

2U POD™

USER MANUAL

*Power Output
Distribution
120 Volt*



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IMPORTANT SAFETY INSTRUCTIONS



WARNING

DO NOT ATTEMPT TO SERVICE THIS PRODUCT YOURSELF. OPENING OR REMOVING THE COVER MAY EXPOSE YOU TO DANGEROUS VOLTAGES, EVEN WHEN THE AC CORD IS DISCONNECTED FROM THE ELECTRICAL OUTLET. REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL.

SAVE THESE INSTRUCTIONS

This manual contains important instructions that should be followed during installation and operation of the 2U POD™.

This product is not intended for use with life support or other U.S. FDA designated “critical” devices.

Read all safety and operating instructions before operating the 2U POD™ and the connected UPS system. Adhere to all warnings on the unit and in this manual. Follow all operating and user instructions.

Turn the UPS off and unplug the 2U POD™ before cleaning. Use only a soft cloth, never liquid or aerosol cleaners.

The UPS and 2U POD™ are designed for data processing equipment. Do not plug laser printers or appliances, such as hair dryers, heaters, vacuum cleaners, or electric drills, into the UPS output receptacles.



WARNING

DO NOT MODIFY THE CABLES IN ANY WAY. CONSULT YOUR DEALER IF THE AC CORDS DO NOT MATCH THE UTILITY RECEPTACLE. THE 2U POD™ MUST BE GROUNDED AT ALL TIMES WHILE IN USE. TURN OFF THE UPS BEFORE UNPLUGGING IT.

The UPS and the 2U POD™ are equipped with grounded plugs (plug types vary depending on model). Do not defeat the safety purpose of this plug. If unable to fully insert the plug into the designated receptacle, contact a qualified electrician or your local dealer or Liebert representative for assistance.

Route power supply cords so they are not walked on or pinched in anyway.



CAUTION

Risk of electric shock, do not remove cover, no user serviceable parts inside. Refer servicing to qualified service personnel.



CAUTION

This device receives power from multiple sources. Before servicing this device, remove all connections. Before servicing the UPS, follow “Maintenance of UPS” instructions in the user manual for your UPS.



CAUTION

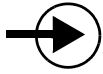
For use in a controlled environment. Refer to manual specifications for environmental conditions.



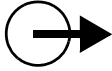
WARNING

WHEN THE 2U POD™ IS IN UTILITY POSITION (MAINTENANCE BYPASS MODE) THE POWER TO THE CONNECTED LOAD IS NOT FILTERED OR CONDITIONED BY THE UPS. THE LIEBERT UPS CONNECTED EQUIPMENT GUARANTEE IS NOT VALID WHILE IN THIS MODE OF OPERATION.

GLOSSARY OF SYMBOLS



Indicates AC Input.



Indicates AC Output.



Consult the manual for additional information.

UTILITY

UTILITY lamp indicates local power is available and the load may be transferred to bypass the UPS.

UPS

UPS lamp indicates UPS power is available and the load may be transferred to the UPS to provide computer-grade power to the load.

INTRODUCTION AND SYSTEM DESCRIPTION

Congratulations on your choice of the Liebert 2U POD™. The Liebert 2U POD provides maintenance bypass capability as well as power output distribution. The Liebert 2U POD can be used on UPSs in the rack mount or tower configuration.

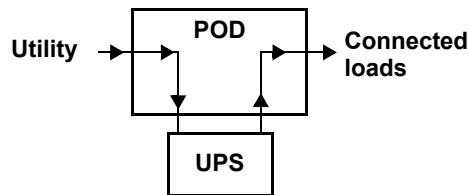
The Liebert 2U POD provides an isolated path of power for your UPS system for preventive maintenance or service.

System Description

The 2U POD has two modes of operation: **UPS** (UPS available) and **UTILITY** (maintenance bypass).

- In **UPS mode**, the power is routed through the UPS system delivering conditioned power to the load, as shown in **Figure 1**.

Figure 1 UPS mode of operation



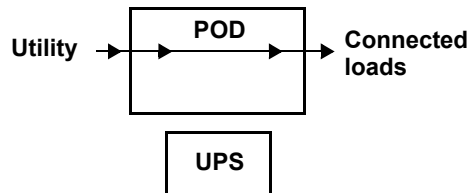
- In **UTILITY mode**, the power is routed around (bypassing) the UPS system (see **Figure 2**). Utility power is supplied directly to the load through the 2U POD.



