MS8500-E
Media Switch Server
Quick Guide

Manual Version: P100-20140307

Notice

The information in this manual is subject to change without notice. Every effort has been made in the preparation of this manual to ensure accuracy of the contents, but all statements, information, and recommendations in this manual do not constitute the warranty of any kind, express or implied.

Environmental Protection

This product has been designed to comply with the environmental protection requirements. The storage, use, and disposal of this product must meet the applicable national laws and regulations.

Safety and Compliance Information

Conventions Used Symbol

The symbols in this chapter are shown in the following table. They are used to remind the reader of the safety precautions during equipment installation and maintenance.

Safety Symbol	Description
	Generic alarm symbol: To suggest a general safety concern.
	ESD protection symbol: To suggest electrostatic-sensitive equipment.
	Electric shock symbol: To suggest a danger of high voltage.

Safety Information

WARNING!

Installation and removal of the unit and its accessories must be carried out by qualified personnel. You must read all of the Safety Instructions supplied with your equipment before installation and operation.

Warnings:

- If the product does not work properly, please contact your dealer or the nearest service center. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

- To reduce the risk of fire or electrical shock, do not expose this product to rain or moisture.
- This installation should be made by a qualified service person and should conform to all the local codes.
- Please install blackouts equipment into the power supply circuit for convenient supply interruption.
- The separate earthing terminal must be permanently connected to earth.
- For AC supplied model: The plug-socket combination must be accessible at all times as it serves as the main disconnecting device.
- Before the power cable is installed or removed, the power must be turned off.
- To avoid heat accumulation, good ventilation is required for a proper operating environment.
- Improper use or replacement of the battery may result in hazard of explosion. Please use the manufacturer recommended battery type.

Caution: Fiber optic ports – optical safety.

Never look at the transmit laser while the power is on. Never look directly at the fiber ports and the fiber cable ends when they are powered on.

Caution: Use of controls or adjustments to the performance or procedures other than those specified herein may result in hazardous laser emissions.

Regulatory Compliance

FCC Part 15

This equipment has been tested and found to comply with the limits for digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

LVD/EMC Directive

This product complies with the European Low Voltage Directive 2006/95/EC and EMC Directive 2004/108/EC.

WEEE Directive–2002/96/EC

The product this manual refers to is covered by the Waste Electrical & Electronic Equipment (WEEE) Directive and must be disposed of in a responsible manner.

Contents

1 Product Introduction

The MS8500-E Media Switching server (referred to as MS8500-E) is a hardware/software server based on the IP Multimedia Operating System (IMOS) and oriented toward IP-based video surveillance systems. The MS8500-E uses the Media Switch 3.0 (MS3.0) software.

Appearance

The actual appearance of the MS8500-E may be different from the illustrations below.

Figure 1-1 Front view

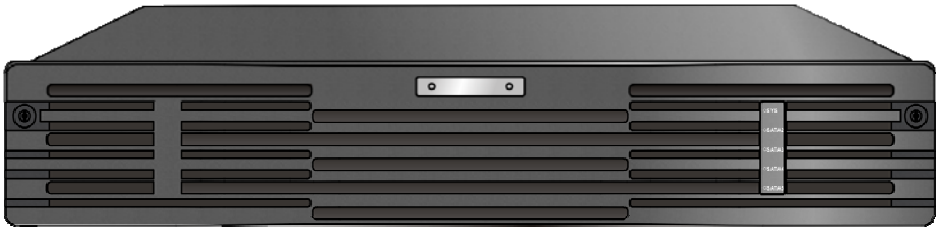
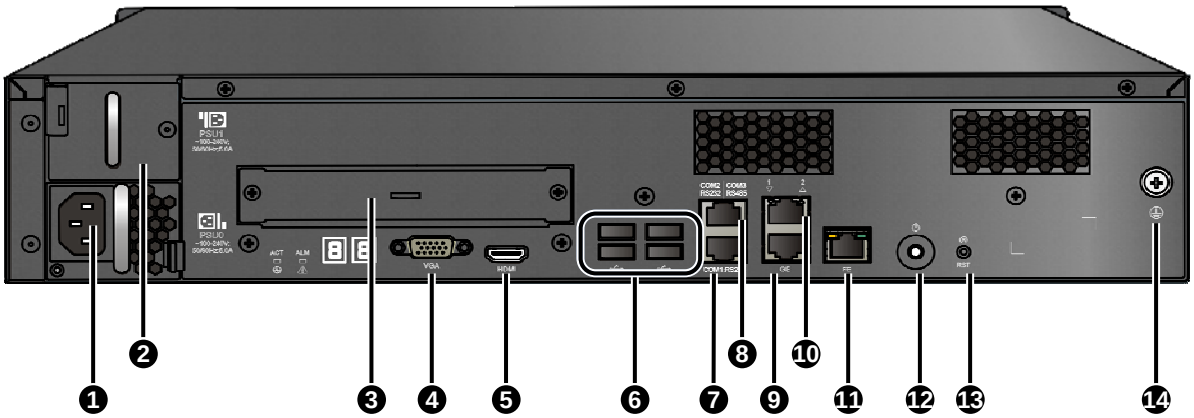


Figure 1-2 Rear view

Ports and Buttons

Figure 1-3 Ports and buttons on the rear panel



1: AC input (for PSU 0)	2: Power (for PSU 1)
3: Network Interface Card (NIC) slot	4: VGA video output
5: HDMI video output	6: USB (× 4)
7: Serial port 1 (RS-232)	8: Serial port 2 (RS-232)/Serial port 3 (RS-485)
9: GE port 1	10: GE port 2
11: FE port	12: Power on/off button
13: Reset button	14: Grounding terminal

For detailed descriptions of the ports and buttons, refer to Table 1-1.

Table 1-1 Port and button descriptions

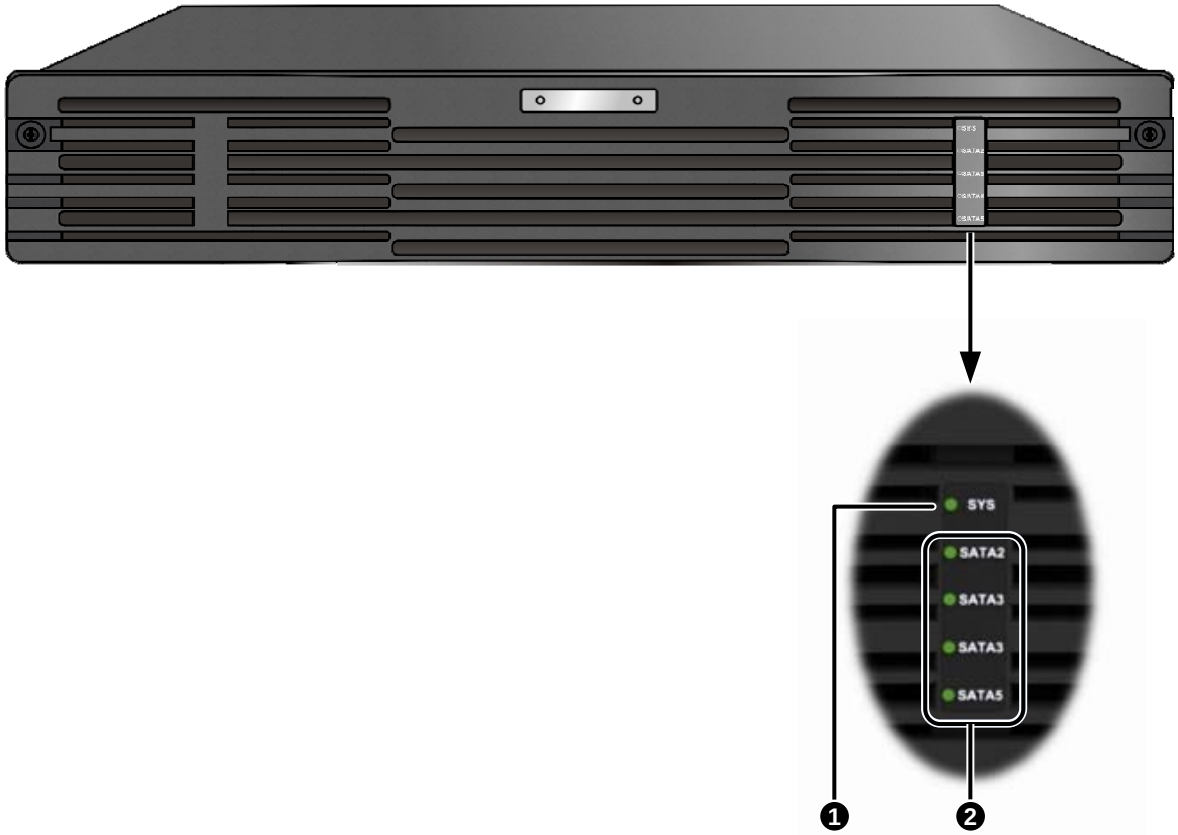
Port	Description
AC input	• 100 - 240 V AC, 50 Hz/60 Hz
Extended power slot	• Standard: 1 slot • Optional: 2 slots in 1+1 redundancy mode
Extended NIC slot	Two options: • NIC with 4 GE ports (RJ-45) • NIC with 2 10GE ports (SFP+)

