Reliable Power Meter's

Power Recorder System Report Writer Guide

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Getting Started

This guide tells you how to install and use the Report Writer option in the Power Recorder System software. It assumes that you have already installed and are already familiar with the main features of the Power Recorder System Software. If you need further information, see the *Power Recorder System Software User Guide*.

Requirements

In order to use the Report Writer, you must have:

- Power Recorder System Software from RPM running on a PC-compatible computer.

  If you already own the basic Power Recorder System software, you can purchase the Report Writer as an add-on package. If you have not yet purchased the Power Recorder System software, you may purchase a combined Power Recorder System + Report Writer package. For more information, contact Reliable Power Meters.

- Microsoft Word Version 6 or later.

  Note: If you are using Microsoft Word Version 6 under Windows 95 or Windows NT, you will need to use standard DOS names (up to eight characters) instead of long file names. If you installed the Power Recorder System software in a folder with a long file name, be sure to rename it before using the Report Writer.

Installing the Report Writer Software

The Report Writer software can be installed as an additional step when you install the Power Recorder System software, or it can be installed at a later time, as an add-on to the Power Recorder System.

NOTE	If you are upgrading to a new version of the Power Recorder System Software, follow the instructions in Appendix C of the *Power Recorder System User Guide*.

To install the Report Writer software when you install the Power Recorder System software

1. Follow the instructions for installing the Power Recorder System software.
2. When the installation asks if you are also installing upgrade products, mark the box next to Report Writer.
3. Click Next and follow the remaining prompts on the screen.

To install the Polling software as an add-on

If you're using Microsoft Windows 95 or Windows NT 4.0

1. Insert the first Report Writer floppy in drive A.
2. Click **Start**, **Settings**, **Control Panels**, **Add-Remove Programs**.
3. In the Add-Remove programs window, click the **Install** button.
4. Click the **Next** button.
5. Navigate to drive A, if necessary and select SETUP.EXE.
6. Click the **Next** button and follow the remaining prompts to add the Report Writer upgrade to your existing Power Recorder System software.

If you're using Windows NT 3.51

1. Insert the first Report Writer floppy in drive A.
2. From the Program Manager **File** menu, choose **Run**.
3. In the RUN dialog box, type A:SETUP and click **OK**.
4. Follow the prompts on the screen.
5. The Power Recorder System Software is updated to include the Report Writer software.

You can confirm that the Report Writer has been accurately installed by checking the toolbar in the Power Recorder System window. The Report Writer tool should now be active rather than dimmed.

Notes for Windows NT Users

This manual uses screenshots and examples based on Windows 95. If your computer uses the Windows NT operating system, these examples may not match what you see on your screen.

For details about the Windows NT desktop and interface, see the documentation from Microsoft that came with the operating system. If you don't understand how the RPM Power Analysis System Software works with a particular Windows NT feature, contact Customer Support at Reliable Power Meters.

About the Report Writer

The Power Recorder System Report Writer works with Microsoft Word to build reports using the data you've retrieved through your Power Recorders. You can use the reports as they are initially created, or revise them to meet your needs.

Note: You must have Microsoft Word Version 6 or later installed on your computer in order to use the Report Writer. (You do not have to start it first.)

The Report Writer creates a report detailing the information you've downloaded from a Power Recorder at a specific location. You specify what information should be included. You can choose to include

- Initial Conditions
- Events
- Voltage, Current, and Frequency
- Voltage and Current Distortion
- Power Summaries

In addition, you can customize exactly what information should be included for each of these items, and you can specify minimum and maximum thresholds so that events that pass those limits are marked.

Getting the Best Results from Your Report

Before you use the Report Writer tool, review the following information to find out how to get a report that best suits your needs.

Change the colors for the graphs

The Report Writer takes snapshots of the screens you see in the Power Recorder System software and includes them in the report. The colors normally used to display the power data and summary graphs on the screen may not be the best ones to print for a report. You can use the **Color** command on the **Options** menu to change the colors of the different screen elements, and if you open a graph before choosing the **Color** command, you can see the effect of each change as you make it.

- Change the Interior Fills from black to white. (This is especially important if you are using an ink-jet printer!)
- If you'll be including phasors in your report, make sure the phasors are visible. If necessary, change the text to black.
- Change the Summary Min/Max lines to a light yellow or black. Light yellow prints as an attractive gray on many black-and-white printers. Or, if you want to turn off the Min/Max lines, change them to white, to match the Interior Fills color.

You can also use the Monochrome setting, which uses a white background with black text and lines.

Note: If you select a color (such as light yellow) and the element you selected appears as gray in your graph instead of as the color, your display settings are probably set to 256 colors. If you want to see the colors you selected in your graph, use the Display Control Panel under Windows 95 or Windows NT 4.0 and change the Color Palette to Hi Color (16 bit) or True Color (24 bit).

