ioSafe

ioSafe SERVER 5 Hardware Guide

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Before You Start

Before you start setting up the ioSafe, please check the package contents to verify that you have received the items below. Please also read the safety instructions carefully before use to prevent your ioSafe from any damages.

Package Contents

Main unit x1	AC power cord x1
	RJ-45 LAN cable x1
	3mm Hex Tool x1
	Hex Tool Magnet x1
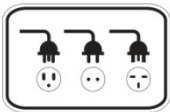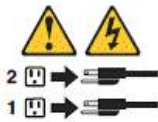
ioSafe at a Glance

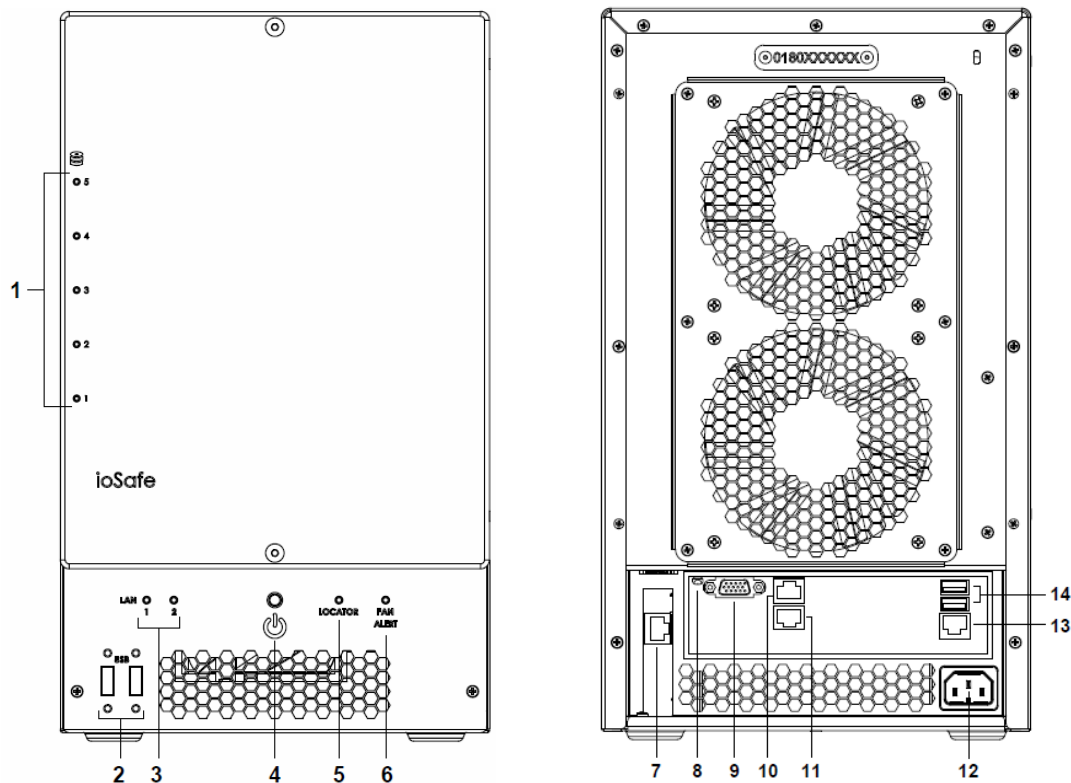| No.	Article Name	Location	Description
1)	HD Indicators	Front Panel	The LED indicator is used to display the status of the internal disks. For more information, see "Appendix B: LED Indication Table" on Page 15.
2)	USB 2.0 Ports	Front Panel	The ioSafe offers USB ports for adding additional external hard drives, USB printers, or other USB devices.
3)	LAN Indicators	Front Panel	The LED indicator is used to display the status of the LAN Connections. For more information, see "Appendix B: LED Indication Table" on Page 15.
4)	Power Button	Front Panel	The power button is used to turn your ioSafe on or off. To turn off your ioSafe, press the Power Button and hold it until you hear a beep sound and the Power LED starts blinking.
5)	Locator	Front Panel	The LED indicator is used to display the status of the internal disks and the system. For more information, see "Appendix B: LED Indication Table" on Page 15.
6)	Fan Alert Indicator	Front Panel	The Fan Alert indicator is used to display an error with the fans.
7)	Raid Management Port	Back Panel	Used to configure and communicate directly with the RAID Card.
8)	UID LED "Locator"	Back Panel	When the UID button is pressed, the front Locator and rear UID LED indicator flashes blue. Press the UID Reset button again to stop the indicator from flashing.

