

## **FC** FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/television technician for help.

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Shielded interface cables, if any, must be used in order to comply with the emission limits.

## **CE** CE Mark

This equipment is in conformity with the EMC directive.

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# 1 Introduction

## 1.1 Welcome

Congratulations on your selection of the 1U HR1014M Server Chassis.

The HR1014M is a reliable and affordable solution for a RAID 1 disk mirroring server chassis. With a cost effective IDE approach, the HR1014M mirrors data to two disk drives simultaneously, and delivers optimized performance, comparable to more costly SCSI based solutions. If one drive fails, data is secured by the other drive and alarm sounds to alert you.

Featuring intelligent online recovery, the HR1014M lets you hot swap a failed drive and the system automatically rebuilds the data to the new drive without any system down time.

The HR1014M server chassis has a modular solution, which makes it easy to maintain. Each hard drive carrier supports a one-inch high 3.5-inch form factor disk drive. The modular CD-ROM/Diskette drive bay is removable and reusable in multiple systems.

The space-efficient design of the HR1014M allows up to 42 units to be stacked in a standard 19" rack cabinet. The heat control system consists of six fans. In addition to its rich standard features, the server chassis is ready to be equipped with an ATX server board (12" x 9.6" maximum), which can be expanded with one PCI card through a riser card solution.

If your applications require an affordable, fast, and reliable storage solution, the HR1014M is the ideal solution for you.

## 1.2 Package Checklist

Some vendors may ship certain components as standard, while other vendors treat the same component as optional. In its most basic configuration, your package should include the following:

### HR1014M Server Chassis

- Accessories Bag
  - Riser Card (1)
  - L-Type metal bracket (1)
  - Flat cable mount (Gray) (3)
  - Flat cable mount (White) (1)
  - Cable tie (6)
  - Spacer support (for motherboards which screw holes do not match the design of this chassis)
  - Cover for FDD/CD-ROM bay
  - Speaker cable (4-pins to be connected to M/B , 2-pins white to be connected to rear of CD-ROM)
  - Screw bag (1) containing 8 screws for HDD, 12 screws for MB
- User's Manual

The following item(s) is (are) normally optional, but some vendors may choose to include them in the basic package:

- Two side rails (24"/50lbs) (comes with 12 screws)

**Caution:**

*For non-proprietary accessories, such as modules, cables, etc., your vendor may be able to recommend compatible and reliable brands.*

### 1.3 Specifications

In order to setup a working system, make sure to keep in mind the following information.

Model:	HR1014M (IDE RAID)
Dimensions::	1.75"(H) x 19"(W) x 23.6"(D)
Motherboard:	One ATX form board (12" x 9.6") Support for dual socket 370 Pentium III CPU
Peripheral Bays:	One removable slim CD-ROM/diskette drive bay
RAID System	IDE RAID level 1 disk mirroring Disk interface Ultra DMA 33/66 Host Transparent and OS independent Battery backup for disk array status Host interface Ultra DMA 33/66 Automatic On-line rebuilding Hot-swaps for drives Audible alarm on drive failure
Add-on Card	One PCI on riser card
System Cooling	One blower (97x95x33mm) for System/CPU Two fans (40x40x20mm) in SPS (Optional) Two fans (40x40x20mm or 40x40x10mm) for System/CPU
Power Supply:	One unique 250W power supply
Front Panel LED Indicators	Power ON/OFF momentary switch Reset momentary switch Buzzer OFF momentary switch Power ON LED (Green) HDD status LED (Green) HDD Failure LED (Red) HDD access LED (Yellow) Temperature warning LED (Red) Cooler Warning LED (Orange) RAID mirror status (Yellow)
Environment:	Ambient temperature Operating + 5° C to + 35° C Non-operating - 40° C to + 70° C Relative Humidity Non-operating 95% @ 30°C Non-condensing
EMC:	US – FCC CFR 47 Part 15 Class B Europe – EN55022 & EN50082-1 CE Mark – Complies with EC directive 89/336/EEC International – CISPR 22, 2 <sup>nd</sup> Edition
Safety:	US/Canada – UL 1950/CSA 950-95, 3 <sup>rd</sup> Edition (UL and CUL) Europe – EN60 950, 2 <sup>nd</sup> Edition International – IEC 950, 2 <sup>nd</sup> Edition: CB Certificate and Report Nordic – EMKO-TSE (74-Sec) 207/94
Accessories:	Two slide rails (24"/50lbs)

## 1.4 Requirements

Space:	Fits into one standard 19" rack Uses 1U of vertical space.
Electrical current:	At 90-120VAC: 2.11A At 208-240VAC: 1.125A
Inrush current:	25 amps at 120VAC
Air flow:	Front to rear

## 1.5 Raid Level

The HR1014M supports RAID level 1, offering reliability and cost effectiveness.

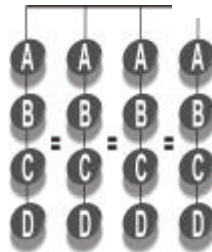
### RAID 1 Mirroring and Duplexing

#### Characteristics:

- Better Read transaction rate than single disks, same Write transaction rate as single disks.
- 100% redundancy of data means no rebuild of data is necessary in case of disk failure, just a copy to the replacement disk.
- All the disks have the same data.

#### Recommended use:

- Accounting
- Payroll
- Financial
- Any application requiring high availability



RAID Level 1

## 1.6 About the Drives

Refer to the disk drive manuals for information on the drive configuration jumpers. Prepare the drives using these guidelines:

- Ideally, use identical disks.
- Both disks must be configured as Master devices.

