

LIEBERT GXT3-10000T230 PARALLEL SYSTEM GUIDE

A maximum of three Liebert GXT3-10000T230 UPSs can be connected in parallel if they meet these requirements:

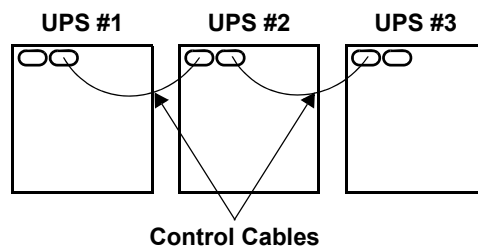
- The units are the same type and rating.
- The settings are identical.
- The UPS input and output connections have been installed according to the UPS user manual, SL-23442, available at Liebert's Web site: www.liebert.com
- Each unit has the same phase connected to the bypass terminal on the input.
- Each unit has been configured to the same nominal output voltage setting.

Input and output cabling must be sized larger to handle the higher power associated with a parallel UPS system.

1.0 INSTALLATION AND OPERATION

The parallel UPS units will be connected in a line (see **Figure 1**).

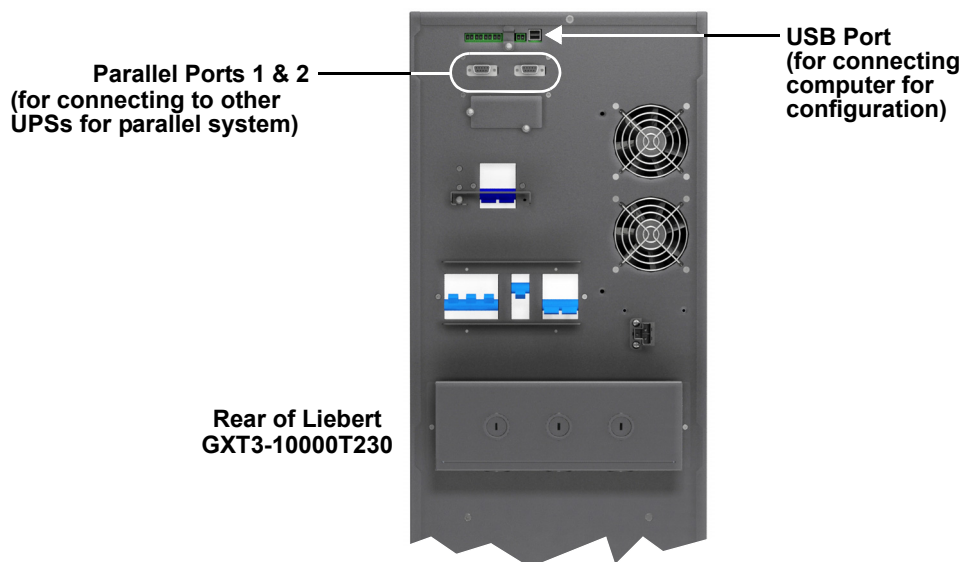
Figure 1 UPS control cable connection



To set up a parallel system:

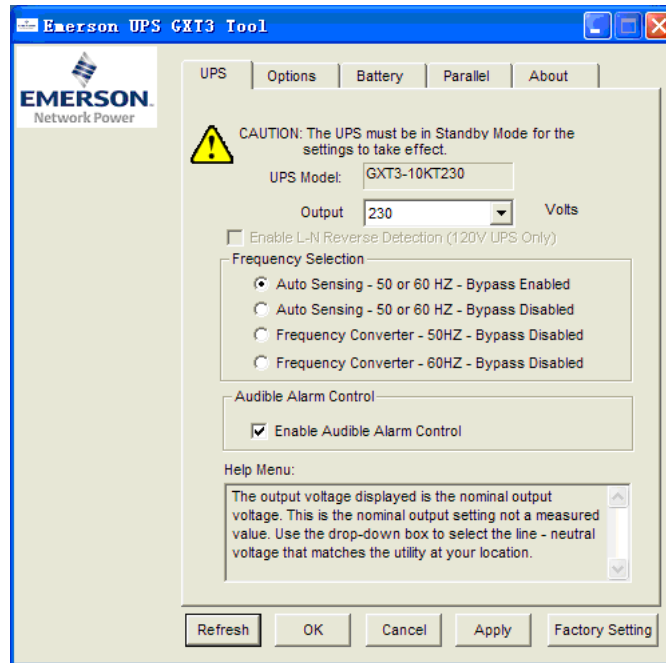
1. Switch Off the mains supply distribution.
2. Connect a factory-supplied 9-pin standard control cable to one of the parallel ports on the back of the Liebert GXT3-10000T230 (either parallel port 1 or parallel port 2). See **Figure 2** for the location of the parallel ports.
3. Set each Liebert GXT3-10000T230 to parallel mode either with a computer connected with a USB cable or with the controls on the front of the Liebert GXT3-10000T230.