Make sure the Full Scale settings for voltage and current are suitable for graphics

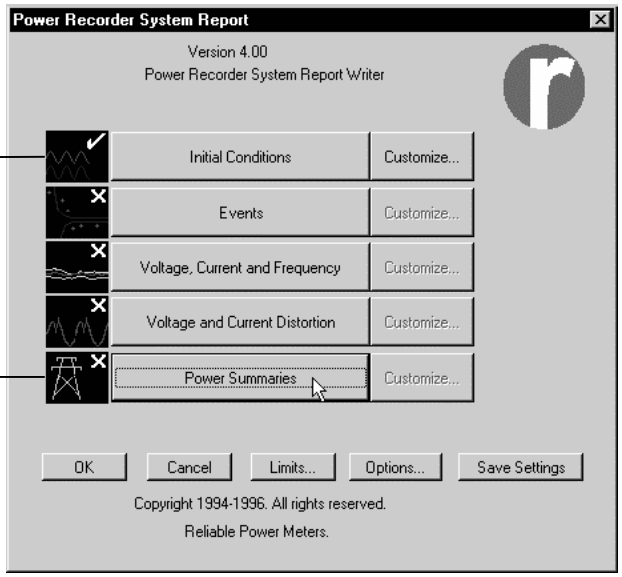
If you've changed the Full Scale Settings using that command on the Options menu, review the Scope tool graphs to make sure they appear appropriately. If necessary, adjust the Full Scale Settings.

Print one topic as a test

It's a good idea to print a "test" report the first time, to make sure you have the settings you want. Reports that include all the topics can take a significant time to process and may use 10MB or more of disk space.

The main Report Writer dialog box lets you specify exactly what information will be included in a report. You may want to print only one topic from this dialog box the first time.

A checkmark indicates a topic will be included. An "x" indicates the topic will be excluded.



Note: When all topics are selected, it can take more than fifteen minutes to generate a three-phase report on a 80486, 33MHz computer. A Pentium 133MHz computer with 32 MB RAM will usually generate a report in less than three minutes.

Consider printing and not saving

Because Power Recorder reports can easily use up to 10MB of disk space each, you may want to print your reports and not save them on your hard drive (you can always generate them again at another time).

For reports you decide to save, you can use them in their standard form or make additional changes to meet your needs.

You can customize the report templates

The Report Writer uses templates to create reports from the Power Recorder System software. You can edit these templates to include your own logo, boilerplate, or introductions to sections. You'll find them in a folder named "Reports" in the directory that contains your Power Analysis System software.

The Report Writer includes five templates:

- RPRpt1Ph.Doc is used for Single phase power types.
- RPRpt2Ph.Doc is used for Split Single phase power types.
- RPRpt3PD.Doc is used for Three Phase Delta phase power types.
- RPRpt3PY.Doc is used for Three Phase Wye phase power types.
- RPRpt25P.Doc is used for 2 ½ Element power types.

Caution: Before you edit any of these template, be sure to make a copy of them and save the copy in a safe place. Then, before making any changes, turn on the display of all non-printing characters so that you won't accidentally delete important elements. The templates contain embedded commands formatted as hidden text.

Creating a Report

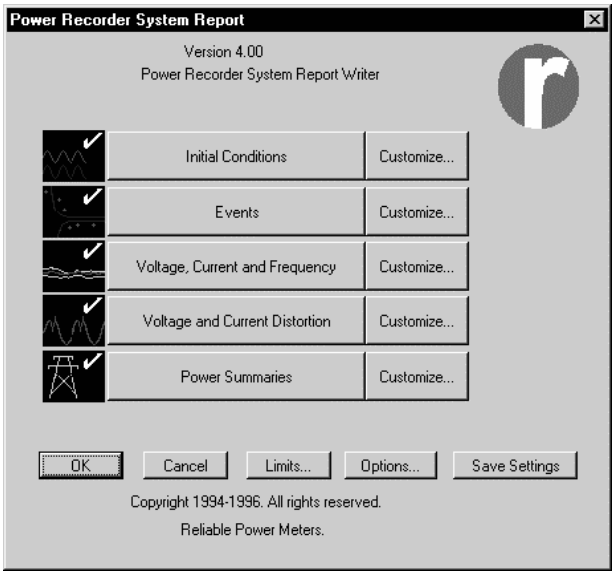
You start and use the Report Writer from the Power Recorder System Software.

To create a report using the Report Writer

1. In the Power Recorder database, select the location for which you want to generate a report.
2. Use the **Colors** command on the **Options** menu to display the colors you want to use in your report.

   For details see "Change the Colors for the Graphs" on page 7.
3. Click the Report Writer button.

   Microsoft Word opens and the main Report Writer dialog box appears.



4. Select which information you want to include in the report.

   Topics with checkmarks will be included.

   To exclude a topic, click the button for that section; the checkmark changes to an X.

Initial Conditions reports on Waveshape and Scope data. Normally this will be the conditions present at the onset of monitoring, unless you use the Capture tool to capture the scope settings at another time.

Events reports on the Power Tolerance curve and Event History data.

