

with some rugged features such as vibration, shock, drop and drip-proof. It is designed for using in vehicle or in the harsh environment.

The A760T Series notebook computer implements the new technologies in the industrial market. Large display panel, high capacity hard disk drive, PCI bus and CD-ROM, etc. An Intel Pentium III CPU is the heart of this notebook computer. This chapter introduces and explains the A760T Series notebook and its computer parts.

## **1-2 System Description**

The A760T Series computer is a compact fully portable notebook computer. It operates as a stand alone system for most applications.

It offers superior performance under harsh environmental and operating conditions. It is fully compatible with the IBM PC/AT standard.

## **1-3 System Configuration**

This section presents and explains possible notebook hardware configurations. Refer to the nameplate on the notebook bottom for that system's configuration.

### **1-3.1 Standard Configuration**

Table 1-1 lists the major common features of the standard A760T systems.

The specifications in this table may be different from yours due to the optional items. Please refer to the detailed specifications including the standard and optional configurations on page d.

	track pad
Expansion	Two PCMCIA sockets (type II or one type III compatible)
I/O Devices	One RS-232 serial port One Centronics parallel port, support EPP/ECP One external monitor port One external PS/2 keyboard/Mouse port One Port Replicator port One external power supply port One infrared port, IrDA compliance One USB port One 1394 Port

### 1-3.2 Options and Accessories

(A)

- CD-ROM
- External FDD
- LED-Backlight Keyboard  
The LED-Backlight keyboard function keys is Fn+F8.
- DVD

(B) BAY 2 Options

- RS-232/RS-422
- RS-485
- LAN
- FAX/Modem

has compartments for up to four diskettes, this manual, the power supply, and all notebook cables.

### **1-3.3 System Identification**

The nameplate listing system information is at the bottom of the notebook.

It contains:

- Factory configuration
- Model number
- Serial number

### **1-4 Unpacking**

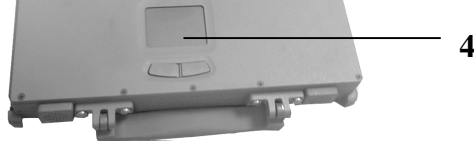
Use this checklist to make sure all items included with the notebook are present in good condition.

- Notebook computer
- Rechargeable battery pack
- AC adapter
- Power cord
- Operation Manual
- PCMCIA diskette
- TRACKPAD diskette
- VGA Driver diskette

If any items are missing or damaged, please contact the supplier.

### **1-5 Notebook Features**

Figures from 1-1 through 1-11 identify the major notebook parts, indicators, and controls.



**Figure 1-1 A760T Notebook, Front View**

### **1-5.1 Cover**

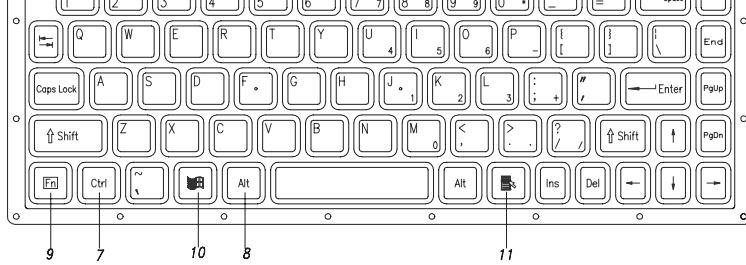
The notebook cover (Item 1, Figure 1-1) houses the display unit and its control devices.

### **1-5.2 Display**

The display have three types, one is 12.1" TFT 16 bit color LCD display (Item 2, Figure 1-1) is selected in A760T-Series notebook computer. The resolution of this LCD display is 800 X 600 pixels (SVGA standard). But the connection mechanism from LCD display to motherboard is designed flexibly for different venders of LCD displays and different types. The other is 13.3" TFT 24 bit color LCD display , the resolution is 1024 X 768.

### **1-5.3 Power Switch**

The power switch (Item 5, Figure 1-1) turns the notebook power on and off.



