

# Personal Computer User Guide

## of DE3650



### Disposal Instruction (US)

For better protection of our earth, please don't throw this electronic device into municipal trash bin when discarding.

To minimize pollution and ensure utmost protection of the global environment, please recycle the product. For more information about the collection and recycling of Waste Electrical and Electronic Equipment (WEEE), you are invited to visit our homepage at [www.aopen.com](http://www.aopen.com) under “Green Products”

### 廃棄上の指示

より良い地球保護のために、電子機器を廃棄処分にする時は、ゴミ箱に捨てないで下さい。汚染を最小限に抑え、地球環境の最大限の保護のために、製品をリサイクルして下さい。 廃電気電子機器 (WEEE) の回収とリサイクルについての情報は、弊社ホームページ [www.aopen.com](http://www.aopen.com) の “Green Products”（環境に優しい製品）をご覧下さい。

### 廢棄及回收處理

為了保護環境，請勿將本產品當作一般廢棄物處理。為減少環境污染，維護地球資源，本產品報廢時，請回收本產品。

### Instruktion til bortskaffelse (Danish)

Af hensyn til vores miljø bedes De ikke bortskaffe denne elektroniske enhed i en almindelig affaldsspand. For at mindske forurening og sikre beskyttelse af miljøet bedes De genbruge produktet. For yderligere information vedrørende indsamling og genbrug af elektronik-affald (Waste Electrical and Electronic Equipment (WEEE)) er De velkommen til at besøge vores website [www.aopen.com](http://www.aopen.com) og læse nærmere under "Green Products".

### Verwijderingsinstructie (Dutch)

Om mogelijke schade aan het milieu of de menselijke gezondheid door ongecontroleerde afvalverwijdering te voorkomen, moet u dit elektronisch product scheiden van andere soorten afval en op een verantwoorde manier recyclen. Verwijder dit product dan ook alstublieft niet samen met ander huishoudelijk afval. Voor meer informatie over de verzameling en recycling van elektrisch afval en elektronische apparatuur (WEEE), nodigen we u uit om onze homepage te bezoeken [www.aopen.com](http://www.aopen.com) onder "Green Products".

### Instruction de Disposition (French)

Pour une meilleure protection de la terre, ne jetez pas ce dispositif électronique dans la poubelle municipale lors de la disposition. Pour éliminer la pollution et assurer la plus grande protection de l'environnement global, réutilisez s'il vous plaît le produit. Pour plus d'informations sur la gestion des déchets d'Equipements Electriques et Electroniques (DEEE ou WEEE), vous êtes invité à visiter notre site à [www.aopen.com](http://www.aopen.com) sous "Green Products".

### Entsorgungsanleitung (German)

Zum besseren Schutze unseres Planeten, schmeissen Sie elektrische Geräte bitte nicht in öffentliche Mülleimer. Zur Verringerung der Verschmutzung und zur Sicherstellung grösstmöglichen Schutzes der Umwelt recyceln Sie bitte das Produkt. Für mehr Informationen zum Sammeln und Recyceln von elektrischen und elektronischen Müll (WEEE) besuchen Sie bitte unsere Homepage unter [www.aopen.com](http://www.aopen.com) unter dem Punkt "Green Products".

### Istruzioni per lo smaltimento (Italian)

Per una migliore salvaguardia del nostro pianeta, si prega di non gettare questo dispositivo elettronico nei normali rifiuti al momento dell'eliminazione. Per ridurre al minimo l'inquinamento ed assicurare la massima protezione dell'ambiente, si prega di riciclare il prodotto. Per maggiori informazioni riguardanti la raccolta ed il riciclaggio delle apparecchiature elettriche ed elettroniche residue (WEEE), siete invitati a visitare la nostra homepage [www.aopen.com](http://www.aopen.com) alla voce "Green Products".

### Instruksjoner for Resirkulering og Oppsamling (Norwegian)

For å beskytte vår planet, kast ikke dette elektroniske utstyret sammen med vanlig avfall. For å beskytte vår natur og miljø, vennligst resirkuler dette produktet. For mer informasjon om oppsamling og resirkulering i henhold til Waste Electrical and Electronic Equipment (WEEE), se vår hjemmeside på [www.aopen.com](http://www.aopen.com) under "Green Products".