No.	Article Name	Location	Description
	UID Reset "Locator"		
9)	D-Sub Port	Back Panel	VGA Port for connecting a monitor
10)	LAN 1 Port	Back Panel	The LAN ports are where you connect RJ-45 cable to the ioSafe.
11)	LAN 2 Port	Back Panel	The LAN ports are where you connect RJ-45 cable to the ioSafe.
12)	Power Port	Back Panel	The power port is where you connect the power cord to the ioSafe.
13)	IPMI LAN Port	Back Panel	Intelligent Platform Management Interface (IPMI) is a set of computer interface specifications that provides management and monitoring capabilities independently of the host system's CPU, firmware (BIOS or UEFI) and operating system.
14)	USB 3.0 Ports	Back Panel	The ioSafe offers USB ports for adding additional external hard drives, USB printers, or other USB devices.

Safety Instructions

	Before cleaning, unplug the power cord first. Wipe ioSafe product with damp paper towels.
	Do not place the ioSafe product on a cart, table, or desk, which is not stable to avoid the product from falling over.
	The power cord must plug in to the right supply voltage. Make sure that the supplied AC voltage is correct and stable.
	To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.
	Risk of explosion if battery is replaced with an incorrect type. Dispose of used batteries appropriately.
3-2-1	At ioSafe, we suggest a minimum of the "3-2-1 Rule" for backup: Make 3 complete copies of your data, keep them on at least 2 separate systems, and have at least 1 protected from natural disaster.

Hardware Setup

Server 5 can be purchased in many configurations including loaded with hard drives or Diskless as well as pre-loaded with Microsoft Server 2012 r2 OS or without an operating system. Depending on the configuration purchased your new system may require additional steps before it can be powered up. If purchased Diskless see Install or Replace Hard Drives section in this document before powering up the system.

