# **User's Guide**

# **PowerAlert<sup>®</sup>** Local Software

**Note:** PowerAlert is not required to operate your UPS System. For the latest PowerAlert updates, go to www.tripplite.com

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# **1. Introduction**

Intended for home and small business applications, PowerAlert Local (PAL) software installs on a desktop PC or networked server and allows the computer to communicate with a UPS system through a serial or USB cable connection. This software can be used to monitor power conditions, control your UPS system and enable automatic computer shutdown in the event of a power failure.

PAL also allows your UPS system to appear as an SNMP-manageable device on your network, enabling remote monitoring and control via PowerAlert Network Management System (PANMS) software or a third-party Network Management System. If you have two UPS systems connected to a computer to provide redundant backup power, PAL can manage both UPS systems. The latest version of PAL has a self-contained, compatible version of Java Runtime Environment (JRE), which allows it to operate independent of any other JRE version installed on the computer.

## 2. Requirements

PAL works with Microsoft Windows and Linux computing platforms. The minimum system requirements for each platform are:

#### Windows 7, 8, 10 (32 & 64 bit), Server 2008, 2012, 2016 (32 & 64 bit)

- Pentium 4 CPU
- 256 MB RAM
- Available USB or serial port
- TCP/IP network connection (required in order for the UPS system to appear on the local network as an SNMP-manageable device)

#### Linux

- Fedora 8 or OpenSUSE 11
- Supported RS-232 and USB UPS
- Available TTY port
- Open 3664 and 3665 ports (any firewall)
- Root user privileges (required for installation)

# **3. Installation**

Download the latest PAL installer from the Downloads tab at the following URL: https://www.tripplite.com/products/power-alert-local

## **3.1 Windows Installation**

Using a USB or serial (DB9) cable, connect a communications port of your UPS system to a corresponding communications port of your computer. If your computer will be backed up by redundant UPS systems, repeat this cable connection procedure for the second UPS system.

Open the downloaded PowerAlert Local folder and double click on the **pal-12.xxxx86.exe** file, then follow the on-screen prompts.

**Note:** If a previous version of PAL is already installed on your computer, the PowerAlert Local installer will attempt to uninstall it before installing the newer version. However, Tripp Lite recommends uninstalling the previous version manually prior to installation of the newer version.



Click **Next** to continue.



Review the License Agreement, select "I accept the terms in the license agreement" and click Next.

# **3. Installation**

👷 PowerAlert Local Software - InstallShield Wizard
Ready to Install the Program       The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back Instal Cancel Cancel

Click **Install** to begin the installation.

😸 PowerAlert Local Software - InstallShield Wizard							
Installing PowerAlert Local Software The program features you selected are being installed.							
17	Please wait while the InstallShield Wizard installs PowerAlert Local Software. This may take several minutes.						
	Status:						
InstallShield							
Instalishiela —	< Back Next > Cancel						

A progress indicator will display the status of the installation. It may take several minutes for the installation to complete, depending on the connection speed.

## **3. Installation**



When the installation has completed, click Finish.

## **3.2 Linux Installation**

- 1. Copy the appropriate software file to your local machine and enter the following as its root: **rpm -i <rpm-file-name**> [--**nodeps**]. Use the RPM main page to help you through any installation issues.
- PowerAlert will install to the directory /var/tripplite/poweralert, and will locate the pald daemon/service process within /var/tripplite/poweralert/engine. To control the status parameters and actions of the daemon/service, type ./[ pald] from the /etc/init.d directory.

## **4. Initial Configuration**

After installation, PAL will detect your UPS system automatically. If your UPS system is not detected, refer to section **5.5 Settings > Device** for possible solutions.

Notable default settings for PAL are shown below. If you want to change any of these default settings, refer to the indicated section for configuration instructions.

Setting	Default Value	Configuration Section
On Battery Event	Not Configured	5.6 Settings > Events
Low Battery Event	Shut Down Computer 15 seconds after Event Shut Down UPS System 2 minutes after Event	5.6 Settings > Events
Email Notification Settings	Not Configured	5.7 Settings > Contacts
SNMP Trap Settings	Not Configured	5.7 Settings > Contacts
User Level (Scheme)	Depends on UPS System Detected	5.9 Settings > Schemes
Ramp / Shed	Remain Off/Remain On	5.5 Settings > Device
SYSLOG	Not Configured	5.8 Settings > System

Table 4 – Default Values for Settings

The PowerAlert Console is PowerAlert Local's primary user interface (Figure 5.1). It displays information about your UPS system and power conditions, provides a direct UPS system control interface and allows you to configure automatic responses to changes in conditions (such as automatic shutdown of your computer during power failures).

Clicking the Tripp Lite logo in the header opens Tripp Lite's Web site in a new browser window. The header also contains the menu buttons and submenu buttons, which are the main navigational elements of the PowerAlert Console. The menu buttons are larger than the submenu buttons. Clicking a menu button selects that menu section and reveals the corresponding submenu buttons.

