

**EWS-844V
15" LCD Display
Workstation**

Version: A0

Thank you very much for purchasing our “EVOC” products

Please check the product package according to the product list. If you find any object or accessory is missed or damaged please contact your local dealer immediately.

- p** 1 EWS-844V workstation
- p** 1 User Manual
- p** 1 accessory box (power cord, screw cap, etc.)

Declaration

None of the content of this manual shall be deemed as the commitment of EVOC. This manual is subject to change without notice. The company is not responsible for any direct, indirect, intentional or unintentional damages or risks resulting from any improper installation or misuse of this product.

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Common Sense in Safety Application

1. Please read these instruction carefully before using the product,
2. Please shut down AC power supply or disconnect AC power cord to prevent you from being shocked or the product from being damaged when you remove or reinstall the main board or the board/card every time.
3. Before a board/card or the computer is moved, make sure that the AC power cord has been pulled out from the socket.
4. When the board/card of a computer is added or removed, make sure that the AC power supply has been disconnected.
5. Before you connect or disconnect any device, make sure that all power cords have been disconnected.
6. Please do not turn On/Off the machine frequently. You may restart the machine at least 30 seconds after your last power down.
7. You shall carry out all upgrading or assembling operation on static discharge workbench, for some precise components are sensitive to electrostatic discharge (ESD);
8. If no static discharge workbench is available, you can try the following methods to decrease the possible damage of ESD:
 - a) Wire a anti electrostatic wristlet that is connected to metal part of machine chassis;
 - b) Touch the metal shell of chassis before touching any parts;
 - c) During plug/unplug parts, keep body touching with metal chassis to release static electricity;

- d) Void unnecessary walking;
 - e) Touch only edge of parts, especially card/board;
 - f) Place chassis on a grounded no-electrostatic workbench. If possible, use a conductive foam mat (not the packing material of parts);
 - g) Prevent parts from sliding on the surface of workbench.
9. Operate using a Philips driver, a strong screwdriver is better (with magnetism, to avoid leaving screw in chassis inside). You shall pay attention not to leave tools or parts in chassis inside;
 10. Keep good ventilation and heat dissipation.

Table of Contents

Chapter One An Introduction to Products	1
A Brief Introduction	1
Ordering Information	2
Performance index	2
Backplane	3
Introduction to power supply	3
Ventilation and heat dissipation.....	4
Electromagnetic compatibility	4
Safety	4
Environment requirements	4
Transportation and storage requirements	4
Trouble shootings	5
Chapter Two Product appearance	6
Product appearance and installation dimension	6
Hardware installation	7
Installation of LCD screen	7
Installation of disk drivers	8
Installation of card holding slab and vibration pad	11
Installation of card holding panel and chassis body	12
Connect keyboard to chassis	13
Clearance of air intake filter	14
Installation of touch mouse driver	15

Chapter One

An Introduction to Products

A Brief Introduction

EWS-844V is an enhanced and integrated workstation based on the LCD module design of EWS-844E. It provides built-in touch mouse and film keyboard. 15" TFT high-luminance LCD screen; industrial standard embedded backplane with 10 slots; has space for 1 5.25" CD-ROM driver, 2 HDD (1 HDD can be installed near the back lid) and 1 FDD.

Industrial standard ATX/AT power supply; 2 pre-positioned USD interfaces; turning of LCD brightness and contrast, as well as switch of standby mode.

It features rational structure and advanced design and is suitable for standard 19" industrial rack; it has integrated IPC system and satisfies IPC server solutions.

As a 8U 19" integrated workstation with high performance-cost ratio, EWS-844V is available for various fields including military, electricity, power grid, transportation, industrial automation, manufacturing, meteorological monitoring and etc

Ordering Information

Models	Description
EWS-844V/7271AT/ 6110P4	EWS-844V Integrated workstation/ IPC-6110P4 industrial backplane/ PS-7271AT power supply.
EWS-844V/270A/ 6110P4	EWS-844V Integrated workstation/IPC-6110P4 industrial backplane/PS-270AT power supply.