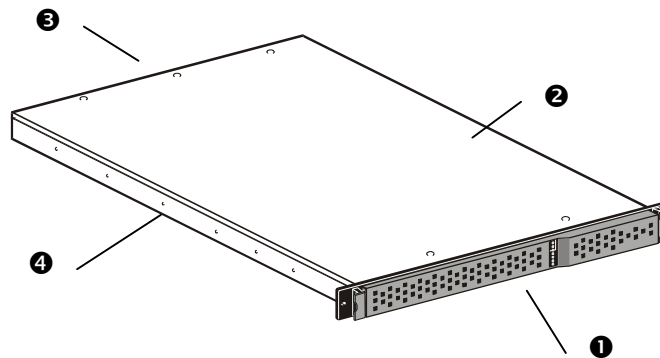
#### Note:

*In case of different disk drive capacity, the disk with the smallest capacity limits the maximum capacity being used of the other disk.*

## 2 Hardware Identification

The following pages describe the major parts of the HR1014M. Later we will describe the use of every part.

### 2.1 Overview

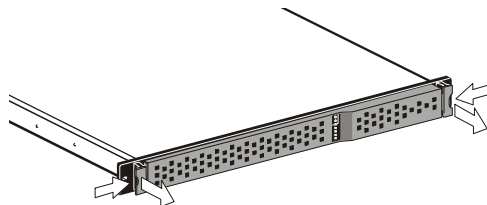


❶	Front Cover (hides front panel interface – see below)
❷	Cover
❸	Rear/Connectors
❹	Holes for Mounting Screws

### 2.2 Front View: Cover

Remove the front cover, as described in the steps below, to reveal the front panel interface.

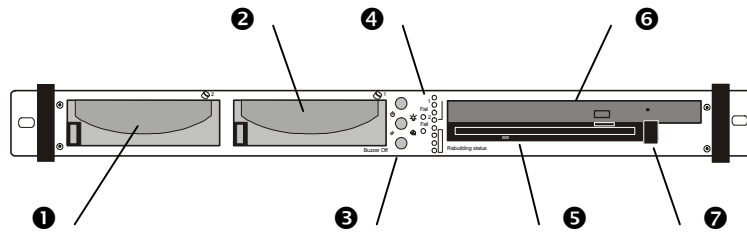
1. Press the plastic placeholders of the front cover inwards, away from the outside.
2. After the front cover gives way, remove the front cover



The front panel cover is used to avoid accidental interference with the features on the front panel interface. We recommend you replace the cover at all times when not working with the system.

### 2.3 Front View: Interface

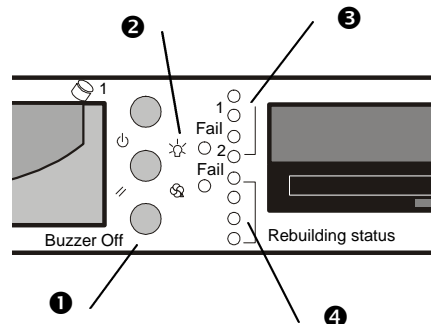
The front panel interface features the following items.






- |   |  |
|---|--|
| ❶ | IDE hot-swap disk drive bay                          |
| ❷ | IDE hot-swap disk drive bay                          |
| ❸ | Switches (see below for details)                     |
| ❹ | LEDS (see below for details)                         |
| ❺ | Diskette drive (optional) inside removable drive bay |
| ❻ | CD-ROM drive (optional) inside removable drive bay   |
| ❼ | Handle of removable drive bay                        |

### 2.4 Front View: Switches and LEDs

Here we will show in detail the switches and LEDs on the front panel interface.



- |   |  |
|---|--|
| <b>❶ Switches (3)</b>   |  |
|  | The switch next to this icon is used to power the system ON/OFF                        |
|  | The switch next to this icon used to reset the system                                  |
| Buzzer Off  | The switch next to this text is used to turn the audible buzzer alarm ON/OFF           |
| <b>❷ System Indicator LEDs (2)</b>  |  |
|  | The LED next to this icon indicates system power status, and turns GREEN for Power ON. |



The LED next to this icon indicates system status, is turned OFF for normal status. It turns ORANGE when a Fan error is detected. Series of 3 short audible alarm beeps will sound continuously. You can turn off the audible alarm by pushing “Buzzer off”, but the LED will be ON until the problem is solved.

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#### ③ Disk Status Indicator LEDs (4)

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1<sup>st</sup> LED This LED monitors the disk in the 1<sup>st</sup> drive bay. The LED next to this text will turn GREEN if a hard disk is installed. It will start flashing ORANGE when hard disk access is detected.

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2<sup>nd</sup> LED This LED monitors the error status of the drive in the 1<sup>st</sup> drive bay.  
If the 1<sup>st</sup> LED is off but this LED turns RED, it indicates that no hard disk is installed  
If the 1<sup>st</sup> LED is on and this LED turns RED, it indicates a hard disk error has occurred.

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3<sup>rd</sup> LED This LED monitors the disk in the 2<sup>nd</sup> drive bay. The LED next to this text will turn GREEN if a hard disk is installed. It will start flashing ORANGE when hard disk access is detected.

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4<sup>th</sup> LED This LED monitors the error status of the drive in the 2<sup>nd</sup> drive bay.  
If the 3<sup>rd</sup> LED is off but this LED turns RED, it indicates that no hard disk is installed  
If the 3<sup>rd</sup> LED is on and this LED turns RED, it indicates a hard disk error has occurred.