The left side of the PowerAlert Console window contains several informational fields. The two uppermost fields display the IP address that PAL is using for SNMP proxy purposes (identical to your computer's current IP address) and the device name for the UPS system that is currently selected. If you have more than one UPS system connected to your computer, you can choose which one will be active in the PowerAlert Console window by selecting it from the drop-down menu. The device names are user-editable. The next three fields display the manufacturer, model name and location of your UPS system; the location field is user-editable (see **5.5 Settings > Device** for instructions on changing user-definable fields). The last three fields display alarm information. These fields will be blank when there is a green check mark by the Alarm Status heading. They will change only if there is an alarm, such as an "on battery" event. The icon will change to indicate alarm type and the fields below will display information about the affected UPS system, the cause of the alarm and the automatic or recommended response to the alarm (see **5.6 Settings > Events** for a list of alarm types and their corresponding icons). Clicking the "Device" button will display information about the device that is experiencing the alarm condition. Clicking the "Log" button will open the PowerAlert event log (see **5.10 Logs > Events** for more information).

The remainder of the PowerAlert Console window contains information and/or controls that change with each menu and submenu selected. The information and controls shown will vary, depending on UPS model and environmental conditions. In addition, there are two user-level settings in PAL that will change the extensiveness of the user interface. This User's Guide shows all the controls and information available in the Business Device Management Scheme, which is the setting for more advanced users. See **5.9 Settings > Schemes** for instructions on changing the user-level setting. The default user level setting depends on the UPS system that is detected by PowerAlert.

## 5.1 Status > Summary

On launching the PowerAlert Console, the Status > Summary window (Figure 5.1) will display. This window contains information about environmental and operating conditions. Four additional buttons within the window allow you to select **Input** information, **Battery** information and **Miscellaneous** information. Information such as Input Voltage is updated periodically. PAL continually queries the device for status information and updates the console as changes are reported. A status indicator appears in the upper right part of each button. If the indicator is green, all functions within that category are operating within normal parameters. If the indicator changes color, one of the variables in that category is outside normal parameters.



Figure 5.1 – PowerAlert Console window

### 5.2 Status > Detail (Available in Business Scheme only)

Click the **Status** menu button and the **Detail** submenu button to display the Status > Detail window (Figure 5.2). This window consolidates the information contained in the four Status > Summary information categories. It may also display additional information categories, depending on the UPS system. Two gauges display the Input Voltage and Battery Charge level. Right-click either gauge to display a pop-up menu that shows a list of variables. Select an alternate variable from the menu to change the information displayed on the gauge (available with select UPS systems only).



Figure 5.2 – Status > Detail window

## **5.3 Actions > Control** (Available in Business Scheme only)

Click the **Actions** menu button and the **Control** submenu button to display the Actions > Control window. Click the "Control List" tab (Figure 5.3) to see UPS system and computer commands that you can execute immediately or schedule for automatic execution. To execute a command immediately, select it from the drop-down menu and press the "Execute Command" button. To schedule a command, select it from the drop-down menu, set the desired time and frequency parameters and press the "Add Action" button. Certain commands have operational parameters that you can change to suit your requirements; they will be shown in the "Parameters" area. Available commands include:

- Operating System Shutdown
- Operating System Restart
- Cancel Shutdown
- Reboot UPS
- Initiate Self-Test
- Cycle All Loads
- Cycle Load
- Turn Load Off
- Turn Load On
- Turn All Loads Off
- Turn All Loads On

For a complete list of commands available for your UPS system, refer to the drop-down menu. Click the "Control Schedule Summary" tab to see a list of scheduled commands for the currently selected device. To remove a command from the schedule, highlight it and press the "Remove Event" button. The maximum number of scheduled commands is 64.

🕌 PowerAlert Agent Conso	le 12.04 — 🗆 🗙
TRIPP-LITE	Status     Image: Control     Image: Control
Engine Address: 172.18.8,106 Device Name:	Oevice Control Commands
Device 1 v	Control List Control Schedule Summary
	Control Command:
	India Sei Test
Manufacturer:	The second se
Tripp Lite	Paraline (et s:
Model:	Description Value Type Minimum Maximum
Tripp Lite UPS	
Location:	
Alarm Status 🞸 Device: Cause: Response:	Schedule this control for: 02:04 PM  Frequency for this control:  Once Jun 21, 2018 Monthly Jun 21, 2018
Device Logs	Add Action Cancel

Figure 5.3 – Actions > Control > Control List tab

Economy Mode (available on select UPS systems) configures an online UPS to function as a line-interactive UPS. In Economy Mode [and while AC utility power is available] the UPS operates at increased efficiency levels, thereby reducing its operating cost. It will switch to battery power if AC utility power is interrupted or out of the acceptable range. To enable Economy Mode, select either "Enable Economy Mode" or "Set Economy Mode", depending on the UPS. If the UPS has "Set Economy Mode", enter a "2" in the "Parameters-Value" field, then click the **Execute Command** button. On the front panel of the UPS system, the "LINE" and "LOAD" LEDs will illuminate green and the "BYPASS" LED will illuminate solid yellow when the UPS system is in Economy Mode.

### **5.4 Actions > Loads** (Available in Business Scheme only)

Click the **Actions** menu button and the **Loads** submenu button to display the Actions > Loads window (Figure 5.4). You can control the outlets of the UPS system by pressing the appropriate "On," "Off" or "Cycle" button. The load of the equipment attached to the UPS system is displayed as a percentage of maximum capacity, allowing you to see whether additional equipment can be added to the UPS system safely.