CAUTION

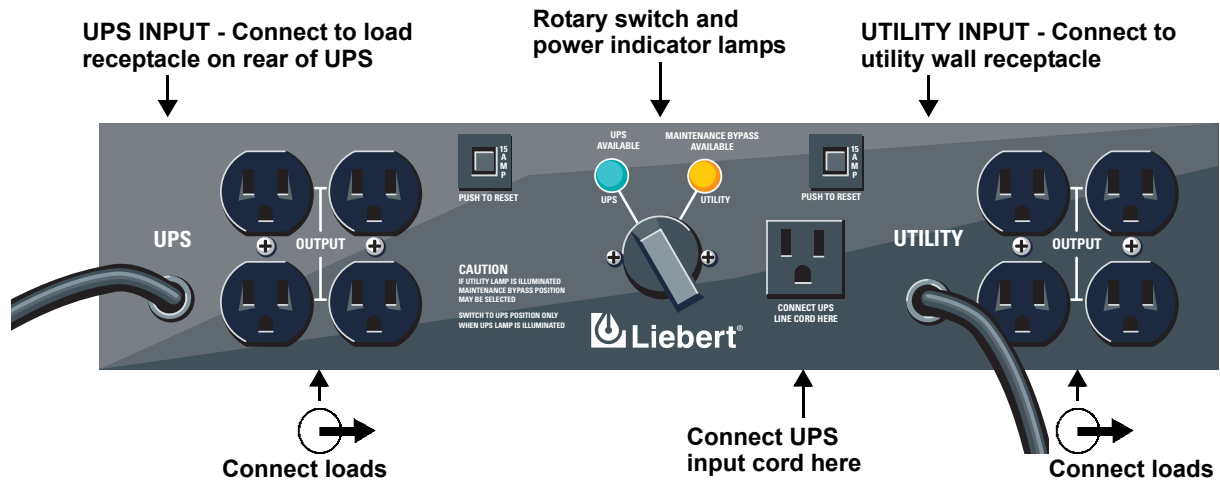
Battery back-up and conditioned power are NOT available during the UTILITY mode of operation.

Figure 2 UTILITY/maintenance bypass mode



- The UPS may be turned off and removed without affecting the load. See **Figure 3**.

Figure 3 2U POD connections



INSTALLATION ON GXT 2U UPS

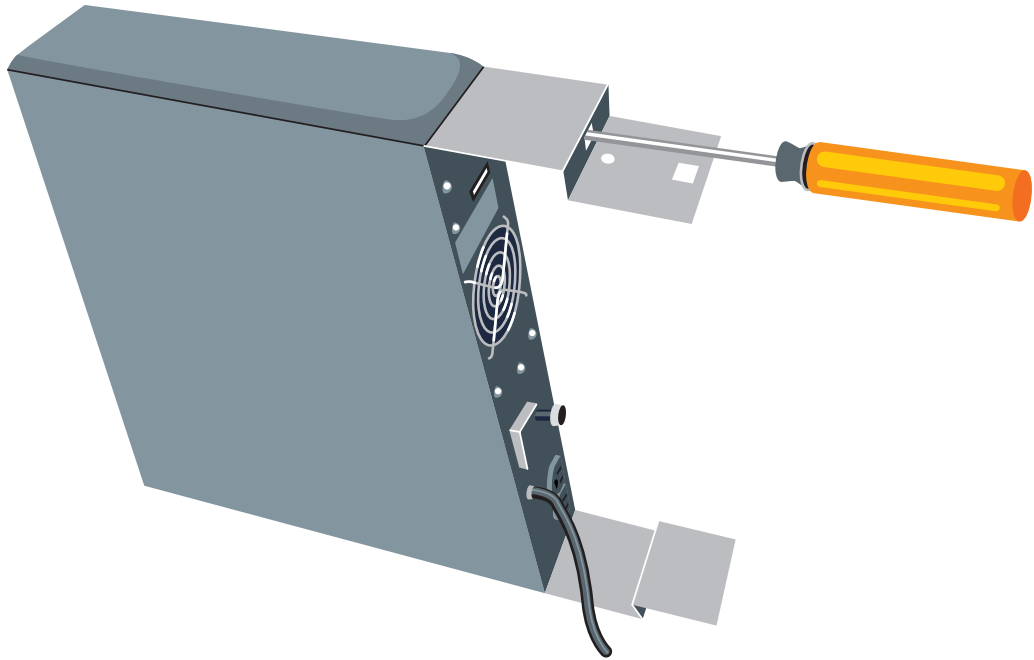


NOTE

This manual provides instructions for the 2U POD only. Refer to your UPS manual for UPS operation and installation instructions.