### REEE - Programa de Tratamento de Resíduos de Equipamentos Eléctricos e Electrónicos (Portuguese)

Para melhor protecção ambiental do nosso planeta terra, não coloque o dispositivo electrónico no receptáculo de lixo municipal. Para minimizar a poluição e garantir protecção máxima do ambiente global, recicle o produto. Para mais informações sobre acerca da recolha e reciclagem de Equipamento Eléctrico e Electrónico (WEEE), convidamos-lhe a visitar nossa página na Internet em [www.aopen.com](http://www.aopen.com) sobre "Green Products".

### Instrucciones para depositar los productos electrónicos (Spanish)

Para proteger mejor el medio ambiente, por favor, no deposite los productos electrónicos en los contenedores de basura tradicionales. Para reducir la contaminación y proteger el medio ambiente se recomienda que los recicle. Para más información acerca de dónde depositar y cómo reciclar Equipos Electrónicos y Desperdicios Electrónicos (WEEE), por favor, visite la página web [www.aopen.com](http://www.aopen.com) y entre en la sección Productos Ecológicos ("Green Products").

### Kassering (Swedish)

För att bättre värna om vår jord bör denna elektroniska utrustning ej kasseras tillsammans med vanligt avfall. För att minimera mängden föroreningar och så långt som möjligt skydda den globala miljön bör produkten återvinnas. För vidare information om insamling och återvinning av uttjänta elektriska och elektroniska produkter (Waste Electrical and Electronic Equipment, WEEE), besök avsnittet "Green Products" på vår hemsida, [www.aopen.com](http://www.aopen.com).

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### FCC notice

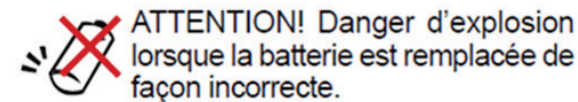
**This device has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.**

Notice: Canadian users

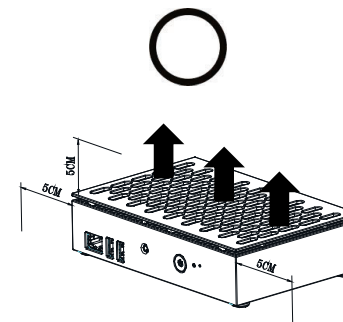
This Class B digital apparatus complies with Canadian ICES-003

### Safety Instructions

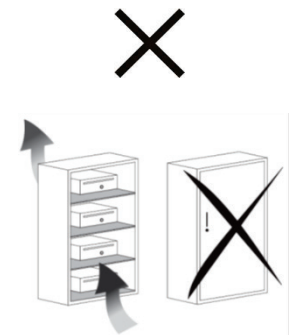
1. Please read these safety instructions carefully.
2. Please keep this User's Manual for later reference.
3. Please disconnect this equipment from AC adapter before cleaning. Use a soft, moist cloth. Don't use liquid or sprayed detergent for cleaning.
4. Make sure the equipment is connected to the power source with the correct voltage, frequency, and ampere.
5. All cautions and warnings on the equipment should be noted.
6. Never pour any liquid into unit openings; this could cause fire or electrical shock.
7. Never open the equipment. For safety reason, the equipment should only be opened by qualified service personnel.
8. If one of the following situations arises, get the equipment checked by a qualified service technician:
  - a. Liquid has penetrated into the equipment.
  - b. The equipment has been exposed to moisture.
  - c. The equipment has not work well or you cannot get it work according to user's manual.
  - d. The equipment was dropped and damaged.
  - e. If the equipment was obvious sign of breakage.
9. Caution on use of battery: Use the battery recommended by the manufacturer or the same type of battery installed by the manufacturer. If incorrect battery is used, it may cause explosion or fire hazard. Recycle or discard used batteries according the manufacturer's instruction or your local authority.