---

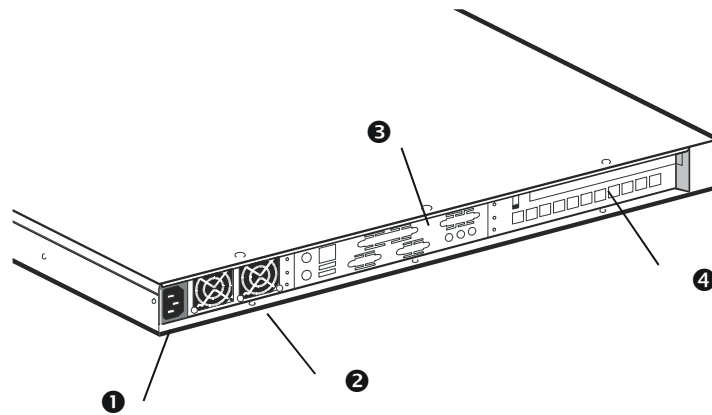
#### ④ Raid Status Indicator LEDs

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This row of four indicators shows disks rebuilding activity. In normal operation, all lights are off. If you are using the online recovery feature to rebuild a drive, all the indicators will turn on at the same time. The first indicator (starting from the bottom) blinks and then turns off when 0 ~25% of the data has been mirrored. Then the next indicator blinks and turns off when 26~50% of the data has been mirrored, and so on.

The drive bay LED indicator that flashes GREEN/RED at the same time, is the one that is being rebuilt. E.g. If the 1<sup>st</sup> and 2<sup>nd</sup> LED are flashing while the rebuilding LEDs are on, it means the hard disk in the “1<sup>st</sup> drive Bay” is being newly installed and undergoing rebuilding.

## 2.5 Top and Rear View: Overview

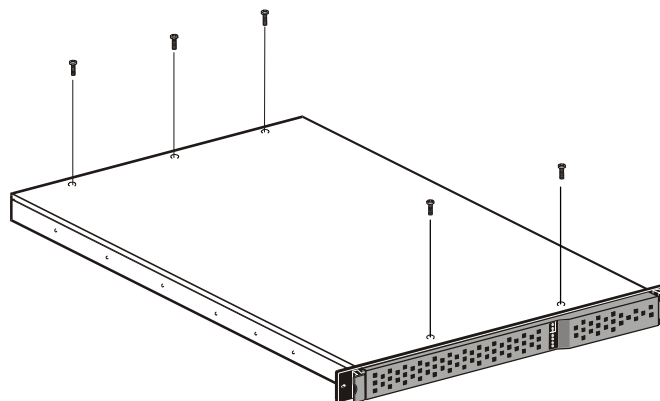


❶	Power connector
❷	Cooling fans
❸	I/O Ports
❹	PCI expansion card (optional) port

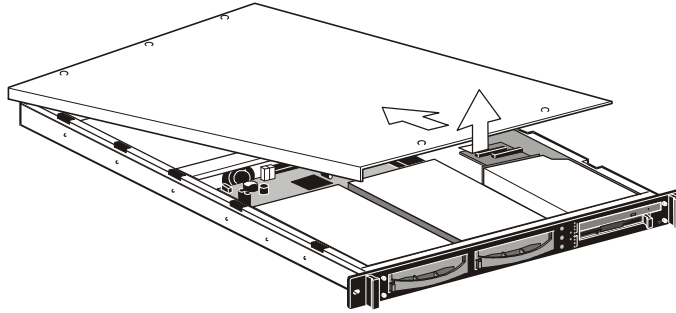
## 2.6 Inside the Chassis: Removing the cover

In order to access the inside components of the chassis, you need to remove the cover.

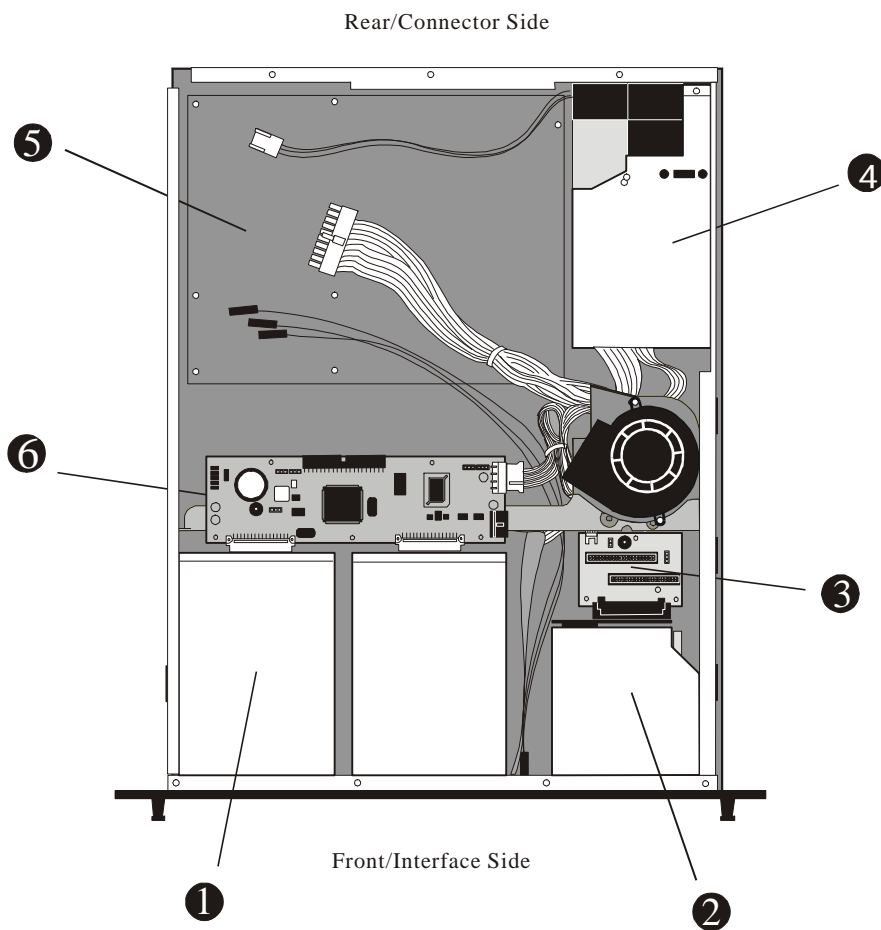
1. Power off the system and disconnect the power connector.
2. Remove the five screws on back of the top cover that hold the cover in place.



