Edition SP1) WEPOS Ver1.1 SUSE Linux Enterprise Desktop 10
Power Code	A power code is not included in the product. Please use one complied with each country's safety standard. For details, please contact the nearest TOSHIBA TEC service representative.

## 8.2 Options

Option Name	Type	Description				
Drawer	24V-drive standard drawer DRWST-51A-4MV Series DRWST-51A-6MV Series DRWST-51A-8MV Series	Size and Weight : 460mm(W) x 400mm(D) x 115mm (H), 10kg. Money Case Type : MC4 Cabinet Color : YG-2 (White), CB (Cool Black) Money Case Type : MC6 Cabinet Color : CB (Cool Black) Money Case Type : MC8 Cabinet Color : YG-2 (White), CB (Cool Black)				
	24V-drive Flip top drawer DRWST-56-EMV-QM-R	Size and Weight : 460mm(W) x170mm(D) x 100mm (H), 6kg. Money Case Type : Euro case Cabinet Color : - (Stainless top)				
	Money case type	Type	Bill holder	Coin tray	Mini coin case	CDC
		4M	5	5	None	Provided
		6M	5	6	None	Provided
		8M	4	6	1	Provided
	EM	5	8	None	Provided	With media slot
Line display	LIUST-51-1A Series	20 characters x 2 lines, 5 x 7 dot display Cabinet color : FW2 (Fair White2), CB (Cool Black)				
	LIUST-A10-RA Series	20 characters x 2 lines, 5 x 7 dot display Cabinet color : FW2 (Fair White2), CB (Cool Black)				
	LIUST-53-11-QM-R	42 characters x 8 lines or 256 x 64 dot Cabinet color : FW2 (Fair White2)				
Printer	TRST-56-P Series	80mm paper width single thermal printer, parallel interface Cabinet color : FW2 (Fair White2), CB (Cool Black)				
	TRST-56-S Series	80mm paper width single thermal printer, serial interface Cabinet color : FW2 (Fair White2), CB (Cool Black)				
	TRST-A10 Series	80/58mm paper width single thermal printer, serial, parallel, USB interface Cabinet color : FW2 (Fair White2), CB (Cool Black)				
	TRST-A15 Series	80/58mm paper width single thermal dual side printing printer, serial, parallel, USB interface Cabinet color : FW2 (Fair White2), CB (Cool Black)				
	TRJST-52-3P-QM-R	58mm paper width 2-station thermal printer, parallel interface Cabinet color : FW2 (Fair White2)				
	TRJST-52-3S-QM-R	58mm paper width 2-station thermal printer, serial interface Cabinet color : FW2 (Fair White2)				
POS keyboard	PKBST-50-3 Series	Max. 81keys POS keyboard, PS/2 interface Cabinet color : FW2 (Fair White2), CB (Cool Black)				