10. Ambient operation temperature: 0 ~ 40 degrees C.
11. Risk of overheating!
  - Do not install DE3650 in a closed space. Be sure the ventilation holes on the top of the DE3650 have at least 1 to 2 inches or 2 to 5 cm of space for ventilation. To ensure that other objects do not cover the ventilation holes on DE3650



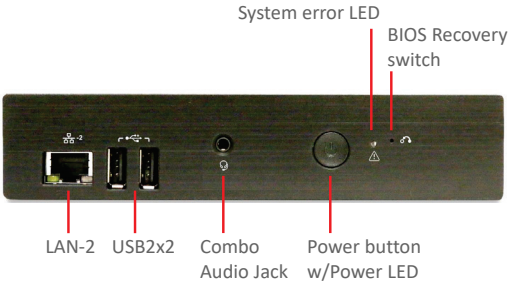
Keep the top space at least 5cm (2 inches) for ventilation



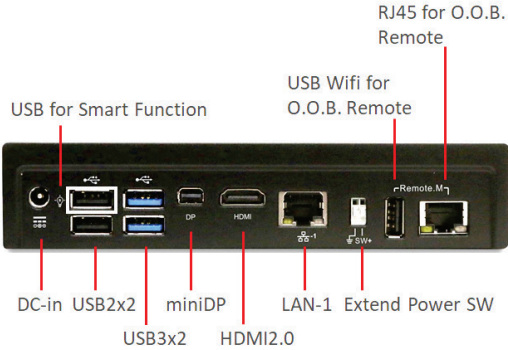
Don't put operating device inside closed space.

I/O of DE3650

Front I/O



Rear I/O



Product Specification

|                       |                                                                                                                                                   |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CPU</b>            | Intel® ELKHART LAKE Dual Core CPU J6412 (TDP<=10W)                                                                                                |
| <b>Memory</b>         | Dual Band DDR4 4GB memory down+ DDR4 SO-DIMM x 1 slot, support 2666/3200 MAX. up to 20GB                                                          |
| <b>Graphics</b>       | Intel UHD Graphics for 10th Gen Intel Processors                                                                                                  |
| <b>Expansion Slot</b> | M.2 2230 x 1(key E for wifi), M.2 2280 x 1(key M for SSD)                                                                                         |
| <b>Audio</b>          | Realtek ALC897 HD Audio CODEC on-Board.                                                                                                           |
| <b>LAN</b>            | Maxlinear GIGA LAN x 1, intel GIGA LAN x 1                                                                                                        |
| <b>Front Panel IO</b> | Power Button x 1 (with Power/HDD indicator), System error indicator x 1, Combo audio jack x 1, BIOS Recovery button x 1, RJ45 LAN x 1, USB2.0 x 2 |
| <b>Rear Panel IO</b>  | DC 19V Jack x 1, HDMI 2.0 x 1, miniDP x 1, RJ45 LAN x 1, USB 3.1 x 2, USB2.0 x 2, Remote. M. RJ45 x 1, USB for wifi x 1, Extend power SW x 1      |
| <b>Adapter</b>        | DELTA ADP-40KD BB 40W (19VDC, 2.1A) AC Power Adapter                                                                                              |
| <b>Input Voltage</b>  | AC 100 ~ 240V                                                                                                                                     |

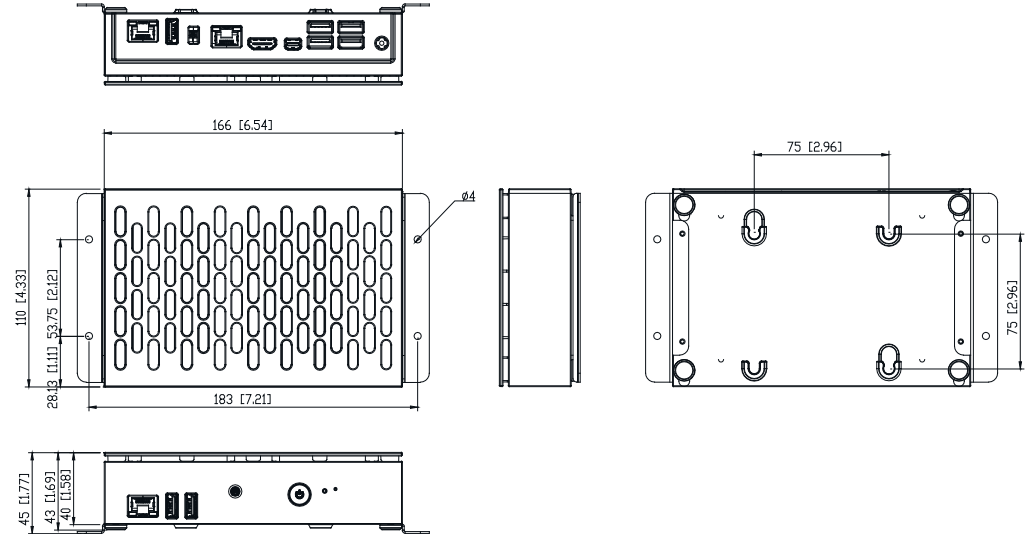
Packing List

DE3650

- ✓ 1 x DE3650 system unit
- ✓ 2 x VESA mount screws
- ✓ 1 x Caution label for heatsink
- ✓ 1 x 40W adapter & power cord
- ✓ 1 x user manual
- ✓ 1 x Insert page for driver download website

