PS3450A-T41/PS3450A-T41-24V Installation Guide

Caution

Be sure to read the "Warning/Caution Information" on the attached sheet before using the product.

Package Contents

- (1) PS-A Unit (1)
- (2) English and Japanese Installation Guides (one of each) <This Guide>
- (3) Warning/Caution Information (1)
- (4) Installation Gasket (1) (attached to the PS-A unit)
- (5) Installation Fasteners (Set of 4)



(6) USB Cable Clamp (2 ports) (2)



(7) USB Holder (1), Screw (1)



(8) Power Connector (1) (attached to the PS-A unit)



AC type (5.08mm pitch)



DC type (7.62mm pitch)

IMPORTANT

 Be careful when installing the PS-A not to damage the built-in HDD.

This unit has been carefully packed, with special attention to quality. However, should you find anything damaged or missing, please contact your local PS-A distributor immediately.

When you order a PS-A unit built to your specifications, that PS-A package should include each optional item's Installation Guide. Please use that guide to check the contents of each optional item's package.

About the Manual

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

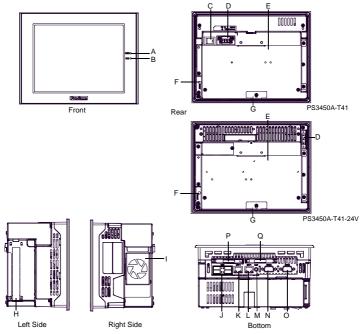
- PS-3450A Series Hardware Manual
- PS-3450A Series Reference Manual
- API Reference Manual Manual can be downloaded from Pro-face Home Page.

URL http://www.pro-face.com/otasuke/

NOTE

• The drivers and utilities for PS-A can be downloaded from Pro-face Home Page.

Part Names and Functions



| | Name | Description | | |
|---|------------------------|--------------------------|---|-----------------------------------|
| | | LED | PS-A Status | |
| | | | Green (lit) | Normal Operation (power is on) |
| Α | Power LED / RAS Status | Green (blinking) | Soft OFF state | |
| A | Lamp (POWER) | Orange (lit) | System Monitor Error Touch Panel Self Test Error | |
| | | Orange/Red (blinking) | Backlight burnout is detected | |
| | | Not lit | Power is OFF | |

| | | 1 | | |
|---|---------------------------------|---|---------|---|
| В | HDD / IDE Access Lamp (DISK) | LED Green (lit) Not lit | | PS-A Status Access to IDE. Not access to IDE. |
| С | Power Switch | _ | | |
| D | Power Connector | Supported by AC ty | /pe (PS | 3450A-T41) only. |
| Е | Expansion Board Cover | _ | | |
| F | Reset Switch (RESET) | | ystem : | on the power. Used in Set SW. Please refer to |
| G | Expansion Board Support | _ | | |
| Н | Expansion unit Interface | 1 port. Used to atta | ch the | PCI Unit. |
| I | Cooling FAN | _ | | |
| | | 4 ports. Complies v connector. | vith US | B 2.0. Uses a "TYPE-A" |
| | USB Interface (USB) | Power supply vo | Itage | 5 VDC ±5% |
| J | | Output curre | | Each port: 500mA (max.), 4 ports totally: 500mA (max.) |
| | | The maximum communication dis | | 5m |
| К | Ethernet Interface (LAN1) | 10BASE-T/100BASE-TX Auto Changeover. This interface uses an RJ-45 type modular jack connector (8 pins). | | |
| L | Ethernet Interface (LAN2) | 10BASE-T/100BASE-TX/1000BASE-T Auto Changeover and Wake On LAN feature. This interface uses an RJ-45 type modular jack connector (8 pins). | | |
| М | Speaker Output Interface (SPK) | 1 port. (standard type AUDIO jack) | | |
| N | Serial Interface (COM2) | Dsub 9-pin plug type. RS-232C, RS-422, RS-485 Changeover. RI/+5V Changeover. | | |
| 0 | Serial Interface (COM1) | Dsub 9-pin plug type. RS-232C. | | 232C. |
| Р | Primary CF Card Interface | Open the cover and insert the CF card. | | |
| Q | Secondary CF Card Interface | | | nt) is available. IDE-type |

^{*1} Since an IDE-type connection is used, the unit is not hot-swappable. When inserting/removing the CF card, be sure that power is turned OFF.

