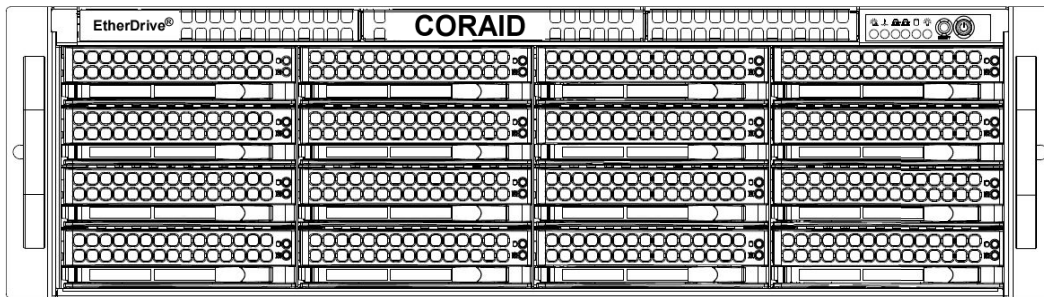
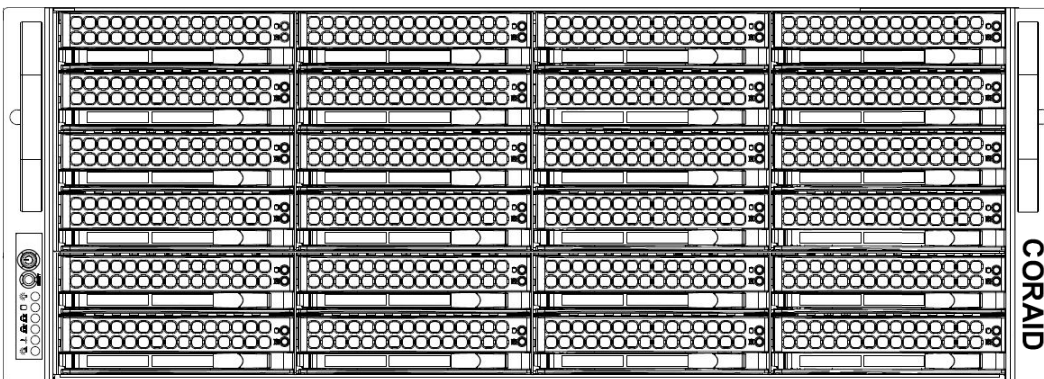




The Linux Storage People



SR1661 (3U - 16Disk)



SR2461 (4U - 24Disk)

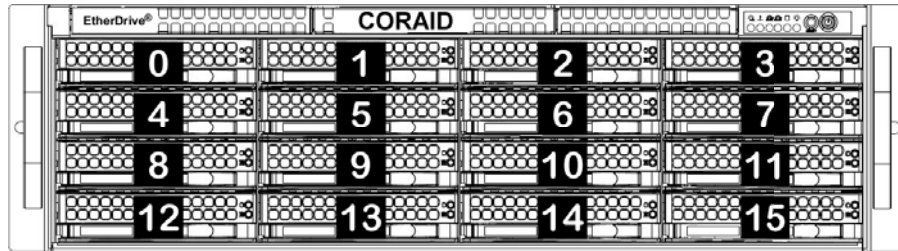
EtherDrive® Storage

Installation Guide

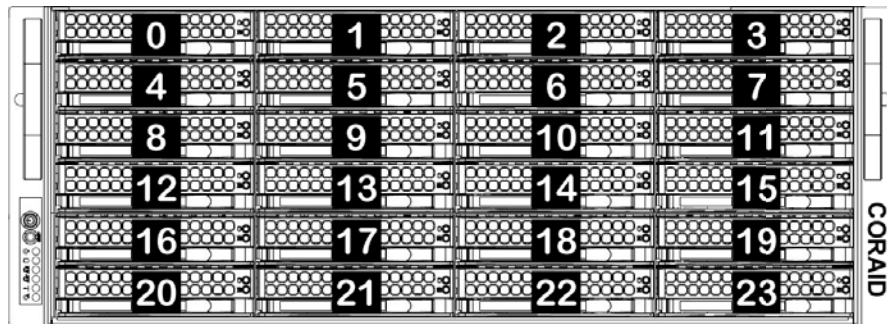
Updated 5 November 2007

Thank you for purchasing EtherDrive® Storage. A simple Ethernet connected shared disk storage device accessed using the ATA-over-Ethernet (AoE) protocol.