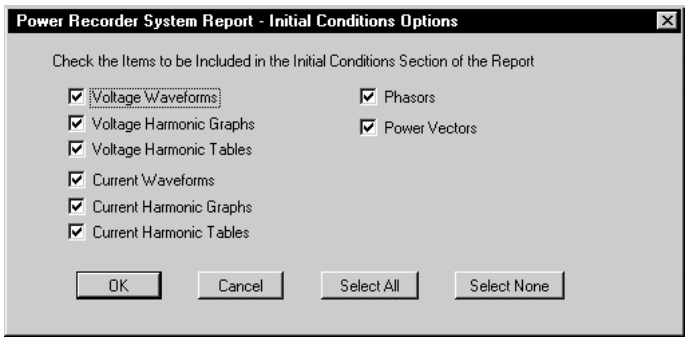
Voltage, Current, and Frequency reports on the Power Recorder System VIF data.

Voltage and Current History reports on the Distortion data.

Power Summaries reports on the Power data.

5. To see and select what specific items will be included for each topic in the report, use the **Customize**... buttons.

   For example, when you click the **Customize...** button next to **Initial Conditions**, this dialog box appears:



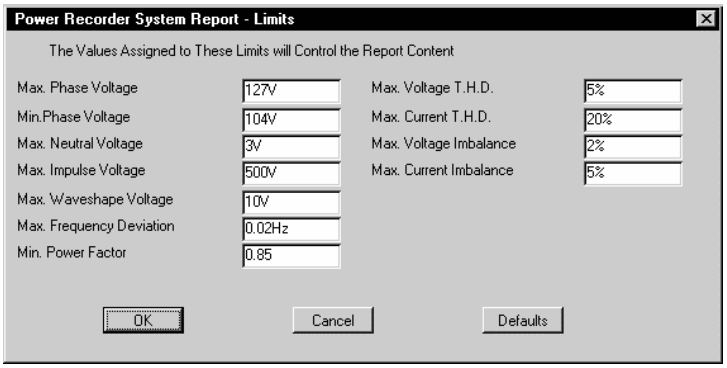
   The dialog box contains different customizing options for each topic.

   To exclude an item from the report, click on the box next to it. The "x" will be removed from the box.

   Click **OK** when you're done.

6. To set the minimum and maximum thresholds to be to be used in the report, click the **Limits** button at the bottom of the main Power Recorder System Report Writer dialog box.

   The Power Recorder System Reports - Limits dialog box appears.

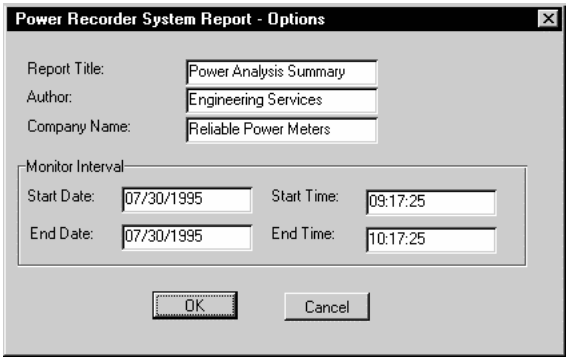


The default values shown are based on the nominal voltage level set in the Power Recorder. You can change each value to the specific limits you want. When monitored data exceeds the limits you specify here, it will be marked in the report with an asterisk to indicate that it is out of tolerance.

Click **OK** to return to the main Power Recorder System Report dialog box.

7. To specify a title, author, and company for the report, click **Options**.

   The Power Recorder Report Options dialog box appears.



   Enter the title, author, and company name you want to be used in the report.

8. To limit the report to a specific timeframe, in the Options dialog box, enter the starting and ending date and time of the monitoring interval you want the report to span.

9. Click **OK** to close the dialog box and return to the main Power Recorder System Report Writer screen.

10. If you want to save the settings for the next time you use the Report Writer, click **Save Settings**.

11. Click **OK** in the main Power Recorder Report Writer dialog box to start the report.

    Using the information for the current location in the Power Recorder System software, a report is created as a Microsoft Word document.

    The Report Writer software processes the template, extracts the appropriate graphs and tables from the Power Analysis Software database for the active location in the software, and inserts them in the written text in the template.

    Note: When all items are selected, it can take more than fifteen minutes to generate a three-phase report on a 80486, 33MHz computer. A Pentium 133MHz computer with 32 MB RAM will usually generate a report in less than three minutes.

12. When the report is finished, you can print or save it in a file.

    If you save the report, it is a standard Word document. You can make additions and changes to it as you wish.

    Remember: Power Recorder reports can easily use up to 10MB of disk space each; you may not want to save each one on your hard drive (you can always generate them again at another time).

Trouble Shooting

Symptom:

Error 102 from Microsoft Word while generating a report about three-phase wye or three-phase delta power.

Problem:

Microsoft Word Version 7 can run out of resources when a large number of high-color color bitmaps have been added to a document. This can occur when you are displaying more than 256 colors.

Solution:

There are several work-arounds for this problem. You can:

- Reconfigure Windows for 256 colors or fewer using the Display control panel.
- Produce the report in smaller sections. To do this, select only some of the report options in one report, and select the others in a second report.
- Update to Microsoft Office97. (Word 8 does not have this problem.)