IMPORTANT

 When attaching peripheral units to the PS-A, be sure the PS-A's power cord is disconnected from the main power supply.

General Specifications

Electrical Specifications

| | | PS3450A-T41 | PS3450A-T41-24V |
|--------|------------------------|--|---|
| | Input Voltage | AC100/240V | DC24V |
| | Rated Voltage | AC85 to 265V | DC19.2 to 28.8V |
| Supply | Rated Frequency | 50/60Hz | _ |
| er Sup | Allowable Voltage Drop | 1 cycle or less (Voltage drop interval must be 1s or more.) | 5ms (max.) |
| Power | Power Consumption | 120VA or less | 65W or less |
| | In-Rush Current | For AC100V (Ambient Temperature): 30A (max.) For AC240V (Ambient Temperature): 50A (max.) | 30A (max.) (Ambient Temperature) |
| Vol | tage Endurance | AC1500V 20mA for 1minute (between charging and FG terminals) | AC500V 20mA for 1minute (between charging and FG terminals) |
| Ins | ulation Resistance | DC500V 10M Ω (min.) (between charging and FG termina | |

■ Environmental Specifications

| | • | |
|----------|--------------------------------|---|
| | Surrounding Air Temperature | 0 to 50°C :without HDD 5 to 50°C :with HDD |
| | Storage Temperature | -20 to +60°C |
| Physical | Ambient Humidity | 10 to 90% RH (Not condensing, wet bulb temperature: 39°C or less. Wet bulb temperature with HDD: 29°C or less.) |
| Ą. | Storage Humidity | 10 to 90% RH (Not condensing, wet bulb temperature:39°C or less.) |
| | Dust | Free of dust |
| | Pollution Degree | For use in Pollution Degree 2 environment |

IMPORTANT |

- When using any of the PS-A's optional devices, be sure to check that device's specifications for any special conditions or cautions that may apply to its use.
- Be aware that not only does the Hard Disk have a fixed lifetime, but that accidents can always occur. Therefore, be sure to back up your Hard Disk's data regularly, or prepare another Hard Disk unit that can be used for backup.
- The Hard Disk lifetime given here may be reduced due to unforeseen environmental factors, however, generally speaking, the disk should last for 20,000 hours (of operation) or approximately 5 years, whichever comes first at an operating temperature of 20°C and 333 hours of operation per month. (HDD access frequency of 20% or less)

 Using the Hard Disk 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 |

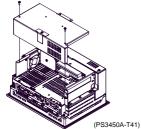
 In order to extend the lifetime of the hard disk, Pro-face recommends you set the Windows® 2000's [Control panel]-[Power Options]-[Turn off hard disks] selection or the Windows® XP's [Control panel]-[Performance and Maintenance]-[Power Management option]-[Turn off hard disks] selection to turn the hard disk off when the unit is not being operated. A setting of 5 minutes is recommended.

Switches

To change the switch settings

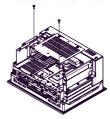
The switches are on the PS-A's circuit board. First of all, the cover is detached.

- For PS-3450A without built-in HDD unit
- (1) Unscrew the screws (2) from the Expansion Board Cover, and remove the cover. When replacing the cover, the torque required for these screws is 0.5 to 0.6 Nem

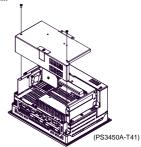


(2) Unscrew the screws (2) of the IDE cover and remove the IDE cover. When

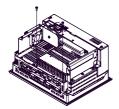
replacing the cover, the torque required for these screws is 0.5 to 0.6 N•m.



- For PS-3450A with built-in HDD unit
- (1) Unscrew the screws (2) from the Expansion Board Cover, and remove the cover. When replacing the cover, the torque required for these screws is 0.5 to 0.6 Nem.