Connecting Your ioSafe

1 Use the LAN cable to connect the ioSafe to your switch/router/hub.

2 Connect one end of the power cord to the power port of your ioSafe, and the other to the power outlet.

3 Now your ioSafe is ready to power up.
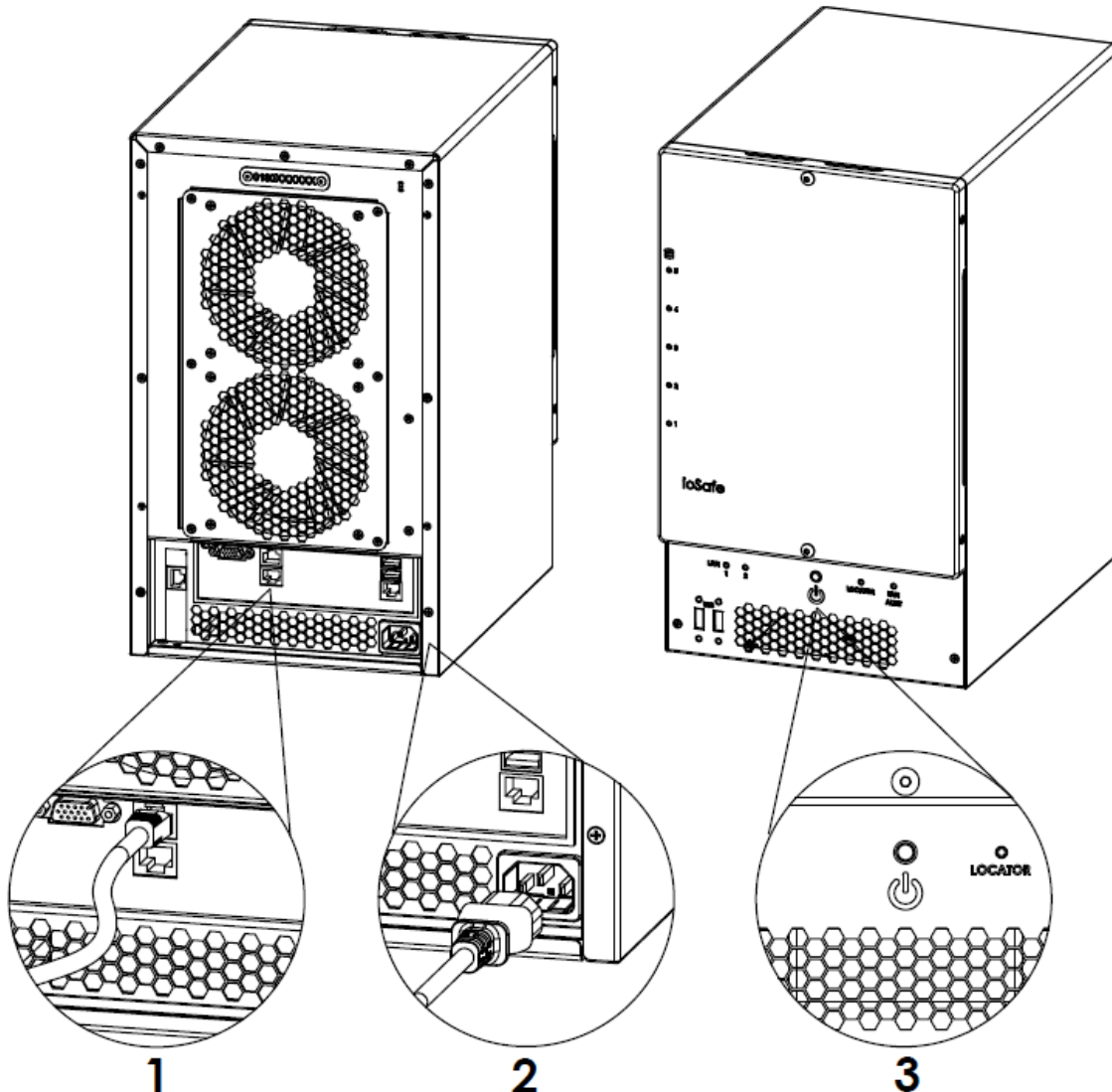
Initial Start-up

If Server 5 was purchased without OS, you will need to review Document "910-11783-00 Preparing Server5 for OS" before proceeding.

Powering up the system

1 Press the Power On/Off button.

2 Confirm a successful power on sequence by ensuring that the Power On/Off LED is illuminated blue.

3 After the system starts, log into Windows Server 2012 R2 using the default credentials

"Administrator / password"

Component replacement

Tools and Parts for Hard Disk Installation

- A Phillips screwdriver
- 3mm Hex Tool (included)
- At least one 3.5" or 2.5" SATA hard disk
  (Please visit **www.iosafe.com** for compatible hard disk models.)

Warning: If you install a hard disk that contains data, the system will format the hard disk and erase all data. If you need the data in the future, please back it up before installation.

Install or Replace Hard Disks

4 Remove the Front Cover using the include 3mm Hex Tool
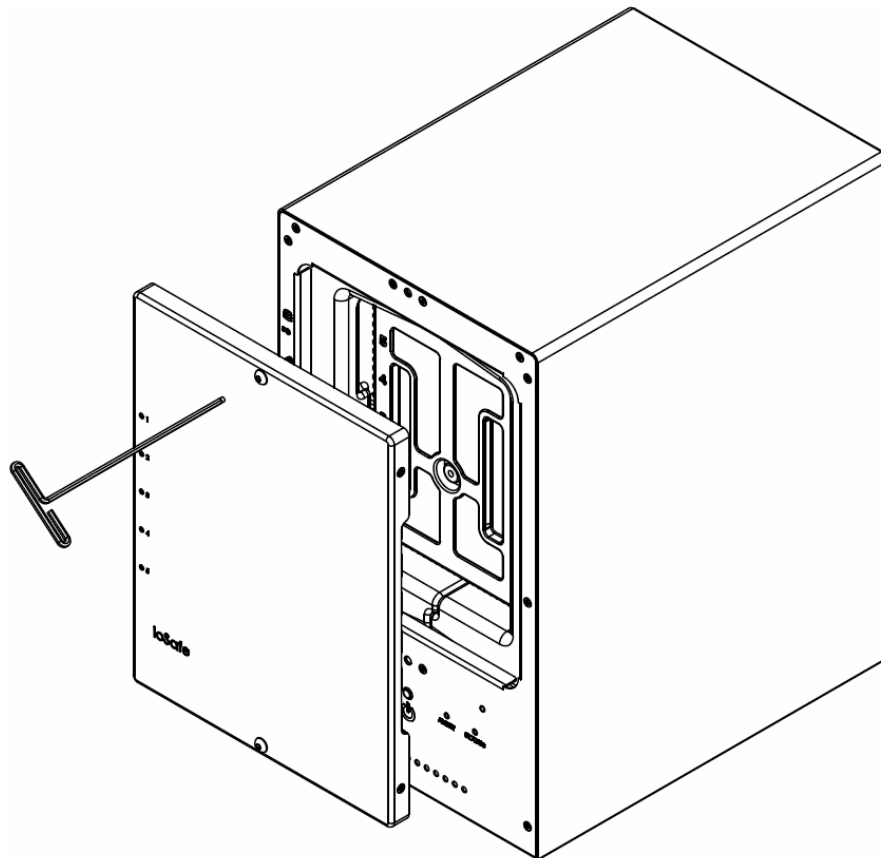
5 Remove the Waterproof Drive Cover using the 3mm Hex Tool.

