



## **Enpac 2500 Version 2.0**

### **What's In These Release Notes**

These release notes correspond to the Enpac 2500 operating system update, version 2.0. Use this version of the operating system with the following:

<b>Product</b>	<b>Compatible Version</b>
Emonitor software	3.3 SR070628 or later

The release notes provide the following information.

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### **Version 2.0 Enhancements**

This section describes the new features in the Enpac 2500 version 2.0 operating system.

#### **Speed Reference Point**

This version of the Enpac 2500 has the ability to determine the speed using a frequency reference item in Emonitor. This allows for machine speeds to be stored and retrieved dynamically.

The speed reference can be configured as a manual entry or a tachometer (external or internal) and its value is used by the frequency items to calculate the Fmax of the dependent measurements. The speed reference frequency is set up in the Frequency Item pane in Emonitor.

#### **SD Memory Cards**

The SD memory card has been added as an option to the Route Memory parameter in the Instrument Setup. You can use the SD card to load and unload lists from Emonitor.

The Enpac supports up to 4 GB in size and 60X speed. The Enpac also supports a PCMCIA to SD converter.

## Multiple Collection on a Single Point

The Enpac can now collect multiple readings for a single measurement point. The Enpac can store up to ten additional measurements for the same measurement point. These additional measurements can be unloaded to your database if so desired.

When you collect more than one spectrum for a point, the Enpac can display the spectrum in a waterfall plot. This enables you to view several measurements in relationship to each other.

To support the multiple collection features, two new parameters have been added to the Instrument Setup – Hist. Data Collect and Hist. Data Review. These parameters allow you to set up how the additional data will be stored and reviewed in the Enpac.

## Diagnostic Frequency Cursor

You can now use a special cursor to identify frequency items on a spectrum in the Enpac 2500. The frequency labels are downloaded from Emonitor with your route. These diagnostic frequencies are the output items from the Frequency Items pane in Emonitor.

## Peak-Hold and Exponential Averaging

Two additional averaging options are now supported – peak-hold and exponential averaging. You can use these averaging options in your route and off route measurements.

## Order Tracking

The Enpac now supports the specification and collection of a spectrum with an Fmax defined in terms of number of orders for a varying machine speed.

With order tracking, the sampling rate is not fixed during the collection period. Instead, the time spacing between the samples may be constantly varying so that a fixed number of samples per shaft revolution is collected. The X-axis of the time waveform is no longer measured in seconds, but instead it is measured in degrees or shaft position. From this the corresponding spectral information is no longer measured in Hz or CPM, but in orders.

To collect Orders Track spectra, you must use a trigger such as a laser tachometer. This can be the internal laser tachometer or an external tachometer.

There are two requirements for implementing this feature. The Fmax value must fall within the range of 10 to 5000 Hz, and the machine speed may not vary by more than 10% during the measurement collection.

## Route Collection Enhancement

The Enpac can now remember the last collection point taken prior to turning off the collector or exiting a route.

## Review Data from Data Collection Screen

The Review Data function is now available in the Data Collection screen. This allows you to review collected data within the route.

## Date Added to Main Menu

The date set in the Instrument Setup screen is now displayed on the Main Menu screen. This makes it easier to verify the date before you start collecting data.

## Corrected Anomalies

Table 1 describes the anomalies corrected by this version of the Enpac 2500 operating system.

**Table 1 Corrected Anomalies**

<b>Anomaly</b>	<b>Description</b>
Memory address labels incorrect in the registry.	The WinsorDL download utility program did not correctly store the memory address labels in the registry.
Possible issues with the memory card.	Intermittently the Enpac 2500 did not recognize the memory card.
Orbit measurements might not get stored during data collecting.	The Enpac 2500 did not store the orbit measurements when the number of lines in the collection specification was greater than 400.
Orbit measurements might not display on the screen during data collection.	Orbit readings taken from a Bentley Nevada panel did not display on the Enpac 2500 screen when you set the Auto Advance parameter to ON in the Instrument Configuration screen.
Orbit plots might not be displayed properly.	The Enpac displayed two time waveforms instead of an orbit plot when reviewing off route orbit data.
Possible performance issues.	Improved the data collection performance.