**Figure 1-2 Rubber Keyboard**

### **1-5.4.1 Function Keys**

The function keys give special commands defined by software. The notebook BIOS also uses function keys to set some configuration parameters.

The rubber keyboard has twelve function keys numbered from F1 through F12 (Item 1, Figure 1-2) and Fn (Item 9, Figure 1-2).

### **1-5.4.2 Embedded Numeric Keypad**

(Item 2, Figure 1-2) These keys act like calculator keys when the NUM LOCK light is on. When the numeric keypad is active, the notebook disables the alphabet keys doubling as numeric keypad keys.

### **1-5.4.3 Num Lock**

The Num Lock key (Item 3, Figure 1-2) activates and deactivates the embedded numeric keypad. When the numeric keypad is active, the NUM LOCK indicator comes on and the alphabetic abilities of the embedded numeric keyboard are disabled.

### 1-5.4.6 Pause/Break

The Pause/Break key (Item 6, Figure 1-2) temporarily or permanently stops a program .

### 1-5.4.7 Ctrl and Alt Keys

(Item 7, Item 8, Figure 1-2) Some software programs use these keys in conjunction with other typewriter keys to perform special functions. See the associated software manual for details.

### 1-5.4.8 Cursor Control Keys

( Figure 1-3) Ten keys around the keyboard right edge work with many programs to enhance editing and cursor placement. See the software manuals for their proper operation. The cursor control keys are:

- Insert (Item 1, Figure 1-3)
- Delete (Item 2, Figure 1-3)
- Home (Item 3, Figure 1-3)
- PgUp (Item 4, Figure 1-3)
- PgDn (Item 5, Figure 1-3)
- → (Item 7, Figure 1-3 )
- ↓ (Item 8, Figure 1-3 )
- ↑ (Item 9, Figure 1-3)
- ← (Item 10, Figure 1-3)
- End (Item 6, Figure 1-3 )

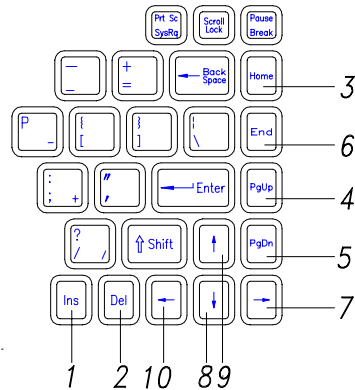
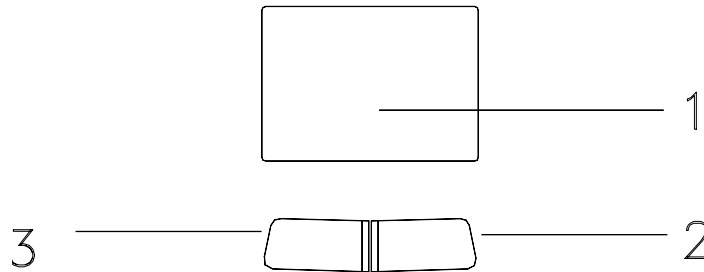


Figure 1-3 Cursor Control Keys

of track pad are easily to clean and control the direction. The pointing device (Item 4, Figure 1-1) moves the cursor about the screen to help work with data.

The track pad consists of three major components:

- Track pad ( Item 1, Figure 1-4 )
- Right input button ( Item 2, Figure 1-4 )
- Left input button ( Item 3, Figure 1-4 )



**Figure 1-4 Track Pad Pointing Device**

### **1-5.6 Volume Control**

The volume control is adjusted from the combination of function keys Fn+F3 (↓) and Fn +F4 (↑).

The “Hot Key Beep” functions of the Fn+F3, Fn+F4 will not be supported to avoid the interface on the normal sound effect.

If the user presses Fn+F5 or Fn+F6 to adjust the LCD brightness, and continues adjusting it when it is already set to the minimum or maximum, it will still keep on beeping every time F5 or F6 is pressed down.

