1. Installing the AC Cord Retaining Clip

Secure the AC cord with the supplied ladder strap/retaining clip assembly to prevent accidental disconnection from the USF-212AS.

1) Wrap the retaining clip around the AC cord. (with the anchor of the ladder strap toward the unit.)
2) Insert the anchor into the hole next to the AC IN socket.
3) Lightly fasten the clip around the AC cord.
4) Plug in the power cord.
5) Slide the clip on the ladder strap toward the plug.
6) Fasten the clip tightly.
7) Gently pull on the AC cord to ensure it is secured.

2. Opening the Front Panel

The front panel may be difficult to open if the USF frame is placed on a desk, and may be damaged the front panel if it is forced to open. Perform the following steps after setting the frame in a rack.

1) Loosen the two thumbscrews of the front panel by turning them counterclockwise.
2) Pull out the front panel using the pull handles. The fan stops while the front panel is open.
3) Pull out the front panel.
4) The front panel rails can be tilted down.
5) The OPEN alarm will sound every 30 seconds. It continues sounding after 5 minutes. In case of the power is on, complete the procedure in a short period of time.

3. Detaching the Front Panel

The front panel can be detached by gently pushing both rails inward.

Handle the front panel carefully so as not to bend the rails.

4. Front Interior

The slot configuration as shown below is revealed when the front panel is removed.

<table>
<thead>
<tr>
<th>No.</th>
<th>Slot Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>Power Supply 1 slot</td>
<td>Dedicated power unit is installed in this slot as standard. Power is supplied when the switch is turned on.</td>
</tr>
<tr>
<td>(2)</td>
<td>Power Supply 2 slot</td>
<td>Slot for redundant power supply USF-212PS. Redundant operation available when optional USF-212PS is installed. A blank panel will otherwise cover the slot.</td>
</tr>
<tr>
<td>(3)</td>
<td>Control module slot</td>
<td>Fan module slot. Enables you to monitor power supply and fan states via SNMP from back connector LAN A and alarm output via GPI. LAN1 and LAN2 are not applicable.</td>
</tr>
<tr>
<td>(4)</td>
<td>FAN4</td>
<td>A fan is installed. Operation status can be monitored using Web GUI Status tab.</td>
</tr>
<tr>
<td>(5)</td>
<td>USF module slot</td>
<td>Dedicated USF module slots. (Front USF modules) For details on module operation, refer to the respective operation manuals.</td>
</tr>
</tbody>
</table>

USF-212AS Packing List:
USF-212AS (1 unit)
AC Cable (1 set, including AC Cord Retaining Clip)
CD-ROM (PDF Operation Manual)
5. USF Module Installation

Module installable slots vary depending on the USF module type. (See “Installation Slots for Front and Rear Modules” below.) If multiple free slots exist, do not install modules side-by-side but leave slots open to prevent overheating and facilitate signal connection from the rear panel.

The procedure for installing the USF module in Slot 1 is described below as an example.

Installing a USF Rear Module

1. Open the front panel and shut down the USF-212AS power supply.
2. Slot 1 is the top slot in the left module block in the rear panel. Remove the blank panel by detaching the two screws on both ends. Keep the blank panel and screws in a safe place after removal.
3. Insert the rear module into the slot and fasten both screws.

Note: Make sure to install the rear module first, then install the front module.

Installing a USF Front Module

Make sure to install the front module after installing the rear module.

1) SLOT 1 is the top slot in the right block of the front panel. (Refer to Sec. 4-5. “Slot Number.”)
2) Set the module on the guide rail and carefully insert the module slowly.
3) Push the handle until the module clicks into the connectors.

Inserting the module by pressing on other than the handle may damage some parts on the module.

Installation Slots for Front and Rear Modules

<table>
<thead>
<tr>
<th>Type 1</th>
<th>Type 2</th>
<th>Type 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front: 1 slot (All slots)</td>
<td>Rear: 1 slot (All slots)</td>
<td>1 slot (Even slots only)</td>
</tr>
<tr>
<td>Front: 1 slot (All slots)</td>
<td>Rear: 2 slots (Upper and lower)</td>
<td>2 slots (Upper and lower)</td>
</tr>
</tbody>
</table>

Available modules:
- 105DADA
- 108ADA
- 104VEA
- 103DEMUX
- 1053DDA
- 1043ADC
- 1100VEA
- 1044UDC

NOTE
- USF modules come as front and rear sets. Be sure to install set modules (front and rear) into their proper slots.
- Make sure to install the rear module first, then install the front module.
- Install blank panels over free slots to prevent foreign material from entering and overheating the chassis.

IMPORTANT
- Beware of the occurrence of electrical breakdown in USF Modules.
- Wear an antistatic wrist strap or equivalent to equalize the electrical potential of the USF-212AS unit and the worker’s body. Do not touch the PCB wiring or parts legs directly with your fingers while working.
- Each USF Module can be installed and uninstalled while the power is on in case of emergency. Shut down the power for non-emergency work.
- When front module is being installed/uninstalled while the power is on, the front panel is in open state. The fan will stop during the procedure, so it is essential to complete the installation within a short period and to close the front panel immediately.
- Be sure to shut down the power to install and uninstall a control module.

6. Connecting USF-212AS to a PC

When USF-212AS is network connected via network to a PC, operation can be monitored on SNMP manager using a web browser, and GPIO alarm setting can be entered. There are two ways to connect USF-212AS to a PC: using LAN A or LAN 1/2 port. Select a suitable port in accordance with system configuration.

LAN A port connection

Green Lit: Connected
Orange Flashing: Transmitting and receiving data

LAN A LED

LAN 1/2 port connection

Connect to LAN 1 or LAN 2 port on the rear panel. (Connection to LAN 1 port is shown in the drawing below.)

LAN 1/2 LED

There are two ways to connect LAN A or LAN 1/2 to a PC; using a web browser when connection is established.

- Open the web browser of the PC and input address.
- Connecting to LAN A: [http://172.16.0.10/](http://172.16.0.10/) (Factory Setting)
- Connecting to LAN 1 or LAN 2: [http://192.168.0.10](http://192.168.0.10) (Factory Setting)

A status page as shown opens on the web browser when connection is established.

- IP Address Change
  1) Click the Network tab.
  2) Input new IP address into the IP Address box of LAN settings to change LAN A IP address.
  3) Input new IP address into the IP Address box of LAN 1/2 settings to change LAN 1/2 IP address.
  4) A confirmation message window opens when you click Apply.
  5) Click OK in the confirmation window.
  6) Click Utility tab, then click Restart.
  7) Click OK when the restart confirmation window opens.

USF-212AS reboots. The new setting is reflected after the restart.

NOTE: IP addresses are assigned to respective USF-212AS modules installed. Refer to USF-212AS operation manual Sec.10 “USF-212AS WEB GUI” for details on setting IP addresses.