**Note:** Loads fluctuate with the power demands of connected equipment. It is prudent to limit the load to approximately 80% of the UPS system's maximum capacity in order to accommodate higher startup power demands and other increased power needs.

The main control buttons affect all outlets. If your UPS system has switchable load banks, additional buttons allow you to control each load bank. You can use the "Description" field to label the banks for easy reference. If the load bank(s) are non-switchable, the control buttons will be greyed out.

Warning: The load controls start or stop the flow of electricity to your UPS system's outlets. Make sure you know which equipment is connected to each load bank before attempting to use these controls.

🕌 PowerAlert Agent Console	12.04							-	
TRIPP-LITE	Status	Actions	Control Loads				Settings	Logs	Help
Engine Address: 172.18.8.106 Device Name:							Devi	ce L	oads.
Device 1 v	Device Lo	ads							
	Loads	.oad Groups							
	Main Co	ntrol: ON	On Off	Cycle					
Manufacturer:	Load:								
Model:									
Tripp Lite UPS	Load	State	Group			Description			
Location:	1	ON							- 1
Alarm Status									
Device:									
Cause:									
Response:	On	Off	Cycle						
							_		
Device Logs							A	pply	Cancel

Figure 5.4 – Actions > Loads window

## 5.5 Settings > Device

Click the **Settings** menu button and the **Device** submenu button to display the Settings > Device window (Figure 5.5.1). In the "Device Variables" tab, you can edit "Location," "Region," "Device Name," "Device ID", "Date Installed", "Low Battery Warning" and "Battery Age Alarm Threshold".

#### Notes:

- Displayed device variables will vary by UPS model.
- The "Low Battery Warning" field is tied to the "Battery Below Warning Level" event.
- "Battery Age Alarm Threshold" is based on either the "Date Installed" entered on the Settings > Device screen or the last "Battery Install Date" set in the UPS. If "Battery Install Date" is not available, use "Set Last Battery Install Date" under the Action > Control menu to enter the last "Battery Install Date."

📓 PowerAlert Agent Console 12.04 - 🗆 🗙					
TRIPP-LITE	Status Actions Settings Device Events Cont	acts System Schemes	Logs Help		
Engine Address: 172.18.8.106 Device Name: Device 1 ~	Device Variables Ramp Settings Shed Settings		evice Settings		
	Name	Value (editable)	Data Type		
	Location		String		
Manufacturer:	Region		String		
Tripp Lite	Device Name	Device 1	String		
Model: Tripp Lite LIPS	Device ID		String		
Location	Date Installed	Jun 21, 2018	Date (MMM DD, YYYY)		
Location.	Low Battery Warning	50	Integer		
	Battery Age Alarm Threshold (Years)	3.0	Float		
Alarm Status √					
Device:					
Cause:					
Response:					
Device Logs	Scan For New Devices Add Device Delete De	vice	Apply Cancel		

Figure 5.5.1 – Settings > Device window

If PowerAlert Local has not yet detected a connected UPS system, click the Scan For New Devices button to initiate local discovery. In the rare event that PowerAlert Local still cannot detect a connected UPS system, you can try to add it manually by clicking the "Add Device" button. As shown in Figure 5.5.2, you will need to select the computer's Communication Port (connecting to the UPS system) as well as the UPS system's Communication Protocol. If your UPS system is still not detected, restart your computer to ensure that the UPS system has been recognized by your computer's operating system. You may also need to modify the port and/or protocol you selected. If the selected device is inactive, you can click the "Delete Device" button to remove it from the device list.

Please indicate the communicat device, and then press the Apply button.	ions parameters for the new
Communication Port (edit if necessary)	: Communication Protocol:
COM3	0002
You can contact Tripp Lite technical s if you need assistance determining yo	upport at 773-869-1234 ur communication protocol.

Figure 5.5.2 – Actions > Add Device(s) window

If the selected device supports load ramping and shedding, the "Ramp Settings" and "Shed Settings" tabs will display (Figure 5.5.3). The "Ramp Settings" and "Shed Settings" tabs each contain a table that shows the numbered load segments available for the selected device. Each load segment has a "Device Description" field, an "Action" field and a "Delay" field. The "Device Description" field allows you to enter a note about the equipment connected to the load segment. The "Action" field allows you to configure the load ramping or shedding behavior by choosing from the possible actions listed in the pop-up menu. The "Delay" field allows you to enter the delay (in seconds) before the specified action is performed. After entering the desired values, click the **Apply** button. Load ramping sequences are applied when AC input power is switched on. Load shedding sequences are applied when AC input power is lost. Load ramping and load shedding require a Tripp Lite UPS system or PDU with controllable load banks (outlets that can be remotely switched on and off); such devices are referred to as autonomous devices. The table below identifies load ramping and load shedding characteristics by device type.

	Custom Loa	ad Ramping	Custom Load Shedding		
	Configuration Execution		Configuration	Execution	
Autonomous Device	Requires webcard or PowerAlert	Functions without webcard or PowerAlert	Requires webcard or PowerAlert	Functions without webcard or PowerAlert	
Non-Autonomous Device	Not supported	Not supported	Requires webcard	Requires webcard	

Table 5.5 – Load Ramping and Shedding Characteristics

![](_page_11_Picture_4.jpeg)

Figure 5.5.3 – Settings > Ramp Settings

## 5.6 Settings > Events

Click the **Settings** menu button and the **Events** submenu button to access the Settings > Events window. The content of the Settings > Events window will differ, depending on which Device Management scheme (Home or Business) you have enabled. For more information about choosing schemes, see **5.9 Settings > Schemes**.

If the Home Scheme is active, the Settings > Events window will display configurable options for how your computer will respond when your UPS system is operating from battery power (Figure 5.6.1).

![](_page_12_Picture_4.jpeg)

Figure 5.6.1 – Settings > Events window, Home Device Management scheme

If the Business Scheme is active, the Settings > Events window displays a more extensive set of controls (Figure 5.6.2). Events are divided into five categories—Critical, Warning, Status, Info and Offline—each with its own icon. This icon (along with other event information) will display in the left-hand Alarm Status section of the PowerAlert Console window when an event of that category occurs.

Engine Address:       Settings       Settings	PowerAlert Agent Console	2.04			- 0	×
Engline Address:       IZ2.18.8.106         Device Name:	TRIPPILITE	Status Actions Settings Dev	Vice Events Contacts System	Schemes	Logs Help	
Device 1     Image: Category     Status Action       Manufacturer:     i Communications Lost     Info       Tripp Lite     Battery Low     Critical       Model:     Contact Notification       Tripp Lite UPS     Self Test Failed       Location:     Self Test Paid       I Battery Above Threshold     Info       Verified     Critical       I Battery Appendix Failed     Critical       I Device Treshold     Info       I Device Treshold     Critical	ngine Address: 72.18.8.106 evice Name:	Events for Device 1		Settings	Sevent Setting	JS
Manufacturer:     Consultations Lost     Info       Tripp Lite     Battery Low     Critical       Model:     Contact Notification       Tripp Lite UPS     Ceneral Fault       Location:     Battery Age Above Threshold       Info     Critical       Destrey Capacity Below Warning Le     SNMP Notification       Contact Notification     SNMP Notification       Destrey Low     Critical       Destrey Capacity Below Warning     Contact Notification       Destrey Low     Critical       Destrey Capacity Below Utreshold     Info       Stattery Age Above Threshold     Info       Overload     Critical       Contact Notification     Set OID Event Raise/Clear	evice 1 v	Name	Category	Securigan	or on battery	4
Manufacturer:     ii Communications Lost     Info       Tripp Lite     Battery Capacity Below Warning Le Warning     Image: Context Notification       Model:     Settery Capacity Below Warning Le Warning     Image: Context Notification       Model:     Settery Capacity Below Warning Le Warning     Image: Context Notification       Model:     Settery Capacity Below Warning Le Warning     Image: Context Notification       Location:     Image: Battery Age Above Threshold     Critical       I Battery Age Above Threshold     Info     Image: Set OID Event Raise/Clear		A On Battery	Warping	Status	Action	
Manufacturer:     Tripo Lite     Shutdown       Tripo Lite     Battery Capacity Below Warning Le Warning     Critical       Model:     Contact Notification     SNMP Notification       Tripo Lite UPS     Temperature High     Warning       Location:     Istery Age Above Threshold     Info       Istery Age Above Threshold     Info     Set OID Event Raise/Clear		Communications Lost	Info		Broadcasting	1
Tripp Lite     Battery Capacity Below Warning Le Warning     Contact Notification       Model:     Ceneral Fault     Critical       Tripp Lite UPS     Self Test Failed     Critical       Location:     Battery Age Above Threshold     Info       I Battery Age Above Threshold     Info       Self Test Failed     Critical       Set OID Event Raise/Clear	anufacturer:	Battery Low	Critical		Shutdown	
Model:     Critical     SNMP Notification       Tripp Lite UPS     Temperature High     Warning     Execute Command Script       Location:     Self Test Failed     Critical     Critical       I Battery Age Above Threshold     Info     Self Of Devent Raise/Clear	ripo Lite	Battery Capacity Below Warning Le.	Warning		Contact Notification	
Intode/s     Ones of the operature High     Warning     Execute Command Script       Tripp Lite UPS     Self Test Failed     Critical     ✓     Logging       Location:     I Battery Age Above Threshold     Info     Self Test Failed     ✓       Location:     I Battery Age Above Threshold     Info     Self Test Failed     ✓       Location:     Verified     Critical     ✓     Self OID Event Raise/Clear	odel	General Fault	Critical		SNMP Notification	
Mipplie Ors         Self Test Failed         Ortical         Ogging           Location:         I Battery Age Above Threshold         Info         Set OID Event Raise/Clear           Alarm Status &         UPS Battery Bad         Ortical	rice Lite LIPS	Temperature High	Warning		Execute Command Script	
Location:  I Battery Age Above Threshold Info  Overload  Overload  Critical  UPS Battery Bad  Critical	ipp Lite UPS	Self Test Failed	Critical		Logging	
Alarm Status A	ocation:	Battery Age Above Threshold	Info		Set OID Event Raise/Clear	
Alarm Status 🖋 🔯 UPS Battery Bad Critical		(S) Overload	Critical			
Alarm Status 97		UPS Battery Bad	Critical	1		
	Alarm Status 🕎			1		
Device:	evice:					
Cause:	ause:					
Response: Quick Selection by Category:	esponse:	Quick Selection	by Category:			
	Desider Laws	S (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)				
Legis Critical Warning Status Into Offline Settings Apply Cancel	Logs	Critical Warning Sta	tus Info Offline		Settings Apply Cancel	

Figure 5.6.2 – Settings > Events window, Business Device Management scheme

For each Event type, you can set one or more actions. Check the "Status" box adjacent to the action item in order to enable it. Most actions have additional parameters that need to be set. Click on an individual Action, and then the "Settings.." button below the list. A new window will appear in which the parameters can be set. The table below identifies each of the actions and their settings.

Action	Settings
Broadcast	This feature is no longer supported; it was tied to Windows Messenger Service, which was discontinued by Microsoft. An alternative would be executing a script to call a user-created batch file.
Shutdown	<ul> <li>Select whether the event will shut down the operating system</li> <li>* Time to elapse before shutting down the operating system</li> <li>Select whether the event will shut down the device</li> <li>* Time to elapse before shutting down the device</li> </ul>
Contact Notification	<ul> <li>Time to elapse before email notification is sent to the selected contacts</li> <li>Time between successive re-transmissions of the notification until the alarm is cleared</li> </ul>
SNMP Notification	<ul> <li>Time to elapse before SNMP traps are sent to the selected IP addresses</li> <li>Time between successive re-transmissions of the SNMP trap until the alarm is cleared</li> </ul>
Execute Script	<ul> <li>Time to elapse before executing the command script</li> <li>Enter the script or program path to execute when the time has elapsed</li> <li>Enter the script or program path to execute when the alarm has cleared</li> </ul>
Logging	No settings
Set OID Event Raise/ Clear	<ul><li>Enter the OID, Type, Value and Delay for the Raise event</li><li>Enter the OID, Type, Value and Delay for the Clear event</li></ul>

Table 5.6 – Event Actions and Settings, Business Device Management Scheme

### **5.7 Settings > Contacts** (Available in Business Scheme only)

Click the **Settings** menu button and the **Contacts** submenu button to display the Settings > Contacts window. The "E-mail" tab (Figure 5.7.1) shows a table of configured e-mail contacts. Before PowerAlert can send e-mail notifications, you must enter e-mail server information and add at least one e-mail contact. Click the "SMTP Settings" button to enter the settings for your local mail server in the SMTP Settings window (inset image). If you do not know the correct settings, contact your network administrator. Add a new e-mail contact by clicking the "New" button and entering the information requested in the pop-up window (Figure 5.7.2).

The "SNMP" tab (Figure 5.7.3) shows a table of configured SNMP contacts. Before PowerAlert can send an SNMP trap to an IP address, you must add at least one SNMP contact. Add a new SNMP contact by clicking the "New" button and entering the information requested in the pop-up window (inset image). Before configuring SNMP traps or SNMP sets for an event, SNMP trap and/or SNMP set destinations must be added here first. For SNMP trap destinations, use port 162. For SNMP set destinations, use port 161. If you do not know the correct settings, contact your network administrator.

**Note:** You also need to configure and enable each event setting through the Settings > Events window (see section **5.6 Settings > Events**) before notifications can be sent to your contacts.

**Note:** If adding an SNMP contact to be used with an SNMP Set Notification, use port 161 or the port number that the remote SNMP device can be accessed on.

PowerAlert Agent Console 12.04		- 🗆 ×
TRIPPLITE Status Actions Settings Device	Events Contacts System Schemes	Logs Help
Engine Address: 172.18.8.106 Device Name: Device 1 Contact Settings		Contact Settings
Email     SNMP       Manufacturer:     Image: SNMP       Tripp Lite     Model:       Tripp Lite UPS     Location:	Phone	MTP Settings × SMTP Server Settings: Server Name : Port : 25 Default : 25
Alarm Status 🗸 Device: Cause:		Use name and password. User's Name : User's Password :
Response: Device Logs SMTP Settings		From:' email address : Save Cancel

Figure 5.7.1- Settings > Contact > Email, SMTP Settings

	e 12.04 Status Actions Settings	evice Events Contacts System Schemes	– – × Logs Help
Engine Address: 172.18.8.106 Device Name:	Contract Saltings		Contact Settings
Device 1 🗸 🗸	Email SNMP	Phone	Edit Contact X
Manufacturer: Tripp Lite Model: Tripp Lite UPS Location:	Term.	TIME	Name: Phone: 000-0000
Alarm Status √ Device:			Email: name@domain.com
Cause:			Save Cancel
Device Logs	SMTP S	ettings	Edit New Delete

Figure 5.7.2- Settings > Contact > Email, New contact

🕌 PowerAlert Agent Conso	le 12.04				- 🗆 X	
TRIPP-LITE	Status Actions Settings	Device Events Contacts System	em Schemes		Logs Help	
Engine Address: 172.18.8.106			r	<b>@</b>	Contact Settings	
Device Name: Device 1 ~	Contact Settings			🕌 Edit IP		$\times$
Manufacturer: Tripp Lite Model: Tripp Lite UPS Location: Alarm Status Device: Cause: Response:	IP Address	Name	Community	IP Address: Name: Community: Port:	0.0.0.0 public 162 Save Cancel	
Device Logs				Edit New [	Delete	

Figure 5.7.3- Settings > Contact > SNMP, New contact

## **5.8 Settings > System** (Available in Business Scheme only)

Click the **Settings** menu button and the **System** submenu button to display the Settings > System window (Figure 5.8.1). The "Shutdown" tab determines whether your computer will hibernate or shut down completely (hibernation also must be enabled through your computer's operating system). Additional settings apply if you have multiple UPS systems connected to your computer.

Click the **Write Config File** button to create a file that contains most of the settings defined through the PowerAlert Console. You can use the configuration file as a backup or to aid the configuration of additional workstations. The configuration file is saved to C:\Program Files (x86)\TrippLite\PowerAlert\ by default.

PowerAlert Agent Consc	ole 12.04	- 🗆 ×
TRIPP-LITE	Status     Actions     Settings     Image: Device     Image: Events     Image: Contacts     Image: System     Image: Schemes	Logs Help
Engine Address: 172.18.8.106 Device Name:	PowerAlert Fonine Settings	System Settings
Device 1 V	Shutdown Configuration SYSLOG Shutdown Type (Global setting)	
Manufacturer: Tripp Lite Model: Tripp Lite UPS	Hibernation     Shutdown	
Location: Alarm Status √	Multiple device shutdown (Global setting)	
Device: Cause:	Shut down when one device indicates shutdown.     Shut down when all devices indicate shutdown.	
Response: Device Logs	Write Config File	Apply Cancel

Figure 5.8.1 – Settings > System > Shutdown

The "Configuration" tab (Figure 5.8.2) contains the option to set an automatic update trap to a PowerAlert Network Management System that is monitoring the PowerAlert Local System. The Discovery option allows the user to define if PowerAlert should search for newly connected local devices at startup.

🕌 PowerAlert Agent Consc	ole 12.04	- 🗆 X
TRIPP-LITE	Status         Actions         Sattings         Device         Events         Contacts         System         Schemes	Logs Help
Engine Address: 172.18.8.106 Device Name:	Power Alert Engine Settings	System Settings
Device 1 V	Power Aler Configuration and an	
	Auto Lindate Tran	
Manufacturer: Tripp Lite Model: Tripp Lite UPS Location:	Trap interval:	
	Discovery	
Alarm Status V Device: Cause: Response:	☑ Don't scan for new devices on startup.	
Device Logs	Write Config File	Apply Cancel

Figure 5.8.2 – Settings > System > Configuration

SYSLOG is a protocol that allows a machine to send event notification messages across IP networks to event message collectors, known as SYSLOG servers. Up to 4 SYSLOG servers may be defined, by either IP address or Hostname, in the "SYSLOG" tab (Figure 5.8.3). Once configured, any event will trigger a message to be sent to the specified SYSLOG server(s).

🕌 PowerAlert Agent Conso	le 12.04 — 🗆 🗙	
TRIPP-LITE	Status       Actions       Settings       Image: Device       Image: Events       Image: Device       Ima	
Engine Address: 172.18.8.106 Device Name:	Bower Alert Engine Settings	
Device 1 v	Shutdown Configuration SYSLOG	
Manufacturer: Tripp Lite Model: Tripp Lite UPS Location:	Instantin Configure the SYSLOG.         The log messages are boxed to the configured IPAddress/Port combination(s).         The generated log messages are based on syslog rfc-3164.         Server Address	×
Device: Cause: Response:	Edit New Delete	~
Device Logs	Write Config File Apply Cancel	

Figure 5.8.3—Settings > System > SYSLOG

## 5.9 Settings > Schemes

Click the **Settings** menu button and the **Schemes** submenu button to display the Settings > Schemes window (Figure 5.9). PowerAlert Local has two user level settings: the "Home Device Management Scheme" and the "Business Device Management Scheme." The home scheme contains basic settings. Several PowerAlert Console windows will not be shown when the home scheme is active, including the Status > Detail window, the Settings > Contacts window, the Settings > System window and all windows for Actions and Logs. In addition, the Settings > Events window is simplified (see **5.6 Settings > Events**).

The default scheme depends on the UPS system detected: simpler UPS systems default to the home scheme and more complex UPS systems default to the business scheme. You can switch between schemes at any time, but some settings may be lost in the transition. If a UPS is connected via a USB cable, it may default to the home scheme even with more complex UPS systems.

PowerAlert Agent Consc	ble 12.04						- C	
TRIPP-LITE	Status Actions	Settings Device	Events Contacts	System Schem	) es		Logs	Help
Engine Address: 172.18.8.106 Device Name: Device 1 V					장 Power	Control	Sche	emes
Manufacturer: Tripp Lite Model: Tripp Lite UPS Location:	O Home Device Ma This option	anagementScheme allows basic co:	nfiguration se	ttings typi	cal for the home	user.		
Alarm Status 🗸 Device: Cause:	<ul> <li>Business Device This option for the busi</li> </ul>	Management Scheme allows advanced ness user.	configuration	ı settings a	ppropriate			
Response: Device Logs								

Figure 5.9 – Settings > Schemes

## 5.10 Logs > Events

Click the **Logs** menu button and the **Events** submenu button to display the Logs > Events window (Figure 5.10). To view the event log, set your preferences, then click the **Retrieve Records** button. Each event displays an icon that identifies its category: "Normal," "Critical," "Warning," "Info" or "Offline." To save the event log to a text file, click the **Options** button, select your preferences in the pop-up window and then click the **Save** button. By default, the event log file will be saved to:

- Windows: C:\Program Files (x86)\TrippLite\PowerAlert\data\paelog.txt
- Linux: \var\TrippLite\PowerAlert\data\paelog.txt

Event log information will also be available in the Windows event log, which can be accessed by navigating to "Administrative Tools" within "Control Panel," and then double-clicking **Event Viewer**. Log entries will appear in the "Application" section, along with entries from other Windows applications and components.

🕌 PowerAlert Agent Consol	e 12.04					- 🗆 ×
TRIPP-LITE	Status Actions	Settings Logs	Events Da	ta		Help
Engine Address: 172. 18.8. 106 Device Name:						🥪 Event Log
Device 1 v	Date	Time	Description			
Manufacturer: Tripp Lite Model: Tripp Lite UPS Location:						
Alarm Status √	Maximum	number of records to r	etrieve ( <= 512):	20		
Device:	To filter the data, one o	r more of the following	can be applied:	Clear Records	Options	Print
Cause:	Show events of type	e:		Vormal Critical Warning	Info Offline	
Response:	Show events on or a	after this date:		Jun 14, 2018		
Device Logs	Show events on or t	before this date:		Jun 21, 2018		

Figure 5.10 – Logs > Events

## 5.11 Logs > Data

Click the **Logs** menu button and the **Data** submenu button to display the Logs > Data window (Figure 5.11). To view a table of logged data, set your preferences, select "Table", then click the **Display** button. You can drag and drop the column headings to rearrange the display order.

Note: Any rearranged display order will not be retained when the PAL console is closed and reopened.

To view a graph of logged data, select "Graph", choose the graphing parameters from the drop-down menu, then click the **Display Records** button. You will be able to graph input voltage, battery voltage, battery capacity (percentage) or output load (percentage). To save the data log to a comma-delimited text file, click the Options button, select your preferences in the popup window and then click the Save button. You can also set the data-logging interval. The data log file will be saved to:

- Windows: C:\Program Files (x86)\TrippLite\PowerAlert\data\padlog#.txt
- Linux: \var\TrippLite\PowerAlert\data\padlog#.txt

🕌 PowerAlert Agent Cor	sole 12.04									- [	) ×
TRIPPLITE	Status A	Actions Sett	ings Logs	Events	Data						Pelp
Engine Address: 172.18.8.106 Device Name:									œ	Data	Log
Device 1 v	Date	Time	Location	Region	Device Name	Device ID	Date Instal	Serial Num	Low Batter	Battery Age	Load Bank
	Jun 21, 2018	2:21:12 PM					20180621	FW-2606 B	50	0.0 Years	0
	Jun 21, 2018	2:16:12 PM					20180621	FW-2606 B	50	0.0 Years	0
	Jun 21, 2018	2:11:12 PM					20180621	FW-2606 B	50	0.0 Years	0
Manufacturer:	Jun 21, 2018	2:06:12 PM					20180621	FW-2606 B	50	0.0 Years	0
Inpp Lite											
Model:											
Tripp Lite UPS											
Location:											
Alarm Status											
Device:											
Cause:											
	Start Date		Jun 14	4, 2018				12:00AM ~			
Response:	End Date		Jun 2	1, 2018				3:00PM ~			
	Table		OG	aph							
Device Logs	Display	Cancel Displa	ay Rer	nove Op	tions						

Figure 5.11 – Logs > Data

## 5.12 Help

Click the **Help** menu button and the **About** submenu button to display the Help > About window (Figure 5.12). The Help > About window displays information about the software version.

Click the Help menu button and the Help submenu button to open a separate Help window in your Web browser.

![](_page_21_Picture_4.jpeg)

Figure 5.12 - Help > About

# 6. Frequently Asked Questions

Question	Answer
Does PAL support encrypted SMTP servers?	No. This means that many of the SMTP servers used by popular email providers like Gmail and Yahoo! Mail are not supported. Note that emails can still be sent to contacts with domains like @gmail.com or @yahoo.com, but unencrypted SMTP servers must be used. PowerAlert Network Management System (PANMS) has a built-in version of PAL and does support encrypted SMTP servers.
How can I send test emails from PAL?	1. In the PowerAlert Agent Console, navigate to "Settings>Events", select "Battery Age Above Threshold", and then check the box for "Contact Notification".
	2. You will be prompted to press the "Settings" button to select the contact and time delay. Confirm that the desired email contact(s) are highlighted blue in the list. Once the delay and contact(s) are configured, press the "Apply" and "OK" buttons.
	3. After the email event for "Battery Age Above Threshold" is configured, navigate to "Settings>Device" in the PowerAlert Agent Console and enter a date three years or more prior to the current date in the "Date Installed" field and click the "Apply" button. This will initiate the "Battery Age Above Threshold" alarm and trigger the previously configured email notification to occur after the specified delay.
	<b>Note:</b> Be sure to set the "Date Installed" value back to the actual date the device was installed after testing is complete.
	4. Confirm the contact(s) receives the email notification. If email notifications are not received, confirm the SMTP server settings, ensure all steps in this document were followed, and check for error messages in the powertalert.log file at C:\Program Files (x86)\TrippLite\PowerAlert\log.
Where are error messages related to the PAL application stored?	The powertalert.log file is located at C:\Program Files (x86)\TrippLite\PowerAlert\log.
Will PAL events write to the Windows Event Viewer?	Yes, current versions of PowerAlert Local will log events in the Application log found in Windows Event Viewer. The source of events triggered by PAL is "PowerAlert Agent"
How can I restore PAL to the settings defined in a paconfig.ini file?	Place the properly configured paconfig.ini file in the C:\Program Files (x86)\TrippLite\PowerAlert directory and then reset PAL per the instructions listed in the <b>Troubleshooting</b> section.

# 7. Troubleshooting

Problem	Possible Solutions					
Instructions for resetting PAL	Please note, this process will erase any previous data and reset PowerAlert to default values, unless a "paconfig.ini" file with alternate settings is used. This process applies to PAL version 12.04.0055 and later for Windows.					
	1. Ensure that the PowerAlert console (graphical user interface) is closed.					
	2. If the PowerAlert Agent service is running, stop it in the Windows Services menu.					
	<b>Note:</b> The Windows Services menu can be accessed by navigating to "Administrative Tools" within "Control Panel" or entering "services.msc" into a Windows Run prompt.					
	3. Delete all the files in the "C:\Program Files (x86)\TrippLite\PowerAlert\data" directory.					
	4. Start the PowerAlert Agent service in the Windows Services menu.					
	5. Wait 30 seconds and attempt to use PowerAlert Local.					
The local UPS system	Check the USB or serial cable connection.					
is not detected by PAL	Confirm that the UPS system is turned on.					
	<ul> <li>Confirm that the USB or serial port of the computer is functional.</li> </ul>					
	<ul> <li>If using USB, confirm the UPS appears in Windows Device Manager.</li> </ul>					
	• Restart your computer to ensure that your computer's operating system has recognized your UPS system.					
	• Reset PAL (see "Instructions for resetting PowerAlert Local" above).					
	• Check for conflicting USB devices (see "Resolving issues with conflicting USB devices" below).					
	• If the UPS system is connected through a contact closure interface, you may need to add it manually. This process is only applicable to select devices connected via a serial cable. If you are using a USB connection, this step does not apply.					
	1. Launch the PowerAlert console					
	2. Click the "Settings" button					
	3. Click the "Add Device" button from the "Device" submenu					
	4. Select the appropriate communication port and protocol in the Add Device Window					
	5. Click the "OK" button					
	See <b>Settings &gt; Device</b> for more information about adding your UPS system manually.					
Emails are not	Confirm that an event, which would trigger an email, has occurred.					
received	Check spam.					
	Confirm that email addresses and SMTP server settings are correctly entered.					
	• Confirm that the desired email contact(s) are highlighted blue in the list for the desired event(s) at Settings > Contacts > Contact Notification.					
	• Check the powertalert.log file at C:\Program Files (x86)\TrippLite\PowerAlert\log for SMTP related error messages.					
Resolving issues with conflicting USB	On occasion, conflicting USB devices (e.g. Bluetooth adapters, KVMs, keyboards, mice, etc.) can stop the PowerAlert Agent Service and prevent PAL from communicating with a UPS.					
devices	To diagnose and resolve issues with conflicting USB devices:					
	1. Disconnect USB devices other than the UPS and reset PAL (as described above)					
	<ol> <li>If PAL now works as expected, check the "Don't scan for new devices on startup" box at Settings &gt; System &gt; Configuration (available only in the Business Scheme) and click Apply</li> </ol>					
	3. Reconnect USB devices as required. The conflicting USB device should no longer stop the PowerAlert Agent Service or prevent UPS communication					
	If the PowerAlert Agent service stops upon the first reconnect of the conflicting device, attempt to restart it and confirm the issue does not reoccur.					

# 8. Technical Support

If you are unable to resolve an issue using the Troubleshooting guide, you can reach Tripp Lite Technical Support here:

#### E-mail

techsupport@tripplite.com

#### Phone

773.869.1234 7AM - 6PM CST

#### Web

The latest PowerAlert Local software updates are available at https://www.tripplite.com/products/power-alert-local

#### **Technical Support Assistance**

www.tripplite.com/support

![](_page_24_Picture_10.jpeg)

1111 W. 35th Street, Chicago, IL 60609 USA • www.tripplite.com/support