### **1-5.8 Keyboard Backlight (Option for Sound Card)**

The Backlight of the Keyboard is toggle from combination of function keys Fn+F8.

### **1-5.9 CRT/LCD/Simulscan Toggle**

The CRT/LCD/Simulscan toggle is changed from the combination of function keys Fn+F9.

### **1-5.10 Panel On/Off**

The Panel on/off is toggle from the combination of function keys Fn+F10.

### **1-5.11 Standby Mode**

The system enter standby mode press the function keys Fn+F11.

### **1-5.12 Suspend Mode**

The system enter suspend mode press the function keys Fn+F12.



### Figure 1-5 A760T Status Row

1. A. When the power is on, then Power LED (Green) is on.
2. A. When the AC power adaptor is connected, then the AC IN LED (Green) is on in power stage.  
B. When charging is in progress, then the CHARGE LED (Orange) is on in power on and off stage. When the battery is fully charged, the CHARGED LED (Orange) goes out.
3. A. When any battery pack is present, then the BATTERY LED (Green) is on in power stage.  
B. When the optional battery pack ( Bay 1 or Bay 2) enters battery low status, then the BATTERY LOW LED (Orange) is on. When if only the primary battery and battery low status then speaker will beep.
4. A. When the HDD, FDD or CD-ROM drive is active, then the HDD/FDD/CD LED (Orange) is on.
5. The “Num Lock” key activates and deactivates the embedded numeric keypad. When the numeric keypad is active, the “Num Lock” indicator come on and the alphabetic of the embedded numeric keypad are disabled.

### **1-5.14 Battery Pack**

Battery Pack is an assembly of the batteries, a battery pack connector board in an enclosed plastic case.

The battery is Li-ion Battery type. The capacity of each is 3800mAH or more. 1.2V, 14 cells are used in one pack. The output voltage of battery pack is 16.8VDC, so the battery pack provides 63.16 watts or more to notebook computer.

Battery pack connector board provides interface between battery cells and DC/DC board. When the inside temperature of battery pack exceeds 55°C, the DC/DC converter board detects it via thermal sensor and shut down the charging current.

### **1-5.15 Low Battery Indication**

When all the batteries voltages are under the low battery status, the speaker will beep and the Battery LED is on (Orange).

If Bay 1 or Bay 2 battery is in battery low status system just only have battery low LED indicate in orange, if primary battery is in battery low status system will have battery low beep indication.

### **1-5.16 Battery Charger**

The A760T Series battery can be charged during power on and power off. The A760T Series has three types of battery packs: the first is primary 14 pcs/pack battery, the secondary is 9 pcs/pack battery and the third is 9 pcs/pack battery. The battery charge status is as follows:

4. Battery charge time period is as follow:

- 4.1 Primary batteries in power on, 30W consumption full charge time are about 4.5 hours. The primary batteries full charge voltages are about 21V (MIN).
- 4.2 The primary batteries in D/D power off, the charge time period are about 2 hours.
- 4.3 The Bay 1 batteries full charge time period in power on, 30W consumption are about 3 hours. The Bay 1 batteries full charge voltage is about 13.4V (min).
- 4.4 The primary, Bay 1 and Bay 2 batteries charge time period are about 3 hours in power off.
- 4.5 The primary battery discharge time period is 1 hour and 36 minutes in power on 30W, but the Bay 1 discharge time period is 1 hour in power on 30W consumption.

### **1-5.17 CHARGE LED Indicator Status**

1. When you insert the battery pack into the system and the AC power adapter is already connected, the CHARGE LED (Orange) flashes three seconds or more and then stays on all the time.
2. When you connect the AC power adapter to the system, and the battery pack is already inserted, the CHARGE LED (Orange) flashes three seconds or more and then stays on during the charge period.