3. Slide the cover backward and lift it off the box.



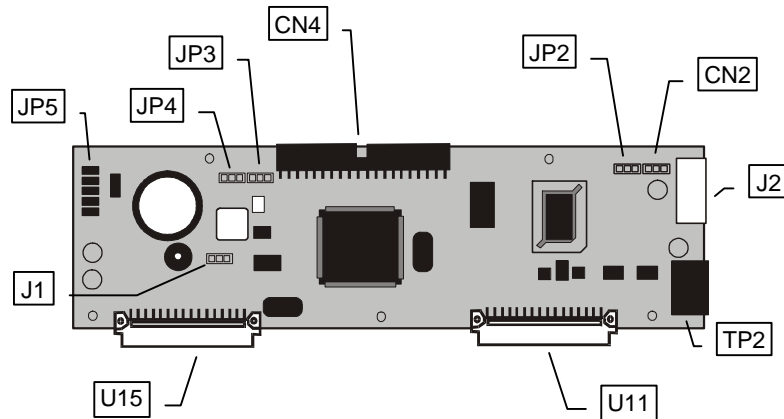
## 2.7 Inside the Chassis: Overview



- |   |  |
|---|--|
| ① | Disk drive bays  |
| ② | CD-ROM/diskette drive bay  |
| ③ | CD-ROM/diskette drive bay controller card (see below for detail) |
| ④ | Power supply   |
| ⑤ | Space for motherboard, use available cables to connect.          |
| ⑥ | RAID controller card (see below for detail)                      |

## 2.8 Inside the Chassis: RAID Controller Card

Use these drawings to find items on the RAID controller card.



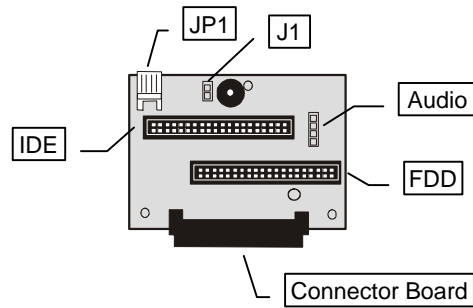
J1	Connector for debugging port
J2	Power Connector
JP2	Connector for fan Sensor
JP3	Connector for fan Sensor
JP4	Connector for fan Sensor
JP5	Jumper set for multiple configurations
CN2	Connector for fan Sensor
CN4	IDE connector for motherboard cable
U11	IDE connector for hard disk drive
U15	IDE connector for hard disk drive
TP2	LED panel connector

### 2.8.1 RAID Controller Card – JP5 Jumper Reference

This jumper set of 5 x 2 jumper pairs allows you to configure a series of system functions.

JP5	Jumper Cap	
	Open	Short
1-2	Enables fan sensor on CN2	Disables fan sensor on CN2
3-4	Enables fan sensor on JP2	Disables fan sensor on JP2
5-6	Enables fan sensor on JP3	Disables fan sensor on JP3
7-8	Enables fan sensor on JP4	Disables fan sensor on JP4
9-10	Open pins when shorting pins 11-12	Sets ACS-7500U1 as Cable Select device
11-12	Sets ACS-7500U1 as Slave device	Sets ACS-7500U1 as Master device

## 2.9 Inside the Chassis:CD-ROM/FDD Controller Card



J1	External speaker connector for motherboard cable
JP1	Power connector
Audio	Connector for CD-ROM Audio-out
FDD	Diskette drive connector for motherboard cable
IDE	CD-ROM IDE connector for motherboard cable
Connector board	Connector for CD-ROM/diskette drive module connector board.

## 3 Intallation

### 3.1 Before You Begin

Before you begin to install the HR1014M, take some precautions to ensure that you avoid the possibility of damage to the product from static electricity.

#### 3.1.1 Static Electricity

In adverse conditions, static electricity can accumulate and discharge through the integrated circuits and silicon chips on this product. These circuits and chips are sensitive and can be permanently damaged by static discharge.

- If possible wear a grounding wrist strap clipped to a safely grounded device during the installation.
- If you don't have a wrist strap, discharge any static by touching the metal case of a safely grounded device before beginning the installation.
- Leave all components inside their static-proof bags until they are required for the installation procedure.
- Handle all circuit boards and electronic components carefully. Hold boards by the edges only. Do not flex or stress circuit boards.

### 3.2 Installation Steps

Follow the steps below to create a working system. Refer to Chapter 1 for product specifications and requirements. Refer to Chapter 2 to locate hardware components.