Port	Description
VGA output	For connection to a VGA display device. Supported solutions and screen refresh rates: ● 1920 × 1080, 50P ● 1920 × 1080, 60P ● 1280 × 720, 50P ● 1280 × 720, 60P ● 1280 × 1024, 60 HZ ● 1024 × 768, 60 HZ
HDMI video output	For connection to an HDMI display device. Supported resolutions and screen refresh rates: ● 1920 × 1080, 50P ● 1920 × 1080, 60P ● 1280 × 720, 50P ● 1280 × 720, 60P ● 1280 × 1024, 60 HZ ● 1024 × 768, 60 HZ
USBs	For connection to a USB device.
Serial port 1 (RS-232)	RJ-45 port for debugging and maintenance purposes.
Serial port 2 (RS-485/RS-232)	RJ-45 port compatible with RS-485 and RS-232 ports.
GE port	10/100/1000 Mbit/s adaptive Ethernet port for connection to a service network.
FE port	10/100 Mbit/s adaptive Ethernet port for connection to a client computer.
Power on/off	Pressing and holding this button for 3 seconds powers off the device. However, this is not a recommended method to power off the device.
Reset button	Pressing this button once restarts the device.
Grounding terminal	For connection to the grounding cable of the device.

LEDs and Nixie Tubes

Front Panel LEDs

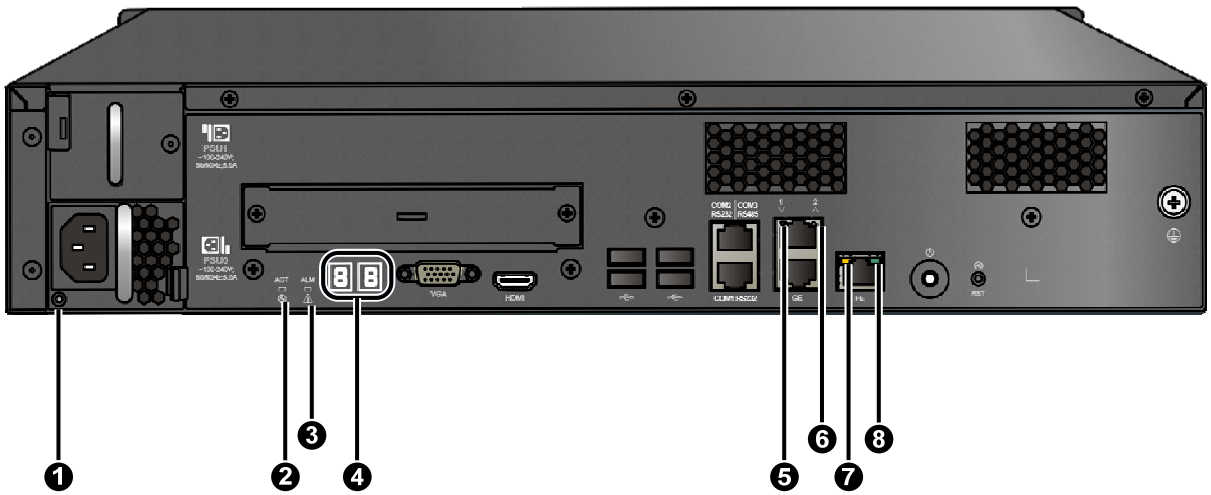
Figure 1-4 Front panel LEDs



1: System LED	2: Hard disk status LEDs

Rear panel LEDs and nixie tubes

Figure 1-5 Rear panel LEDs and nixie tubes



1: Power module LED	2: Heartbeat LED
3: Alarm LED	4: Device status nixie tubes
5: GE port 1 LED	6: GE port 2 LED
7: FE port LINK LED	8: FE port ACT LED

LED and nixie tube descriptions

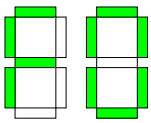
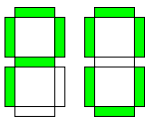
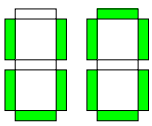
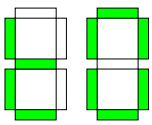
For descriptions of the LEDs, refer to Table 1-2. For descriptions of the nixie tubes, refer to Table 1-3.

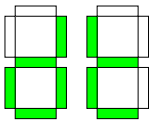
Table 1-2 LED descriptions

LED	Color	Indication
System LED	Green/yellow	• Steady green: The system is operating properly. • Steady yellow: At least one hardware component is faulty.
Hard disk status LED	Green	LEDs SATA2-SATA5 indicate status of hard disks in slots 2-5: • Off: The hard disk is powered off or not installed. • Steady green: The hard disk is linked. • Blinking green: The hard disk is reading or writing data.
Power module LED	Green/red	• Off: The power module is not connected to AC power. • Steady green: The power module is connected to AC power, and the device is powered on. • Blinking green: With one power module installed, the power module is connected to AC power, but the device is not powered on. • Blinking red: With two power modules installed, power module A is connected to AC power but B is not, and the device is powered on, then the LED for power module B blinks red. • Steady red: The power module is faulty.
Heartbeat LED	Green	• Off: The device is powered off. • Blinking at 1 Hz: The system is operating properly. ***Note:*** *The Heartbeat LED does not blink until the system is completely started.*
Alarm LED	Yellow	• Off: The device hardware is normal. • Steady on: The device has a faulty hardware component.

LED		Color	Indication
GE port LED		Green/yellow	• Off: No network connection. • Steady green: A network connection is established, and the data transfer rate is 1000 Mbit/s. • Blinking green: The data transfer rate is 1000 Mbit/s, and the port is transmitting or receiving data. • Steady yellow: A network connection is established, and the data transfer rate is 100Mbit/s. • Blinking yellow: The data transfer rate is 100Mbit/s, and the port is transmitting or receiving data.
FE port LEDs	LINK (Link status LED)	Yellow	• Off: No network connection. • Steady on: A network connection is established.
	ACT (Data transceiving LED)	Green	• Steady on: A network connection is established, but the port is not transmitting or receiving data. • Blinking: A network connection is established, and the port is transmitting or receiving data.

Table 1-3 Nixie tube descriptions

Status	Indication
Two digits	It shows the main board temperature (in Celsius degrees) during system operation. Blinking digits indicates a temperature alarm.
F0/0F/FF (F blinks) 	Blinking F indicates that the corresponding fan module is faulty. 0 indicates that the corresponding fan module is working properly. The nixie tube on the left represents fan module 0, and that on the right represents fan module 1.
P0/0P/PP (P blinks) 	Blinking P indicates that the corresponding power module is faulty. 0 indicates that the corresponding power module is working properly. The nixie tube on the left represents PSU 0, and that on the right represents PSU 1.
U0/0U/UU (U blinks) 	• U0: The CMOS battery is under voltage. • 0U: The main board voltage is abnormal. • UU: Both the CMOS battery voltage and the main board voltage are abnormal.
t0/0t/tt (t blinks) 	• t0: The fan on the left side of the CPU radiator is faulty. • 0t: The fan on the right side of the CPU radiator is faulty. • tt: The fans on both sides of the CPU radiator are faulty.

Status	Indication
dt blinks 	According to S.M.A.R.T, the hard disk temperature is out of the normal range. In this case, you need to check the dust filter.

System Specifications

NOTE!

The specifications are subject to change without prior notice.

