

Install the ROME® in 3 Easy Steps

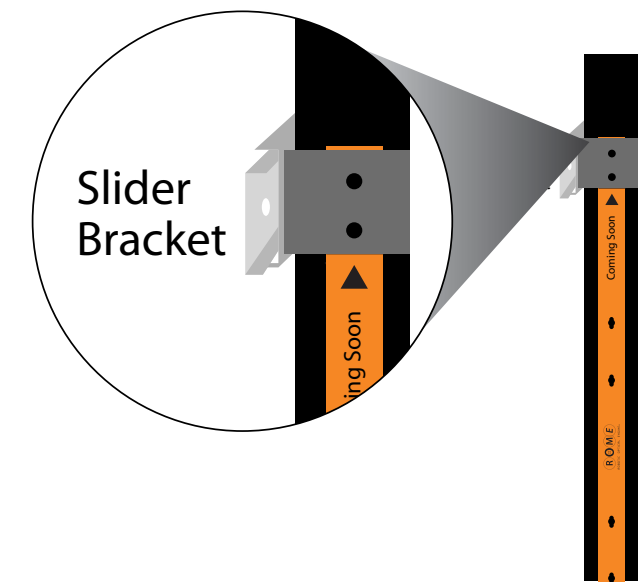
0. Preparation

Install Slider Mounting Kits

Position the Slider Height Ruler on the rack. The lower end of the ruler should be 12 inches from the rack floor. Use the correct ruler for EIA or WECCO racks.

Place one slider mounting kit above the arrow and screw onto the post and repeat for second kit.

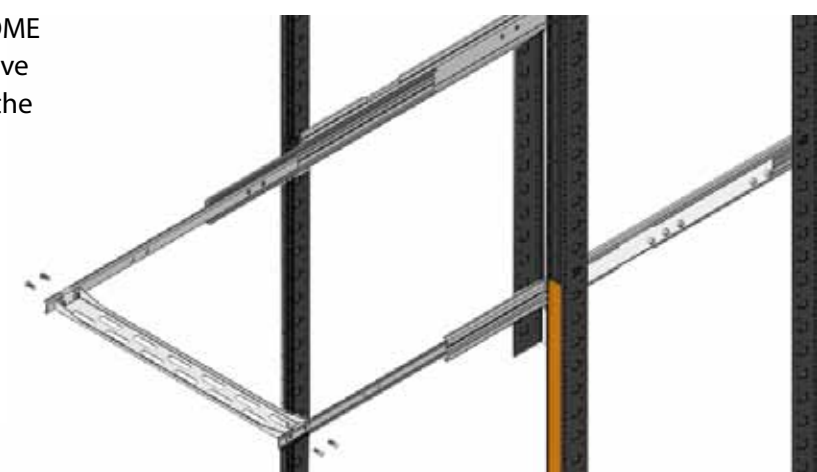
Minimum rack depth requirement: 36 in
Maximum rack depth requirement: 43 in
(914.4 mm - 1092.2 mm)



Perform Clearance/Level Testing

- Fully extend the sliders arms through the front of the rack
- Use the clearance/level tool by placing it on the 2 extended slider arms and adjust to make posts align.
 - Check right to left leveling using a level, adjust sliders front brackets as needed.
 - Run the tool between the 2 sliders from the front of the rack to the back to check for clearance.
 - When the level is in the back, check again with a level. Adjust back screws if needed.

Note: If installing ROME in a populated rack, install ROME in the lowest available space on the rack. Once you have located the space to be used, place the templates on the front post of that space.



Have a Lift Ready

Have a mechanical lifting ready to lift and maneuver the ROME (87 kg), to avoid possible bodily injury.

Note: For reference, have the completed pre-deployment checklist on hand.



1. Unpack

Perform a Visual Inspection of Package

Check to see if the package is secure and damage free after arrival.

Locate Shock Sensors

Shock sensor indicators should be white when the package arrives. If the shock indicator is red (activated), stop the process and call Wave2Wave.