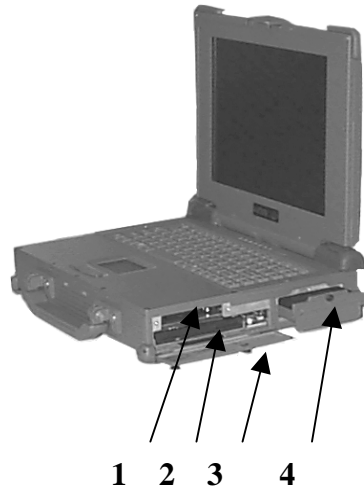
5. There have no any sound indicator when battery pack is installed or uninstalled.

### 1-5.18 Diskette Drive and CD-ROM

(Item 2, Figure 1-6) The notebook has space for a 1.44 MB, 3.5-inch diskette drive and CD-ROM drive. The space can put removable FDD drive or CD-ROM drives.

The diskette drive allows permanent data storage in a compact, transferable media. Data stored on diskettes can be easily passed from one machine to another.

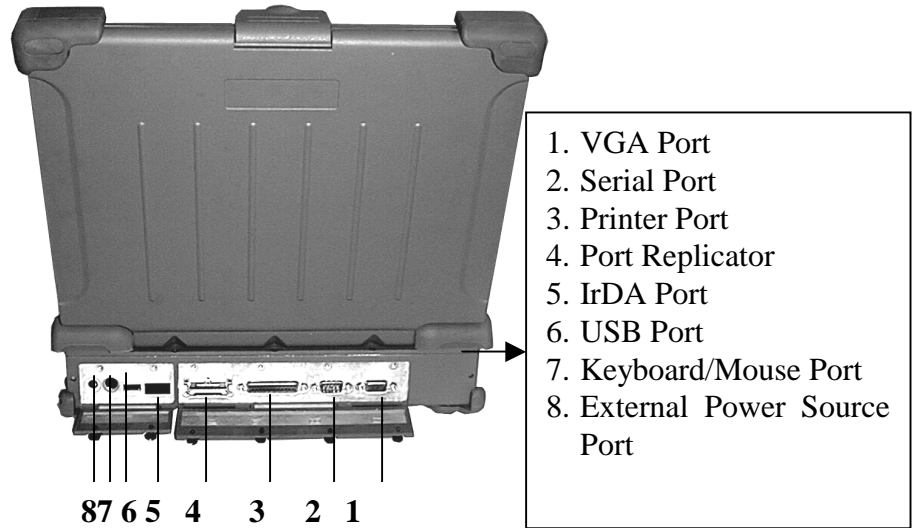
The A760T Series diskette drive accepts 3.5-inch double-density (720 KB) and high density (1.44 MB) diskettes.



**Figure 1-6 Diskette Drive and CD-ROM**

a Type-II PCMCIA card. Together, they support one Type-III PCMCIA card. VGA Port

This 15-pin (Item 1, Figure 1-7) analog port is for connecting in external monitor.



**Figure 1-7 Rear Side View**

address.

### **1-5.23 Printer Port**

The printer port (Item 3, Figure 1-7) is a 25 pin D-type interface, Usually this interface supports a parallel printing device.

### **1-5.24 Port Replicator Port**

The Port Replicator Port (Item 4, Figure 1-7) is an 80 pin interface, Expand two SIO, two USB, two PS/2, PIO, VGA port.

### **1-5.25 IrDA Port**

This infrared port (Item 5, Figure 1-7) complies IrDA, and ASK Standards, which allow you to connect your notebook to an IR device wirelessly.

### **1-5.26 USB Port**

The USB port (Item 6, Figure 1-7) transfers at 1.2 or 1.5Mbit/sec.

### **1-5.27 Keyboard/Mouse Port**

The Keyboard/Mouse port (Item 7, Figure 1-7) for IBM PS/2 keyboard/Mouse.

### **1-5.28 External Power Source Port**

If the notebook will be in use for a long continuous period, connect an external power source to the notebook here ( Item 8, Figure 1-7).

### **1-5.29 External Power Adapter**

The A760T external power adapter converts 100-240V, 50-60 Hz to 19VDC, 60 watts, CV mode for the notebook & expansion unit.