1. Install a motherboard. Refer to your motherboard manual for documentation on installing all necessary extra components, such as a processor, memory modules, etc. and to connect all cables to their proper connectors.
2. Connect the ATX power cable from the power supply to the motherboard.
3. Connect the front panel switch cables to their proper counterparts on the motherboard. The front panel switch cables include one Power Switch, one Reset Switch, and one Buzzer On/Off Switch cable.
4. Install fans and connect fan power cables to connectors on RAID controller card. Set the jumpers of JP5 to the proper settings (see below for more information).
5. Connect one IDE cable from the motherboard to the RAID controller card IDE connector.
6. Connect one IDE cable from the motherboard to the CD-ROM/diskette controller card IDE connector.
7. Connect one FDD cable from the motherboard to the CD-ROM/diskette controller card FDD connector.
8. Install disk drives in the hot-swap disk drive bay drawers. (See below for more information)
9. Install the CD-ROM/diskette drive bay module (see below for information on assembling the CD-ROM/diskette drive bay module).
10. Set the voltage switch (inside the top cover) to the proper setting for your area (see below for more information).
11. Install the HR1014M into a server rack. Refer to your rack manual for documentation on installing the server chassis. Note that an optional pair of slide rails is available for use with the server chassis.
12. Connect any peripheral devices you want to use with your system, using the motherboard I/O ports on the back of the chassis.
13. Connect an AC power cable to the power connector in the back of the chassis.

Refer to the remainder of this chapter to learn more about some specific installation issues. Next go to chapter 4 to read about the operating instructions of your server chassis.

### 3.3 Setting Jumpers

#### 3.3.1 How to Set Jumpers

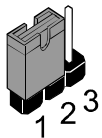
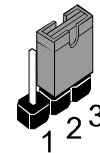
A jumper consists of two or more pins. Some jumpers might be arranged in a series with each pair of pins numbered differently. Jumpers are used to change the electronic circuits on the mainboard. When a jumper cap is placed on two jumper pins, the pins are **SHORT**. If the jumper cap is removed (or placed on just a single pin) the pins are **OPEN**.



This illustration shows a 2-pin jumper. When the jumper cap is placed on both pins, the jumper is **SHORT**. If you remove the jumper cap, or place the jumper cap on just one pin, the jumper is **OPEN**.



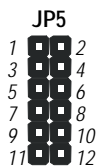
This illustration shows a 3-pin jumper. The jumper cap is placed on pins 2 and 3, so this jumper setting is **SHORT PINS 2-3**.



This illustration shows the same 3-pin jumper. The jumper cap is placed on pins 1 and 2, so this jumper setting is **SHORT PINS 1-2**.

#### 3.3.2 RAID Controller Card – JP5 Jumper Reference

This jumper set of 5 x 2 jumper pairs allows you to configure a series of system functions.



		Jumper Cap	
Pins	Open	Short	
1-2	Enables fan sensor on CN2	Disables fan sensor on CN2	
3-4	Enables fan sensor on JP2	Disables fan sensor on JP2	
5-6	Enables fan sensor on JP3	Disables fan sensor on JP3	
7-8	Enables fan sensor on JP4	Disables fan sensor on JP4	
9-10	Open pins when shorting pins 11-12	Sets ACS-7500U1 as Cable Select device	
11-12	Sets ACS-7500U1 as Slave device	Sets ACS-7500U1 as Master device	

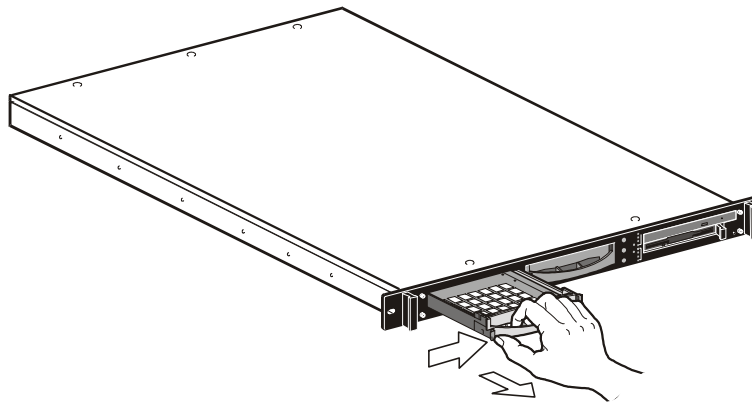
### 3.4 About the Disk Drive Carriers

The two drive carriers inside your server chassis are used to hold the disk drives. Below we will briefly talk about how to insert a disk in the carriers and how to use the carriers. For more information about the operating instructions of the RAID system, refer to the next chapter

#### 3.4.1 Using the Drive Carriers in the Server Chassis

In order to remove and replace a drive carrier follow these steps.

1. Remove the cover of the front panel.
2. Unlock a drive carrier by releasing the plastic latch, on the left side of each carrier. Push the latch to the right, while pulling and sliding the drive carrier out of the chassis using the handle on the front.



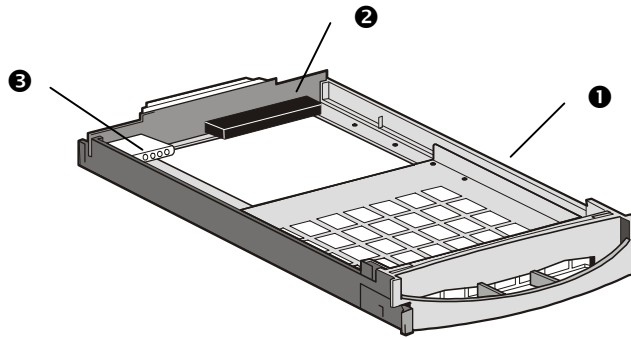
3. To replace a drive carrier, push it all the way into an empty bay of the chassis, until the latch fixes the drive in place.