Unpack the Contents of the Package

Perform a Visual Inspection of Inside Contents

Check to see if the contents inside are damage free after arrival. Locate the shock sensor indicator on the ROME. If it's red (activated), stop the process and call Wave2Wave.

Note: Keep packaging for transportation of ROME if required in the future.



2. Install the ROME® Chassis

Mount the ROME Chassis

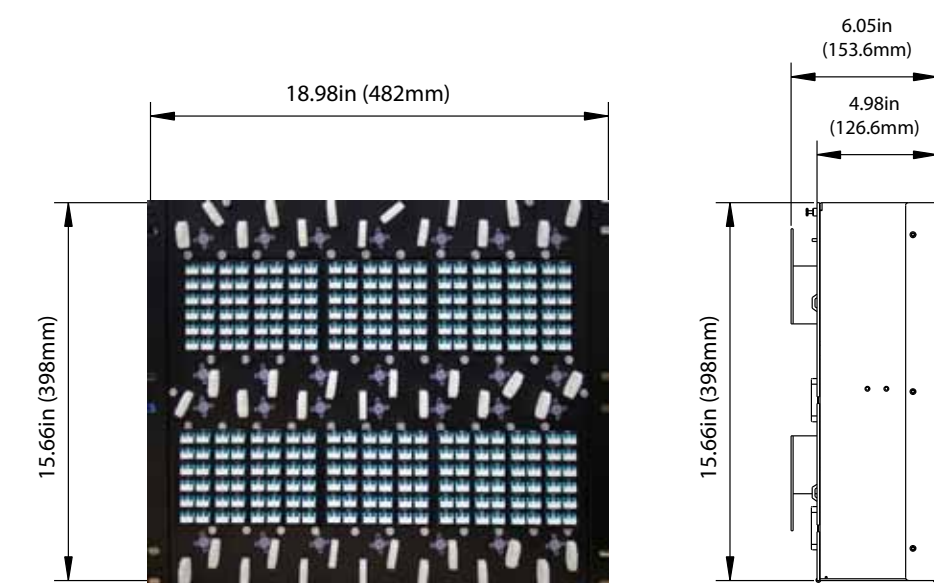
Take special precautions to ensure that the system remains stable. Mount the first ROME unit on the lowest set of sliders. Continue to mount ROME units from the bottom up.

1. Move the ROME Chassis to the lift.
2. Position the ROME unit with the front panel on the inner side of the lift
4. Route the patch panels through the rack and mount them on the other side of the rack.
5. Extend (slide-out) the sliders arms to maximum extension.
6. Lift the ROME and place it at the height of the sliders.
7. Align the extended arms of the sliders with the ROME mounting brackets located on the left and right side at the top of the ROME.
8. Attach the slider arms to the ROME mounting brackets using the supplied bolts (do not use washers or nuts). There are 6 attachment points per side.
9. Slide the ROME Chassis into the rack.
10. Secure the ROME to the front rack posts with a minimum of 2 screws, one in each side.

Mount Patch Panels

The patch panels are pre-connected to ROME with a fiber trunk. To install the EXO mini panels, secure each EXO mini to the rear posts of the rack using the mounting ears and screws. The patch panels should be mounted below the slider mounting kits and above the bottom of the ROME Chassis.

The fiber cable from the patch panels to the ROME Chassis should be tied down to the rack to organize the cable, but it must be tied down so that enough slack remains to allow for the ROME Chassis to slide out for maintenance. To enable this, the fiber cable has red indicators at each end of the cable, indicating where the cable should be tied down so as to leave enough slack.



Option 1: You will need a total of 20Us to properly install ROME chassis, LCU and fiber patch panel in front of rack.

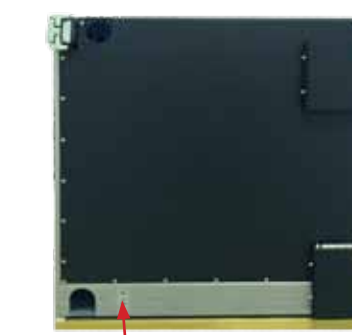
Option 2: You will need a total of 11Us to properly install the ROME chassis and LCU in front of the rack and a total of 9Us to install the fiber patch panel behind the ROME chassis.