Option Name	Type	Description
TFT monitor	TFTST-56T Series	12.1" SVGA TFT monitor equipped with the touch panel, LVDS interface (PCI slot type) Cabinet color : FW2 (Fair White2)
	TFTST-76T-2A1K-QM-R	12.1" SVGA TFT monitor equipped with the touch panel, VGA interface Cabinet color : Black
	TFTST-76T-5A1K-QM-R	15" XGA TFT monitor equipped with the touch panel, VGA interface Cabinet color : Black
	TFTST-A20-2A1 Series	12.1" SVGA TFT monitor non-touch panel, VGA interface Cabinet color : FW2 (Fair White2), CB (Cool Black)
	TFTST-A20-5A1 Series	15" XGA TFT monitor non-touch panel, VGA interface Cabinet color : FW2 (Fair White2), CB (Cool Black)
	TFTST-A20-2A2 Series	12.1" SVGA TFT monitor equipped with the touch panel, VGA interface Cabinet color : FW2 (Fair White2), CB (Cool Black)
	TFTST-A20-5A2 Series	15" XGA TFT monitor equipped with the touch panel, VGA interface Cabinet color : FW2 (Fair White2), CB (Cool Black)
	TFTST-A20-2L2 Series	12.1" SVGA TFT monitor equipped with the touch panel, LVDS interface (50 pin type) Cabinet color : FW2 (Fair White2), CB (Cool Black)
	TFTST-A20-5L2 Series	15" XGA TFT monitor equipped with the touch panel, LVDS interface (50 pin type) Cabinet color : FW2 (Fair White2), CB (Cool Black)
	TFTST-B20-2A2 Series	12.1" SVGA TFT monitor equipped with the touch panel, VGA interface Cabinet color : FW2 (Fair White2), CB (Cool Black)
	TFTST-B20-5A2 Series	15" XGA TFT monitor equipped with the touch panel, VGA interface Cabinet color : FW2 (Fair White2), CB (Cool Black)
Operation unit	LKBST-65-TT11 Series	12.1" SVGA TFT monitor equipped with the touch panel, integrated keyboard, LVDS interface (PCI slot type) Cabinet color : FW2 (Fair White2)
	LKBST-65-TF12 Series	12.1" SVGA TFT monitor equipped with the touch panel, integrated keyboard, LVDS interface (26 pin type) Cabinet color : FW2 (Fair White2), CB (Cool Black)
Drawer interface conversion box	KIT-DCNV-TED-QM-R	Drawer interface conversion box
Integration Tray	KIT-TRAY-B20-F1-QM-R	Integration tray type 1 for FW2 (Fair White2) cabinet
	KIT-TRAY-B20-K1-QM-R	Integration tray type 1 for CB (Cool Black) cabinet
Vertical Installation Stand	KIT-STAND-B20-F-QM-R	Vertical installation stand kit for FW2 (Fair White2) cabinet
	KIT-STAND-B20-K-QM-R	Vertical installation stand kit for CB (Cool Black) cabinet

**NOTE:** For details, please contact the nearest TOSHIBA TEC sales representative.

## 8.3 Internal Options

Option Name	Type	Description
HDD unit	KIT-HD2-120-S-QM-R	Type : SATA interface Capacity : 120GB Accessory : Bracket, Screws
Expansion Memory	KIT-SOD-05-01-QM-R	DDR2-533 PC2-4200, SODIMM, 512MB
	KIT-SOD-10-01-QM-R	DDR2-533 PC2-4200, SODIMM, 1GB
	KIT-SOD-20-01-QM-R	DDR2-533 PC2-4200, SODIMM, 2GB
Expansion COM Board	KIT-COM-PCI-QM-R	Type : PCI Spec : 5V/12V Powered COM, 2 channels
Expansion LCD Interface	KIT-LVDS-B20-QM-R	50 pin type LVDS (Digital) interface
	KIT-LVDS-7-B20-QM-R	26 pin type LVDS (Digital) interface
Cable	KIT-CBL-CDV-B20-QM-R	Power / Signal cable for optional CD/DVD drive Accessory : Screws
	KIT-CBL-RLY-B20-QM-R	Touch panel / Beep signal cable for LVDS board (for PCI slot type LVDS board)

**NOTE:** For details, please contact the nearest TOSHIBA TEC sales representative.

English

**The following information is for EU-member states only:**

**Disposal of products**

(based on EU-Directive 2002/96/EC,

**Directive on Waste electrical and electronic equipment – WEEE)**



The use of the symbol indicates that this product may not be disposed as unsorted municipal waste and has to be collected separately. Integrated batteries and accumulators can be disposed of with the product. They will be separated at the recycling centers.

The black bar indicates that the product was placed on the market after August 13, 2005.

By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environmental and human health, which could otherwise be caused by inappropriate waste handling of this product.

For more detailed information about the take-back and recycling of this product, please contact your supplier where you purchased this product.

Franaçis

**Les informations suivantes ne concernent que les utilisateurs des pays membres de l'union Européenne :**

**Recyclage des produits**

(Basé sur la directive Européenne 2002/96/EC,

**Directive sur le recyclage des équipements électriques et électroniques – REEE – WEEE)**



L'utilisation de ce symbole indique que ce produit ne doit pas être jeté sans tri préalable, comme un déchet classique, mais doit être collecté séparément. Les batteries et accumulateurs intégrés peuvent être laissés en place, ils seront récupérés par le centre de recyclage.