6 Remove the Drive trays using the provided 3mm Hex Tool.
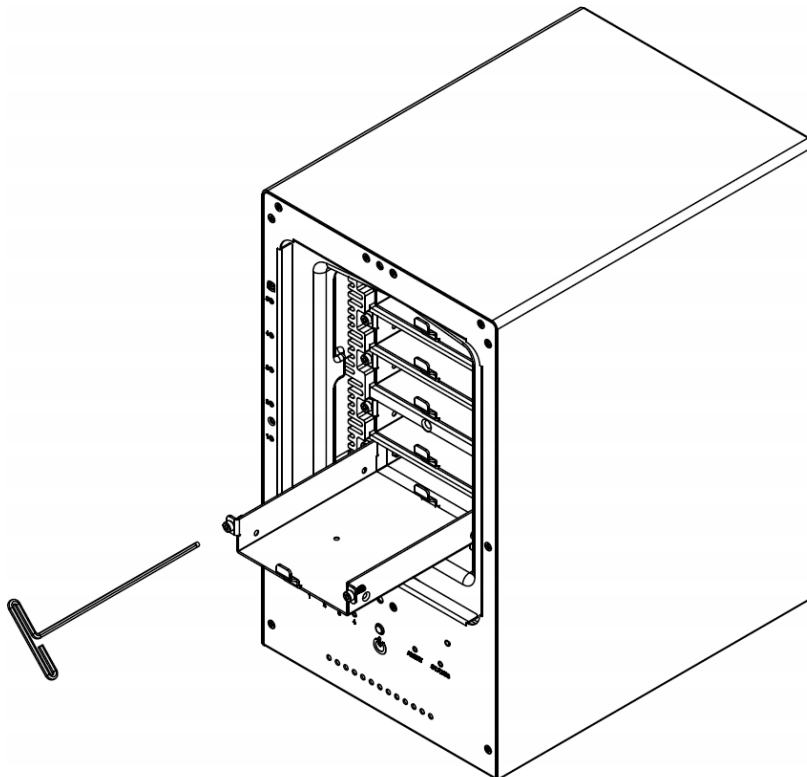
7 Install a compatible Hard Drive into each Drive Tray using (4x) Drive Screws and a Phillips screwdriver.
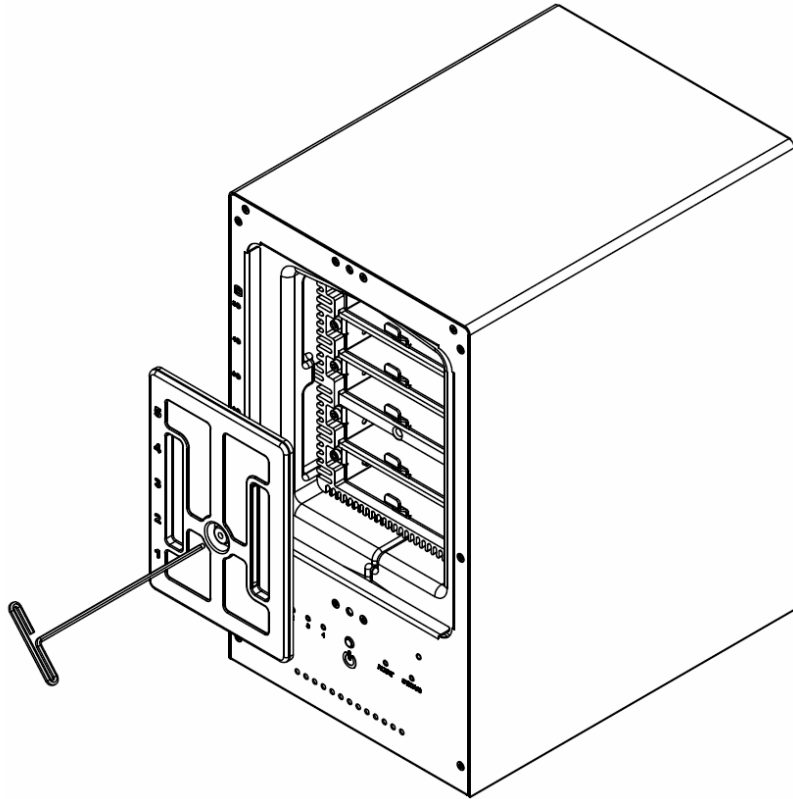
(Please visit **www.iosafe.com** for compatible hard drives models.)