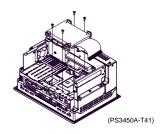


(2) Unscrew the screws (2) of the HDD cover and remove the HDD cover. When replacing the cover, the torque required for these screws is 0.5 to 0.6 N•m.

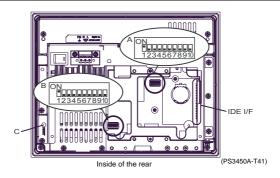


(3) Unscrew the screws (4) of the HDD unit, remove the cable connector from IDE I/F while lifting up the HDD unit, and remove it.

To replace the HDD unit, connect the cable connector to IDE I/F securely and fix the HDD unit with the screws (4). (For the location of the IDE/IF, refer to the following figure "Inside of the rear".) The torque required for these screws is 0.5 to 0.6 Nom



2. About Switches



| Switch Location | Switch Name | Description |
|--------------------|-------------|---|
| Α | | 10-point dip switch. For System Set SW details and the factory settings details, see Table (1). |

| Switch Location | Switch Name | Description |
|--------------------|-----------------------|---|
| В | Serial Mode Select SW | 10-point dip switch. Designates COM2 communication settings. For Serial Mode Select SW details, see Table (2). Factory Settings: For RS-232C |
| С | Reset SW | ■ Power Button Mode In advance, turn ON the System Set SW No.6. For Windows® 2000, the mode of [When I press the power button on my computer] that is selected from PS-A's start menu-[Settings]-[Control panel]-[Power Options]-[Advanced]-[Power buttons] is operated when pressing the Reset SW. For Windows® XP, the mode of [When I press the power button on my computer] that is selected from [Control panel]-[Performance and Maintenance]-[Power Management option]-[Advanced] is operated. NOTE PS-A restarts when pressing the switch at the Soft OFF*1 state (the Power LED / RAS Status Lamp is blinking in green). Reset Switch Mode In advance, turn OFF the System Set SW No.6. PS-A restarts when pressing the Reset SW. |

^{*1} The Soft OFF refers to the state that Windows® has been shut down and the power is provided only for the electric circuit to boot system. This Soft OFF State is different from what is System Standby set by Windows®.

| Switch No. | Description | ON | OFF | Notes |
|---------------|---|--------------|----------|--|
| 1 | Used for the system. | Reserved | Reserved | Factory Settings: ON |
| 2 | Used for the system. | Reserved | Reserved | Factory Settings: OFF |
| 3 | Used for the system. | Reserved | Reserved | Factory Settings: OFF |
| 4 | Cancellation function of pushing two points on the touch panel 1. | Enabled | Disabled | Factory Settings: OFF The middle point is not considered to be touched when the SW is Enabled. It is considered to be touched when the SW is Disabled. |
| 5 | Used for the system. | Reserved | Reserved | Factory Settings: OFF |
| 6 | Changes Reset SW mode. | Power button | Reset SW | Factory Settings: OFF |
| 7 | Used for the system. | Reserved | Reserved | Factory Settings: OFF |

| Switch No. | Description | ON | OFF | Notes |
|---------------|---|---------------|----------|--|
| 8 | Changes COM2 (RI <> +5V). (enabled only when RS- 232C mode) | +5V Output | RI | Factory Settings: OFF |
| 9 | Changes a Master/ Slave setting for Primary CF card Interface. | Slave | Master | The factory settings depend on your selected built-in accessory. |
| 10 | Used for the system. | Reserved | Reserved | Factory Settings: OFF |

Table 1) System Set Switches

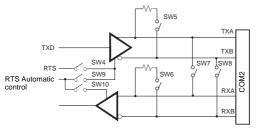
^{*1} When two points are pushed, it is considered that middle point between the two points is touched according to the nature of the analog resistive touch panel. When the switch, etc. is set on the middle point, it will be enabled and may operate. To prevent such a switch from malfunction in case of pushing two points, turn ON the SW No.4 in advance, then the middle point will be disabled to be touched.