La barre noire indique que ce produit a été mis sur le marché après le 13 Août 2005.

En vous assurant que ce produit est correctement mis au rebut, vous participerez à prévenir les éventuelles conséquences néfastes sur l'environnement et la santé publique qui pourraient autrement être causés par une gestion inappropriée des déchets contenus dans ce produit.

Pour obtenir des informations complémentaires sur la récupération et le recyclage de ce produit, veuillez contacter le fournisseur auprès duquel vous en avez fait l'acquisition.

Deutsch

**Wiederverwertungsinformationen für Verbraucher:**

(gemäß EU-Directive 2002/96/EC,

**Gesetz über das Inverkehrbringen, die Rücknahme und die umweltverträgliche Entsorgung von Elektro- und Elektronikgeräten [ElektroG] – WEEE).**



Die folgenden Informationen gelten nur für EU-Mitgliedsstaaten.

Das durchgestrichene Mülltonnensymbol weist darauf hin, dass dieses Produkt nicht wie allgemeiner Hausmüll behandelt werden darf. Verbaute Batterien oder Akkus müssen vorher entnommen und separat entsorgt werden.

Der schwarze Balken unter dem Symbol besagt, dass das Produkt nach dem 13. August 2005 in Verkehr gebracht wurde.

Indem Sie aktiv mit helfen, dieses Produkt ordnungsgemäß zu entsorgen, helfen Sie mit mögliche negativen Auswirkungen auf die Umwelt sowie die menschliche Gesundheit zu vermeiden.

Für nähere Informationen zur Rücknahme und Wiederverwertung dieses Produktes wenden Sie sich bitte an Ihren Lieferanten.

Español

**La siguiente información solo concierne a los Estados Miembros de la UE:**

**Desechado de los productos**

(basado en la Directiva Europea 2002/96/EC,

**Directiva sobre Residuos de equipos eléctricos y electrónicos – REEE – WEEE)**



El uso de este símbolo indica que el producto no puede ser desecharo como basura común doméstica por lo que debe ser recogido de forma separada. Sus baterías y acumuladores integrados pueden eliminarse junto con el aparato. Estos elementos serán separados en los centros de reciclado.

La barra negra indica que el producto fue puesto en el Mercado después del 13 de Agosto de 2005. Asegurando que nos deshacemos del producto de forma correcta, ayudaremos a evitar potenciales consecuencias negativas tanto para el medio ambiente como para la salud pública, que podrían producirse debido a un tratamiento inapropiado.

Para obtener información más detallada sobre la recogida y reciclaje de su producto, por favor, póngase en contacto con el proveedor que se lo suministró.

Nederlands

**Onderstaande informatie geldt enkel in EU lidstaten:**

**Het afdanken van producten (volgens EU-richtlijn 2002/96/EC,**

**Richtlijn betreffende afgedankte elektrische en elektronische apparatuur – WEEE)**



Dit symbool geeft aan dat dit product niet mag afgedankt worden als algemeen huishoudelijk afval. Het dient afzonderlijk gecollecteerd te worden. Geïntegreerde batterijen of laders kunnen samen met dit product afgedankt worden. Zij worden in het recyclagecentrum gescheiden. De zwarte balk geeft aan dat dit product na 13 augustus 2005 verhandeld werd.

Door een aangepaste afdanking van dit product beschermt u het milieu en de volksgezondheid tegen mogelijke schadelijke gevolgen, die anders zouden kunnen voortvloeien uit het onjuist verwerken van de resten van dit product. Vraag inlichtingen over de terugname en recyclage van dit product aan uw leverancier.