Table 1-4 System specifications

Item	Description
Height	2 U (86.1mm)
Dimensions (H x W x D)	86.1 mm x 446 mm x 500 mm (excluding the mounting brackets and slide rails)
Number of fans	4
Weight	• Standard: <12 kg • Maximum: <14 kg
Overall power consumption	Maximum: 200 W
Maximum number of hard disks	4
Hard disk type	SATA II
Working temperature	0°C to 40°C Recommended range: 10°C to 35°C
Working humidity	20% to 80% (non-condensing)
Storage temperature	-20°C to +60°C
Storage humidity	10% to 90% (non-condensing)
Working altitude	– 60 m to +5000 m

Factory Default Settings for Network Parameters

Table 1-5 lists the factory default settings for the network parameters. You may change these settings as required.

Table 1-5 Factory default settings for network parameters

Item	Description
FE port	Obtains an IP address through DHCP.

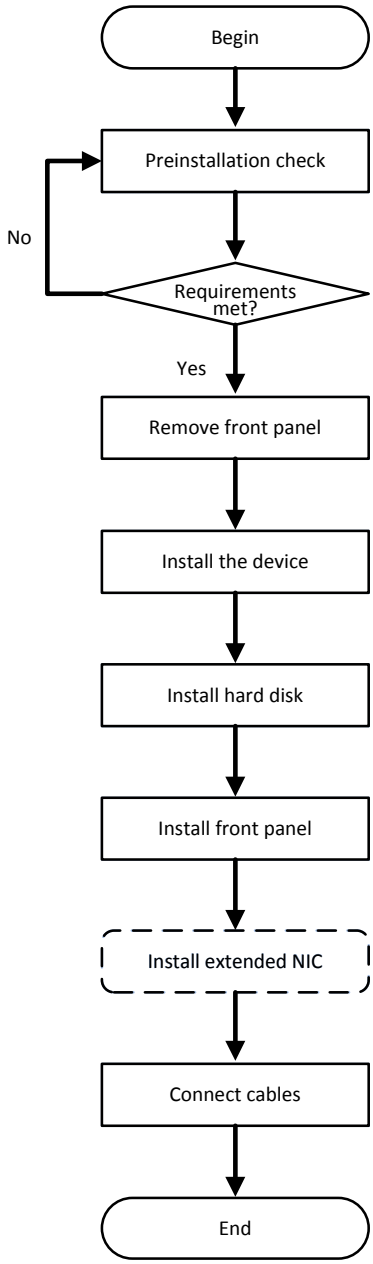
Item	Description
GE port 1	• IP address/subnet mask: 192.168.0.12/255.255.255.0 • Default gateway: None.
GE port 2	Obtains an IP address through DHCP.
Extended network port (optional)	Obtains an IP address through DHCP.
Host name	The host name is “Localhost”.

2 Hardware Installation

This chapter describes the hardware installation procedure.

Installation Procedure

Figure 2-1 Installation flowchart



Preinstallation Check

Checking device components

Check the device model and accessories delivered along with the package to ensure that all the device components are complete and intact. For details about the device model, and types and quantities of accessories, see the packing list.

Checking installation tools

Prepare the following tools:

- Straight screwdriver and cross screwdriver
- Antistatic wrist strap or gloves

Checking the installation site

The device must be installed indoors, and the lightning protection and grounding requirements must be met.

- Ensure that the installation environment meets the lightning protection requirements. If necessary, use appropriate lightning protection apparatuses for the device.
- Ensure that the device is properly grounded through the grounding terminal. For details, refer to "Connecting the Grounding Cable".

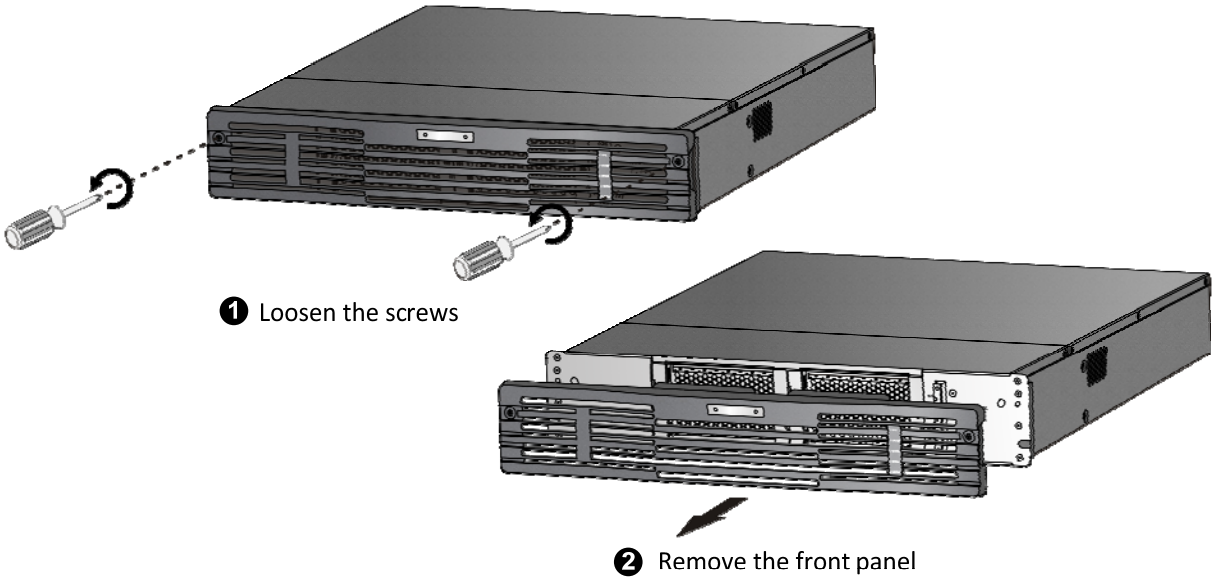
WARNING!

Do not remove the tamper seal (as shown in Figure 2-2) from the device chassis without confirmation from your local dealer.

Figure 2-2 Tamper seal

Removing the Front Panel

Figure 2-3 Removing the front panel



Installing the Device in a 19-inch Cabinet

Preinstallation Check

Check the grounding and stability of the cabinet. Ensure that the cabinet has sufficient weight-bearing capacity for the device, and no obstacle is affecting the installation inside or around the cabinet.

Before installing the device in a standard 19-inch cabinet, check that:

- The cabinet is properly grounded and stabilized.
- The weight-bearing capacity of the cabinet is sufficient to support the device, and no obstacle inside or around the cabinet will affect the device installation.
- The cabinet door is not a glass door.
- The cabinet is supported by a bracket instead of rollers.