Ground the ROME

The attachment point on the ROME in order to connect to the customer facility ground is located at the left rear (lower) corner when looking from the rear of the ROME.

Verify that the ground cables/wires are made of copper and that the gauge of ROME to facility ground cable is at least 10 AWG (ROME accepts up to 6 AWG).

1. Connect the ROME Chassis to the facility ground using a ground wire with a dual-hole compression lug.
2. Place a flat washer on each of the two supplied M5x10 (1/5" x 2/5" long) bolts.
3. Place the ground wire compression lug on top of the flat washers.
4. Place star washers on top of the ground wire compression lug (on each bolt).
5. Bolt the assembly onto the ROME using the M5x10 bolts.



Rear Ground (Earth) Point



2-Hole Compression Lug

3. Install the ROME® LCU

Mount the LCU

The LCU can be installed in the middle of the rack or on top of a ROME. Affix the LCU to the rack, using the front and rear ears. Use a level to ensure that the LCU is properly level.

Connect Signaling and Ground Cables

The LCU can be connected to up to 4 ROMEs in the same rack. To connect the LCU to each ROME Chassis, the following steps need to be taken:

1. Connect the LCU to ROME signaling cable to the LCU output.
2. Connect the cable to the back of the corresponding ROME.

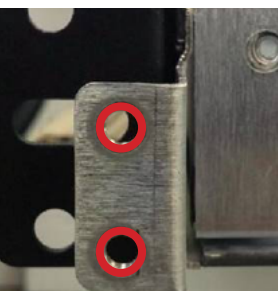
Signaling Cable

The signaling cables should be tied down to the rack to organize the cables, but they need to be tied down so that enough slack remains to allow for the ROME Chassis to slide out for maintenance. Each signaling cable has red indicators at each end of the cable, showing where the cable can be tied down so as to leave enough slack.

Ground Cable

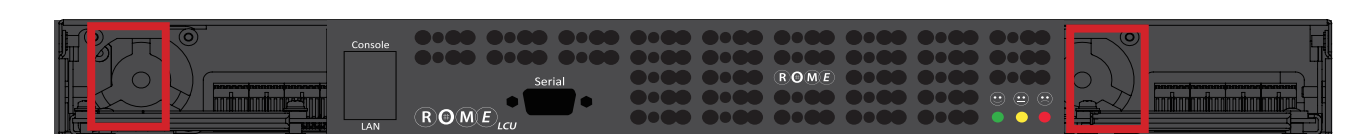
Connect ground to the ROME LCU as follows:

1. The LCU grounding terminal is located at the back left corner
2. Connect the LCU to the facility ground using a ground wire with a dual-hole compression lug.
3. Place a flat washer on each of the two supplied M5x10 (1/5" x 2/5" long) bolts.
4. Place the ground wire compression lug on top of the flat washers.
5. Place star washers on top of the ground wire compression lug (on each bolt).
6. Bolt the assembly onto the LCU using the M5x10 bolts.



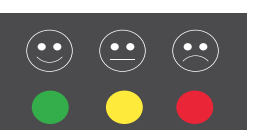
Power Up

The power cable connection is located on the front panel of the LCU.



Attach the 120VAC power plug to the LCU front panel power supply. Either or both power supplies can be connected. As soon as one power cable is plugged in, ROME will automatically start up and go through an initial set up.

Once ROME has successfully started up, all three LEDs will begin blinking.



The hardware installation is now complete. The next step is to configure the ROME software and ROME users, which is covered in the ROME Administrator's Manual.

