WATT BOX™

engineered by Snap av

IP WEB INTERFACE

User's Guide

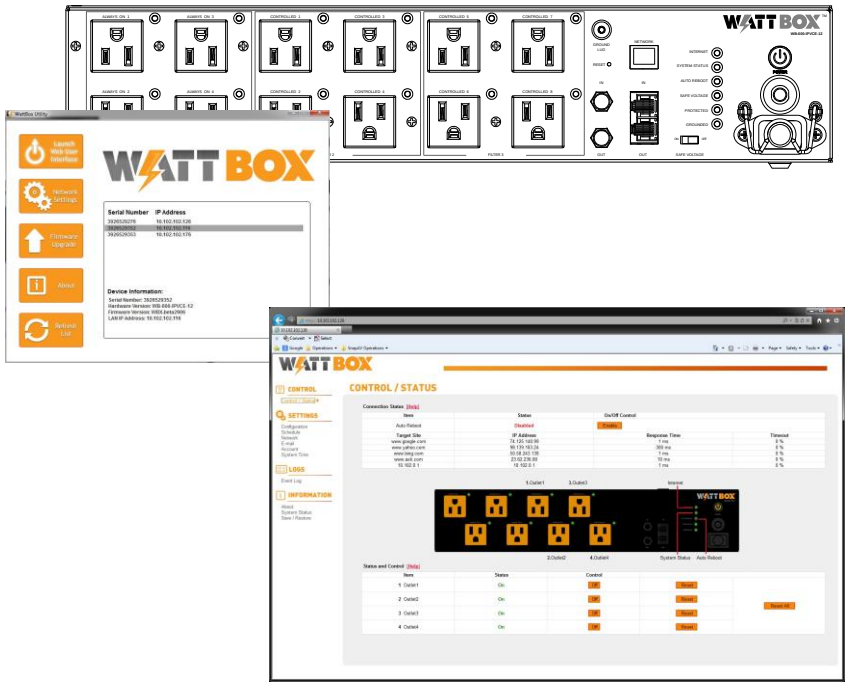


Table of Contents

1. Overview

This document outlines the operation of the WattBox™ Configuration Utility and Web Interface for WattBox IP Power Conditioners. Read the entire document before using the Configuration Utility or Web Interface.

If you have any questions after reading this document, please contact SnapAV Technical Support.

Note: *The WattBox Utility must be run in order to view the IP address and configure the network settings for initial setup.*

2. Contacting Technical Support

Phone: (866) 838-5052

Email: Techsupport@snapav.com

3. Using OvrC.com

This WattBox IP+ Device is equipped with OvrC, which gives you remote device management, real-time notifications, and intuitive customer management, right from your computer or mobile device. Setup is plug-and-play, with no port forwarding or DDNS address required.

Go to www.OvrC.com to learn more.

4. Accessing the Web Interface

4.1. Accessing From an Internal Network

Using the WattBox Utility

Select a WattBox from the device list and click the Launch Web Browser button or double click the device to launch the browser.

From a Browser

Open the web browser and enter the IP address of the WattBox.

Example: http://192.168.1.55:1000

Note: *If the default port (80) has not been changed it is not required at the end of the address. Example:* ***http://192.168.1.55***

If the WattBox has been given a name as described in section 8.1 IP Address on pg. 9, the name can be entered in place of the WattBox IP address.

Example: http://NetworkWB400:1000

Note: *If the default port (80) has not been changed it is not required at the end of the address. Example:* ***http://NetworkWB400***

4.2. Accessing from a Remote Location

If Dynamic DNS (section: 8.4 Dynamic DNS) has been configured, the WattBox can be accessed from a remote location. When accessing remotely, the name for the server is used in place of an IP address.

Open the web browser and enter the DDNS name of the WattBox, DDNS service provider, and the external port for that has been configured in the router to allow access to the WattBox.