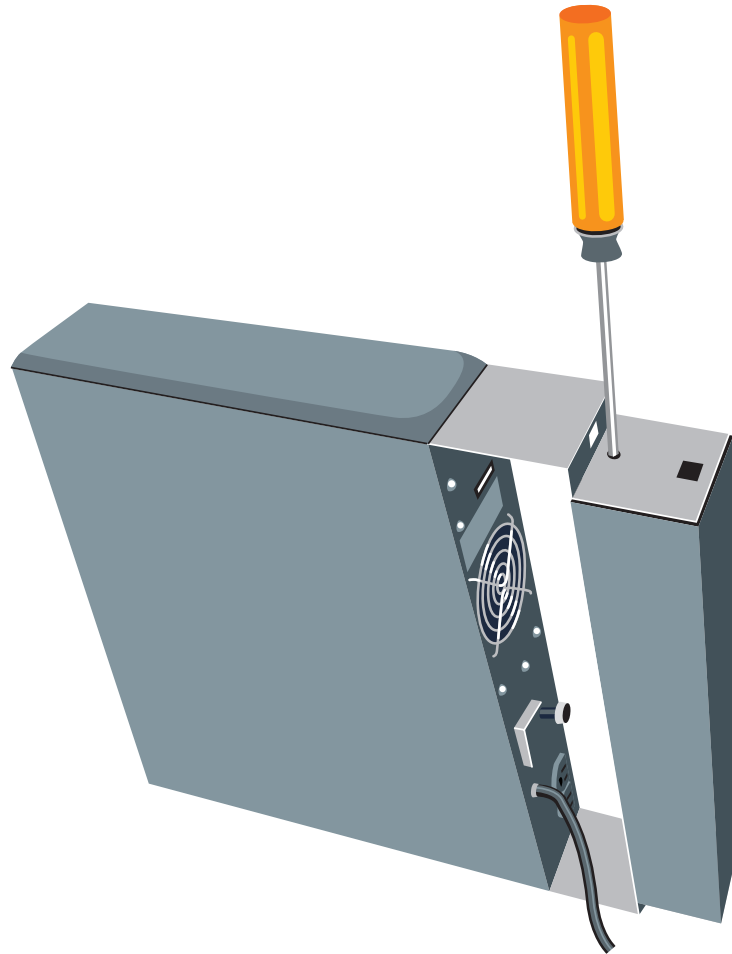
1. Unpack the 2U POD carefully, noting the packing method. Retain the box and packing material for possible future shipments.
2. Visually inspect the 2U POD for freight damage. Report damage to the carrier and your local dealer or Liebert representative.
3. Verify that the 2U POD input cord, UPS input cord, and receptacle for the UPS have the same type of configuration.
4. If you already have a UPS installed, turn off all connected loads and unplug them from the UPS. Turn off the UPS and disconnect the input cord.
5. Attach the two POD securing brackets (this is optional for GXT 2U UPS) to the rear of the UPS (see **Figure 4**). You will need a long M3 Phillips head screwdriver for this procedure (the torque is 7 in-lb, or 0.79 Nm). The POD brackets have a hole to allow the screwdriver to reach the screw.

Figure 4 Attaching POD securing brackets to rear of UPS



6. Next attach the POD to the securing brackets (see **Figure 5**). The POD can be installed to face one of three different directions utilizing the same mounting procedures.