Performance index

- I Dimension: W*H*D 482mm*354mm*262mm
- I Structure: high strength aluminum alloy structure
- I Space for disk drivers: 1 5.25" CD-ROM driver, 2 3.5" hard disk driver and 1 3.5" floppy disk driver
- I Keyboard interface: 1 6-Pin DIN interface fixed on I/O rack on the left of chassis for external keyboard connection
- I USB interface: 2 standard USB interfaces on the front of chassis
- I System control: Reset button and power switch within the room of the front panel
- I Status indication: LED indicators for hard disk and power supply within the room of the front panel
- I Net weight: 20Kg
- I Working temperature: 0°C~+50°C
- I Storage requirements: -40°C~+60°C
- I Relative humidity: 5%~90%, 40°C no moisture condensation

Backplane

EWS-844V integrated workstation, complying with 10-slot industrial standard backplane, adopts EVOC standard IPC-6110P4 backplane with stable performance and strong expandability. This backplane can be expanded to 4 ISA slots, 4 PCI slots and 2 PICMG slots; complies with AT and ATX power supply.

For more information, please visit our website at

<http://www.evoc.com>

Introduction to power supply

EWS-844V adopts a 270W industrial ATX (or AT) power supply of standard PS/2 dimension: 150*140*86MM; equipped with a long-life double-ball temp-controlled low-noise fan; green and energy effective PFC function; protection for over-current, over-voltage, over-load and short-circuit; suitable for bad environment.

Range of input voltage: 180~264VAC

Input frequency: 47~63Hz

This power supply features protection of over-load and over-voltage, low drain current and stable performance. Its parameters such as conductivity, radiativity, harmonic current, surge, and safety feature can meet industrial PC power supply standard of P.R.C. (GB4943, GB9254, GB/T17168) and have passed the certification of 3C.

Ventilation and heat dissipation

- I There is one air intake fan on the right side of chassis, one air outtake fan in the power supply and one air draft hole near the I/O ports, these devices can discharge heat out from chassis. Under the help of big space, EWS-844V is really an excellent product with super heat discharge ability.

Electromagnetic compatibility

- I Its radio disturbance limitation meets the level A of GB9254-1998
- I Its interference immunity meets the specification of GB/T 17618

Safety

- I Meet the basic requirements of GB4943

Environment requirements

- I Its climatic environment adaptability meets the level 2 requirements of 4.8.1 of GB/T9813
- I Among the mechanical environment adaptabilities, its anti vibration, shock resistance and collision adaptability meet the level 2 requirements of 4.8.2 of GB/T9813.

Transportation and storage requirements

- I Transportation:

The well packaged products can be transported via any mean to any where. But they shall not be exposed in open cabin or carriage, not be stored in open storage. Nor shall they be mixed with any flammable, explosive or corrosive materials during transportation. They shall be kept away from any rain, snow, liquid or mechanical damage.

I Storage:

The product shall be stored warehouse in temperature of $0^{\circ}\text{C} \sim 40^{\circ}\text{C}$ and humidity of 30% to 85% in its original package. There shall not be any harmful gas, flammable or explosive materials, or corrosive chemicals in the warehouse. The warehouse shall also be away from any mechanical vibration, shock or strong magnetic field. The package shall be 10cm or more from floor, and 50cm at least 50cm from wall, heat source, cold source, window and air intake hole.

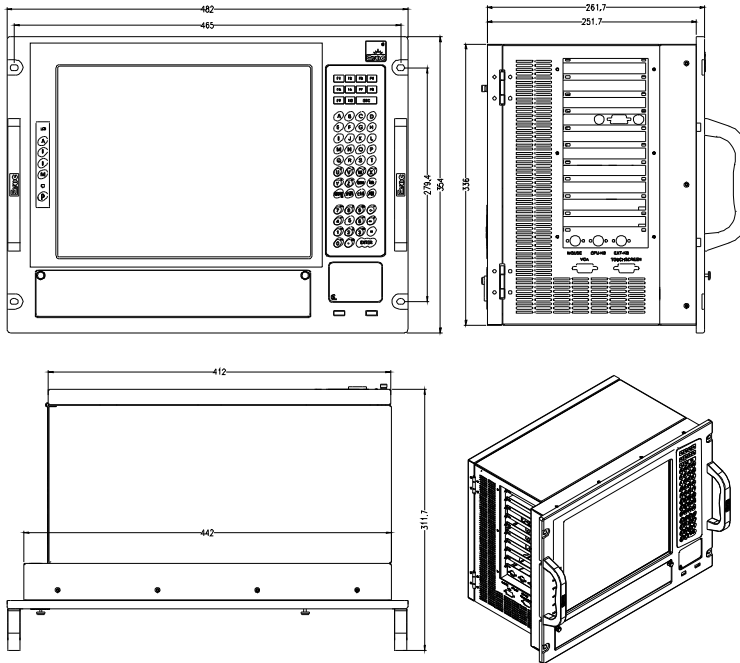
Trouble shootings

For the trouble shooting of EWS-844V, please refer to the General Faults and Resolutions of Industrial Computers. They will not be detailed here.