#### 3.4.2 Loading a Drive in a Drive Carrier

**Note:**

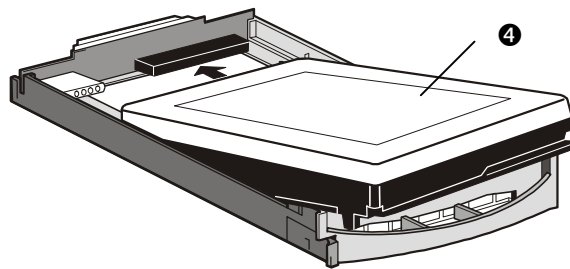
1. We recommend that you use identical disk drives in the two drive carriers.
2. The hard disk drives must be configured as Master devices. Refer to the hard disk drive documentation for more information.

1. Remove a drive carrier from the chassis as described above.



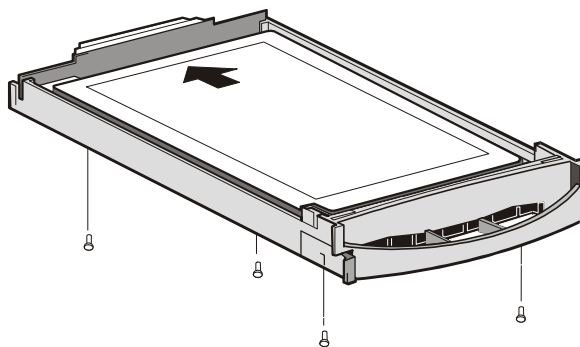
- |   |                            |
|---|----------------------------|
| 1 | Disk drive carrier (empty) |
| 2 | IDE connector              |
| 3 | Power connector            |

- Place the first disk drive in the drive carrier, so that the power and IDE connectors correspond with the connectors inside the carrier.



- |   |            |
|---|------------|
| 4 | Disk drive |
|---|------------|

- Connect the power connector to the disk drive first, then carefully push the disk drive so that the drive's IDE and power connectors seat into the IDE and power connectors in the disk carrier.



Make sure the connectors are firmly seated, secure the disk drive in with the flat screws (6x6mm) provided, next slide the loaded disk drive carrier into the HR1014M chassis.

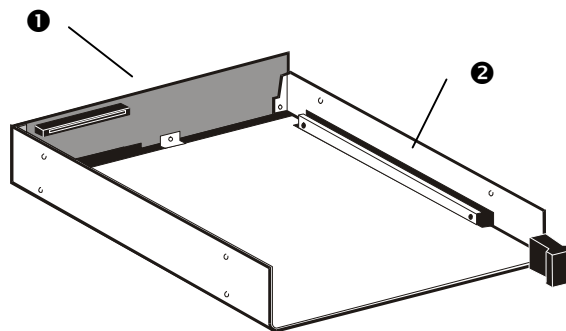
4. Repeat steps 1 to 3 for the second disk drive.
5. Refer to the next chapter for operating instructions.

### 3.5 About the CD-ROM/Diskette Drive Module

The CD-ROM/diskette drive module is modular and can be used with a series of identical server chassis', so you only need to assemble one set for multiple system.

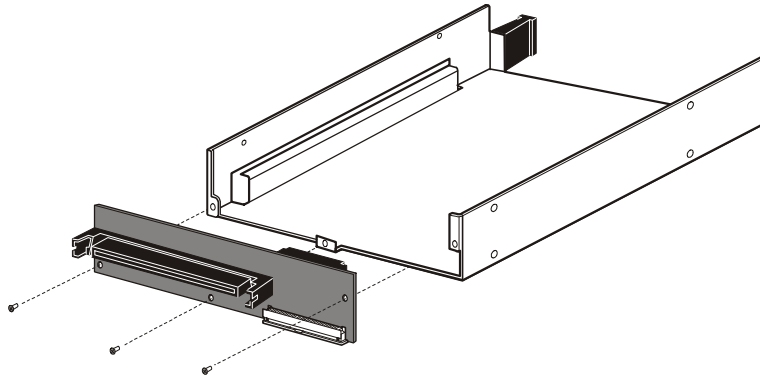
#### 3.5.1 Assembling the CD-ROM/Diskette Drive module

Use the steps below to assemble a CD-ROM/diskette drive module.

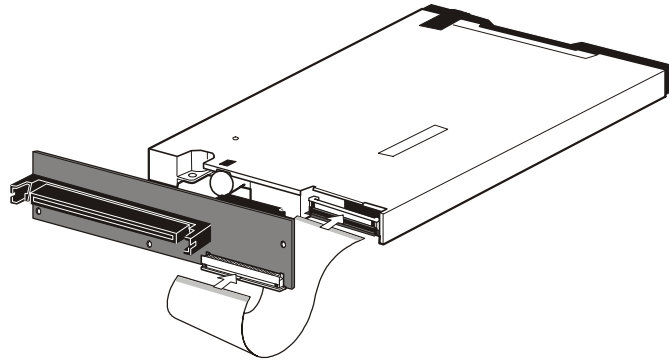


- 
- |   |                 |
|---|-----------------|
| ❶ | Connector board |
| ❷ | Module frame    |
- 

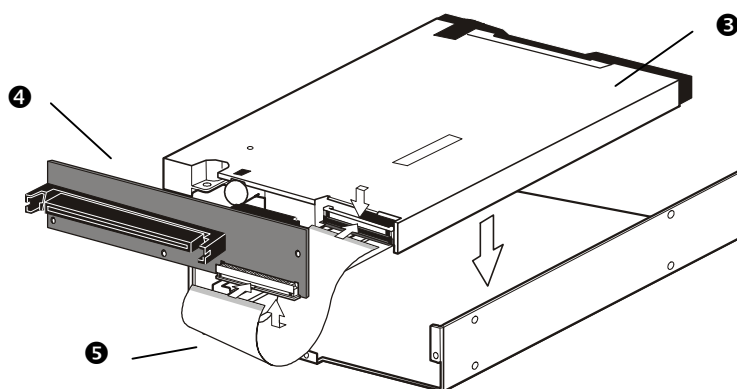
1. Disassemble the connector board (PCB) and module frame, using the three screws on the rear side of the PCB, and remove the board.