Figure 5 Attaching POD to securing brackets

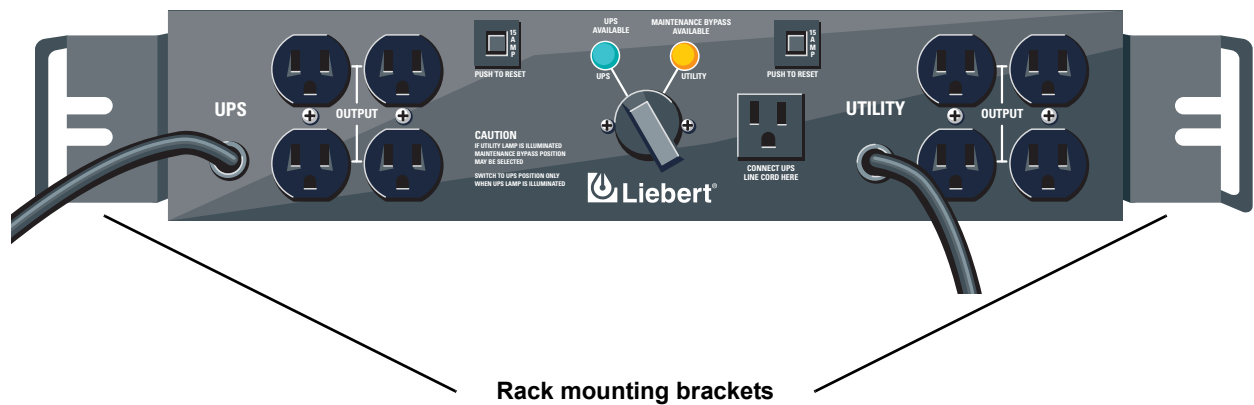


7. Make sure the 2U POD rotary switch is in the UTILITY position. Plug the 2U POD input cord (labeled “UTILITY”) into the utility outlet (wall receptacle).
WARNING: The 2U POD is now electrically live. The UTILITY lamp (orange) should now be illuminated.
8. Plug the UPS input cord into the receptacle on top of the 2U POD labeled “CONNECT UPS LINE CORD HERE.”
WARNING: The UPS system is now electrically live.
9. Connect the 2U POD UPS output cord (labeled “CONNECT TO UPS OUTPUT RECEPTACLE”) to the output of the UPS system.
10. Plug in all loads to the output distribution receptacles, evenly distributing them on the 2U POD. The 2U POD now powers your equipment in the UTILITY mode.
11. Turn ON the loads and ensure all are up and operating according to specification.
12. Start the UPS according to its specific user manual.
13. Verify that the UPS lamp (green) on the 2U POD is illuminated. If so, transfer the rotary switch from UTILITY to UPS. The load is now being supplied with conditioned power through the UPS.
14. Before any operation or procedure, always verify that both the UPS lamp (green) and the UTILITY lamp (orange) are illuminated before changing the status of the rotary switch.

RACK MOUNT INSTALLATION

1. Rack mount installation of the 2U POD is possible with the use of the rack mounting brackets (shipped with the POD). See **Figure 6**.
2. The rack mount brackets allow you to rack mount the POD in a 19" enclosure (23" to 19" rack adapters would have to be purchased separately if you are using our 23" Foundation or equivalent cabinet).
3. The POD can be mounted to face one of four directions depending on your application, utilizing the rack mount brackets provided.
4. Determine the desired position and direction for the POD, face it in that direction, then attach the brackets to the POD with the screws provided.
5. Consult your rack/enclosure manufacturer's recommendations for specific rack mounting hardware that will be required.
6. The holes on the rack mount bracket are notched for easy installation. Tighten the POD securely to the rails and then follow the start-up directions for the POD in the previous section, **Installation on GXT 2U UPS**.

