
PS-3650A/PS-3651A Series Hard Disk Unit (PS365XA-HD250) Installation Guide

The PS365XA-HD250 is the hard disk unit (HDD unit) for Pro-face's PS-3650A/PS-3651A Series (hereafter referred as the "PS-A") units. This 2.5 inch 250GB hard disk is designed to be installed inside the PS-A unit.

Corresponding units:

PS-3650A/PS-3651A Series
(only for the units installing a Serial ATA interface)

About the Manual

For the detailed information on PS-A series, refer to the following manuals.

- PS-3650A/PS-3651A Series Hardware Manual

The manual can be downloaded from Pro-face Home Page.

URL

<http://www.pro-face.com/otasuke/>

Safety Cautions

WARNING

- Be sure to check that the PS-A unit's power is disconnected before installing the unit, in order to prevent an electrical shock.
- Do not attempt to modify or open the HDD unit, since it can cause a shock or fire.
- When installing the HDD unit, be sure to read this guide "Installation" section's information completely to insure that the unit is correctly installed.

To Prevent Accidents

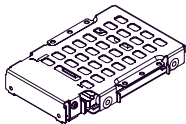
- Since the HDD unit is a precision instrument, be sure it is neither hit by nor pressed strongly against another object. After unpacking, be sure the unit is not dropped or jolted during installation. Also, a PS-A unit built in to a larger unit (i.e. operation panel) should be removed and packed separately prior to shipping.
- Be sure water, liquids or metal particles are not allowed to enter the HDD unit. Any of these may cause either a breakdown or an electrical shock.
- Do not place or store this unit in a location where there is direct sunlight, excessive heat, dust or vibration.
- Do not store or operate this unit near chemicals, or where there are chemical fumes.
- Do not allow anyone other than Pro-face's own service staff to perform maintenance or adjustments to this unit.
- Do not move or shift the PS-A unit while the HDD unit is installed and the PS-A unit's power is ON.
- Do not use the HDD unit in locations where corrosive gasses are present, since they can lead to a hard disk breakdown.
- To prevent the data damage, be sure to shut down the PS-A unit's OS according to the correct procedure before turning OFF the main power.
- To prevent memory leaks, restart the OS periodically.
- The hard disk has the lifetime. To use it longer by steady operation, read the attached "Instructions for Using the Hard Disk" carefully.
- In order to extend the lifetime of the hard disk, Pro-face recommends you set the Windows® [Control panel]-[Performance and Maintenance]-[Power Management option]-[Turn off hard disks] selection to turn the hard disk off when the unit is not being operated. A setting of 5 minutes is recommended.

Unit Disposal

- When this HDD unit is disposed of, it should be done so according to your country's regulations for similar types of industrial wastes.

Package Contents

- (1) HDD Unit (1) (PS365XA-HD250)



- (2) Attachment Screws (4)



- (3) Installation Guide (1) (This Guide)
(4) Instructions for Using the Hard Disk (1)

Pro-face has taken the utmost care to ensure the quality of this product when it was shipped, however, should, for any reason, problems or damage have occurred during shipping, please contact your Pro-face representative immediately for service.

IMPORTANT

- This HDD unit has a finite usage lifetime. Therefore, be sure to back up all HDD data periodically and/or prepare a backup HDD unit.

Hardware Specifications

■ Features

Capacity	250GB
Average Seek Time	13msec (TYP)
Power Consumption	At Startup: 4.5W or less Read/Write: 1.5W (TYP) During Wait: 0.2W (TYP)
Interface	Serial ATA Rev. 1.0a
Operation Lifetime	5 years, or 30,000 operating hours, whichever comes first
Weight	Approx. 400g

IMPORTANT

- The HDD unit's lifetime will vary, depending on the usage conditions and environment. The above value is

calculated assuming an ambient temperature of 20°C and 732 hours of operation per month. (HDD access frequency of 20% or less)

■ Environment

Surrounding Air Temperature	PS-3650A Series: 5°C to 50°C
	PS-3651A Series: 5°C to 45°C
Storage Temperature	-20°C to +60°C
Ambient Humidity	10%RH to 90%RH (no condensation) (Wet bulb temperature: 29°C or less)
Storage Humidity	10%RH to 90%RH (no condensation) (Wet bulb temperature: 39°C or less)
Noise Immunity	Noise Voltage: 1,500Vp-p Pulse Width: 50ns, 500ns, 1μs (via Noise Simulator)
Electrostatic Discharge Immunity	6kV
Vibration Resistance	When operating: 10Hz to 57Hz single-amplitude 0.0375mm 57Hz to 150Hz 4.9m/s ² X,Y,Z directions: 10 cycles (for 80 minutes)
Concussion Resistance	When Shipping: 3,920m/s ² (1ms, Half-sine shock pulse)

IMPORTANT

- Using the HDD unit in an environment that is excessively hot and/or humid will shorten the disk's usage lifetime. A wet bulb temperature of 29°C or less is recommended. This is equivalent to the following data.