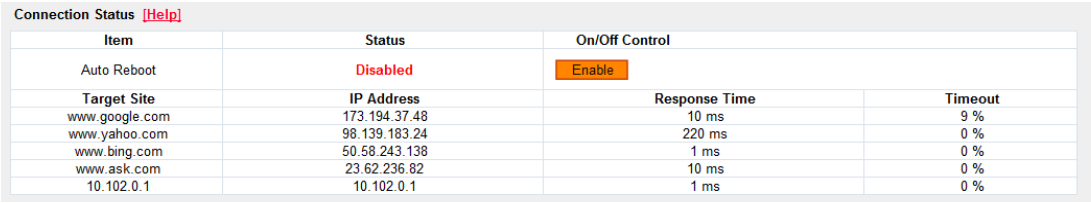
Example: **http://JonesWattBox:1000**

Note: *The WattBox utility* ***cannot*** *be used to launch the browser when accessing remotely. Use OvrC to access it from the web without port forwarding or DDNS setup.*

See Section: 8.3 Port Number and 8.4 Dynamic DNS for port forwarding and DDNS address setup instructions.

5. Control / Status

5.1. Connection Status

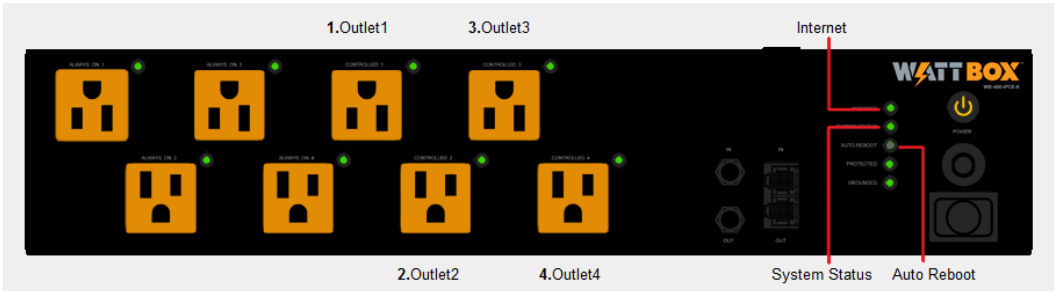


Connection Status [Help]

Item	Status	On/Off Control	
Auto Reboot	Disabled	Enable	
Target Site	**IP Address**	**Response Time**	**Timeout**
www.google.com	173.194.37.48	10 ms	9 %
www.yahoo.com	98.139.183.24	220 ms	0 %
www.bing.com	50.58.243.138	1 ms	0 %
www.ask.com	23.62.236.82	10 ms	0 %
10.102.0.1	10.102.0.1	1 ms	0 %

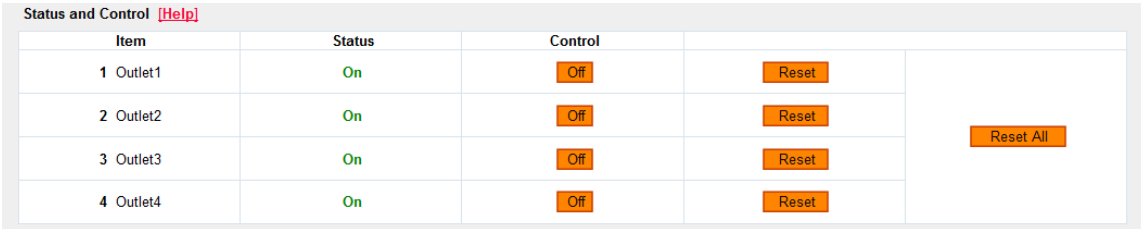
Auto Reboot	Status: Displays the current state of Auto Reboot. Click the button under "On/Off Control" to toggle between enabled and disabled. The status is indicated by the current name of the button: **Enabled**: Auto Reboot is Enabled. **Disabled**: Auto Reboot is Disabled.
Target Site	List of sites/IP addresses configured to ping for Auto Reboot. The last item listed is the address of the router, which is an automatic setting. Modify the list using the Configuration menu. (See Section: 6.2 Website / IP Address)
IP Address	Lists the IP addresses of Target Sites.
Response Time	Current response time of the Target Site.
Timeout	Percentage of communication vs. loss of communication time recorded for the site. A 0 (zero) indicates that no communication loss has occurred with the site.