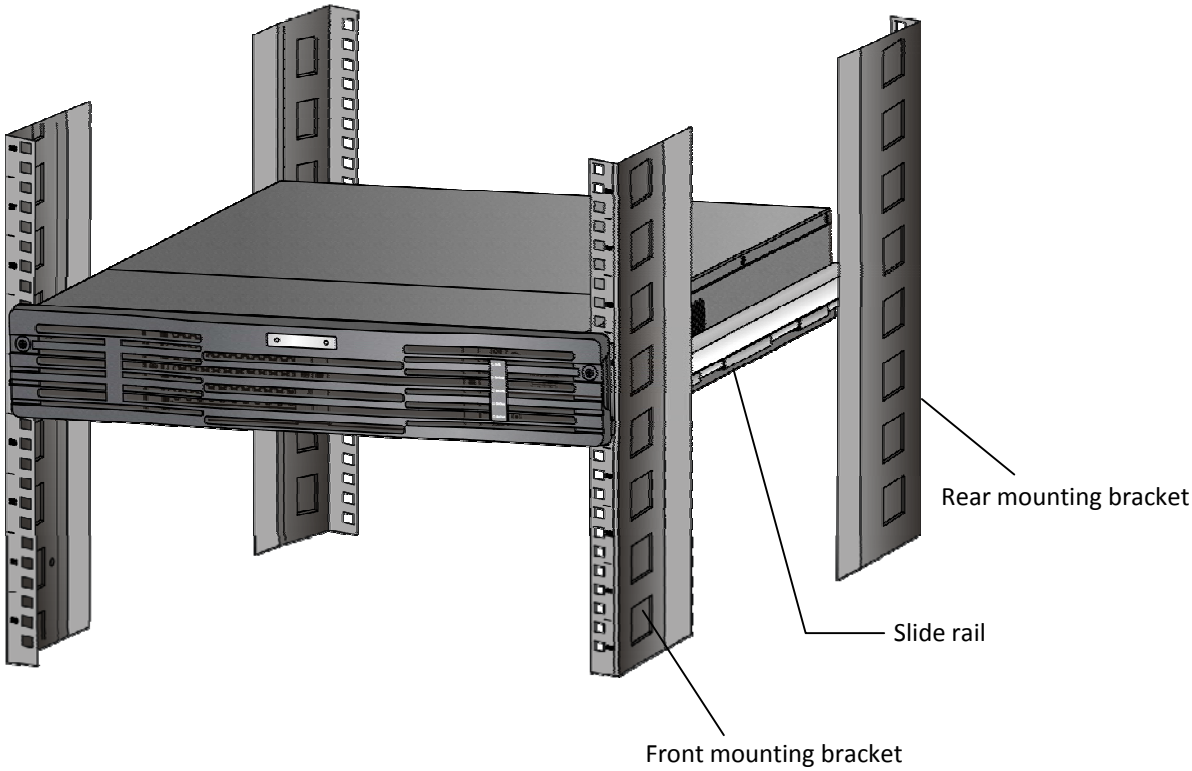
Installation Procedure

Planning the installation position in the cabinet

Plan the space and position according to the height (2 U) of the device and the number of devices you want to install. If the cabinet is equipped with a tray, use the tray for the installation. If no tray is available, use slide rails.

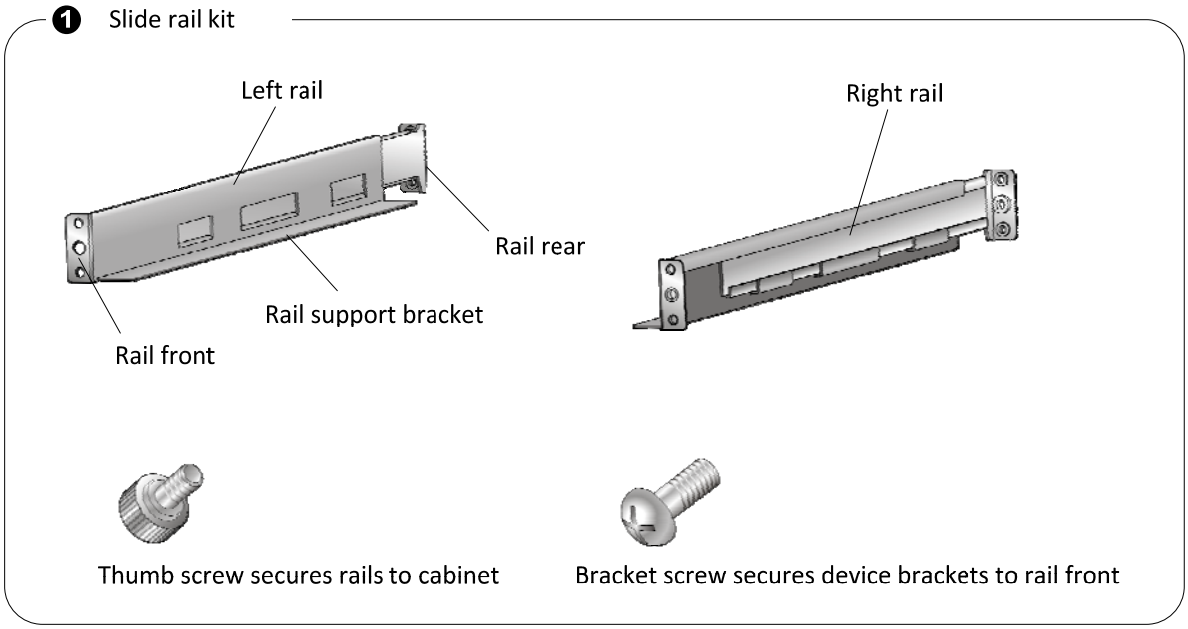
This procedure takes slide rails as an example. Figure 2-4 shows the slide rails and the installed device in the cabinet.

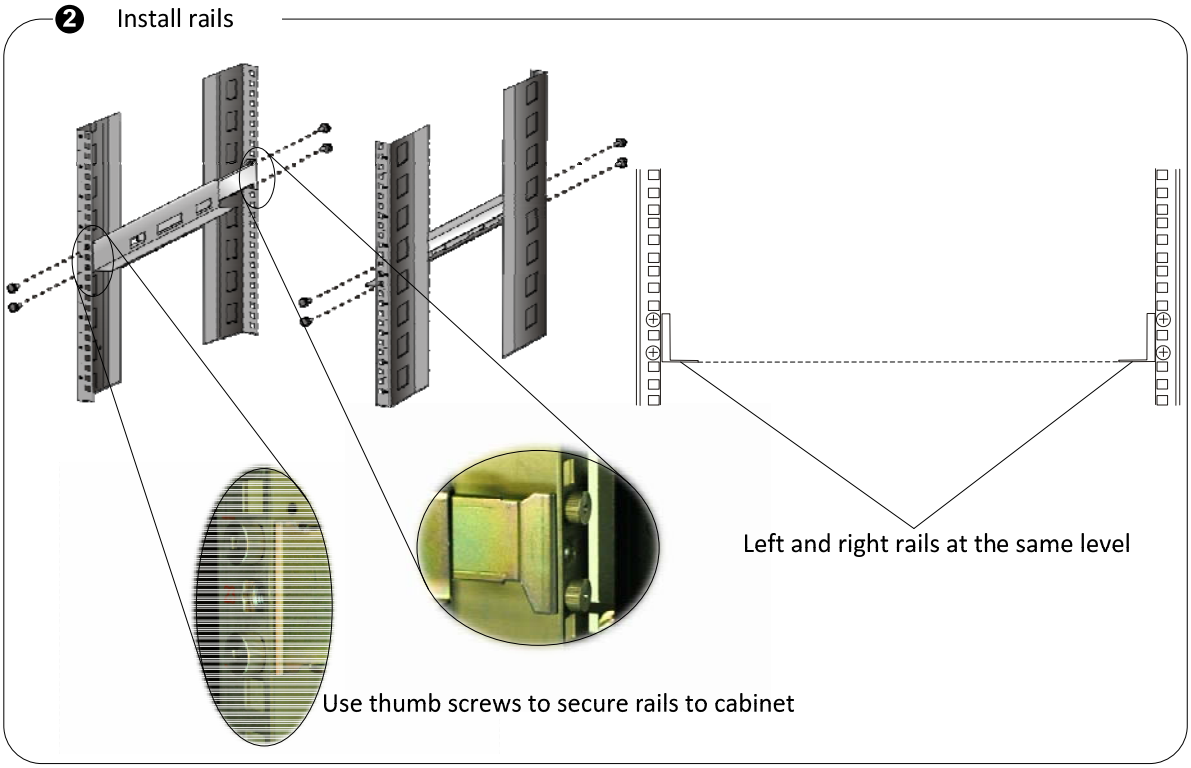
Figure 2-4 Installed device in the cabinet



Attaching the slide rails to the cabinet

Figure 2-5 Installing the slide rails





NOTE!

You can extend the slide rails to fit the cabinet.

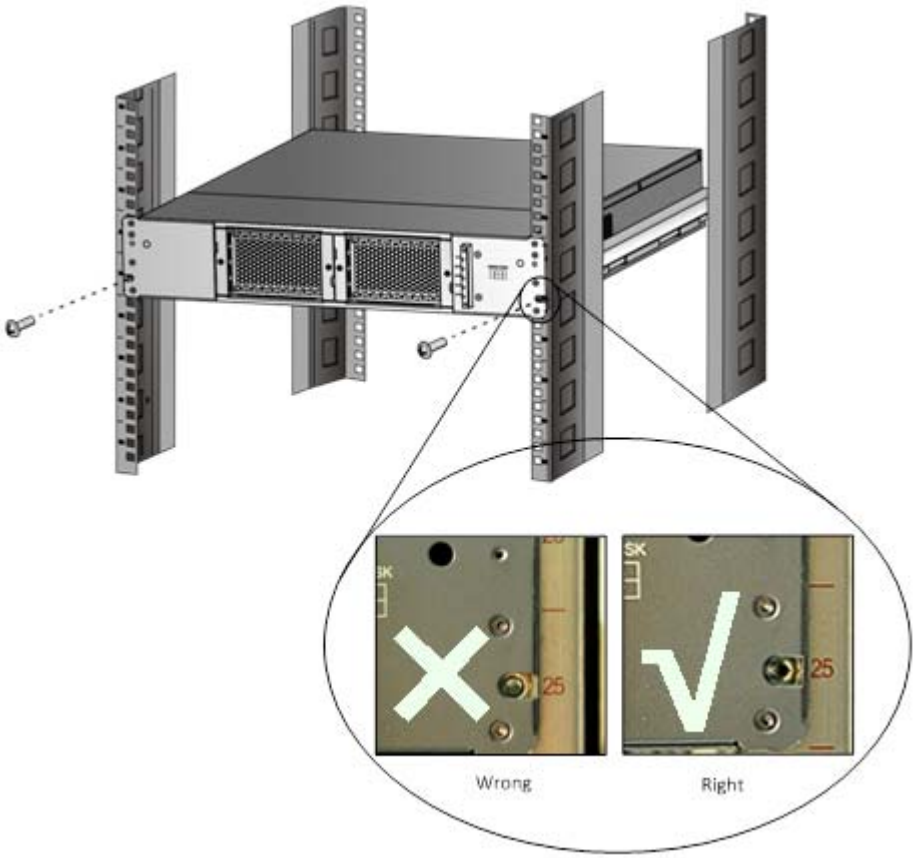
Mounting the device onto the slide rails