| Switch No. | Description | ON | OFF | RS- 232C | RS- 422 | RS- 485 |
|------------|---|---|---|-------------|-------------------|--------------------------|
| 1 | Changes COM2's communication method | RS-232C | RS-422/RS-485 | ON | OFF ^{*1} | OFF*1 |
| 2 | Changes COM2's communication method | RS-422/RS-485 | RS-232C | OFF | ON | ON |
| 3 | Changes COM2's communication method | RS-422/RS-485 | RS-232C | OFF | ON | ON |
| 4 | Changes TX data's output mode | TX data output is controlled via the RTS signal. | TX data output is NOT controlled via the RTS signal. (normally output) | OFF | ON/ OFF | ON/ OFF ^{*3} |
| 5 | Switches the TX termination resistance ON/ OFF | Inserts termination resistance of 220Ω between TXA and TXB. | No termination | OFF | ON | ON/ OFF*2 |
| 6 | Switches the RX termination resistance ON/ OFF | Inserts termination resistance of 220 Ω between RXA and RXB. | No termination | OFF | ON | ON/ OFF ^{*2} |

| Switch No. | Description | ON | OFF | RS- 232C | RS- 422 | RS- 485 |
|---------------|---|--|-----------------------------------|-------------|------------|--------------------------|
| 7 | Switches the shorting of TXA and RXA ON/OFF | Shorts TXA and RXA (RS-485 mode) | No shorting (RS-422 mode) | OFF | OFF | ON |
| 8 | Switches the shorting of TXB and RXB ON/OFF | Shorts TXB and RXB (RS-485 mode) | No shorting (RS-422 mode) | OFF | OFF | ON |
| 9 | RTS Automatic control mode | The data is automatically | The data is not automatically | OFF | OFF | ON/ OFF ^{*3} |
| 10 | (enabled only when RS-485 mode) | controlled via the RTS signal. | controlled via the RTS signal. | OFF | OFF | ON/ OFF ^{*3} |

Table 2) Serial Mode Select Switches

Serial Mode Select Switches (SW4 to SW10) operate as shown in the circuit diagram below.



External Interfaces

IMPORTANT

- This PS-A unit's serial port is not isolated. When the host (PLC) unit is also not isolated, and to reduce the risk of damaging the RS-232C/RS-422/RS-485 circuit, be sure to connect the #5 SG (Signal Ground) terminal.
- Serial Interface (COM1, COM2)

| Interfit Bracket | #4-40 (Inch screw thread) |
|------------------|---------------------------|

^{*1} Be sure to keep the settings, "OFF" for RS-422 or RS-485.

^{*2} If you use the termination resistance, base your settings on the connection specifications.

^{*3} To control TX output driver via RTS automatically, set ON. Be sure to set SW No.4 OFF. Not to control TX output driver via RTS automatically, set OFF. Be sure to set SW No.4 ON.

◆COM1

| Pin | RS-232C | |
|-------|---------------------------|----------------------------------|
| # | Signal Name | Meaning |
| 1 | CD | Carrier Detect |
| 2 | RD (RXD) | Receive Data |
| 3 | SD (TXD) | Send Data |
| 4 | ER (DTR) | Data Terminal Ready |
| 5 | GND | Signal Ground |
| 6 | DR (DSR) | Data Set Ready |
| 7 | RS (RTS) | Request to Send |
| 8 | CS (CTS) | Clear to Send |
| 9 | CI (RI) Called status dis | |
| FG FG | | Frame Ground (Common with SG) |

♦COM2

COM2 can be changed to either RS-232C, RS-422 or RS-485. (The factory setting is RS-232C.) To change this setting, set Serial Mode Select switch on the circuit board to the desired position.