> *Note:* If you want to set up a RAID set, it is recommended that all installed hard disks are of the same size to make the best use of hard disk capacity.
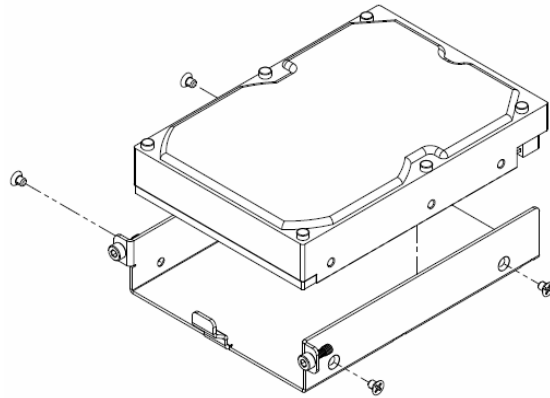
8 Insert the loaded hard drive tray into the empty hard drive bay and tighten the screws using the 3mm Hex Tool.
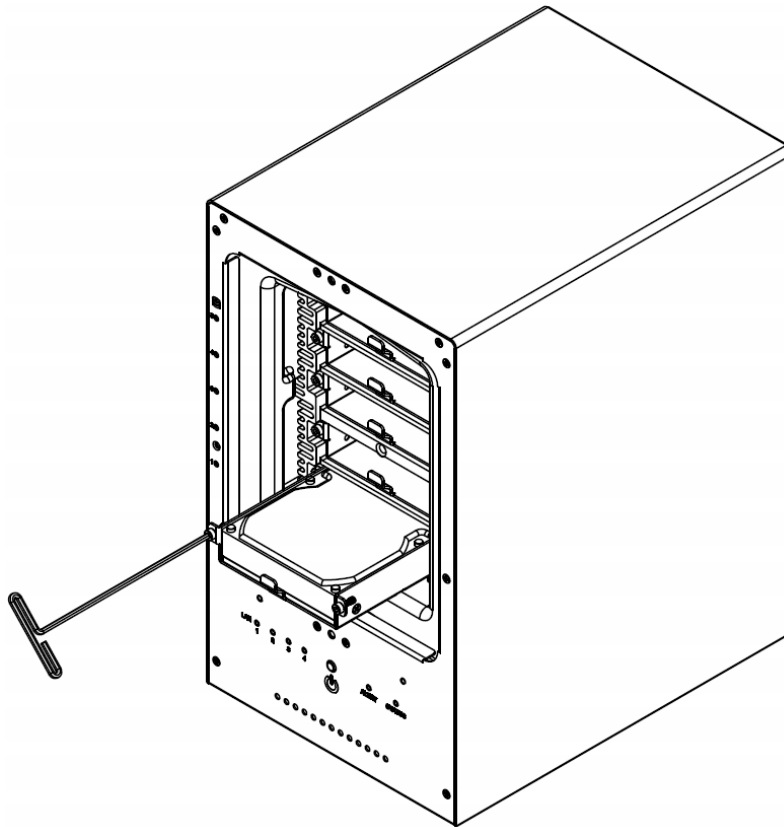
> *Important:* Make sure the tray is pushed in all the way. Otherwise, the hard disk might not be able to function properly.