CAUTION!

Ensure that the device perfectly aligns with the U marks on the mount bars and is in full contact with the tray or the slide rails. A gap between the device and the tray or the slide rails will cause instability of the device and may affect its operation stability. For hard disks, instability may cause damage and increase read/write errors.

1. Place the device onto the slide rails and then push the device slightly into place.
2. Align the screw slots on the device with the screw holes on the cabinet, insert the screws through the holes and then tighten the screws.

Figure 2-6 Securing the device to the cabinet using screws



Installing the Device on a Workbench

If a 19-inch cabinet is not available, you may directly place the device on a clean workbench.

Before installing the device on the workbench, check that:

- The workbench is firm enough to bear the weight of the device and the cables.
- The workbench is stabilized and properly grounded.
- Room of at least 30 cm in the front and at the back of the device, and at least of 10 cm on both sides of the device should be reserved on the workbench for heat dissipation purpose.

- No other object is placed on the device.

Installing the Hard Disks

The slots for hard disks are inside the device, so you need to remove the front panel and the dustproof cover first.

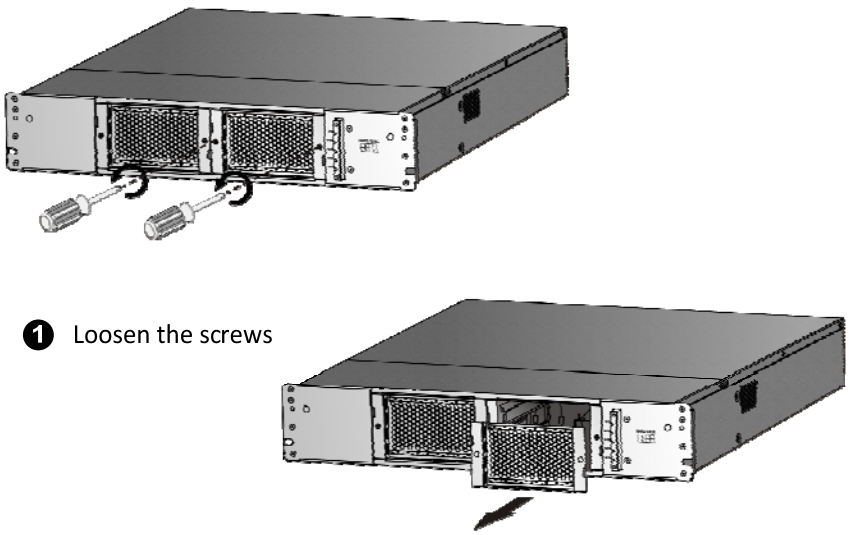
Preinstallation Check

- Carefully read the instructions for the hard disks included in the package.
- Use an antistatic wrist strap or antistatic gloves throughout the procedure.

Installation Procedure

Removing the dust filter

Figure 2-7 Removing the dust filter



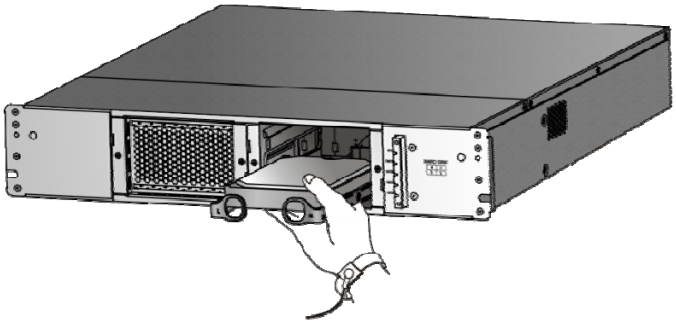
Inserting the hard disk

Unpack the hard disk, and then slowly insert it into the hard disk slot.

NOTE!

Two hard disks are delivered with the device and should be installed in slots 2 and 3.

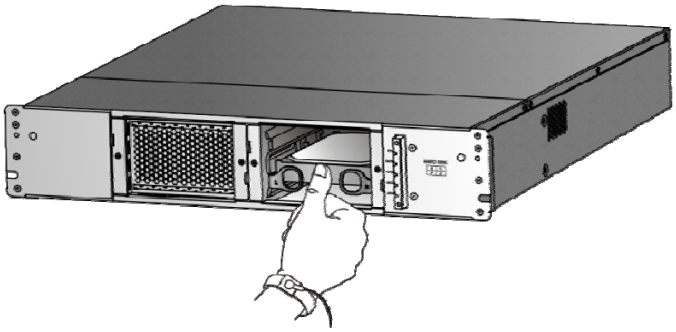
Figure 2-8 Inserting the hard disk



Pushing the hard disk in place with your thumb

When the hard disk is inserted halfway, slowly push the hard disk with your thumb till it clicks into place.

Figure 2-9 Pushing the hard disk in place with your thumb



Installing the Front Panel

Attach the front panel to the front of the device and then tighten the captive screws.

Figure 2-10 Installing the front panel

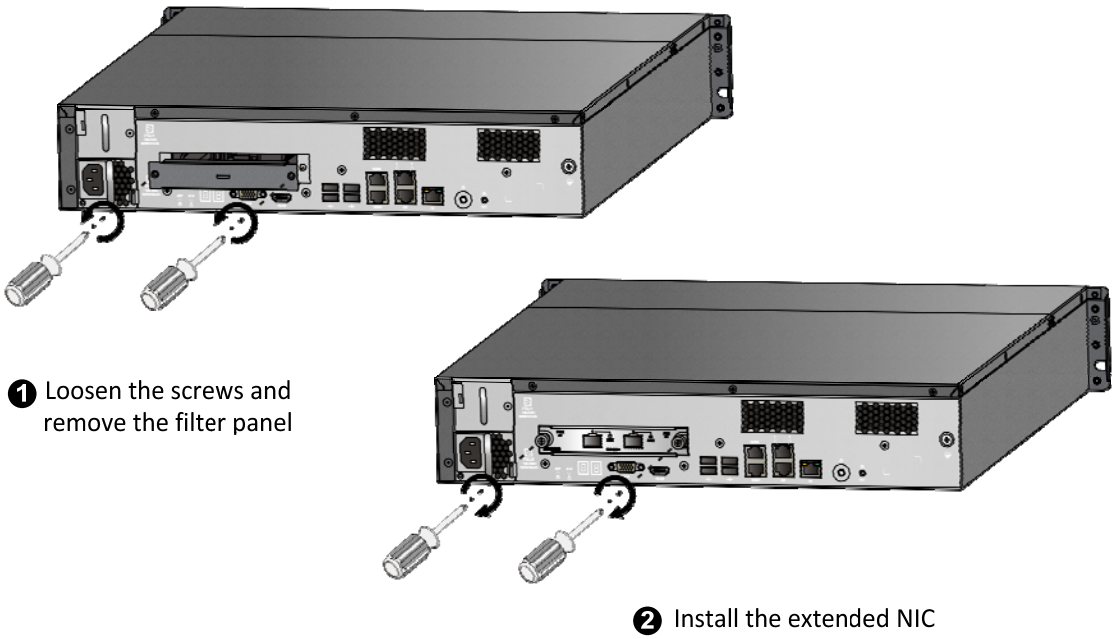
Installing the Extended Network Interface Card (Optional)

Two types of extended network interface cards (NICs) are allowed. You may choose either type as required:

- NIC with 2 10GE ports (SFP+)
- NIC with 4 GE ports (RJ-45)

The following procedure takes an NIC with two 10GE ports as an example: Remove the filler panel, and then install the extended NIC.