Figure 6 2U POD with rack mounting brackets



INDICATOR LAMPS

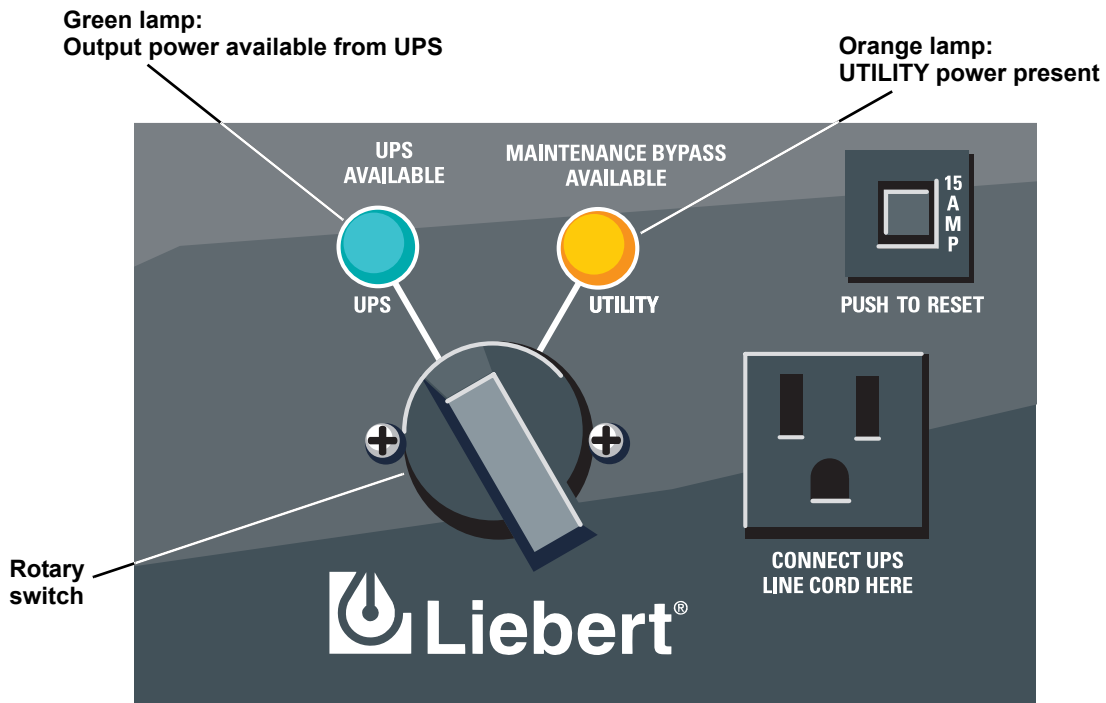
UTILITY Indicator Lamp

This orange lamp is illuminated when utility power is present (see **Figure 7**). It signals that you may transfer the loads to maintenance bypass (UTILITY mode) operation via the rotary switch. During a utility power outage, this lamp will be off and the UPS will supply battery back-up power to the connected loads.

UPS Indicator Lamp

This green lamp is illuminated when there is output power available from the UPS (see **Figure 7**). It signals that it is safe to transfer the connected loads from utility power back to UPS output power.

Figure 7 Indicator lamps on 2U POD



OPERATION

Transfer to Maintenance Bypass

To transfer to maintenance bypass (utility) from UPS, use the following steps:

1. Ensure the UTILITY lamp (orange) is illuminated. If the lamp is not illuminated, refer to **Troubleshooting** section.
2. Transfer the rotary switch from UPS to UTILITY, provided the UTILITY lamp is illuminated on the 2U POD.
3. Turn the UPS off.
4. Disconnect the two cables connecting the UPS to the 2U POD.
5. You may now service the UPS.

Transfer to UPS

To transfer to UPS from maintenance bypass (utility), use the following steps:

1. Reconnect the UPS to the 2U POD. Start the UPS according to the instructions in the UPS user manual.
2. Verify that UPS lamp (green) on the 2U POD is illuminated. If so, transfer the rotary bypass switch from UTILITY to UPS. If the lamp does not illuminate, refer to **Troubleshooting** section.
3. Conditioned power is now being supplied through the UPS.

SPECIFICATIONS

Transfer Time (to and from maintenance bypass)	< 6 milliseconds
Operating Ambient Temperature	32°F to 104°F (0°C to +40°C)
Storage Ambient Temperature	-4°F to 140°F (-20°C to +60°C)
Dimensions W x D x H: in. (mm)	3.5 x 3.0 x 15.5 (88 x 77 x 394)
Weight: lbs (kg)	10 (4.5)
Length of input utility cord: ft (m)	10 (3.0)
Length of input cord going to UPS: ft (m)	6 (1.8)
Humidity	0 to 95% non-condensing
Agency/Standards	UL 1778, c-UL, ISTA Procedure 1A

This 2U POD is intended for use with a UPS meeting all the following requirements:

- UPS input cord is compatible with the rating and type of receptacle on the 2U POD labeled “CONNECT UPS LINE CORD HERE.”
- UPS output receptacle is compatible with the 2U POD input power connector labeled “UPS.”
- Available utility receptacle is compatible with the 2U POD input power connector labeled “UTILITY.”

TROUBLESHOOTING

Problem	Cause	Solution
UTILITY lamp (orange) not illuminated.	Utility not present.	Call qualified service personnel to restore power to receptacle.
	2U POD input cord not connected to utility.	Refer to 2U POD installation instructions in this manual: <ul style="list-style-type: none"> • Installation on GXT 2U UPS and • Rack Mount Installation.
UPS Available lamp (green) not illuminated.	UPS output power not present.	Turn on UPS. Refer to UPS user manual.
	UPS input and/or output cord not connected to 2U POD.	Refer to 2U POD installation instructions in this manual: <ul style="list-style-type: none"> • Installation on GXT 2U UPS and • Rack Mount Installation.
2U POD will not start some / all connected loads.	2U POD output circuit breaker has tripped.	Reset 2U POD circuit protectors.
2U POD circuit protectors trip after resetting.	Overcurrent on 2U POD receptacle.	Recalculate load requirements, distribute load among other 2U POD receptacles.

2U POD™

USER MANUAL

The Company Behind the Products

With over a million installations around the globe, Liebert is the world leader in computer protection systems. Since its founding in 1965, Liebert has developed a complete range of support and protection systems for sensitive electronics:

- Environmental systems—close-control air conditioning from 1 to 60 tons
- Power conditioning and UPS with power ranges from 300 VA to more than 1000 kVA
- Integrated systems that provide both environmental and power protection in a single, flexible package
- Monitoring and control—from systems of any size or location, on-site or remote
- Service and support through more than 100 service centers around the world and a 24/7 Customer Response Center

While every precaution has been taken to ensure the accuracy and completeness of this literature, Liebert Corporation assumes no responsibility and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

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