5.2. Real Time WattBox Status Graphic



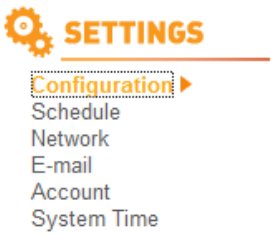
Internet	Green (Solid):	All sites/IP Addresses are communicating with the WattBox
	Green (Blinking)	Some, but not all, addresses are responding correctly.
	Red (Solid):	None of the Sites/IP Addresses are communicating with the WattBox.
Auto Reboot:	Illuminated:	Auto Reboot is Enabled, WattBox will perform power cycle for outlets that are ON when communication with the assigned Website/IP Address is lost. ***Note:*** *Outlets that are OFF, will not power cycle.*
	Not Illuminated:	Auto Reboot is Disabled, no power cycle will occur when communication with the assigned Website/IP Address is lost.
Outlet LEDs (next to outlet):	Illuminated:	Outlet is ON.
	Not Illuminated:	Outlet is OFF.

5.3. Status and Control

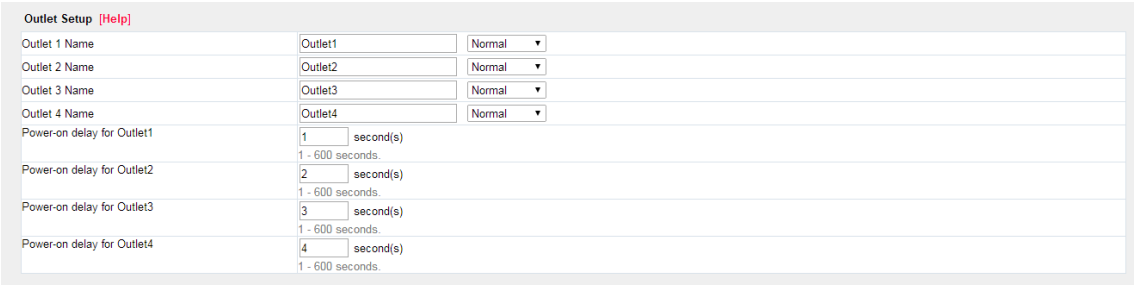


Item	Number and name of outlet. If no name has been assigned in Outlet Setup, this will display, “Outlet“ followed by the number.
Status	Current status of outlet. (On or Off)
Control	Turns outlet On/Off, the button name will change with the reverse of the current state of the outlet. If outlet is set to Master Switch Disabled (Reset Only), Disabled will be shown and no outlet control can be performed.
Reset	Performs a power cycle for the selected outlet. Outlet will turn off and then turn On. No Reset button will appear for outlets that are currently Off. ***Note:*** *The power cycle occurs based on the delay times configured in Outlet Setup.*
Reset All	Performs a power cycle for all outlets on the WattBox. Note: **The power cycle occurs based on the delay times configured in Outlet Setup.**

6. Configuration



6.1. Outlet Setup



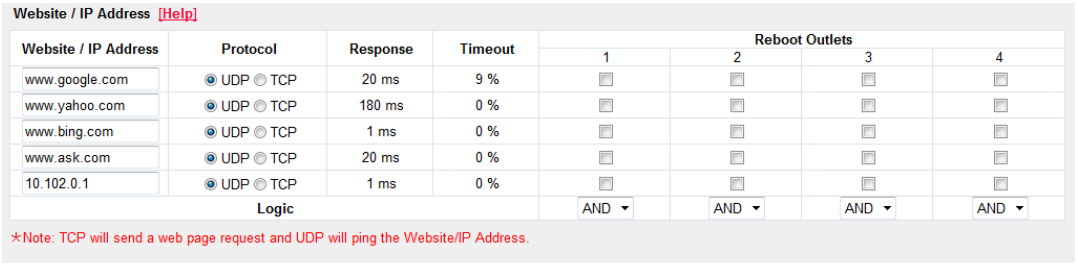
WB-200/WB-400

Outlet Name	Allows for naming the outlet based on the device connected. Router, Modem, ETC…	
Outlet Mode:	**Normal**	Enables full outlet control via Web interface, outlet can be turned On/Off or Reset.
	Reset Only	Disables full outlet control via Web interface, outlet can be Reset, but not turned On or Off. *Recommended setting for devices that should never be turned off, such as routers and modems to avoid accidental disconnection.*
Power On Delay	Sets the turn on time between each outlet when the WattBox is powered ON or an Outlet reset has been performed. Default setting is an additional 1 sec between each outlet starting at 1 for outlet 1. *It is recommended that this is set to at least 5sec for media servers and other devices that require a longer turn on time.*	