Italiano

**Le seguenti informazioni sono solo gli stati membri della UE:**

**Smaltimento del prodotto**

**(basato sulla direttiva EU-Directive 2002/96/EC,**

**Direttiva sullo smaltimento per il Riciclaggio delle Apparecchiature Elettriche od Elettroniche – RAEE – WEEE)**



Questo simbolo indica che i prodotti non possono essere smaltiti come rifiuti urbani non differenziati ma devono essere raccolti separatamente. Eventuali batterie o accumulatori possono essere smaltiti con il prodotto. Verranno separati dai centri di riciclaggio

La barra nera indica che il prodotto è stato inserito nel mercato dopo il 13 Agosto 2005

Assicuratevi che questo prodotto sia smaltito correttamente, contribuirete a prevenire potenziali conseguenze negative per l'ambiente e la salute umana, che potrebbero essere altrimenti causate da uno smaltimento improprio di questo prodotto.

Per maggiori dettagli sul riciclo, o su come rendere il prodotto, contattate il vostro fornitore.

Português

**A informação que se segue é apenas dirigida a países membros da UE:**

**Reciclagem de produtos (baseado na directive-UE 2002/96/EC,**

**Directiva sobre a reciclagem de resíduos de equipamentos eléctricos e electrónicos – REEE – WEEE)**



O uso deste símbolo indica que este produto não pode ser colocado nos pontos de recolha de lixo comum e deve ser recolhido separadamente. As baterias integradas e acumuladores podem ser entregues juntamente com o produto. Serão depois separados nos centros de reciclagem.

A barra negra indica que o equipamento foi colocado no mercado após 13 de Agosto de 2005.

Ao assegurar-se que este produto é tratado correctamente está a ajudar a prevenir potenciais consequências negativas para o ambiente e para a saúde humana, que poderiam ser causadas pelo inapropriado tratamento deste produto.

Para mais informação sobre a reciclagem e tratamento deste produto, contacte o seu fornecedor.

Polski

**Informacje dla Państw członkowskich Unii Europejskiej:**

**Utylizacja urządzeń**

**(na podstawie dyrektywy Unii Europejskiej 2002/96/EC,**

**Dyrektywa dotycząca odpadów elektrycznych i elektronicznych – WEEE)**



Użycie symbolu oznacza, że urządzenie nie może być traktowane jako niesegregowane odpady i musi być zebrane oddzielnie. Zintegrowane baterie i akumulatory mogą być utylizowane razem z urządzeniem. Zostaną one posegregowane w centrach utylizacji.

Czarny prostokąt oznacza, że urządzenie zostało wprowadzone na rynek po 13 sierpnia 2005.

Poprzez zastosowanie się do prawidłowych procedur utylizacji tego urządzenia, pomożecie Państwo ograniczyć potencjalne negatywne skutki dla środowiska i zdrowia ludzkiego, które mogłyby zaistnieć na skutek niewłaściwej utylizacji tego urządzenia.

W celu uzyskania dodatkowych informacji odnośnie zwrotu i utylizacji tego urządzenia prosimy o kontakt z punktem zakupu tego urządzenia.

**The following information is for EU-member states only:**

**Disposal of batteries and/or accumulators**

**(based on EU-Directive 2006/66/EC,**

**Directive on batteries and accumulators and waste batteries and accumulators)**



The use of the symbol indicates that batteries and/or accumulators may not be disposed as unsorted municipal waste and has to be collected separately.

By ensuring that batteries and/or accumulators are disposed of correctly, you will help prevent potential negative consequences for the environmental and human health, which could otherwise be caused by inappropriate waste handling of this product.

For more detailed information about the take-back and recycling of batteries and/or accumulators, please contact your supplier where you purchased this product.

**Les informations suivantes ne concernent que les pays membres de l'Europe :**

**Comment disposer des batteries et/ou des accumulateurs**

**(basé sur la directive Européenne 2006/66/EC,**

**Directive sur les batteries et accumulateurs et recyclage des batteries et accumulateurs)**



L'utilisation de ce symbole indique que ces batteries et/ou accumulateurs ne doivent pas être jetés sans tri préalable, mais doivent être collectés séparément.

En vous assurant que ces batteries et/ou accumulateurs sont correctement mis au rebut, vous participerez à prévenir les éventuelles conséquences néfastes sur l'environnement et la santé publique qui pourraient être causées par une gestion inappropriée de ce produit.