Temperature	at 35°C	at 40°C
Humidity	no higher than 64%RH	no higher than 44%RH

Installation

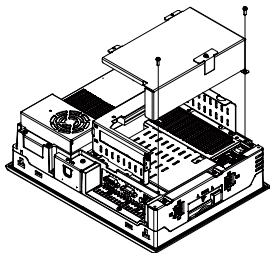
⚠ WARNING

- Shock Danger! Be sure to unplug the PS-A unit from its power supply prior to installing the HDD unit.

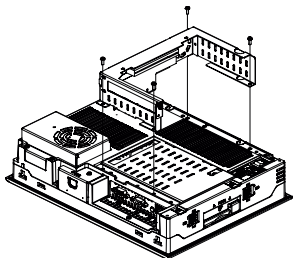
IMPORTANT

- Since the HDD unit and PS-A's the circuit board are a precision instrument that has a low resistance to shocks, be sure it is neither hit by nor pressed strongly against another object when installing it.
 - The electric power may be supplied to the PS-A unit even when the screen blacks out (such as the standby mode). Be sure to confirm that the power cable on the rear side of the PS-A is disconnected.
- When attaching the HDD unit to the PS-3650A

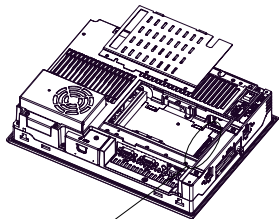
- (1) Turn OFF the power switch of the PS-A and remove the power cable. Place the PS-A on a flat, level surface facing the display face downwards.
- (2) Unscrew the expansion board cover's screws (2) and remove the expansion board cover.



- (3) Unscrew the expansion board base's screws (4) and remove the expansion board base.



- (4) Remove the DISK cover.

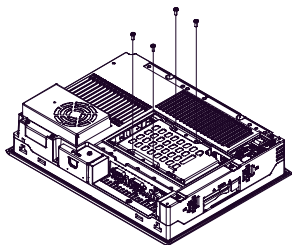


Serial ATA Interface

- (5) Mount the HDD unit vertically on the circuit board and plug the HDD unit cable connector in the Serial ATA interface.

IMPORTANT

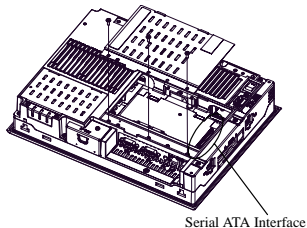
- Mount the HDD unit vertically and thoroughly not to hit the circuit board. Otherwise, it may cause a malfunction or damage the HDD unit and PS-A.
- (6) Fix the HDD unit with the screws (4) which are contained in your package. The torque required to tighten these screws is 0.5 to 0.6 N·m.



- (7) With opposite procedure above, set the DISK cover, expansion board base, and expansion board cover to the PS-A unit, respectively. The torque required to tighten these screws is 0.5 to 0.6 N·m.

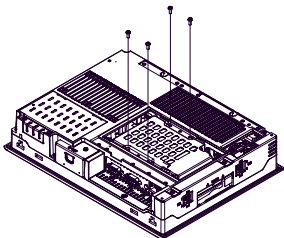
■ When attaching the HDD unit to the PS-3651A

- (1) Turn OFF the power switch of the PS-A and remove the power cable. Place the PS-A on a flat, level surface facing the display face downwards.
- (2) Unscrew the DISK cover's screws (3) and remove the expansion board base.



- (3) Mount the HDD unit vertically on the circuit board and plug the HDD unit cable connector in the Serial ATA interface.

- (4) Fix the HDD unit with the screws (4) which are contained in your package. The torque required to tighten these screws is 0.5 to 0.6 N·m.



- (5) With opposite procedure above, set the DISK cover to the PS-A unit. The torque required to tighten these screws is 0.5 to 0.6 N·m.

Inquiry

Do you have any questions about difficulties with this product? Please access our site anytime that you need help with a solution.

<http://www.pro-face.com/otasuke/>

Note

Please be aware that Digital Electronics Corporation shall not be held liable by the user for any damages, losses, or third party claims arising from the uses of this product.

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IMPORTANT

- Mount the HDD unit vertically and thoroughly not to hit the circuit board. Otherwise, it may cause a malfunction or damage the HDD unit and PS-A.