Figure 2 Port locations on Liebert GXT3-10000T230

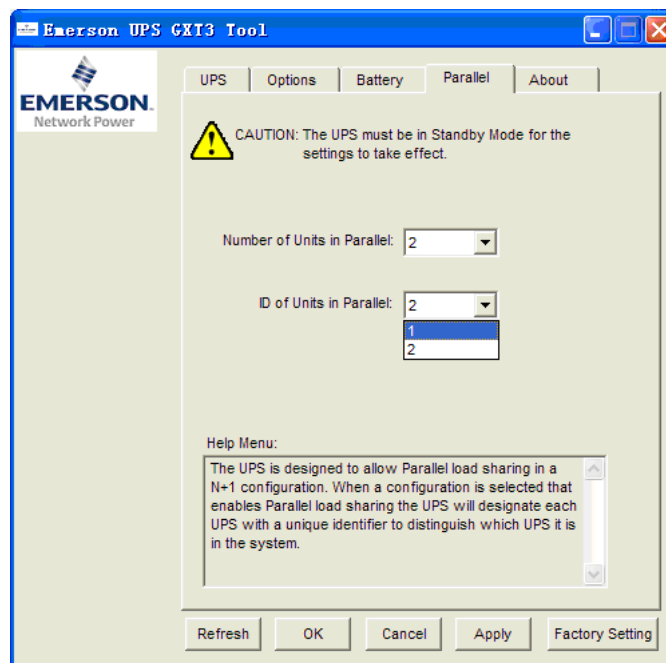


1.1 Set the UPSs to Parallel with a Computer

1. Use the supplied USB cable to connect the computer to the first Liebert GXT3-10000T230 to be configured (see **Figure 2**).
2. Close the input breakers of the UPS connected to the computer. The LCD will illuminate once the input power has been connected to the UPS.
3. Run the configuration program, **Emerson UPS GXT3 Tool.exe**, found on the supplied CD.
4. Configure the output voltage as shown in the figure below. The output voltage can be modified using the Output drop down list on the UPS tab.



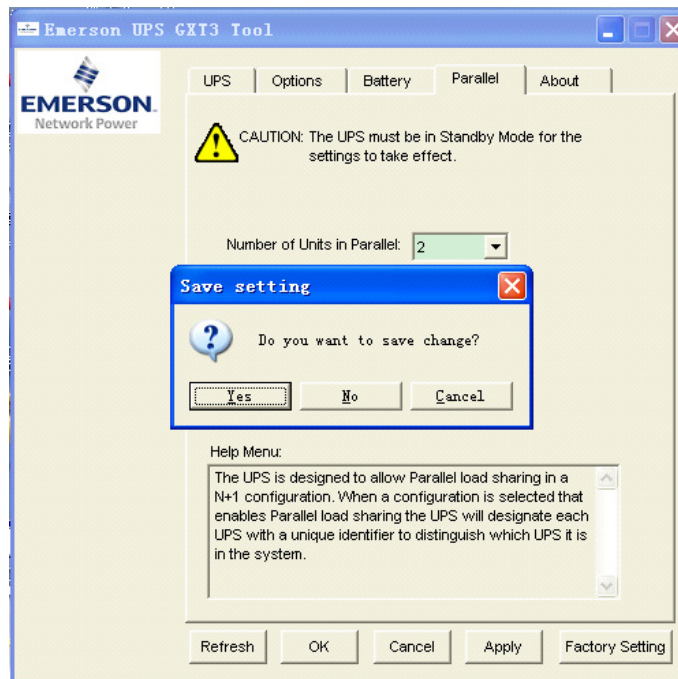
5. To set up the UPSs, select the **Parallel** tab (see below), then use the drop-down list in the Number of Units in Parallel field to set the number of UPSs that will be in the paralleled system.
6. Identify the UPS in the ID of Units in Parallel field: Select **1** for the first UPS. (Each UPS must be configured separately; when configuring the second UPS, select **2**. If a third UPS is to be configured, select **3**.)