2. Install a standard slim size diskette drive. To do so, first connect a diskette drive flat flexible cable to the connector on the rear side of the diskette drive.
3. Connect the other end of the diskette drive flat flexible cable to the connector on the rear side of the connector board.

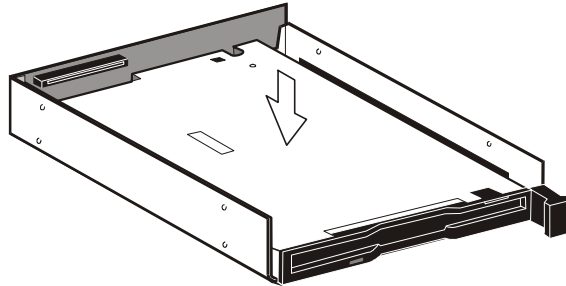


4. Next gently lower the diskette drive into the assembled frame, and fix it with the screws provided.

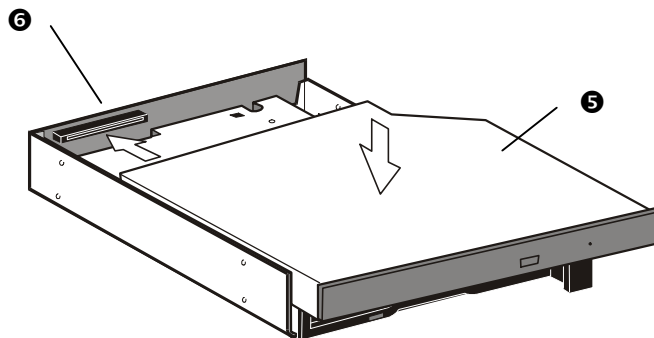


- 
- |   |  |
|---|--|
| ③ | Diskette drive (standard slim size)  |
| ④ | Connector board  |
| ⑤ | Flat flexible cable connected to both the diskette drive and the connector board |
-

5. Replace the connector board, making sure the flat flexible cable slips between the module frame and connector board.

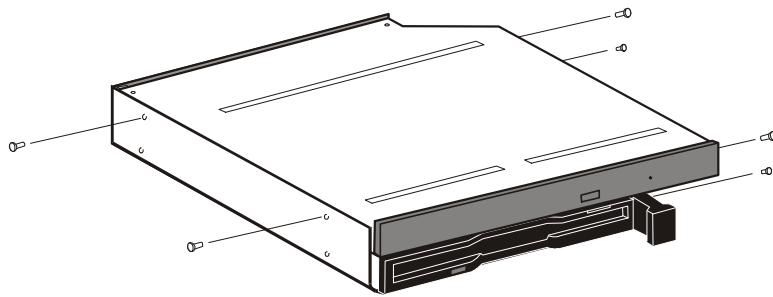


6. Install a standard slim size CD-ROM drive. Gently lower the CD-ROM drive into the assembled frame, on top of the diskette drive, while aligning the drive so that the 50pin (IDE/Power/Audio) female connector corresponds with the 50pin male connector on the inside of the connector board.
7. Carefully push the drive backwards so that the drive's connector seats into the connector of the connector board.



- 
- |   |                                   |
|---|-----------------------------------|
| 5 | CD-ROM drive (standard slim size) |
| 6 | IDE connector                     |
- 

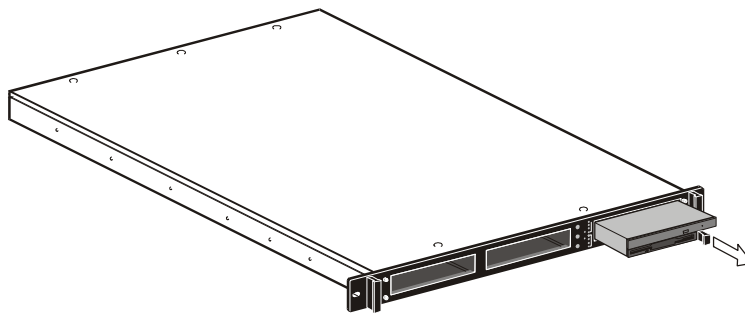
8. Fix the CD-ROM drive using two screws on both sides of the assembled module.



### 3.5.2 Using the CD-ROM/Diskette Drive module

In order to insert and remove the CD-ROM/diskette drive module follow these steps.

1. Remove the cover of the front panel.
2. Turn off the system and disconnect any power cables.
3. Push the module all the way into an empty CD-ROM/diskette drive bay of a chassis, until the front of the module and the chassis level.