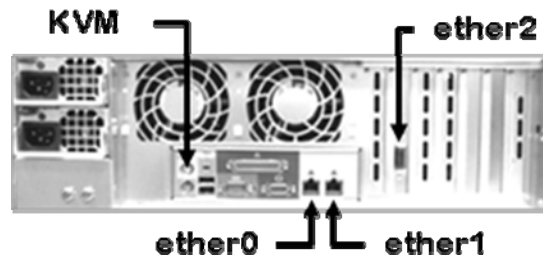
EtherDrive® Storage consists of a cabinet (4 post rack) mounted appliance equipped with slots for SATA disks.



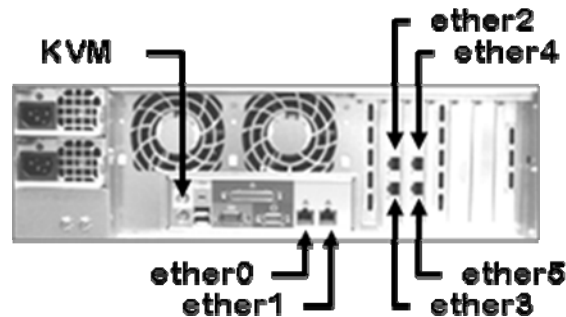
SR1661 - Slot Numbering Scheme



SR2461 - Slot Numbering Scheme



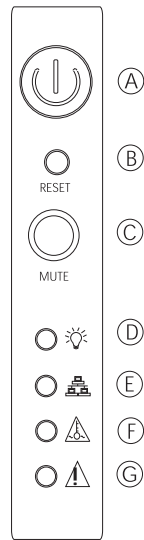
Rear Panel Port Numbering Scheme (ether2 = 10 GigE)



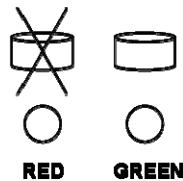
Rear Panel Port Numbering Scheme (six GigE)

Control Panel and Indicator LEDs

The EtherDrive® Storage shelf is equipped with color LED indicators and buttons located on the front panel.



- A. **Power On/Off Red Button** – Toggles unit power on and off.
- B. **Reset Button (recessed)** – Pressing reset, causes system to reboot.
- C. **Alarm Mute Button** – Normally “OFF” Red, turned “ON” only when Blade has detected a fault and halted, indicating the Blade must be removed and serviced.
- D. **Power On Green LED** – “ON” Green when unit power is turn on.
- E. **Network Activity Green LED** – Flashes “ON/OFF” Green on any detected Ethernet activity.
- F. **High Temperature Alarm Red LED** – “ON” Red when chassis internal temperature exceeds 40°C.
- G. **Power Supply Fail Alarm Red LED** – “ON” Red during power supply module failed.



Each disk carrier also has two light pipe indicators to show disk status. Red “On” when disk has failed and Green “Flashing/On” during disk activity.

Package Contents

- One shelf assembly including a full complement of disk carrier trays.
- IEC power cord(s)
- Two slide out cabinet mounting rail assemblies
- Screws to mount SATA disk to disk drive trays

Safety Precautions

- The SR1661 or SR2461 chassis weigh more than 50 pounds without disk drives. Each disk drive ads about 1.3 pounds. A full SR2461 chassis can weigh almost 100 pounds, so use 2 strong people to lift the unit and avoid injury.
- The SR1661 and SR2461 chassis have hot swap power modules. Disconnect the power cord from the power supply module before removing the module.
- The SR1661 and SR2461 chassis have hot swap internal fans. Use extreme caution when opening top cover to replace a fan unit.