Please refer to "Switches" for details.

| Pin | RS-232C | | |
|-----|-------------------------------|---|--|
| # | Signal Name | Meaning | |
| 1 | CD | Carrier Detect | |
| 2 | RD (RXD) | Receive Data | |
| 3 | SD (TXD) | Send Data | |
| 4 | ER (DTR) | Data Terminal Ready | |
| 5 | GND | Signal Ground | |
| 6 | DR (DSR) | Data Set Ready | |
| 7 | RS (RTS) | Request to Send | |
| 8 | CS (CTS) | Clear to Send | |
| 9 | CI (RI)/ +5V ^{*1} | Called status display/ +5V Output (Switching available) | |
| FG | FG | Frame Ground (Common with SG) | |

^{*1} To change the RI/+5V setting of #9 pin set System Set switch to the desired position.

| Pin | RS-422 | |
|-----|-------------|-------------------------------|
| # | Signal Name | Meaning |
| 1 | RDA | Receive Data A (+) |
| 2 | RDB | Receive Data B (-) |
| 3 | SDA | Send Data A (+) |
| 4 | NC | No Connection |
| 5 | GND | Signal Ground |
| 6 | NC | No Connection |
| 7 | SDB | Send Data B (-) |
| 8 | NC | No Connection |
| 9 | NC | No Connection |
| FG | FG | Frame Ground (Common with SG) |

| Pin | RS-485 | |
|-----|-------------|----------------------------------|
| # | Signal Name | Meaning |
| 1 | DATA + | Send/Receive Data(+) |
| 2 | DATA - | Send/Receive Data(-) |
| 3 | NC | No Connection |
| 4 | NC | No Connection |
| 5 | GND | Signal Ground |
| 6 | NC | No Connection |
| 7 | NC | No Connection |
| 8 | NC | No Connection |
| 9 | NC | No Connection |
| FG | FG | Frame Ground (Common with SG) |

IMPORTANT

- Be sure to connect pin number 5 (GND) of COM1 and COM2 (RS-232C) to the host unit's Signal Ground terminal.
- Be sure to confirm what settings will be used by the other device and set the slide switches accordingly. Failure to do so can result in a unit malfunction or damage.

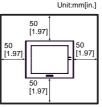
- Whenever changing the PS-A switches, be sure to first turn the PS-A's power supply OFF. Failure to do so can cause a PS-A malfunction.
- Connect the FG terminal line to the shell.
- FG and SG terminals are internally connected in the PS-A. When connecting to another device, be sure not to create an SG shorting loop in your system.

Installations

1. Installation Requirements

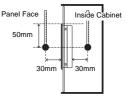
 For easier maintenance, operation, and improved ventilation, be sure to install the PS-A at least 50 mm [1.97 in.] away from adjacent structures and other equipment.





Be sure that the surrounding air temperature and the ambient humidity are within their designated ranges. (Surrounding air temperature: with HDD 5 to 50°C without HDD 0 to 50°C, Ambient humidity: 10 to 90%RH, Wet bulb temperature: 39°C or less, with HDD: 29°C or less)
 When installing the PS-A on the panel of a cabinet or enclosure, "Surrounding air tem-

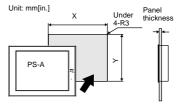
perature" indicates both the panel face and cabinet or enclosure's internal temperature.



 Be sure that heat from surrounding equipment does not cause the PS-A to exceed its standard operating temperature.

2. PS-A Installation

Create a Panel Cut following the dimensions in the table below. Also, determine the panel thickness according to the panel thickness range with due consideration of panel strength.

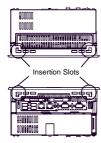


| Х | Y | Panel thickness |
|--------------------------|--------------------------|--------------------|
| 218.5 ⁺¹ | 165.5 ⁺¹ | 1.6[0.06] |
| -0 | ₋₀ | to |
| [8.60 ^{+0.04}] | [6.52 ^{+0.04}] | 10.0[0.39] |

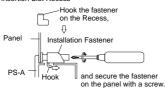
(2) Confirm that the installation gasket is attached to the PS-A unit and then place the PS-A unit into the Panel from the front.

IMPORTANT

- It is strongly recommended that you use the installation gasket, since it absorbs vibration in addition to repelling water.
 - For the procedure for replacing the installation gasket, refer to "PS-3450A Series Hardware Manual"
- (3) Insert each fastener's hook into the slot and tighten it with a screwdriver. Insert the installation fasteners securely into the insertion slot recess. There are four insertion slots.