Chassis Dimension

DE3650 Dimension (unit: mm[inch])



AOPEN Smart function provides several major features shown below

### 1. System error LED:

This LED indicator lights with different color to show the status of the key devices during the boot process. When an error occurs, the status of the current problem can be judged by the color of the LED. And it can help you to speed up debug and repair process.

When the BIOS POST initializes the device, the color of the LED lights lit as follows

Step 1. Memory initialization >> Blue color

Step 2. Display Device initialization >> Green color

Step 3. Boot device initialization >> Blue + Green color

Step 4. BIOS handoff to Operating System >> LED Off (Default after boot)

System error LED



### 2. BIOS Recovery:

If the BIOS is corrupted, you can use the BIOS Recovery feature to reload the BIOS and successfully boot your system again.

Step 1. Please prepare a USB flash drive (format with FAT32) and BIOS bin file (\FPT\TEAxxx.bin), change the BIOS file name to AOPEN.bin and copy it to the root directory of USB flash drive.

Step 2. Plug in AC adapter to DE system and insert USB flash drive to Smart function USB port.

Step 3. Insert a paper clip to press the BIOS RECOVERY BUTTON at front panel.

Step 4. System power led will lit, system error led will start flashing green color to indicate BIOS update is in process. BIOS update process will take around 7 minutes.

Step 5. System will auto reboot when BIOS update is finished.

Insert USB flash drive to this USB port



System error LED



BIOS Recovery button

P.S. BIOS recovery will clear data in DMI table and Mac address, so please contact your system integrator before execute BIOS recovery.

### 3. USB Keyboard to power On/Off/Reset PC system:

The Smart function USB port can support USB Keyboard to power On/Off/Reset PC system by specific keyboard shortcut as below, please insert an USB Keyboard to Smart function USB port and follow the keyboard shortcut as below.

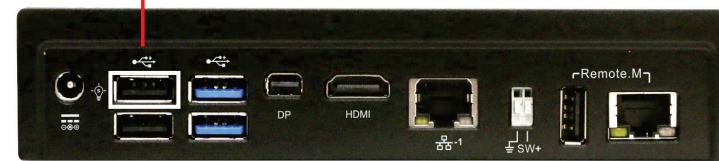
Keyboard shortcut:

Power On >> ALT+P

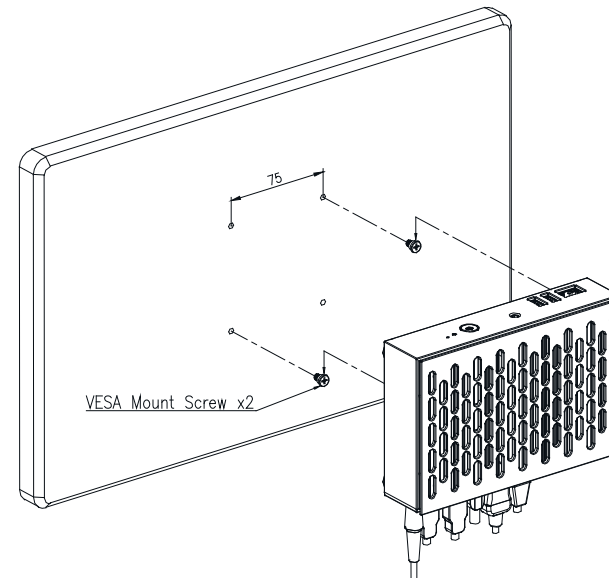
Power Off >> ALT+P+O

Reset >> ALT+R+T

Insert USB flash drive to this USB port



### VESA Mount (75mm x 75mm) installation Schematic diagram (Screws Included)



PN: 49.DER02.0110