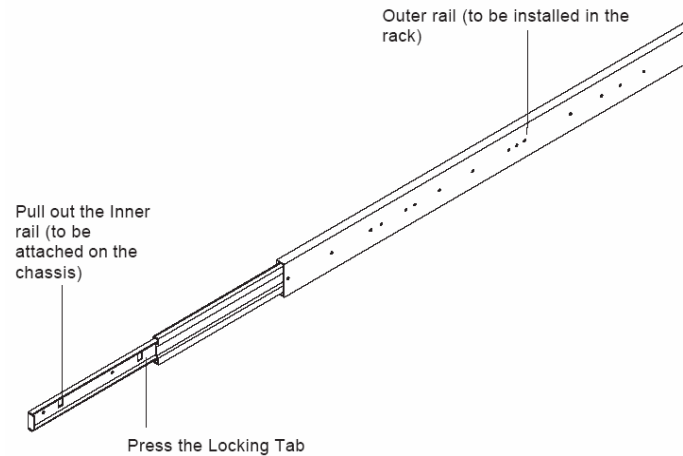
Operating Precautions

- The SR does not contain battery backed RAM. Coraid recommends the use of an uninterruptible power supply (UPS) for your SR so that recently modified data in RAM will reach the disks in the event of a power outage at your facility.

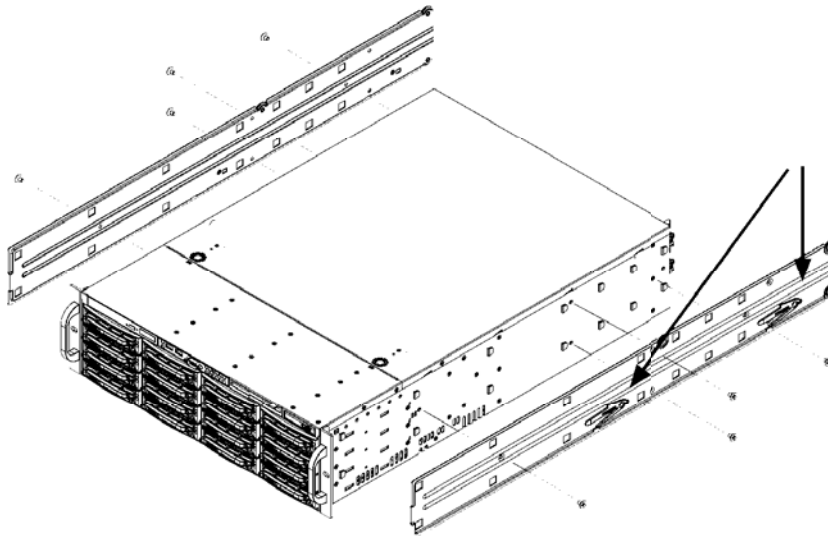
Quick Installation in 3 easy steps

1. Cabinet Installation and Power Connection

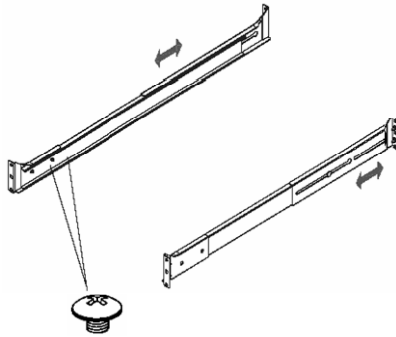
- a. Mount the shelf into the desired cabinet location. We recommend the sys admin/installer attach a unique shelf number label to the front of the cabinet rail for easy storage unit identification. This shelf number will be used by the sys admin in the first steps of configuration via the storage units console port once physical installation is complete.
- i. Included in the shipping package is a pair of rail assemblies. In each rail assembly, locate the inner rail and the outer rail. Press the locking tab to release the inner rail from its locking position and pull out the inner rail from the rail assembly. (*The inner rails are to be attached to the chassis and the outer rails are to be installed in the rack.)