Insertion Slot Recess



IMPORTANT

- Tightening the screws with too much force can damage the PS-A unit.
- The necessary torque is 0.5N•m.
- Be sure to insert installation fasteners in the recessed portion of an installation fasteners hole. If the fasteners are not correctly attached, the PS-A unit may shift or fall out of the panel.

Wiring

↑ WARNING •

- To avoid an electric shock, prior to connecting the PS-A unit's power cord terminals to the power terminal block, confirm that the PS-A unit's power supply is completely turned OFF, via a breaker. or similar unit.
- Any other power level can damage both the PS-A and the power supply.
- Since PS3450A-T41-24V has no power ON/OFF switch, be sure to attach a breaker-type switch to its power cord.
- When the FG terminal is connected, be sure the wire is grounded.
- Wiring the power supply cable

IMPORTANT

- When the FG terminal is connected, be sure the wire is grounded. Not grounding the PS-A unit will result in excessive noise. Use your country's applicable standard for grounding.
- Power Cord Specifications

Use copper conductors only.

| Power Cord Diameter | 0.75 to 2.5mm ² (18 to 12 AWG) |
|------------------------|--|
| Conductor Type | Simple or Stranded Wire*1 |
| Conductor Length | 10mm |

*1 If the Conductor's end (individual) wires are not twisted correctly, the end wires may either short against each other, or against an electrode.

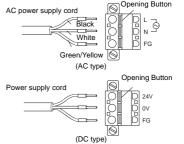
Wiring

When connecting the power cord, use the following items when performing wiring. (Items are made by Phoenix Contact.)

| Recommended Driver | SZS 0.6x3.5 (1205053) |
|---|---|
| Recommended Pin Terminals | AI 0.75-10GY (3201288) AI 1-10RD (3200182) AI 1.5-10BK (3200195) AI 2.5-12BU (3200962) |
| Recommended Pin Terminal Crimp Tool | CRIMPFOX ZA3 (1201882) |

NOTE

- Accompanying AC type power supply connector is CA7-ACCNL-01 of Pro-face (Digital Electronics Corporation) or FKC2.5/3-STF-5.08 is manufactured by Phoenix Contact.
- Accompanying DC type power supply connector is CA7-DCCNL-01 of Pro-face (Digital Electronics Corporation) or GFKC2.5/3-STF-7.62 is manufactured by Phoenix Contact.
- Connecting the Power Cord
- Confirm that the power is not supplied to the PS-A unit.
- Unplug the power connector from the rear of the PS-A unit.
- (3) Push the Opening button by a small and flat screw driver to open the desired pin hole.
- (4) Insert each pin terminal into its each hole. Release the Opening button to clamp the pin place.



(5) After inserting all three pins, insert the Power Plug into the Power Connector at PS-A. Fix the plug with two (2) minus screws.

IMPORTANT

- Confirm that all wires are connected to AC type power supply connector correctly.
- The torque required to tighten these screws is 0.5 to 0.6N•m.
- To prevent the possibility of a terminal short, use a pin terminal that has an insulating sleeve.

2. Power Supply Cautions

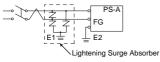
- Input and Output signal lines must be separated from the power control cables for operational circuits.
- To improve the noise resistance, be sure to twist the ends of the power cord wires before connecting them to the Power connector (Plug).
- The PS-A unit's power supply cord should not be bundled with or kept close to main circuit lines (high voltage, high current), or input/output signal lines.
- To reduce noise, make the power cord as short as possible.
- If the supplied voltage exceeds the PS-A unit's range, connect a voltage transformer.
- Between the line and the ground, be sure to use a low noise power supply. If there is an excess amount of noise, connect a noise reducing transformer.
- The temperature rating of field installed conductors: 75°C only.

IMPORTANT

- Use voltage and noise reducing transformers with capacities exceeding Power Consumption value.
- Must be used with a Class 2 Power Supply. (PS3450A-T41-24V)
- Connect a surge absorber to handle power surges.