9 Replace the Waterproof Drive Cover and securely tighten using the supplied 3mm Hex Tool

WARNING: BE SURE TO TIGHTEN THIS SCREW USING THE PROVIDED HEX TOOL. THE HEX TOOL IS DESIGNED TO FLEX SLIGHTLY WHEN THE SCREW IS SUFFICIENTLY TIGHT AND THE WATERPROOF GASKET IS PROPERLY COMPRESSED. AVOID USING TOOLS OTHER THAN THE SUPPLIED HEX TOOL AS YOU COULD UNDER TIGHTEN OR BREAK THE SCREW.
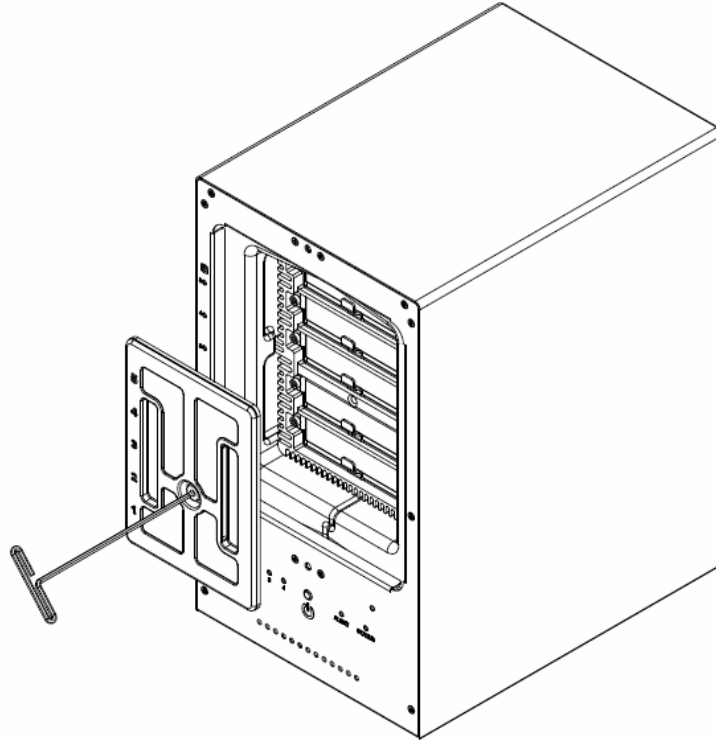
10 Install the Front Cover to finish the installation and protect the drives from fire. Keep the Hex Tool nearby for future use. A magnet is provided to attach the Hex Tool to the back of the ioSafe or some other convenient location.
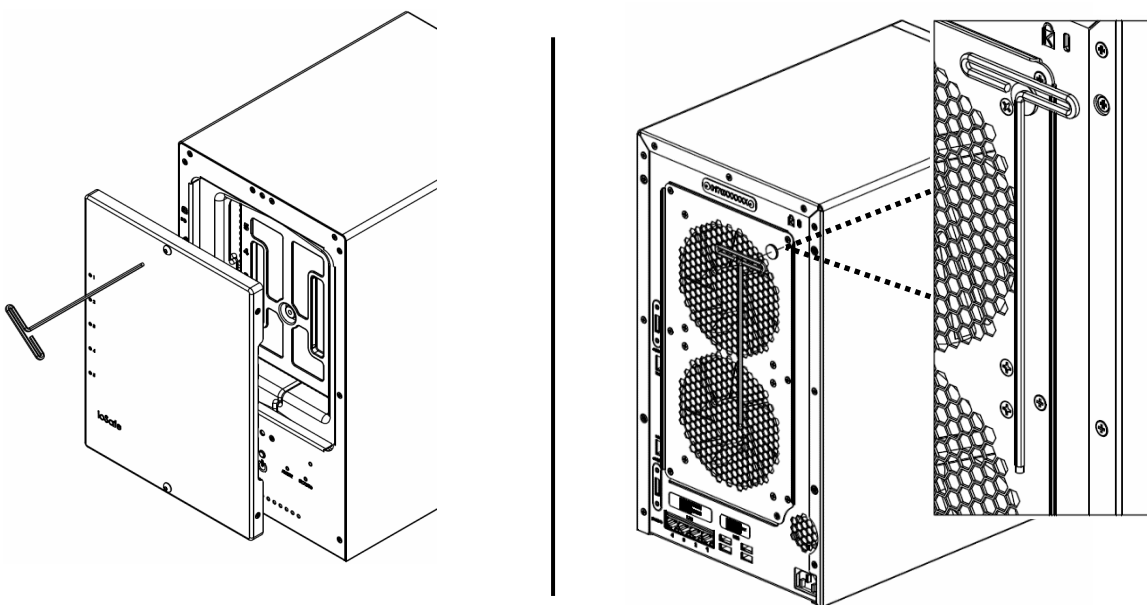
Replace System Fan Assembly

If your fans are not working properly on your ioSafe the Fan Fault LED will illuminate on the front panel. Follow the steps below to replace the malfunctioning fans with a good set.