Figure 2-11 Installing the extended NIC

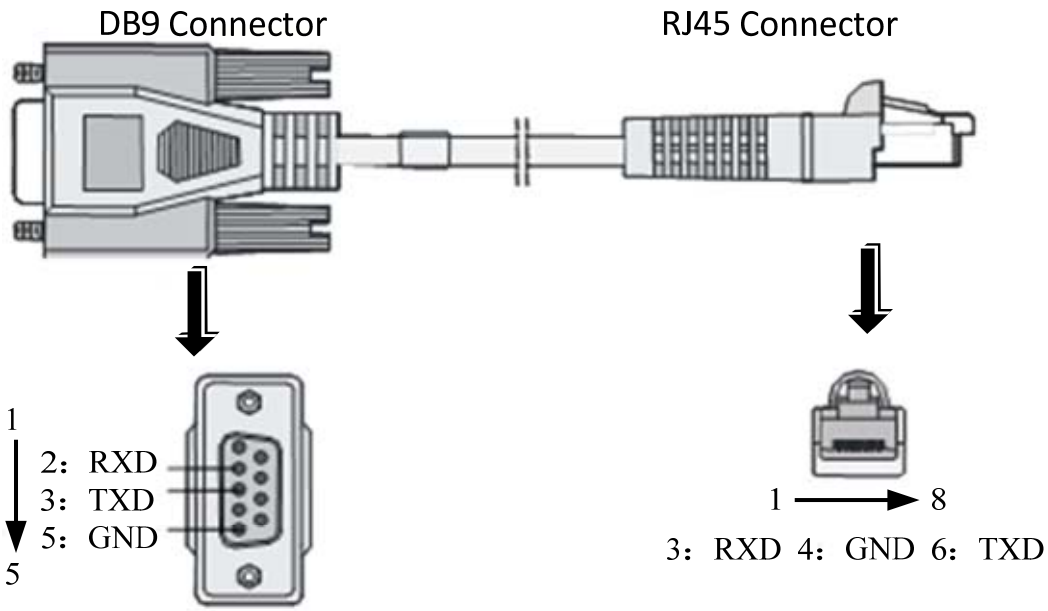


Connecting Cables

Connecting the RS-232 Cable

Figure 2-12 shows cable requirements for device maintenance through serial port 1 (RS-232). The DB9 port is connected to the PC, and the RJ-45 port is connected to serial port 1 on the device.

Figure 2-12 RS232 cable



Connecting the Grounding Cable

WARNING!

Ensure that the device is properly grounded to prevent personal injury and device damage (due to lightning and interference).

Ensure that the grounding resistance does not exceed 5 ohms, and the grounding cable is not longer than 30 meters. For more information, refer to YD5098 specifications.

Connect one end of the grounding cable to the grounding terminal of the device, and connect the other end to a reliable grounding point, as shown in Figure 2-13.

Figure 2-13 Connecting the grounding cable

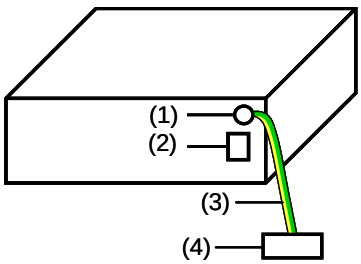
Using a grounding bar in the equipment room

NOTE!

If the cabinet you are using provides a grounding bar, connect the grounding cable of the device to the grounding bar.

If a grounding bar is available in the equipment room, connect the other end of the grounding cable to the grounding bolt on the grounding bar and then tighten the secure nut, as shown in Figure 2-14.

Figure 2-14 Grounding using a grounding bar in the equipment room

	(1) Grounding terminal
	(2) AC input
	(3) Grounding cable
	(4) Grounding bar in equipment room

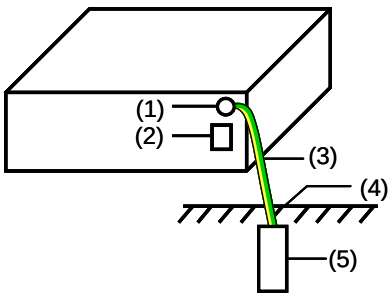
CAUTION!

Do not connect the grounding cable to a fire fighting pipe, heating radiator, or lightning arrester. The grounding cable must be connected to the grounding system of the equipment room.

Using a buried grounding conductor

If the installation environment provides no grounding bar but a mud ground which can be used to bury a grounding conductor, you may bury a angle steel (or pipe) at least 0.5 m long into the ground and use the buried angle steel (or pipe) for grounding purpose. The grounding cable of the device must be connected and soldered to the steel angle (or pipe), and the joint point should be protected with anti-corrosion treatment. Figure 2-15 shows how the grounding cable should be connected

Figure 2-15 Grounding using a buried grounding conductor

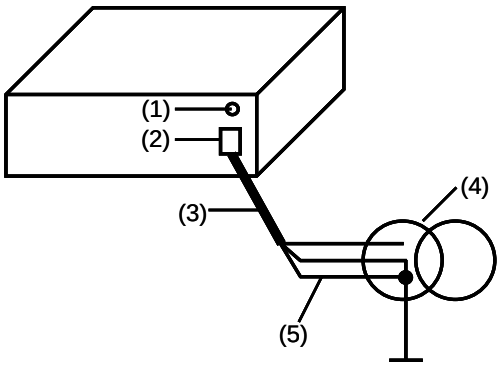


	(1) Grounding terminal
	(2) AC input
	(3) Grounding cable
	(4) Earth
	(5) Angle steel or steel pipe

Grounding through the protection earthing (PE) cable of AC power

If neither a grounding bar nor a mud ground is available, connect the grounding cable of the device to the PE cable in the manner as shown in Figure 2-16. In addition, make sure that the PE cable of AC power is properly grounded in the power distribution room or on the AC power transformer side

Figure 2-16 Grounding through the PE cable of AC power



	(1) Grounding terminal
	(2) AC input
	(3) AC power cable
	(4) Power transformer
	(5) PE cable

Connecting the Power Cable

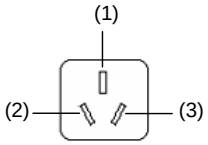
CAUTION!

Before you connect the power cable, ensure that the power switch is OFF.

Unpack the AC power cable and connect it to power.

For the power socket, a three-wire single-phase power socket (as shown in Figure 2-17) or a multifunctional computer power socket is recommended. The neutral point of the power supply must be properly grounded. Generally, the neutral point of the power system for a building is grounded during cabling. Check that the power system of the building is properly grounded.

Figure 2-17 AC power socket



(1) Neutral point	(2) Zero wire	(3) Live wire

3 Device Power On/Off

- To power on the device: Press the Power On/Off button after you have connected the device to power.

CAUTION!

Before you connect the device to power, ensure that the grounding cable has been properly connected.

- To power off the device: Log in to the server through the SSH client and then run the **poweroff** command. You can also power off the device by pressing and holding the Power On/Off button for three seconds.

CAUTION!

To power off the device by pressing and holding the Power On/Off button is not recommended.

4 Basic Configuration

WARNING!

Configuration operations shall be performed by qualified personnel only. Any random configuration operation may cause severe system faults and loss of data.

Configuration Tasks

Table 4-1 Configuration task description

Configuration Task		Description
Configuration through Web	Logging in through the Web	Log in to the Web interface.
Configuration Through command line interface	Viewing and modifying parameter settings	View and modify parameter settings.
	Performing service operations	View service status, start, stop and restart service.
	Viewing system logs	View system logs.
	Viewing the system version	View system version information.

Logging In to the Web Interface

After you have logged in to the Web interface, you can perform operations including setting the device ID and the VM server IP. For details, refer to the Online Help.

NOTE!

Use the default administrator password “admin” when you access the Web interface for the first time.

Perform these steps:

1. Open the Web browser on the client computer. In the address bar, enter the URL of the MS8500-E server in “http://MS8500-E server IP address:port number” format. For example, http://192.168.0.30:8080.
2. In the login dialog box, enter the user name and password as administrator, and then click **Ok**.