IMPORTANT

 Be sure to ground the surge absorber (E1) separately from the PS-A unit (E2). Select a surge absorber that has a maximum circuit voltage greater than that of the peak voltage of the power supply.



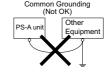
3. Grounding Cautions

- Be sure to create an exclusive ground for the Power Cord's FG terminal. Use a grounding resistance of 100Ω , a wire of $2mm^2$ or thicker, or your country's applicable standard.
- The SG (signal ground) and FG (frame ground) terminals are connected internally in the PS-A unit.
 - When connecting the SG line to another device, be sure that the design of the system/connection does not produce a shorting loop.
- The grounding wire should have a cross sectional area greater than 2mm². Create the connection point as close to the PS-A unit as possible, and make the wire as short, as possible. When using a long grounding wire, replace the thin wire with a thicker wire, and place it in a duct.



Common Grounding (OK)





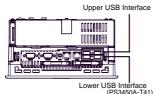
4. Input/Output Signal Line Cautions

- All PS-A Input and Output signal lines must be separated from all operating circuit (power) cables.
- If this is not possible, use a shielded cable and ground the shield.
- To improve noise immunity, it is recommended to attach a ferrite core to the power cord.

To prevent the USB cable from coming off

■ Attaching the USB Cable Clamp

 Place the PS-A unit face-down on a flat surface as shown below. Your PS-A unit has four USB connectors



NOTE

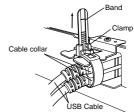
- When using two or more USB ports, be sure to first connect one USB cable to the upper USB connector, and then connect the second USB cable to the lower USB connector.
- When using only one of the USB ports, be sure to use the upper USB connector. This allows you to securely clamp the USB cable in the cable clamp.
- (2) Unscrew the two (2) attachment screws used to hold the Expansion Board Cover in place, and open the Expansion Board Cover.

SEE→ "Switches"-"To change the switch settings" on page 5

(3) Fix the USB holder with a screw. The torque required for this screw is 0.5 to 0.6 N•m. Next, as shown, insert the USB Cable Clamp's band through the hollow of the holder. Pass the USB cables through the Cable Clamp's band and securely tighten the clamp band around the cables.

NOTE

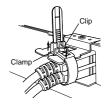
- Be sure the clamp is securely holding the USB cable's plug and collar.
- Be sure the clamp is positioned as shown below, with the clamp pointing upwards not to the side. This is to keep the clamp from interfering with nearby connectors and their cables.



(4) Replace the Expansion Board Cover and reattach two (2) attachment screws. The torque required for these screws is 0.5 to 0.6№m.

■ Removing the USB Cable Clamp

(1) To remove the clamp from the USB cables, push down on the clamp strap's clip to release it while pulling up on the clamp.



Installation prerequisites for standards

The following units are UL/c-UL listed products:

(UL File No.E220851)

| Product Model No. | UL/c-UL Registration Model No. |
|-------------------|--------------------------------------|
| PS3450A-T41 | 3581702-01 |
| PS3450A-T41-24V | 3581702-11 |

For the detailed certification's information, refer to the Pro-face Home page.

<Cautions>

Be aware of the following items when building the PS-A into an end-use product:

- The PS-A unit's rear face is not approved as an enclosure. When building the PS-A unit into an end-use product, be sure to use an enclosure that satisfies standards as the end-use product's overall enclosure.
- · The PS-A unit must be used indoors only.
- Install and operate the PS-A with its front panel facing outwards.
- If the PS-A is mounted so as to cool itself naturally, be sure to install it in a vertical panel. Also, it's recommended that the PS-A should be mounted at least 50mm away from any other adjacent structures or machine parts. The temperature must be checked on the final product in which the PS-A is installed.
- For use on a flat surface of a Type 1 Enclosure.

CE Marking

- PS3450A-T41 units are CE marked, EMC directives and Low Voltage Directive compliant products.
- PS3450A-T41-24V units are CE marked, EMC directives compliant products.

For the detailed information, be downloaded and refer the Declaration of Conformity from Pro-face Home Page.

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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