WB-600

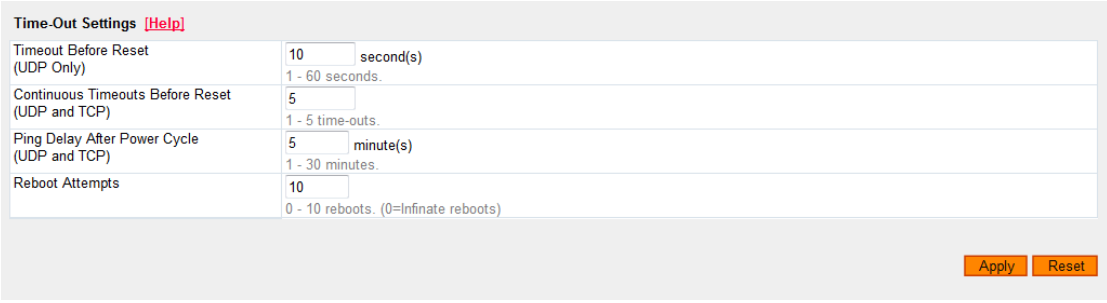
Outlet Name	Name the outlet based on the device connected. Example: Router, Modem, ETC…	
Outlet Mode:	Master Switch Enabled:	Enables outlet control via main power button. Outlets will turn On/Off when power button is pressed. Web interface control remains for turning outlets On/Off or Resetting.
	Master Switch Disabled:	Disables outlet control via main power button. Outlets will NOT turn On/Off when power button is pressed. Web interface control remains for turning outlets On/Off or Resetting.
	Master Switch Disabled (Reset Only):	Disables outlet control via main power button. Outlets will NOT turn On/Off when power button is pressed. Web interface allows for outlet to be reset, but disables the ability to turn outlets On/Off from Web interface.
Power On Delay	Sets the turn on time between each outlet when the WattBox is powered ON or an outlet reset has been performed. Default setting is an additional 1 sec between each outlet starting at 1 for outlet 1. *It is recommended that this is set to at least 5 seconds for media servers and other devices that require a longer turn on time.*	

6.2. Website / IP Address



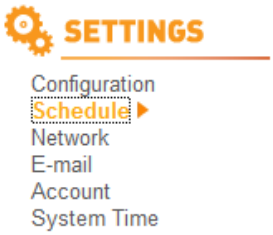
Website / IP Address	List of Websites / IP Addresses to Ping for Auto Reboot. Last item in the list is the address of the router. This is auto populated by the WattBox software, but can be changed if needed.
Protocol	Setting for network communication type. We recommend that UDP is used as it will communicate with both websites and IP address. Only use TCP for troubleshooting or if the connected device requires this setting. TCP: Will send a request to websites. UDP: Will send a ping to websites or IP address. This is the recommended setting.
Response	Current response time of the Target Site.
Timeout	Percentage of communication vs. loss of communication time recorded for the site. A 0 (zero) indicates that no communication loss has occurred with the site.
Reboot Outlets	Assign the target site to a particular outlet for Auto Reboot. The number of outlets changes based on the WattBox model. Only outlets that are ON when communication is lost will power cycle. Checked: Outlet will power cycle when ON if communication to the site is lost. Unchecked: Outlet will NOT power cycle when ON if communication to the site is lost.
Logic	And - Outlet will power cycle when ON if communication to ALL checked sites is lost. Or – Outlet will power cycle when ON if communication to ANY one of the checked sites is lost.