Configuration Through the Command Line Interface

Viewing and Modifying Parameter Settings

Viewing parameter settings

Use the following commands to view the current parameter settings.

```
[root@localhost ~]# mscfgtool.sh -q
DeviceID=msserver
ServerPort=5060
ServerIP=192.168.254.152
ServerID=iccsid
DBType=PostgreSQL
DBServerName=192.168.254.152:5432:imos
DBUserName=postgres
DBPassword=******
```

Modifying parameter settings

Use the corresponding scripts to modify parameter settings when necessary, for example, when the network configuration has changed. The commands are described as follows. The boldface descriptions are explanatory notes.

- Change the MS8500-E device ID:

`ID[root@localhost ~]# mscfgtool.sh deviceid MS8500-E`**- - -MS8500-E is the new MS8500-E device ID.**

- Change the VM server IP:

`[root@localhost ~]# mscfgtool.sh serverip 192.168.254.155`**- - -192.168.254.155 is the new VM server IP.**

NOTE!

You can also modify MS8500-E device ID and VM server IP through the Web interface. For details, refer to MS8500-E Online Help.

- Change Apache port numbers:

NOTE !

You need to modify the port number only when the default port number is already being used.

Run the following command to modify the Apache port number of MS8500-E:

`[root@ localhost ~]# mscfgtool.sh namehost 893`**--- 893 is the new port number of MS8500-E**

For more commands to modify parameter settings, run the **mscfgtool.sh -help** script. After you have completed the modification, run the **msserver.sh restart** script to restart service and apply the new settings.

Performing Service Operations

Viewing service status

```
[root@localhost ~]# msserver.sh status
```

```
Msserver is running
serversnmpd is running
DiskReadOnlyCheck is running
Msdaemon is running
```

The service status is either **running** or **stopped**.

If the status of a process as shown above is displayed as **stopped**, you need to restart the service manually. For details, refer to "Restarting the service".

If an executable file of the server is deleted, or if its executable permission is modified, a "does not exist" message will be displayed, indicating that the service does not exist. In that case, you need to reinstall the software.

Starting the service

The MS8500-E service automatically starts when the software installation is completed. To start the service manually, use the following command:

```
[root@localhost ~]# msserver.sh start
```

Stopping the service

To stop the service manually, use the following command:

```
[root@localhost ~]# msserver.sh stop
```

Restarting the service

To restart the service manually, use the following command:

```
[root@localhost ~]# msserver.sh restart
```

Viewing System Logs

System logs are stored in the **/var/log/imoslog** directory. To search the directory for a log file, use the **ls** command. To view the content of a log file, use the **tail** command. The following command output is only for your reference.

```
[root@localhost ~]# cd /var/log/imoslog
[root@localhost log]# ls
abc                       imf_msserver_0.log      piranha
abc.cap                   imf_msserver_1.log      pm
acpid                     imf_ns_0.log            p.pcap
adapter_product00.log     imf_ns_1.log            ppp
adapter_product01.log     imf_SDK_0.log           prelink
...
[root@localhost ~]# tail adapter_product00.log
```

Viewing the System Version

Use the following commands to view system version information. The following shows an example. The actual version information may be different.

```
[root@localhost ~]# mscfgtool.sh –v
Interior version : MS8500V300R001B03D019SP05
Exterior version : MS8500-IMOS110-B3139SP05
BUILDTIME        : 2013-03-16 05:49
```

5 Software Upgrade, Uninstallation and Reinstallation

WARNING!

Upgrading, uninstalling, and reinstalling the MS8500-E server shall be performed only by qualified personnel. Any inappropriate upgrade, uninstallation or reinstallation operation to the MS8500-E may cause severe system faults and loss of data.

Preparation

Preinstallation Check

- Before you start an upgrade or a reinstallation, verify the network settings for the server, including IP address, subnet mask, and gateway. Modify the settings as required if necessary. For details, refer to "Viewing and Modifying Parameter Settings".
- The network connection between the server and the client computer is normal.
- The client computer is installed with the SSH client, and through which you have connected to the server. For details, refer to Logging In to the Server Through the SSH Client. Do not exit the SSH client until you have completed the upgrade or installation; otherwise, the upgrade or installation will fail.

NOTE!

When you log in to the MS8500-E through the SSH client for the first time, use 192.168.0.30/24 as the IP address of the GE 1 port, 22 as the port number, and use root/uniview as the default user name and password.

Logging In to the Server Through the SSH Client

Icons as shown in Table 5-1 appear on your desktop when the installation of the SSH Secure Shell Client software is completed.

Table 5-1 SSH Secure Shell Client shortcuts

Icon	Function
	For connection to the MS8500-E server.
	For uploading the software installation package to the MS8500-E server.

Perform the following steps to log in to the MS8500-E server through the SSH client:

1. Double-click 

. The SSH Secure Shell window is displayed, as shown in Figure 5-1.

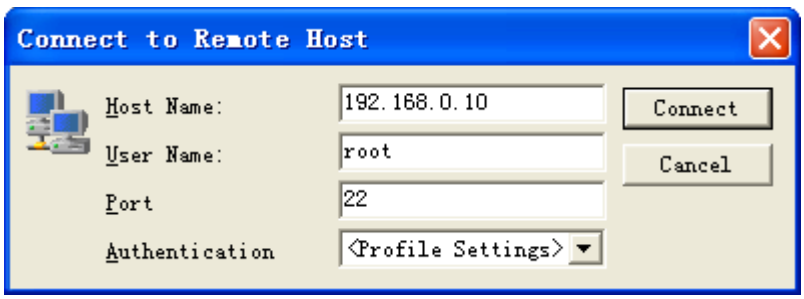
Figure 5-1 SSH Secure Shell window

2. Click 

, and then in the **Connect to Remote Host** dialog box, type the IP address of the MS8500-E server as the host name, type **root** as the user name, keep the default settings for the rest parameters as shown in Figure 5-2, and then click 

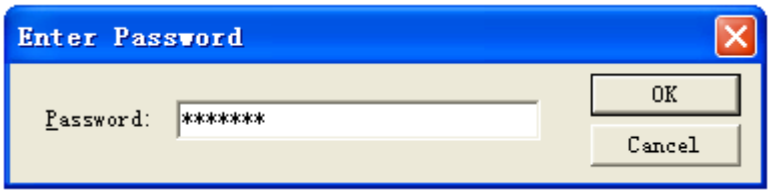
.

Figure 5-2 Connect to Remote Host dialog box



3. When the **Enter Password** dialog box as shown in Figure 5-3 appears, type **uniview** as the password and then click **OK** to log in to the server.

Figure 5-3 Enter Password dialog box



Software Upgrade

Strictly follow these steps to ensure a successful software upgrade:

1. Copy and extract the software package.
2. Run the upgrade script.

Copying and Extracting the Software Package

Use the SSH client to copy the package of the new version to a working directory (take **/root** as an example) in the current server operating system and then extract the package.