To replace the system fans:

1 Shut down your ioSafe. Disconnect all cables connected to your ioSafe to prevent any possible damages.

2 Remove the 6 perimeter screws that secure the malfunctioning fan assembly.

3 Remove the malfunctioning fan assembly:

   a Pull the assembly from the back panel of your ioSafe to expose the fan connections.

   b Disconnect the fan cables from the connector located near the bottom of the fan socket, and then remove the assembly.
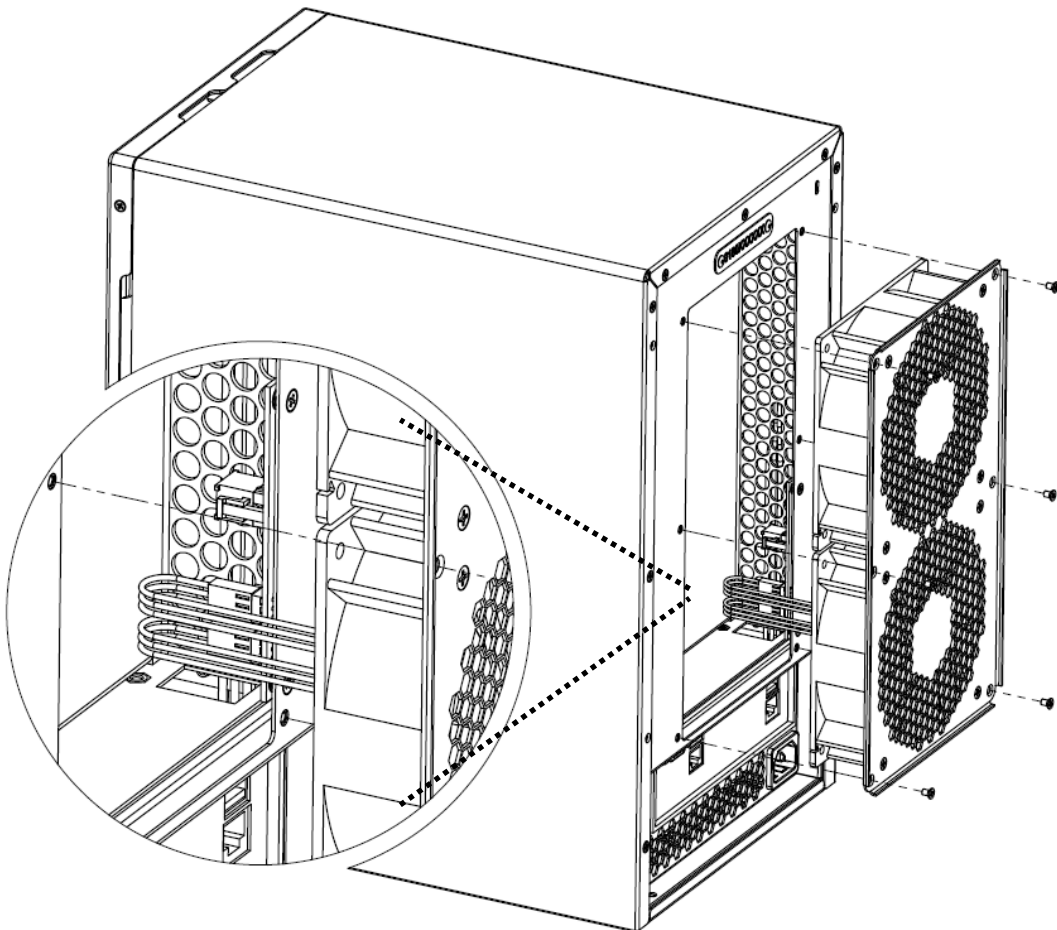
4 Install the new fan assembly:

   a Connect the fan cables of the new fans to the fan connectors.