## Operating System Upgrade Procedures

Below are the procedures to upgrade your Emonitor software and the Enpac 2500 firmware.

### Upgrading Emonitor Software to Service Release SR070628

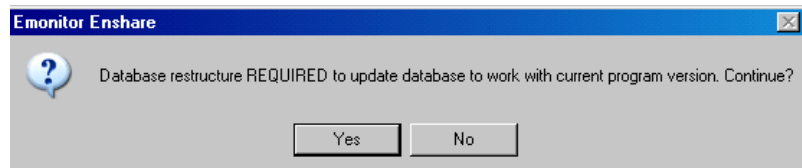
The Enpac 2500 version 2.0 operating system requires Service Release SR070628. The Service Release file is located on the Enpac 2500 CD in the \\Service Release\\SR070628 directory.

Service Release SR070628 is only for Emonitor version 3.3. Emonitor must be upgraded to version 3.3 before you can install this Service Release. You must install this Service Release on every PC that has Emonitor installed.

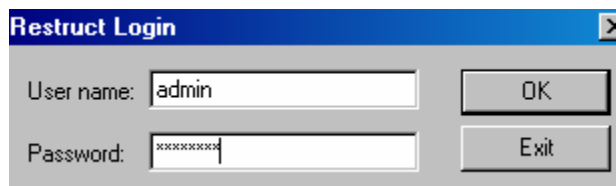
Updating Emonitor also requires updating the database structure. The restructure program automatically starts when you start Emonitor for the first time after the upgrade. The restructure program will have to be performed on all installed databases.

To install the Service Release and restructure the database, follow these steps.

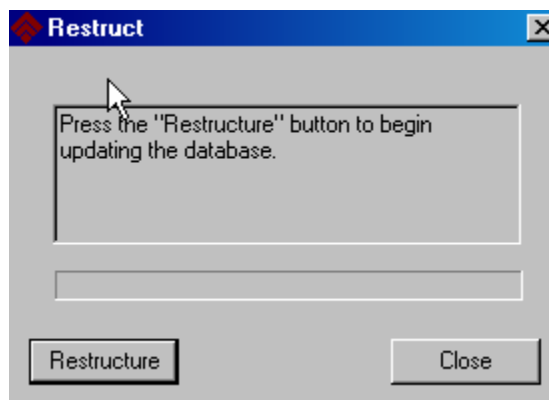
1. Back up your database before updating your Emonitor software and make sure no users are connected to the database.
2. Insert the Enpac 2500 v.2.0 CD-ROM into the CD-ROM drive of the computer.
3. Double click on the SR070628.exe file located in the \\Service Release\\SR070628 directory. It should automatically extract and install the needed files.
4. When the installation is complete, click **Finish**.
5. Start your Emonitor software from the **Start** menu. Click **Yes** to update your database. The restructure program automatically starts.



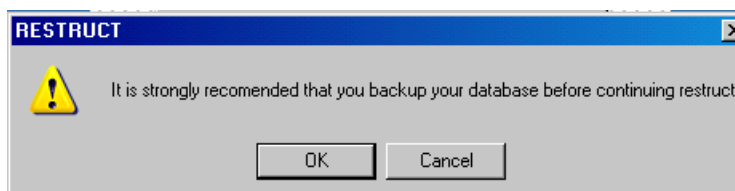
6. Enter in your Emonitor User name and Password and click **OK**. Make sure you have administration rights. The default user name is admin. The default password is password.



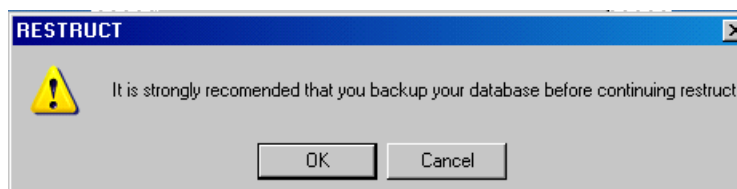
7. Click **Restructure** to begin the update process.