Chapter Two

Product appearance

Product appearance and installation dimension

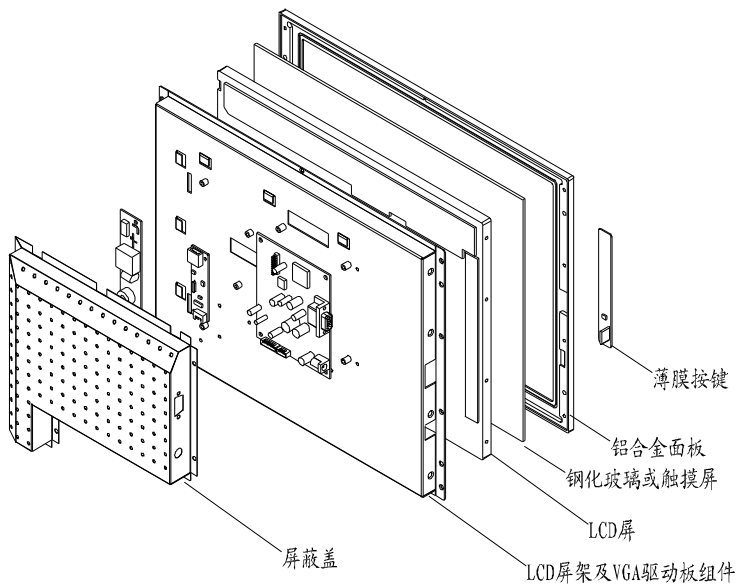


(2-1) Appearance and installation dimension (Unit: mm)

Hardware installation

Installation of LCD screen

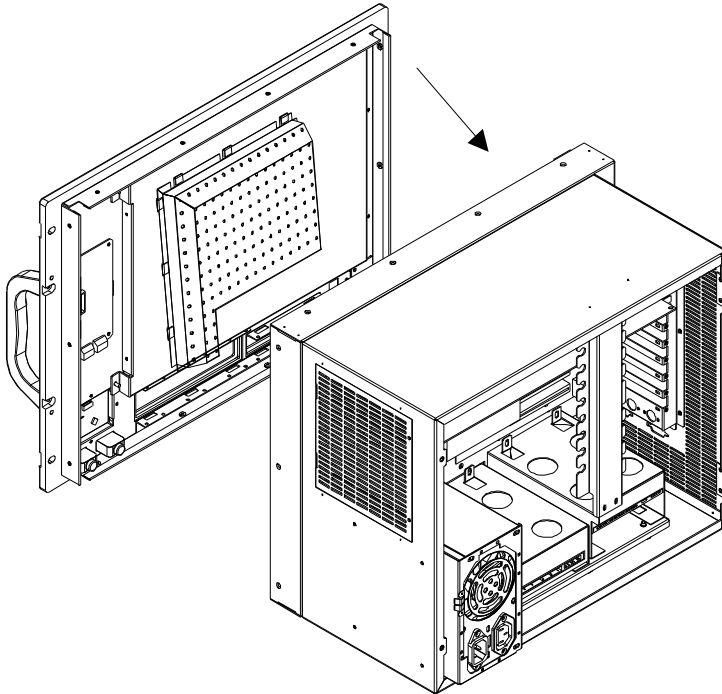
Firstly assemble the LCD screen and the screen bracket. Then paste the film keystrokes on the surface of panel before connecting cable, installing inverter and VGA driver card. Then paste EVA dustproof mat on the front face of LCD screen and fix the screen upon the aluminum panel covered with reinforced glass or touch screen. Please see the following figure 2-2:



(2-2) Installation of LCD screen

Finally assemble the finished panel to the chassis as shown in figure

2-3:



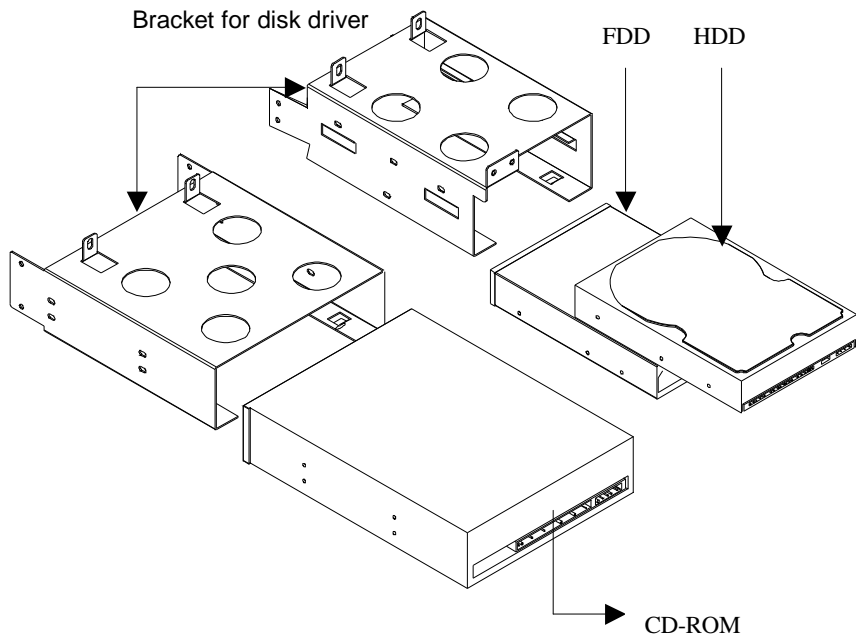
(2-3) Assembly of panel parts

Installation of disk drivers

EWS-844V provides spaces for 4 disk drivers: one FDD, 2 HDD and 1 CD-ROM driver, of which 3 are fixed on 4 different brackets and connected to chassis body with shock pad. During the assembly, one earthing splinter shall be added to one shock pad to guarantee good

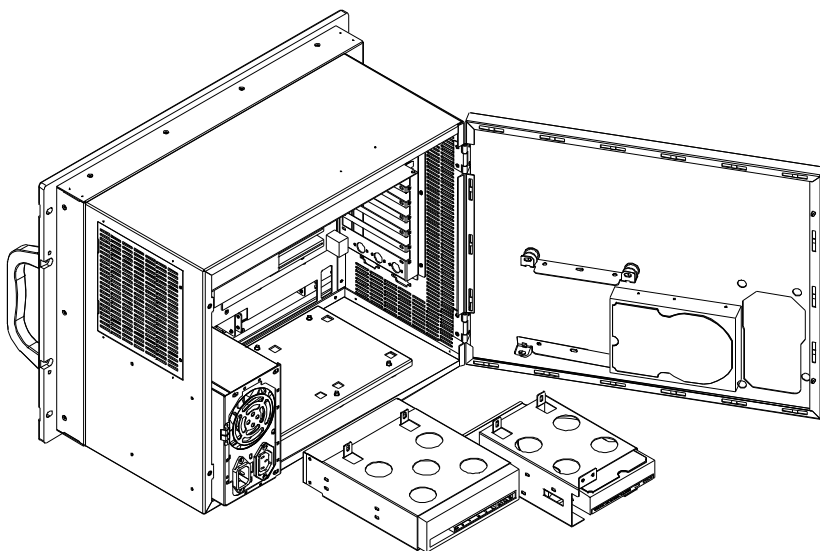
grounding. You can fix another HDD on the back cover. To install your disk drivers please refer to the following figure.