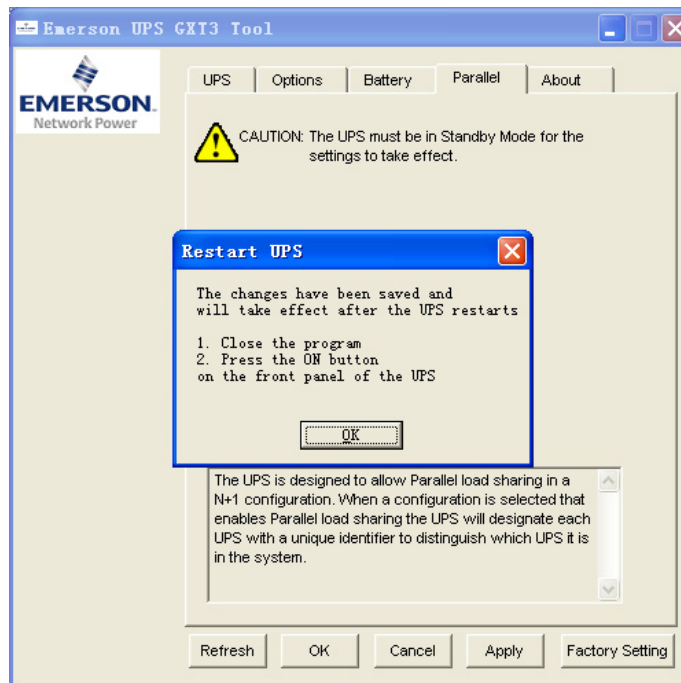
Example shows two Liebert GXT3-10000T230 units being set up in parallel. The ID of Units in Parallel drop-down list will show three digits if three units are used.

Each UPS must be configured separately. Use this screen to identify only one UPS at a time.

7. Click **OK**, then click **Yes** in the Save setting dialog box, shown below.



8. Click **OK** in the Restart UPS dialog box to save your configuration and exit (see below)



9. Repeat **Steps 1** through **8** to set up the other units that will be in the paralleled UPS system.



NOTE

Ensure that the settings of all the units in parallel are identical. If the settings are not identical, the parallel system will not function properly.

1.2 Set the UPSs to Parallel with the UPS's Integral Controls

1. Close the input breakers of the UPS. The LCD will illuminate.
2. Press the Enter key to access the main menu.
3. Press the Down arrow to scroll down the menu.
4. Select **SETUP** and press the Enter key.
5. Select **No. of Unit** and press the Enter key; the LCD will display **1, 2, 3** to permit setting the number of Liebert GXT3-10000T230 UPSs that will be in the paralleled system.
6. Select the correct digit for the number of UPSs that will be in the paralleled system, and press the Enter key.
7. Press the Enter key again to confirm the setting.
8. Scroll through the SETUP menu to the UPS Addr field and press the Enter key. The LCD will display the number of UPSs to be paralleled:
 - **1,2** if **2** was selected in **Step 6**—two UPS units will be in the paralleled system.
 - **1,2,3** if **3** was selected in **Step 6**—three UPS units will be in the paralleled system.
9. Select **1** as the address for the first UPS in the paralleled system.
10. Repeat **Steps 1** through **9** to configure the remaining UPSs to be in the system, except select **2** for the parallel ID of the second UPS in **Step 6**. If the paralleled system has three UPSs, select **3** for the third UPS.

2.0 START THE UPSs

1. Use the buttons on the front of the first Liebert GXT3-10000T230 in the paralleled system to select the **Control** menu in the main menu list.
2. Press the Enter button to enter the Control menu.
3. Select **Turn On** and press the Enter button; confirm the operation to turn the UPS On.
4. Repeat **Steps 1** through **3** on the second Liebert GXT3-10000T230 and then on the third UPS.

The inverter indicators illuminate indicating that the parallel system is ready to supply the load.

Connect the load to the UPS output distribution; the load is spread evenly across all the UPSs in the paralleled system.



NOTE

If the UPS signals an overload warning, verify that all of the output circuit breakers are closed.

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