8. Make sure you have backed up your database, then click **OK** to continue.



9. Make sure that no users are still attached to the database, then click **OK** to continue.



10. When the process is finished, click **Close**. You can now run the new version of Emonitor.

**TIP**

The amount of time needed for this process depends on your processor speed and the amount of RAM available.

## Upgrading Enpac 2500 Operating System

The Version 2.003 firmware file and the WinSerDL download utility are located on the Enpac 2500 CD in the OpSys directory.

To load the Version 2.0 operating system, follow these steps.

1. Press the ON/OFF key for one second to power off the Enpac 2500.
2. Attach the charger adapter and make sure the unit is powered.
3. Using a flat head screwdriver, loosen the two 1/4 turn fasteners on the battery access panel and remove the battery access panel.
4. Press the Reset switch using a 1/16th inch diameter pin or a straightened paper clip and press the LEFT and RIGHT ARROW keys.

The data collector will display the Engineer Mode Menu screen.

5. Replace the battery access panel and tighten the two 1/4 turn fasteners.
6. Connect the Enpac 2500 to the computer with an RS-232 serial cable.
7. Insert the Enpac 2500 v.2.0 CD-ROM into the CD-ROM drive of the computer.
8. On the taskbar, click the **Start** button, and then click **Run**.
9. Type `x:\OpSys\2500download.bat` (where x is the drive letter for your CD-ROM drive), and click **OK**. The WinSerDL dialog appears. Make sure the correct **Com Port** is selected.
10. From the Engineer Mode Menu screen, press 2 on the data collector's numeric key pad to start the transfer.
11. In the WinSerDL dialog, click **Start Download**.

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**IMPORTANT**

This must be done 5 to 10 seconds of pressing 2 on the unit or the Enpac 2500 may timeout.

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A progress bar displays in the dialog indicating the progress of the transfer. A progress bar also displays at the bottom of the Enpac 2500 screen. This transfer may take as long as 20 minutes.

When the transfer is complete, the message "Transfer complete" displays in the WinSerDL dialog and the Engineer Mode Menu screen reappears.

12. Close the WinSerDL dialog and disconnect the Enpac 2500 from the computer.
13. From the Engineer Mode Menu screen, press 1 on the data collector's numeric key pad to boot the Enpac 2500. Allow the unit some time to update.

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**IMPORTANT**

It will be necessary to re-enter the date and time in the Enpac 2500.

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**TIP**

To confirm that the correct version was loaded, press F3 (About) on the Main Screen. The Firmware Version should match the operating system file just loaded.



## Rockwell Automation Support

Rockwell Automation provides technical information on the web to assist you in using our products. At <http://support.rockwellautomation.com>, you can find technical manuals, a knowledge base of FAQs, technical and application notes, sample code and links to software service packs, and a MySupport feature that you can customize to make the best use of these tools.

For an additional level of technical phone support for installation, configuration and troubleshooting, we offer TechConnect Support programs. For more information, contact your local distributor or Rockwell Automation representative, or visit <http://support.rockwellautomation.com>.

## Installation Assistance

If you experience a problem with a hardware module within the first 24 hours of installation, please review the information that's contained in this manual. You can also contact a special Customer Support number for initial help in getting your module up and running:

United States	1.440.646.3434 Monday – Friday, 8am – 5pm EST
Outside United States	Please contact your local Rockwell Automation representative for any technical support issues.

## New Product Satisfaction Return

Rockwell tests all of our products to ensure that they are fully operational when shipped from the manufacturing facility. However, if your product is not functioning and needs to be returned:

United States	Contact your distributor. You must provide a Customer Support case number (see phone number above to obtain one) to your distributor in order to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for return procedure.

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