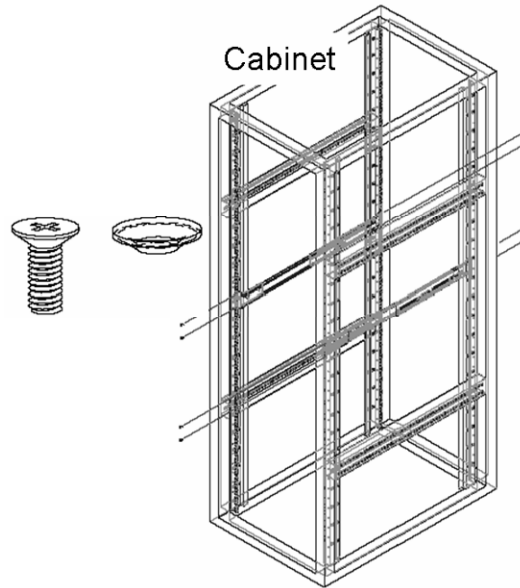
- ii. Locate the five rail buttons on each side of the chassis and locate the five corresponding holes on each of the inner rail. (*Please note that one end of the hole is larger than the other end of the hole.)



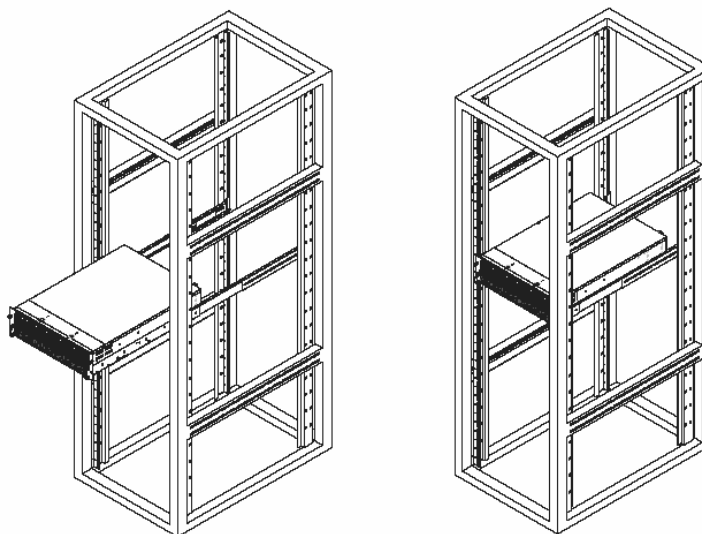
- iii. Align the larger end of each hole against its corresponding button. Once all aligned, push the holes toward their corresponding buttons and the rail is placed on the chassis. Once the rail is placed on the chassis, pull the rail forward until the rail buttons lock in the small ends of the corresponding holes. Secure the rail to the chassis with a screw provided. Repeat the above steps to install other rail on the chassis.
- iv. After you have installed the inner rails on the chassis, you are ready to install the outer rails of rail assemblies to the rack. (* The rails are designed to fit in the cabinets with the depth of 28" to 33".) Locate a pair of front (-short) and rear (-long) brackets provided. Please note that the brackets are marked with Up/Front Arrows (-front) and Up/Rear arrows (-rear). Secure the front (-short) bracket (marked with the Up/Front arrows) to the outer rail with two screws provided.



- v. Locate the two buttons on the outer rail and attach the rear (-long) bracket to it by sliding the opening of the rear rail through the button. Measure the depth of your rack and adjust the length of the rails accordingly. Repeat the same steps install the other outer rail on the chassis.
- vi. Secure both outer rail assemblies to the cabinet with screws and washers.



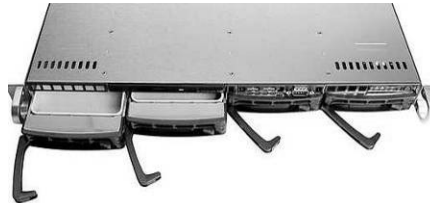
- vii. Once the rail assemblies are securely installed on the cabinet, slide the CED3U15SS (or CED1U4SS) chassis into the rail assemblies as shown below: (Note some rail screw adjustment may be require to achieve smooth sliding in and out)



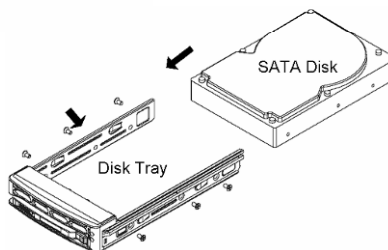
- b. The power supplies in the shelf are auto sensing universal voltage (115/230VAC, 50/60Hz) and they come with IEC connectors. The chassis is supplied with two power cords for USA power systems. Other user supplied IEC adapter cords may be required to meet power plug needs outside the USA.
- c. All three power connections should be used for redundancy. A fully loaded chassis requires power on at least two out of the three power connections. After connection to an AC power source, press the power switch located on the front panel of the unit and observe that the units fans are operational. The shelf is now ready for disks to be installed.