Ready to Go

Safety Always Remember to Wear an ESD Strap

Warning Class A Product: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures. Canada Class A Warning: This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe "A" est conforme à la norme NMB-003 du Canada. VCCI Class A Warning for Japan: This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

Disposal: Separate Collection in European Countries

The following apply only to users in European countries: This product is designated for separate collection at an appropriate collection point. Do not dispose of as household waste. To avoid the potentially damaging effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately. This symbol indicates that this product is to be collected separately. For more information, contact the retailer or the local authorities in charge of waste management.

Possible Laser Hazard

This device can switch laser based source signals, which, at higher wattage levels, require additional precautions by the user. Since it is the user that determines what signals are transmitted through this device, and not the device manufacturer, it is the responsibility of the user to take the necessary precautions as dictated by the source equipment generating the signals in question. It is recommended that the user add any warning labels to this device, as necessary, in the case of higher level laser sources that may be potentially harmful if exposed to the user.

Heavy Equipment

Due to the heavy, 87 kg, weight of the ROME and also to its slide out capability, it is important that care is taken in lifting and mounting ROME to a rack.

1. Never attempt to lift or tilt the chassis without the use of a mechanical lifting device, such as the one pictured. The lifter should support at least 100 kg.
2. Take special precautions to ensure that the system remains stable.
 - a. The rack used to mount the ROME must be properly anchored to the floor.
 - b. If the ROME unit is the only unit in the rack, it should be mounted near the bottom of the rack (while still allowing bottom clearance).
 - c. When mounting this unit in a partially filled rack, when possible, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.
 - d. The ROME should be mounted with 30 cm (12 inches) of clearance is required on both the top and bottom of the ROME unit while in the extended (slide-out) position.
 - e. If the rack is provided with stabilizing devices, install the stabilizers before mounting or servicing the unit in the rack.

Electrical Current

- Electrical current from power, telephone, and communication cables is hazardous.
1. Do not connect or disconnect any power cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
 2. This apparatus must be properly grounded with a protective earth contact.
 3. The device is intended for use when supplied with power from a supply providing -48 or +49 VDC, up to 6.5A.
 4. Disconnect power (following proper shutdown procedures), telecommunications systems, networks, and modems before you open the device covers. Remove all jewelry (including rings, necklaces, and watches), wear a grounding wrist strap, and do not directly touch the backplane with your hand or any metal tool, to avoid possible shocks, burns, or ESD damage to the unit.
 5. Never turn on any equipment when there is evidence of fire, water, or structural damage.
 6. DO NOT OPEN ROME Unit when power is on. Hazardous voltages exist within the unit as well as moving parts that may cause injury. The unit may be opened ONLY by trained and qualified personnel.

Proper Grounding Required

This equipment must be grounded. Never defeat the ground conductor or operate the equipment in the absence of a suitably installed ground conductor. Contact the appropriate electrical inspection authority or an electrician if you are uncertain that suitable grounding is available. When installing or replacing the unit, the ground connection must always be made first and disconnected last.

Avoiding Circuit Overload

- Overloading a circuit is potentially a fire hazard and a shock hazard under certain conditions. To avoid these hazards:
1. Take care when connecting units to the supply circuit so that wiring is not overloaded.
 2. Ensure that your system's electrical requirements do not exceed the branch circuit protection requirements. Refer to ROME's electrical specifications.
 3. The cross section of the AC or DC power supply cords used must be at least 16AWG.
 4. An over current protection device (15A branch circuit breaker) should be incorporated into the building installation.

Rack Certification

To ensure safety, all configurations of the rack cabinet must be certified by a nationally recognized testing laboratory in order to verify compliance with country-specific safety regulations. This process ensures that the end product remains safe for the operator and service personnel under normal and foreseeable misuse conditions.

Extending Devices Forward in Rack

Do not extend more than one sliding device at a time. The maximum allowable weight for devices on slide rails is 350 kg (771 lbs).

Tools Prepare for installation using the ROME pre-installation kit. (1 kit per ROME)



Slide Mounting Kit (2)

Used to Slide ROME into Rack



Slider Height Ruler (2)

Used to Measure Height Position on Rack (Optional)