Before You Begin

Who Should Read this Guide

This guide contains information about installing and using Energy Trending (NetPower Trend).

This guide assumes that you have a working knowledge of Microsoft Windows and that you can perform basic tasks such as moving, sizing, and switching between windows, using the scrollbar, and so on. If you are new to the Windows environment, it is strongly recommended that you read the Windows documentation or view the Windows on-line help or tutorial.

This section contains information you should be aware of prior to installing or using the PowerNet Software applications, including:

♦ How this guide is organized.

♦ The conventions used in this guide, such as how information is presented visually and how keyboard and mouse instructions are presented.

♦ How to contact Product Support.

♦ A list of additional documentation that might be helpful.

How This Guide Is Organized

This guide is divided into the following chapters:

Chapter 1: Overview contains an overview of NetPower Trend.

Chapter 2: Getting Started contains information on NetPower Trend software and license installation, and explains the NetPower Trend main window and its commands.

Chapter 3: NetPower Trend Plot Groups describes how to set up plot groups for energy users or IMPACC meters.

Chapter 4: Manually Generating, Viewing, and Managing NetPower Trend Plots describes how to generate and interpret NetPower Trend plots.

Chapter 5: Using the Automatic Scheduler describes how to set up the NetPower Trend Automatic Scheduler to automatically generate plots at periodic intervals for the plot groups you defined.

Appendix A: How NetPower Trend Calculates Data Points describes how NetPower Trend calculates data points for each type of plot.

Appendix B: Memory Considerations describes how NetPower Trend uses memory and the relation between the available computer resources and the capabilities of NetPower Trend.

Appendix C: Configuring Data Sources describes how to set up data sources.

Appendix D: NetPower Trend / Energy Logging Supported Devices describes important information about the devices that NetPower Trend supports, including rollover values and database fields used in computing energy usage.

Index contains a comprehensive reference list of PowerNet Software terms along with the pages in this manual on which they occur.

Document Conventions

This guide uses certain conventions to describe how to perform tasks and to help you locate information quickly. These conventions are categorized as follows:

♦   Visual—how information is visually presented in this manual.

♦   Keyboard—how keys and keystrokes are represented in this manual.

♦   Mouse—how you will be expected to use a mouse. For example, an instruction to click on an item means that you should point to the item and click once with the left mouse button

The following sections describe these conventions in detail.

Visual

This guide uses certain visual cues to emphasize important information.

Background or reference information is placed in a *note box*. An example is shown below.

Note
Information relevant to the task is located in a note box.

Information that is critical or which might warn you about a potential problem is placed in an *important box*. An example is shown below.


Important
Information important to completing the task or warning you of possible problems is located in an important box.

You will sometimes be instructed to *type* a command. For example, during installation, you might choose to manually type the command **a:\setup.exe** rather than using the Browse button to find and select the setup file. When instructing you to type specific words or characters, this manual will show the words or characters in bold. What you should type is shown in lowercase letters unless it must be typed in uppercase or mixed case to work properly.

Keyboard

The keyboard contains certain function and non-typing keys. Windows controls the functions that many of these keys perform. In addition to their standard Windows uses, some keys have a specific use in the PowerNet Software applications. The following table identifies the keys that are used in the applications, indicates how they are represented in this guide, and lists the tasks they perform:

Key	Represented As	Purpose
Home	[Home]	Moves the locator bar to the beginning of the line or list
End	[End]	Moves the locator bar to the end of the line or list
←	left arrow	Moves the locator bar left one position
→	right arrow	Moves the locator bar right one position
↑	up arrow	Moves the locator bar left one position (same action as the left arrow)
↓	down arrow	Moves the locator bar right one position (same action as the right arrow)

Sometimes you will be required to press a combination of keys. For example, you might be instructed to press [Ctrl][P]. This means that you should hold down the [Ctrl] key and press the letter "P."

Also, you can access any menu or command located in the main window by holding down the [Alt] key and pressing the underlined letter of the desired option. For example, you can access the File menu by pressing [Alt][F]. The Options menu would appear if you pressed [Alt][O], and so on.

You may enter information into a PowerNet Software application, using either the keyboard or the mouse. To enter information using the keyboard, see the section *Using the PowerNet Software Window Elements*.
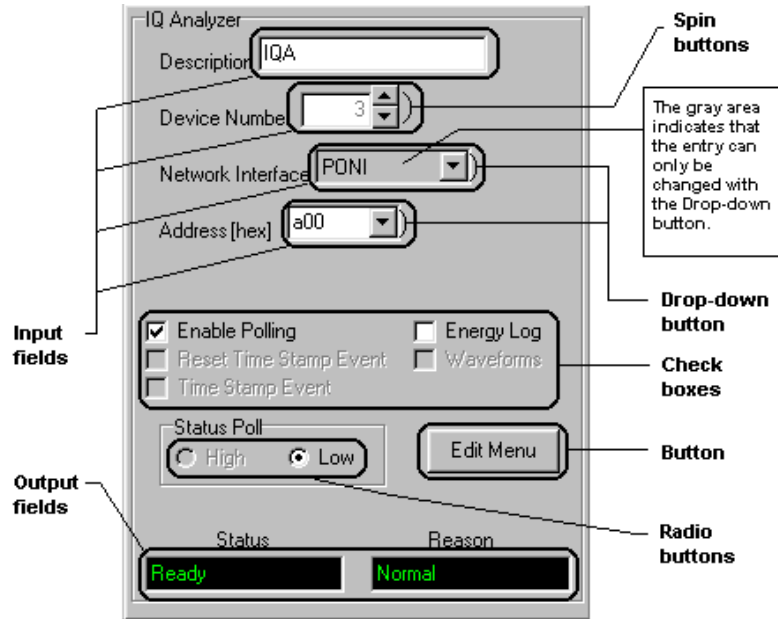
Mouse

The following table contains mouse-related terms and information with which you should be familiar before using this guide. Please refer to the Microsoft Windows User Guide for more information about using a mouse.

Term	Description
Left mouse button	The primary mouse button, unless you have configured your mouse differently. When this guide instructs you to click on an item, you should point to it and press the left mouse button once. For information about configuring a mouse, refer to the Microsoft Windows documentation.
Right mouse button	The secondary mouse button, unless you have configured your mouse differently. Use the right mouse button only when this guide specifically instructs you to do so.
Pointer	The white arrow that you can move around the screen using the mouse.
Point	Means to position the pointer so that it is resting on the desired item on the screen.
Click	Means to quickly press and release the left mouse button once without moving the mouse. When this guide tells you to click on an item, you should point to that item and then click.
Double-click	Means to quickly press and release the left mouse button *twice.*
Drag-and-drop	Means to click on a selected item and hold the left mouse button while you move the cursor to another position. Once the cursor is in the correct position, you release the mouse button to drop the selected item in the new position.

You may enter information into a PowerNet Software application, using either the keyboard or the mouse. To enter information using the mouse, see the section *Using the PowerNet Software Window Elements*.

Using the PowerNet Software Window Elements

To enter information into a PowerNet Software application, you use either the keyboard or the mouse. The following picture shows a typical application window and its corresponding screen elements.

The following tables describe these window elements.

Window Element	Input
Input Field	Keyboard (Type a name or number. If the input field is grayed out, the entry can only be selected with the drop-down button.)
	Mouse (Click the spin buttons to increment a number)
	Mouse (Click the drop-down button to pick from a list of options)
Button	Click to open or close a dialog box, or to enable or clear input settings.
Check box	Click to enable feature/clear to disable feature; multiple selections are allowed.

Window Element	Input
Radio button	Click to enable feature; only single selections are allowed.

The convention that will be used throughout this manual will be to instruct you to type information in a particular input field.

The convention that will be used throughout this manual will be to instruct you to read information that displays in a particular output field.

Product Support

The Eaton Corporation provides several types of technical support for the IMPACC family of products. The following sections describe each type of support.

Help Desk

The Power Management Application Support help desk is available 24-hours a day, seven days a week to assist you with your problems or questions.

For help by phone, please call 1-800-809-APSC(2772) or (412) 490-6714.
By fax, dial (412) 490-6712.

For help by e-mail, please mail pmpapps@ch.etn.com

The Power Management Application Support web page can be found at: http://www.ch.cutler-hammer.com/pmp/

You can also reach the support group by mail. Comments or suggestions should be directed to:

Eaton Corporation
Cutler-Hammer Westinghouse Products
Power Management Application Support
240 Vista Park Drive
Pittsburgh, PA 15205

Fax Retrieval of Engineering Documents (FRED)

You can receive product information and application notes via the Fax Retrieval of Engineering Documents (FRED) system. FRED permits you to request and receive information immediately via a fax machine.

To reach FRED, use your fax machine to call (412) 490-4710, then follow the instructions provided. FRED will ask a series of questions to which you will respond by pressing keys on your fax machine. When finished, FRED will send the requested information to your fax machine.

Additional Documentation

Other documents that you might find helpful include:

PowerNet Software User's Guide

This guide contains detailed information about installing, configuring, and using PowerNet Software.

NetPower Billing User's Guide

This guide contains detailed information about installing, configuring, and using Energy Billing.

Subnetwork, Communications, and Component Documents

Device	Document Number *	Document Title
AEM II (Assemblies Electronic Monitor)	TD 17216	Assemblies Electronic Monitor
	DB 8175	Assemblies Electronic Monitor II
	SA 1587A	Assemblies Electronic Monitor II
BIM (Breaker Interface Module)	IB 29C893	Instructions for Installation, Operation and Maintenance of Breaker Interface Module
CED (Central Energy Display)	DB 8178 TD 17527	IQ Central Energy Display IQ Central Energy Display
CMU (Central Monitoring Unit)	CS 8226	ADVANTAGE NEMA Rated Full-Voltage Magnetic Contactors and Starters
CONI III (Computer Operated Network Interface)	IL 17436 (replaces IL 17199)	Instructions for Computer Operated Network Interface Used with IMPACC Networks
MINT (Master INCOM Network Translator)	IL 17200	Instructions for Master INCOM Network Translator
	IL 17466	Instructions for Master INCOM Network Translator II

Device	Document Number *	Document Title
PONI (Product Operated Network Interface)	IL 17158A	Instructions for Product Operated Network Interface Cards Used in INCOM Networks
	IL 17361	Instructions for Product Operated Network Interface Used with Incom PowerNet Networks
	IL 17202A	Instructions for RS232 PONI Product Operated Network Interface Module

* CS–Catalog Section, IB–Instruction Book, SA–Sales Aid, DB–Descriptive Bulletin, IL–Instructional Leaflet, TD–Technical Document

Device-Related Documents

Device	Document Number †	Document Title
Accutrol 400	DB	Accutrol 400 Adjustable Frequency Motor Control
Addressable Relay	IL 17196A (model A)	Instructions for Addressable Relays Used in INCOM
Addressable Relay II	IL 17435 (model B)	Instructions for the Addressable Relay II Used in the INCOM Networks of IMPACC Systems
Advantage	CS 8226	ADVANTAGE NEMA Rated Full-Voltage Magnetic Contactors and Starters
	SA 11870	Advantage Motor Control Technical Data
Advantage Control	CS 8226	ADVANTAGE NEMA Rated Full-Voltage Magnetic Contactors and Starters
Advantage Control Module (ACM)	CS 8226	ADVANTAGE NEMA Rated Full-Voltage Magnetic Contactors and Starters
AF97	IL9075A05	Installation, Setup, and Maintenance Manual
Analog Input Module (AIM)	Not Yet Available	

Device	Document Number †	Document Title
Digitrip 1150	Not Yet Available	
Digitrip 3000	IL 17555	Instructions for Installation and Maintainence of the Cutler-Hammer Digitrip 3000 Protective Relay
Digitrip MV	32-266	Digitrip MV
	SA 12020	Westinghouse Digitrip MV Circuit Protection
	DB 33-750	Digitrip MV Trip Unit
	IB 33-740	Instructions for Installation, Operation and Maintenance of Digitrip MV
Digitrip OPTIM	IL 29C890	Instructional Overview for Use of the Digitrip OPTIM Trip Unit System
	IL 29C891	Instructions for Installation, Operation and Maintenance of Westinghouse Digitrip OPTIM
	IL 29C892	Instructions for Operation of Westinghouse OPTIMizer Hand Held Programmer
Digitrip RMS	SA 11581A	Digitrip RMS
Digitrip RMS T700	IL 29-853	Digitrip RMS T700
Digitrip RMS T800 and T810	IL 29-854	Digitrip RMS T800
Digitrip RMS T910	IL 29-889	Instructions for Westinghouse Digitrip RMS 910
IQ 500	CS 8177	IQ-500 Modular Overload Relay
	TD 17287A	The IQ-500 Modular Overload Relay
IQ 1000, IQ 1000 II	TD 17194	IQ 1000
	SA 11488	IQ 1000
	DB 8173	IQ 1000 II

Device	Document Number †	Document Title
IQ Analyzer	DB 8179	Westinghouse IQ Analyzer
	TD 17530	Instructions for the installation, operation, and maintenance of the Westinghouse IQ Analyzer Electrical Distribution System Monitor
IQ Data	DB 8171	IQ Data
	TD 17283B	IQ Data Line Metering System User's Manual
IQ Data Plus, IQ Data Plus II	TD 17195	IQ Data Plus Line Metering and Protection System User's Manual
	SA 11479	IQ Data Plus
	DB 8170	IQ Data Plus II
	TD 17271A	IQ Data Plus II Line Metering and Protection System User's Manual
IQ Data Plus II HV	DB 8176	IQ Data Plus II HV
	TD 17296	IQ Data Plus II HV Line Metering and Protection System User's Manual
IQ DP 4000	TD 17548	Instructions for Installation, Operation and Maintenance of IQ DP 4000 Electrical Distribution System Monitor
IQ Generator	DB 8172	IQ Generator
	TD 17284B	IQ Generator Line Metering System User's Manual
IQ Sentinel	DB 8178	IQ Energy Sentinel
IQ Power Sentinel	IL 17553	Installation Instructions for IQ Power Sentinel - Internal CT
MPCV	IB 35-581B	(MPCV)
Universal RTD	IL 7367	Instructions for Universal Resistance-Temperature Detector (RTD) Module

† CS=Catalog Selection; IB=Instruction Book; SA=Sales Aid; DB=
Descriptive Bulletin; IL=Instructional leaflet; TD=Technical Document