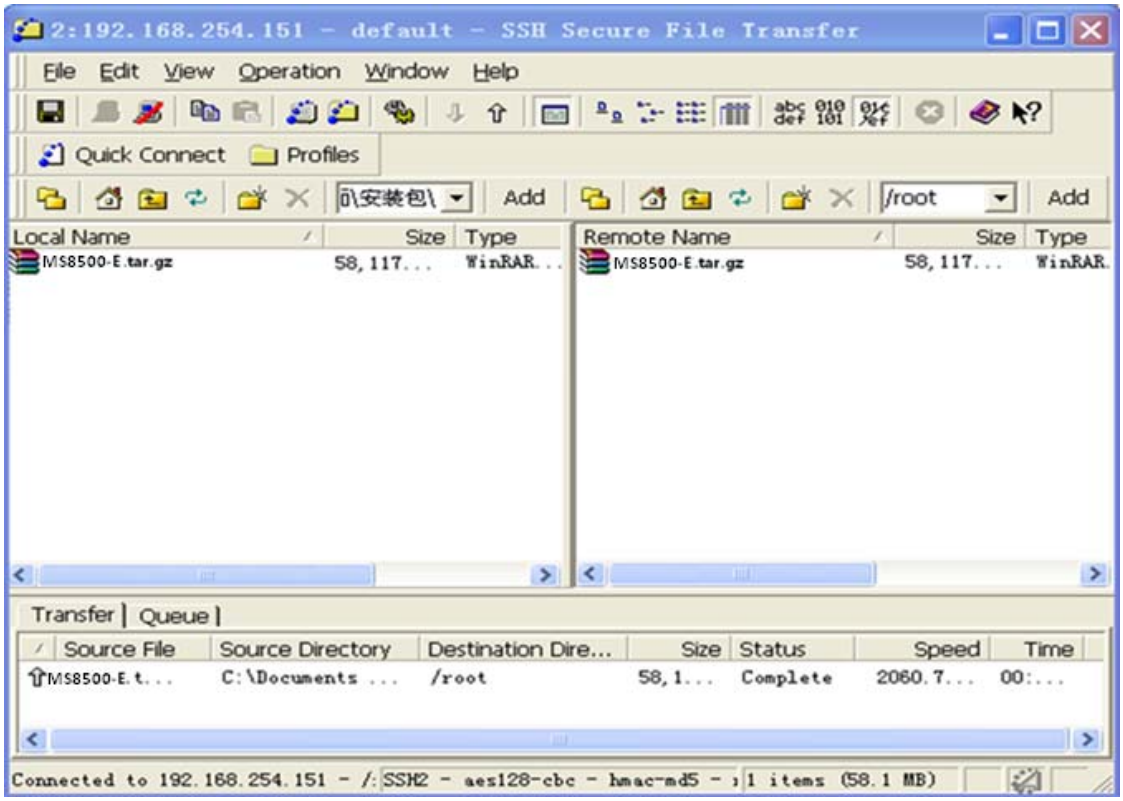
The procedure is as follows:

1. Log in to the server by using the SSH client and then click . A window appears.
2. In the left pane of the window, select the directory where the installation package (for example, MS8500-E) is located and then drag the package to the **/root** directory in the right pane. The package is copied to the server, as shown in Figure 5-4.

NOTE!

The working directory must be named in English.

Figure 5-4 Copying the package to the server



3. Access the directory containing the package and then use the **tar** command to extract it

```
[root@localhost ~]# tar zxvf MS8500-E.tar.gz
```

When the package is extracted, a directory containing upgrade, uninstallation and reinstallation scripts is generated.

Running the Upgrade Script

Access the generated directory and run the **sh msupdate.sh** script by using the following commands:

```
[root@localhost ~]# cd MS8500-E
[root@localhost MS8500-E]# sh msupdate.sh
```

Then follow system prompts to complete the upgrade.

Software Uninstallation

WARNING!

Uninstallation will delete all the related data, so back up all the data before you start.

To uninstall the software, perform these steps:

1. Log in to the MS8500-E server through the SSH client.

2. Access the directory containing the **sh msuninstall.sh** script and run this script by using the following commands:

```
[root@localhost ~]# cd MS8500-E
[root@localhost MS8500-E]# sh msuninstall.sh
```

Then follow system prompts to complete the uninstallation.

Software Reinstallation

By default the MS8500-E is intended for stand-alone installation. This procedure takes stand-alone installation as an example. For information about high-availability installation, contact technical support.

WARNING!

Reinstalling the software will uninstall the current version and delete all the related data, so back up all the data before you start.

To reinstall the software, perform these steps:

1. Copy the installation package to a working directory in the current server operating system and then extract the package. For details, refer to "Copying and Extracting the Software Package".
2. Access the directory containing the **source msinstall.sh** script and then run this script by using the following commands. The command output is for your reference only and may be different in the actual reinstallation process. The boldface descriptions are explanatory notes.

```
[root@localhost ~]# cd MS8500-E
[root@localhost MS8500-E]# source msinstall.sh
2013-03-15 15:42:09 : Do not close the terminal during the installation; otherwise, unknown error might occur.
MS8500-E installation begins...
Please choose the language of MS8500-E (default 0.Chinese): ---Choose a language for the version.
0.Chinese
1.English
Please input you choice:1
What version of MS8500-E do you want to install[default:1. stand-alone]:---Choose the standalone installation mode.
1. stand-alone
2. high ability (HA)
Please input your choice:1
Please input MS8500-E device ID[default:msserver]:---Set the MS8500-E device ID, which must be unique in the network. To use the default, press Enter.
Use default DeviceID:msserver
Please input Video Manager server port[default:5060]:---Set the VM server port. To use the default,and then press Enter.
Use default Server Port:5060
Please input SNMP port[default:162]: ---Set the SNMP server port. To use the default, press Enter.
Use default Snmp Port:162
Please input Video Manager server IP address[such as 192.168.0.11]:---Set the VM server IP.
```

```
192.168.254.152
Route initialization succeeded
Route initialization succeeded!
Begin to install MS8500-E server ...
Begin to install rpm pdt_imos ...
Install rpm pdt_imos finished...
Install rpm pdt_imos succeeded
Begin to install rpm MS8500-E ...
Install rpm MS8500-E finished...
Install rpm MS8500-E succeeded
Install succeeded
Begin to start MS8500-E server ...
Starting MSSERVER services: starting msserver
start ok 0
CImfLogTask: logNumber = IMFMaxLogNumber 2
CImfLogTask: logSize = IMFMaxLogSize 1048576
CImfLogTask: logPath = IMFLogPath /var/log/imoslog
Start msserver succeeded
/usr/local/mswww/apache/htdocs/../bin/apachectl start: httpd started
Start msdaemon succeeded
Start servers succeeded
Install MS8500-E succeeded
```

The MS8500-E server automatically restarts when the installation is completed. You can use the **msserver.sh status** script to view the service status. For details, refer to "Performing Service Operations".

6 FAQs

How to Replace a Hard Disk?

The hard disk slots are inside the device, so you need to remove the front panel and the dust cover first. For details, refer to "Removing the Front Panel".

Preinstallation Check

- Carefully read the instructions in the hard disk package.
- Use an antistatic wrist strap or a pair of antistatic gloves.

Installation Procedure

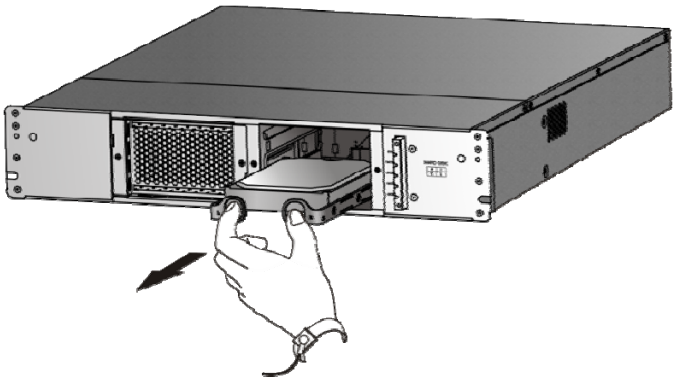
Removing the hard disk

Hold the left and right handle bars in the manner as shown in Removing the hard disk and then pull the handle bars smoothly to disengage the hard disk from the backplane. Wait for at least 30 seconds till the hard disk stops spinning and then fully remove the hard disk from the slot.

CAUTION!

Use your strength appropriately to avoid damaging the handle bars.

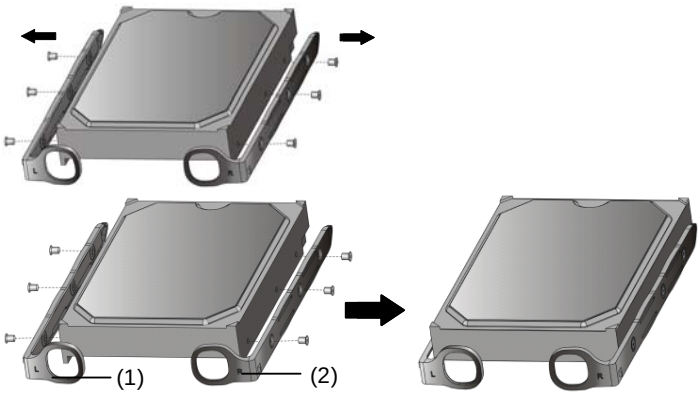
Figure 6-1 Removing the hard disk



Removing and installing the handle bars

Remove the handle bars from the faulty hard disk and then install them on the new hard disk. Make sure that you install the left and right handle bars properly.

Figure 6-2 Removing and installing the handle bars

	(1) Left handle bar, marked with “L”. (2) Right handle bar, marked with “R”.

Installing the hard disk

For details, refer to “Installing the Hard Disks”.

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