5 Replace and tighten the 6 screws you removed in step 2.

Product Support

Congratulations! You are now ready to manage and enjoy all the features of your ioSafe. For more information regarding specific features, please refer to our online resources available at **www.iosafe.com**

Data Recovery Procedure

If the ioSafe faces possible data loss for any reason, you should immediately call the ioSafe Disaster Response Team at 1-888-984-6723 (US & Canada) or 1-530-820-3090 (International) extension 430. You can also send an email to **disastersupport@iosafe.com**. The professionals at ioSafe can determine the best actions to take to protect your valuable information. In some cases a self-recovery can be performed and provide you with immediate access to your information. In other cases, ioSafe may request that the product be returned to the ioSafe factory for data recovery. In any case, contacting ioSafe is the first step.

The general steps for disaster recovery are:

1. Email disastersupport@iosafe.com with your serial number, product type and date of purchase.

2. If you cannot email, call ioSafe Disaster Support Team at 1-888-984-6723 (US & Canada) or 1-530-820-3090 (International) extension 430

3. Report disaster event, and obtain return shipping address/instructions

4. Follow ioSafe team instructions on proper packaging.

5. ioSafe will recover all data which is recoverable according to the terms of the Data Recovery Service Terms and Conditions.

6. ioSafe will then place any recovered data on a replacement ioSafe device

7. ioSafe will ship the replacement ioSafe device back to the original user

8. Once the primary server / computer is repaired or replaced, the original user should restore the primary drive data with the ioSafe backup data

Contact Us

Customer Support
USA Toll Free Phone: 888.98.IOSAFE (984.6723) x400
International Phone: 530.820.3090 x400
Email: **customersupport@iosafe.com**

Technical Support
USA Toll Free Phone: 888.98.IOSAFE (984.6723) x450
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Email: **techsupport@iosafe.com**

Disaster Support
US Toll Free Phone: 888.98.IOSAFE (984.6723) x430
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Email: **disastersupport@iosafe.com**

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Specifications

Item	ioSafe SERVER 5
Fire Protection	Protects data from fire. Up to 1550°F (843°C), 30 minutes per ASTM E-119.
Flood Protection	Protects data from flood. Fully submersed, fresh or salt water, 10 foot (3m) depth, 72
CPU Model	Intel Xeon D-1521
CPU Frequency	2.4GHz 4-Core, 8 Threads
System Memory	Up to 128GB DDR4 ECC RDIMM
Memory Expandable	yes
Drive Bays	5
Compatible Drive Type	3.5" or 2.5" SATA (III)
RAID Controller	Areca ARC-1226-8i
Hot Swappable Drives	Yes
Ethernet	2X 10GBASE-T LAN 1000/100
Rear Panel I/O	VGA Port – D-sub x1 USB 3.0 x 2 RJ45 10Gbase-T ports x2
Front Panel I/O	USB 2.0 x 2
Size (HxWxD)	14.8" x 8.7" x 12.5" (375mm x 221mm x 317mm)
Weight	58.5lbs (26.5Kg) (without hard drives & external cabling)
Graphics Controller	ASPEED AST2400
Max. Resolution	1920x1200@60Hz
System Fans	120mm x2
Noise Level	61dB
Power Supply Unit	220W
AC Input Power Voltage	100V to 240V AC
Power Frequency	50/60Hz
Power Consumption	141W
Operating Temperature	40 to 95°F (5 to 35°C)
Storage Temperature	-5 to 140°F (-20 to 60°C)
Relative Humidity	5% to 95% RH

LED Indication Table

LED Indication	Color	Status	Description
Power	Blue	Static	Powered on
		Off	Powered off
Hard Drive Status Indicator	Green (activity)	Blinking	Disk is being accessed
		Off	Disk is idle
	Yellow (fault)	Blinking	When the fault LED is blinking (2 times/sec), that disk drive has failed and should be hot swapped immediately. When the activity LED is lit and fault LED is fast blinking (10 times/sec) there is rebuilding activity on that disk drive. Through the Raid Management Portal, a user can also identify specific drive which fast blinks a single fault LED or to locate a system by fast blinking all the drive fault LED's
		Static	No disk present
		Off	Disk is Present and status is normal
Front LAN 1, Lan 2	Green	Static	Connection Established
		Blinking	Network is active
		Off	Network is down
Fan Alert	Orange	Off	Fans Normal
		Static	HDD above 61C or Fan is Stopped
Locator	Blue	Static	Helps locate the Device being managed
Rear LAN (ACT/Link)	Green	Off	No Link
		Blinking	Data Activity
		On	100Mbps Connection
Rear LAN (SPEED)	Green	Off	10Mbps Connection
		Off	100Mbps Connection
		On	1Gbps Connection