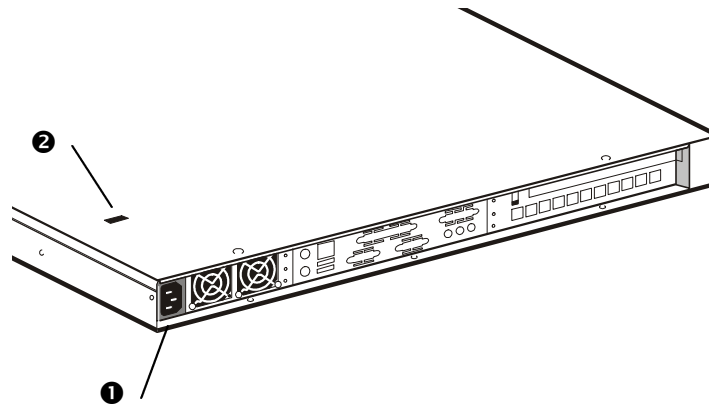
4. To remove a module from a chassis, use the black handle on the right side of the module to pull it out of the chassis.

**Note:**

System must be POWER OFF before inserting or removing a CD-ROM/diskette drive module

### 3.6 Voltage Switch and Power Connection

Before connecting a power cable to the server chassis, make sure to set the voltage switch to the proper setting for your area.



- 
- ❶ Power connector
  - ❷ Voltage switch
- 

The voltage switch can be used to set the power-input voltage to either 115 (for 90-120VAC range) or 235 (for 208-240VAC range). Failing to set this switch to the proper value can cause serious damage to your system.

**Follow steps below to set your voltage switch.**

- 1) Remove the five screws on the top cover.**
- 2) Slide the cover backward and lift it off the chassis.**
- 3) Check voltage on power supply, switch it to exact voltage that matches standard at your area.**
- 4) Gently put the cover back and screw it properly.**

After the input voltage is set correctly, locate the power connector on the back of the chassis and align a power cable to plug into the power connector.

## 4 Operating Instructions

This chapter will discuss the basic operating instructions for use with your HR1014M server chassis.

If you have installed two new disk drives, refer to 4.1

If you have installed one disk drive with data and one new disk drive go to 4.2.

### 4.1 *Situation 1: Two new disk drives (identical or non-identical)*

1. Turn on the computer system.
2. When the system prompts you to enter the BIOS setup program shortly after power-on, follow the instructions and enter the BIOS setup program. Set the hard disk drive mode to "Auto".
3. Save your changes to the BIOS setup program and reboot the system. Your system is now ready to start working and to automatically mirror all data written to it on two disk drives.
4. If you have installed non-identical hard disk drives, your computer will recognize the HR1014M as a single hard disk with a capacity equal to the smaller hard disk drive installed in the HR1014M.

### 4.2 *Situation 2: Installing one drive with data and one new backup drive*

1. The new backup drive must have the same capacity or a larger capacity than the drive with data.
2. Insert the carrier with the disk drive with data first, and don't insert the carrier with the new disk drive yet. This identifies the drive with data as the source drive.

**Note:**

*When you insert a loaded carrier with a disk drive, the first drive to get inserted is designated as the source drive and the other drive becomes automatically the backup drive.*

3. Turn on the computer system.
4. When the system prompts you to enter the BIOS setup program shortly after power-on, follow the instructions and enter the BIOS setup program. Set the hard disk drive mode to "Auto".
5. Save your changes to the BIOS setup program and reboot the system.
6. After the boot process is complete, insert the carrier with the new drive. This identifies the new drive as the backup drive.
7. The system will immediately begin mirroring the data from the first drive to the backup drive. Any old data on the backup drive will be lost, and is overwritten with the mirror image of the first drive.

**Note:**

*You can repeat this procedure twice in order to install a working HR1014M server chassis with a new pair of larger drives without losing any data. In that case, you can omit steps 3, 4 and 5. However, under DOS and Windows 3.1/95/98, you might not be able to access the extra space if the existing data is stored in an extended DOS partition. Under Windows NT or 2000, you can use the Disk Administrator to create new partitions in the extra space of larger drives.*

### 4.3 Online HR1014M Feature

The online HR1014M feature allows you to hot swap a failed disk drive with a new one, automatically recovering all data to the new drive with no system down time. When the front panel indicators alert you that a drive has failed, follow these instructions.

1. Leave the system turned on. Remove the carrier of the disk drive that has failed and slide it out of the chassis.

**Note:**

The HR1014M system will continue to save data to the remaining disk. No current or new data is lost while you are replacing the failed drive.

2. Remove the failed disk drive from the carrier and install a new one according to the instructions given before.
3. Slide the carrier with the new drive into the server chassis.
4. The system will immediately begin mirroring the data from the first drive to the new drive. Any data on the new drive is overwritten with the mirror image of the first drive.

### 4.4 Rebuilding LED Error Status Display

Use the table below to identify the status of the Raid Status Indicator LEDs.

<ul style="list-style-type: none"> <li>○</li> <li>●</li> <li>●</li> <li>●</li> </ul> <p>Disk No Response</p>	<ul style="list-style-type: none"> <li>○</li> <li>●</li> <li>●</li> <li>○</li> </ul> <p>Disk failure</p>
<ul style="list-style-type: none"> <li>○</li> <li>●</li> <li>○</li> <li>○</li> </ul> <p>Target disk size smaller than source disk size</p>	<ul style="list-style-type: none"> <li>○</li> <li>○</li> <li>●</li> <li>○</li> </ul> <p>Target disk UDMA Mode smaller than source disk</p>
<ul style="list-style-type: none"> <li>○</li> <li>○</li> <li>○</li> <li>●</li> </ul> <p>Target disk has bad sector(s)</p>	<ul style="list-style-type: none"> <li>○</li> <li>○</li> <li>○</li> <li>○</li> </ul> <p>System OK</p>