For the installation of FDD, HDD, CD-ROM driver on driver bracket, please see figure 2-4



(2-4) Installation of disk driver and bracket

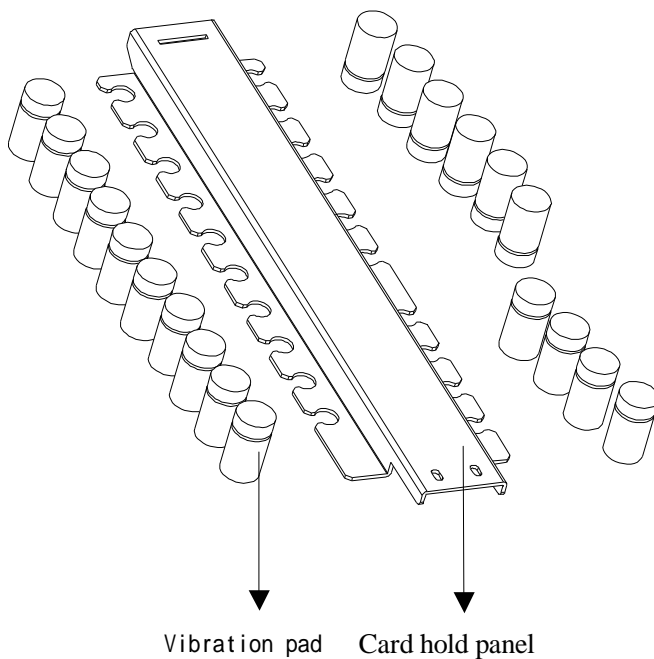
Fix the finished driver bracket to the chassis using screws on the right position, as shown in figure 2-5:



(2-5) Installation of bracket parts and chassis body

Installation of card holding slab and vibration pad

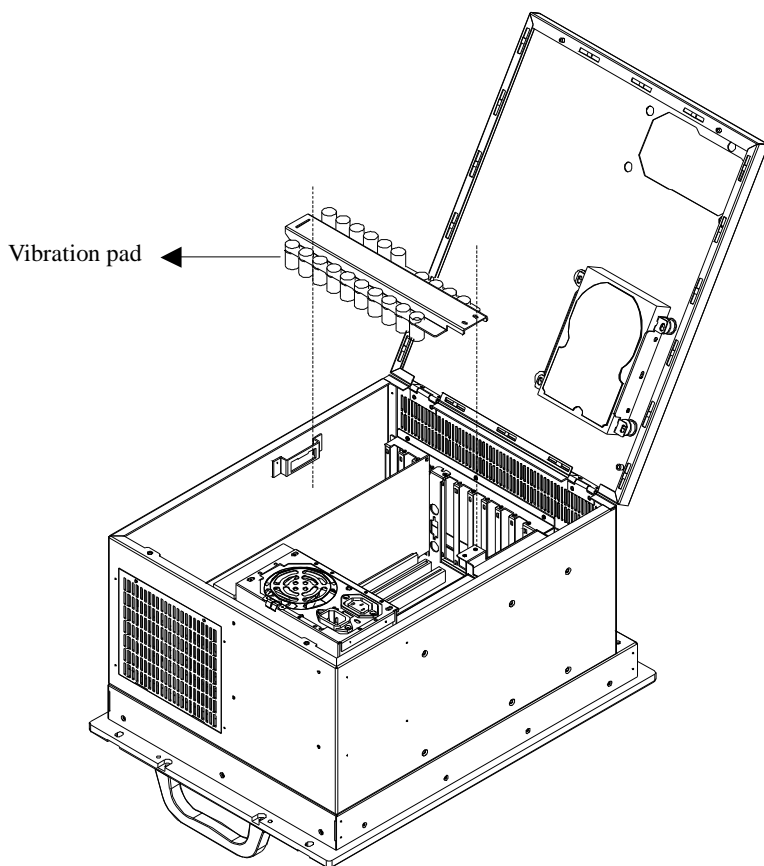
Insert rubber pad into card holding panel (vibration pad is inserted into the aperture of card holding panel), thus to keep the balance of the two sides of chassis and prevent shock and vibration. As shown in figure 2-6:



(2-6) Installation figure of card holding slab and vibration pad

Installation of card holding panel and chassis body

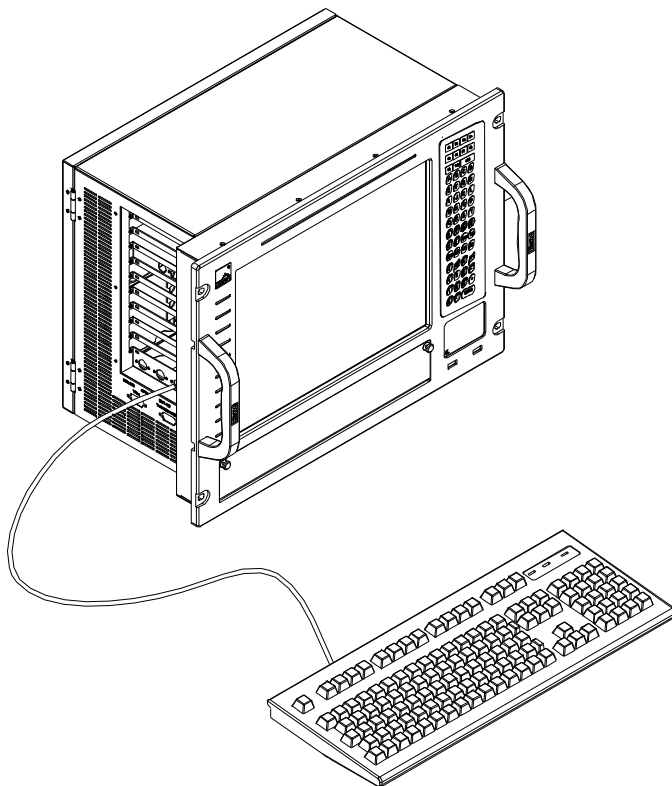
Open the cover of chassis, remove the screws that fixing card holding panel and remove the panel. Slide the card/board slowly into the slot and press the card/board into backplane slot, and fix them by screws. Then insert vibration pad (to prevent from any shock or vibration during movement) into card holding panel, fix card holding panel and close the chassis cover, as shown in figure 2-7:



(2-7) Installation of card holding panel and chassis body

Connect keyboard to chassis

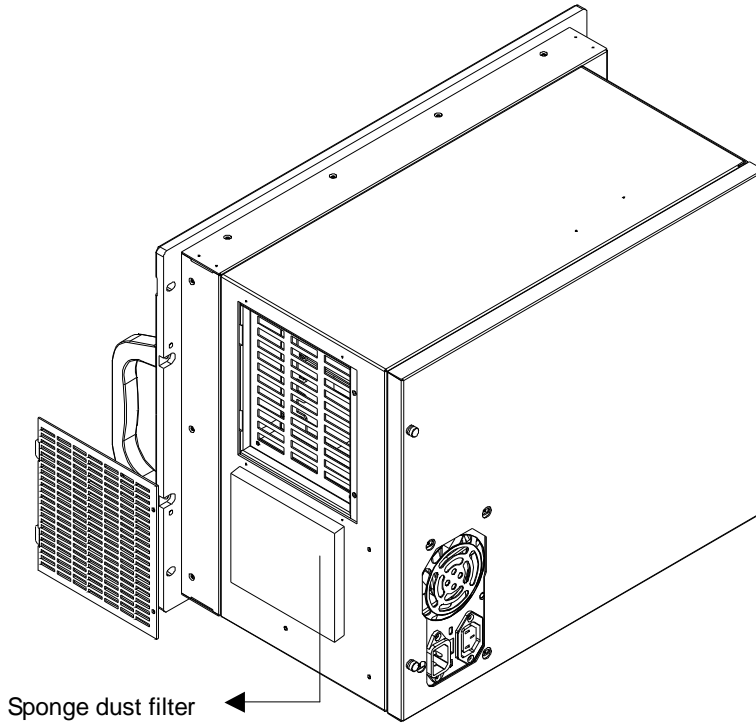
After all cards, disk drivers and other devices have been fixed, connect the LCD cable. Check and ensure that all assemblies are right before power on EWS-844V. If keyboard is needed, please connect it following figure 2-8:



(2-8) Connect keyboard to chassis

Clearance of air intake filter

The dustproof filter shall be cleaned per 3 months following such steps: remove the cover of filter, take out the filter, blow off the dust on the filter and reassemble them again, as shown in figure 2-9:



(2-9) Air intake filter

Installation of touch mouse driver

- (1) Power on system
- (2) Put the touch mouse driver into the CD-ROM driver.
- (3) Select touch mouse driver from the interface and select touch screen driver from the dialog popped up, and the double click “SETUP.EXE”.
- (4) Complete the installation following hints.

For more information, please visit our website at <http://www.evoc.com>