2. SATA Disk installation

- a. EtherDrive® Storage is designed to accommodate standard 3.5" SATA disk drives. Press the colored release tab located on the drive tray door to release the drive tray from its locking position and extend the extraction handle to withdraw the drive tray.



- b. (Note: Disk trays are initially supplied with a plastic blank where the disk is installed. This plastic blank also provides an air flow restriction to slots that are not yet inhabited by disks. Do not remove the plastic blank until you are ready to install a disk in its place, to maintain proper air flow within the shelf.) Remove the plastic blank attached to the disk drive tray and install a SATA disk drive in its place using six screws provided.



- c. The disk and tray is now ready to be plugged into its slot in the shelf.

3. Shelf Address Configuration & Network Connection

- a. **IMPORTANT NOTE:** Each shelf sharing a common Ethernet network must have a **unique** address to prevent an address conflicting which may disrupt operation of other storage devices on the network
- b. Connect a terminal to the serial com port on the back of the unit. (Com1 settings are 9600 N 1). Now refer to the software manual for configuration setup.
- c. SR1661 & SR2461 EtherDrive® Storage appliances have multiple Ethernet connections on the rear of the shelf. Use **CAT6** Ethernet cable only when using GigE networking, and CX4 or Optical cables when using 10 GigE networking.
- d. Coraid recommends the use of Ethernet switches that support 802.3x (flow control). Most modern Ethernet switches support these standards.
- e. Install the latest AoE software driver on each Server that will be accessing the EtherDrive Storage. This can be downloaded from Coraid's web site at www.coraid.com/support
- f. EtherDrive Storage is now ready and accessible by the network connected Servers, equipped with ATA-over-Ethernet (AoE) drivers. Please consult the Coraid web site www.coraid.com/support for helpful "HOWTO" information.

**CAUTION !! – DO NOT SHIP PRODUCT WITH DISKS INSTALLED.
THIS MAY DAMAGE UNIT AND WILL VOID THE WARRANTY**

Warranty and Return Policy

Coraid Inc. ("Coraid") provides this Limited warranty to the entity that originally purchased the CORAID product.

Limited Warranty: CORAID warrants that the Hardware portion of the CORAID products described below will be free from material defects in workmanship and materials from the date of original purchase of the product, for the period of thirty six (36) months ("Warranty Period")

CORAID's sole obligation shall be to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund at CORAID's sole discretion. Such repair or replacement will be rendered by CORAID at CORAID's Service Center. The replacement Hardware need not be new or have an identical make, model or part. CORAID may in its sole discretion replace the defective Hardware (or any part thereof) with any reconditioned product that CORAID reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement Hardware will be warranted for the remainder of the original Warranty Period from the date of original retail purchase.

Limited Software Warranty: CORAID warrants that the software portion of the product ("Software") will substantially conform to CORAID's then current functional specifications for the Software, from the date of original retail purchase of the Software for a period of thirty six (36) months ("Warranty Period").

Submitting A Claim: The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to CORAID as outlined below: The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow CORAID to confirm the same.

1. The original product owner must obtain a Return Material Authorization ("RMA") number from the CORAID Service Center.
2. After an RMA number is issued, the defective product must be packaged securely in suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package.
3. The customer is responsible for all in-bound shipping charges to CORAID. No Cash on Delivery ("COD") is allowed. Products sent COD will either be rejected by CORAID or become the property of CORAID. Products shall be fully insured by the customer. CORAID will not be held responsible for any packages that are lost in transit to CORAID.
4. Return Merchandise Ship-To Address is Coraid Inc. 565 Research Dr., Athens, Georgia 30605

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FCC: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules.