

Helmer Ultra-Low Temperature Freezer Set-Up Guide



For product registration and complete instructions, refer to current manuals available at

info.helmerinc.com/manuals



Required Tools

- Ratchet
- 12" socket extension
- 9/16" socket
- 1/2" socket
- 1/2" open-end wrench
- 5/8" open-end wrench
- 9/16" open-end wrench
- Utility knife
- Pry bar
- Hammer
- #2 Phillips screwdriver
- Bubble level

NOTE: Two people will be required to remove the freezer from the pallet.

Remove Freezer from Pallet

1. Remove the cardboard, banding, and packaging materials.
2. Locate the tape securing a thin nylon block at the lower left corner of the door. Remove the tape and block. Removal of the block may require opening the door.
3. If present, remove the (2) front and (2) rear orange blocks from the skid using a #2 Phillips screwdriver.
4. Using a #2 Phillips screwdriver, remove the screws securing the panel at the bottom rear of the unit. Set the panel and screws aside.
5. Using a ratchet, 9/16" socket, and 12" extension, remove the (6) hex bolts under the freezer (A). The freezer will shift slightly and the weight of the freezer will rest on the casters.
6. Remove (1) hex bolt from the bottom of the refrigeration compartment in the back of the freezer (B).
7. Remove the condenser grill cover from the front of the freezer.
8. Remove (1) hex bolt from bottom of condenser filter compartment (C).
9. Remove the blocks at the front of the pallet (D). A pry bar may be necessary to remove the blocks from the pallet.

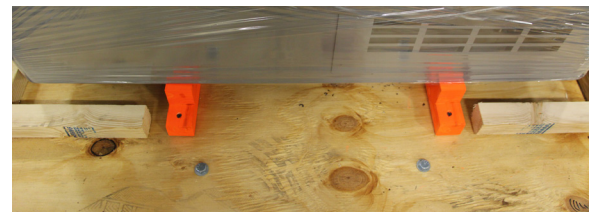
CAUTION: While one person removes the wedges, a second person should hold the freezer to prevent it from tipping and rolling off until the person removing the wedges is clear of the area in front of the freezer.

Ensure no people or obstructions are next to the pallet where the freezer will roll off of the pallet.

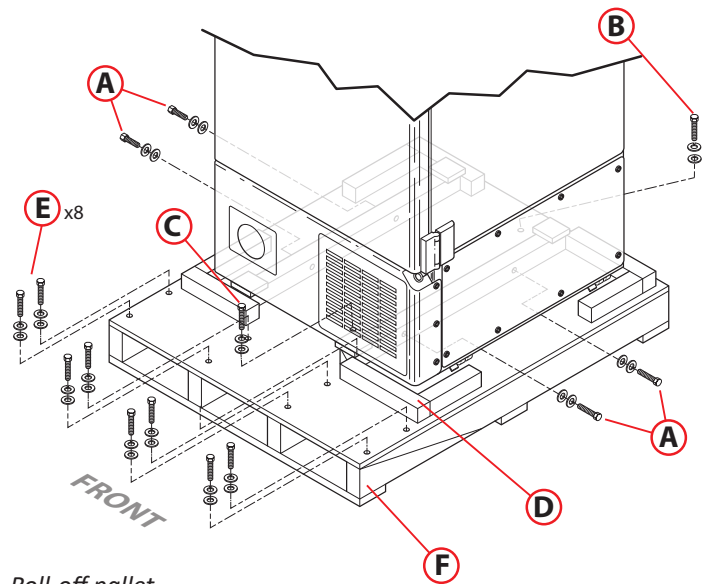
10. Using a ratchet and 9/16" socket, remove the (8) hex bolts securing the wedges to the bottom of the pallet (E).
11. Remove the wedges from under the pallet (F). A hammer may be necessary to remove the wedges.
12. Using two people, push the freezer toward the front of the pallet. The freezer and pallet will pivot and the freezer will roll off of the pallet.



Exterior packaging



Orange blocks



Roll-off pallet

Remove Compressor Restraints

1. Using ½" socket and ½" open-end wrench, remove the hex bolt securing the compressor restraint under the high-stage compressor. Set the hex bolt, washer and hex nut aside for use in installing the rubber compressor foot (Qty.: 1 per compressor).
2. Lift compressor mounting plate slightly and slide the restraint out.
3. Slide the compressor foot (found in accessory box) under the compressor mounting plate and align the hole in the foot with the opening in the bottom of the freezer and mounting plate.
4. Insert the metal spacer (found in accessory box) in the center of the rubber compressor foot.
5. Insert hex bolt through the bottom of the freezer and up through the compressor foot and mounting plate.
6. Place the washer and hex nut over the protruding hex bolt. Hand-thread hex nut.
7. Secure using torque wrench, and tighten to 78.8 in-lbs.
8. Repeat steps 1 – 7 for low-stage compressor.

NOTE: When removing the compressor restraint from the low-stage compressor, approach from the left side of the compressor to avoid damage to the copper tubing mounted to the floor of the refrigeration compartment.

10. Place rear panel over refrigeration compartment and align holes in panel with threaded holes in freezer.
11. Hand thread screws and tighten using #2 Phillips screwdriver .

Install Interior Shelves

NOTE: Helmer recommends moving storage racks before the unit reaches the setpoint temperature.

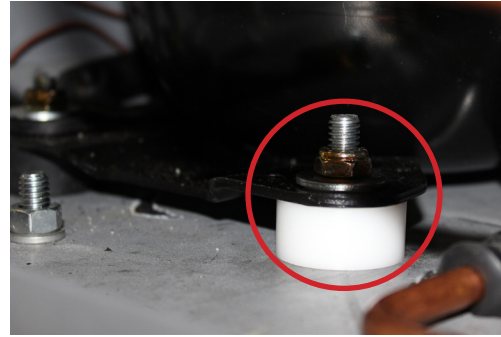
1. Install shelf clips in the shelf standards at marked locations.
2. Shelf clips must be installed so horizontal portion is oriented upward.
3. Insert upper tab of shelf clip into slot in standard and Pivot downward to insert lower tab.
4. Starting with the bottom shelf, insert shelf into chamber at an angle, then set the shelf flat on the clips.

Install Rear Stand-Offs

1. Align the holes in the stand-offs with the corresponding threaded holes on the back of the freezer.
2. Insert the hex bolts through holes in the stand-offs.
3. Hand-thread the hex bolts into the threaded holes.
4. Using a 9/16" open-end wrench (or box wrench), tighten the hex bolts.

Install Power Cord Strain Relief

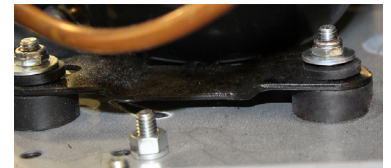
1. Insert power cord into receptacle on the rear of the freezer.
2. Slide the power cord retainer upward, engaging the groove in the power plug with the slot in the retainer.
3. Align holes in the retainer with corresponding holes on the cabinet.
4. Insert screws with lock washers through holes in the retainer.
5. Hand-thread the screws into the holes in the cabinet and tighten using a #2 Phillips screwdriver.



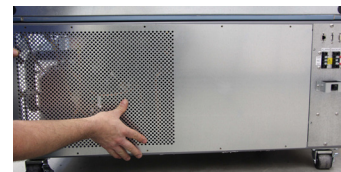
Compressor restraint



Rubber compressor foot with metal spacer



Rubber compressor foot installed



Rear panel



Shelf clip



Interior shelf



Rear stand-off



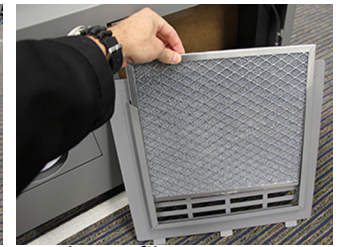
Power cord retainer

Install Condenser Filter

1. Pull the top of condenser grill away from the freezer and lift upward to disengage tabs at the bottom of grill.
2. Insert condenser filter into guides on back of the condenser grill ensuring wire mesh is oriented toward the condenser.
3. Insert tabs at the bottom of grill into corresponding slots in freezer base and pivot the grill toward the freezer base until magnets on bezel engage the grill.