Pour obtenir des informations complémentaires sur la récupération et le recyclage de ces batteries et/ou accumulateurs, veuillez contacter le fournisseur auprès duquel vous en avez fait l'acquisition.

**Für EU Mitgliedsstaaten:**

**Beseitigung von Batterien und Akkumulatoren (gemäß EU Direktive 2006/66/EU über Batterien und Akkumulatoren sowie Altbatterien und Altakkumulatoren**



Das durchgestrichene Mülltonnensymbol weist darauf hin, dass dieses Produkt nicht wie allgemeiner Hausmüll behandelt werden darf. Verbaute Batterien oder Akkus müssen vorher entnommen und separat entsorgt werden. Indem Sie aktiv mithelfen, dieses Produkt ordnungsgemäß zu entsorgen, helfen Sie mit, mögliche negative Auswirkungen auf die Umwelt sowie die menschliche Gesundheit zu vermeiden.

**La siguiente información es sólo para los países miembros de la UE:**

**Eliminación de baterías y/o acumuladores de energía**

**(basado en la Directiva Europea 2006/66/EC, de baterías y/o acumuladores de energía y eliminación de las mismas)**



El uso de este símbolo indica que la batería no debe ser arrojada a cualquier contenedor de basura y debe ser recogida por separado.

Asegúrese de que las baterías son desecharas correctamente, así ayudará a prevenir posibles consecuencias para el medio ambiente y la salud de las personas, originadas por un desecho inapropiado de este producto. Para más información acerca de la recogida y reciclaje de las baterías, por favor, póngase en contacto con su proveedor.

Nederlands

**De volgende informatie geldt enkel in EU lidstaten:  
Het afdanken van batterijen en/of accumulators  
(volgens EU richtlijn 2006/66/EC,  
richtlijnen over batterijen en accumulators en afgedankte batterijen en accumulators)**



Dit symbool geeft aan dat batterijen en/of accumulators niet als ongesorteerd huishoudelijk afval afgedankt mogen worden maar wel afzonderlijk moeten gecollecteerd worden.  
Door batterijen en/of accumulators op de juiste manier van de hand te doen, beschermt u het milieu en de volksgezondheid tegen mogelijke negatieve gevolgen die kunnen voortvloeien uit het onjuist verwerken van de afval van deze producten.  
Stel u in verbinding met de leverancier van deze producten voor gedetailleerde informatie over hun terugname en recyclage.

Italiano

**Le seguenti informazioni sono il mercato EU:  
Smaltimento Batterie e/o Accumulatori  
(in base alla direttiva EU-2006/66/EC,  
Direttiva relativa alle batterie ed accumulatori ed al relativo smaltimento)**



Il simbolo indica che le batterie non possono essere smaltite con l'apparecchiatura , ma devono subire uno smaltimento separato.  
Assicurarsi che le batterie e gli accumulatori siano smaltiti correttamente eviterà possibili danni all'ambiente ed alla salute, che potrebbero invece verificarsi in caso di smaltimento non corretto.  
Per maggiori dettagli al riguardo contattate il vostro fornitore.

Português

**A informação que se segue é apenas dirigida a países membros da UE:  
Reciclagem de pilhas e/ou acumuladores (baseada na directiva EU-Directiva 2006/66/EC,  
directiva sobre a reciclagem de resíduos de pilhas e/ou acumuladores)**



A utilização do símbolo indica que as pilhas e / ou acumuladores não podem ser colocados nos pontos de recolha de lixo comum e devem ser recolhidos separadamente.  
Ao assegurar que as pilhas e / ou acumuladores sejam tratados correctamente está a ajudar a prevenir potenciais consequências negativas para o ambiente e para a saúde humana, que poderiam ser causadas pelo inapropriado tratamento deste produto.  
Para mais informação sobre a reciclagem e tratamento deste produto, contacte o seu fornecedor.



**TOSHIBA TEC CORPORATION**

**E** EO1-12041A