Condenser grill



Condenser filter

Location Requirements

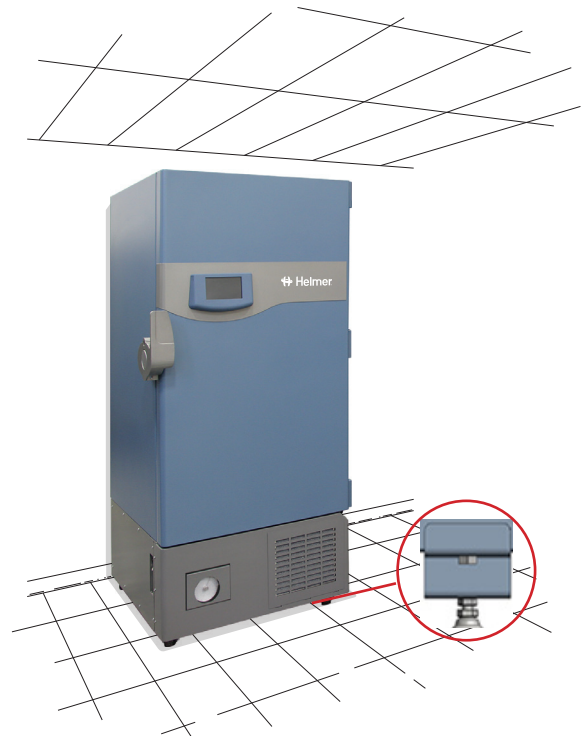
- Has a grounded outlet meeting the electrical requirements on the product specification label (Helmer does not recommend operating this unit on a GFI/GFCI outlet).
- Meets the limits specified for ambient temperature (15 °C to 32 °C) and relative humidity (80% for temperatures up to 25 °C, decreasing linearly to 53% at 32 °C).
- Is clear of direct sunlight, high temperature sources, heating vents, and air conditioning vents.
- Has a minimum of 8" (203 mm) above and 4" (102 mm) of space behind the freezer.

Placement

1. Ensure the door is closed and casters are unlocked.
2. Move the freezer into place and lock the casters.
3. Ensure the minimum space requirements are met when placing the freezer.
4. If the rear stand-offs are installed, the freezer may be pushed against a wall so the stand-offs make contact with the wall.

Set Leveling Feet

1. Hand-thread leveling feet downward to contact the floor.
2. Using a 5/8" open-end wrench, adjust the legs to achieve a flat reading (front to back) from a bubble level..
3. Check the leveling legs and rear casters to ensure the freezer contacts the floor at four points. Adjust leveling legs as necessary.
4. Hand-thread the jam nuts upward until they meet the weld nut.
5. While holding the leveling foot with a 5/8" open-end wrench, use a 9/16" open-end wrench to snug the jam nut against the bottom of the freezer.






Freezer placement and leveling

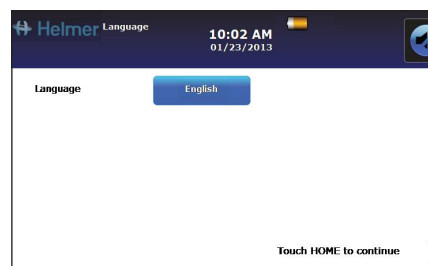
NOTE: Installation of an optional third party probe or back-up refrigeration system should be completed prior to powering the unit on.

Power On

1. Confirm the freezer is at room temperature.
2. Plug the power cord into a grounded outlet that meets the electrical requirements on the product specification label.
3. On the left side of the freezer, switch the main power switch and the monitoring system battery switch **On**.
4. The monitoring system powers on and displays the Language screen.
- 5 Touch the **Language** button, then select the language from the drop-down menu.
- 6 If an alarm sounds, temporarily mute the alarm by touching **Mute**.
- 7 Touch **Home** to display the Home screen.
- 8 Connect the chart recorder backup battery, if equipped.

REF Model XXXXX Series™		
SN 0000000	(12)03182016245126 (13)2051899	2016-03-18 Made in USA
Description Weight 000 lb / 000 kg Patent	Voltage 000V a.c. Hz 00.00 Amps 0.0A Power 0.00kW Fuse 0.00A Type "X"	Helmer, Inc. 14400 Bergen Boulevard Noblesville, IN 46060 USA www.helmerinc.com
	Ref Type XXXX Amount 00000000kg Design Pressures 00psig/000psig GWP 0000 CO2 Equ. 000000kg	
This unit is intended for use in laboratories in commercial, industrial, or institutional occupancies as defined in the Safety Standard for Refrigeration Systems, ASHRAE 15		

Sample product specification label



Language screen



Mute button



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