6.3. Time Out Settings

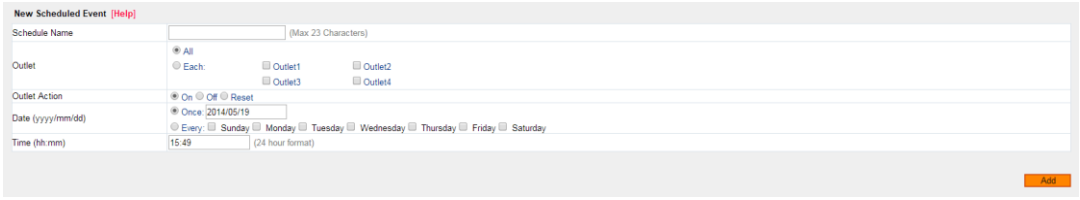


Timeout Before Reset (UDP Only)	Sets the timeout interval before an Auto Reboot is performed.
Continuous Timeouts Before Reset (UDP and TCP)	Sets the number of timeouts after an Auto Reboot is performed.
Ping Delay After Power Cycle (UDP and TCP)	Sets the amount of time before Auto Reboot resumes pinging once an auto reboot has been performed.
Reboot Attempts	Amount of Auto Reboots to attempt when communication with a Website/IP Address is lost. (0 =Infinite Reboots)
Apply	Applies changes made to settings for entire screen.
Reset	Resets all settings to last applied state. This does not perform any changes to the WattBox settings.

7. Schedule

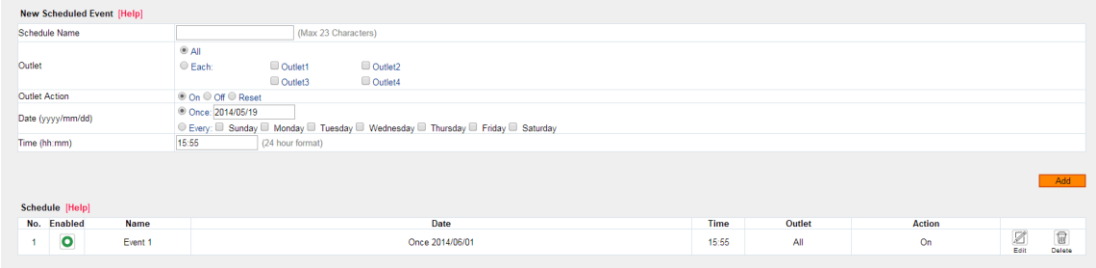


7.1. New Scheduled Event



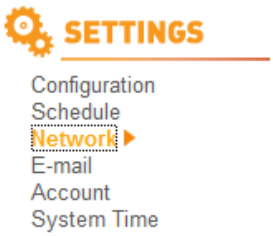
Outlet	Selects the outlet for the scheduled event. All: Event will be applied to ALL outlets. Each: Event will be applied to the selected outlets.
Outlet Action	Sets the action to perform for the event. (Turn On, Turn Off, or Reset)
Date	Date the event will occur. Once: Event will occur only on this date. Every: Event will repeat for every day that is selected.
Time (hh:mm)	Time of day event will occur entered in 24hr format. Example: 9:00am=09:00, 1:00pm=13:00
Add	Adds the event to the list. Multiple events can be added.

7.2. Schedule

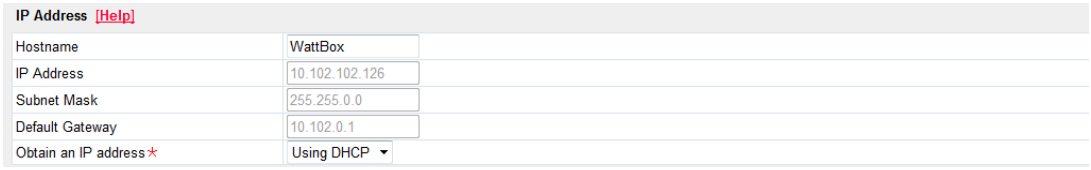


No.	Number of the scheduled event
Enabled	The event is enabled and will be performed per the scheduled date and time. The event has been disabled and will not be performed regardless of the scheduled date and time. Events are enabled when added. Disable an event by clicking “Edit” and unchecking the Enabled checkbox. Click “Save” to save the change.
Date	Date the event will occur.
Time	Time of day the event will occur shown in 24hr format. Example: 9:00am=09:00, 1:00pm=13:00
Outlet	Outlet that will be controlled for the event.
Action	Action that will be performed for the event.
Edit	Allows for editing of the event once added. We recommend saving the schedule to a backup configuration before making any changes to avoid losing important settings.
Delete	Deletes the event from the schedule. We recommend saving the schedule to a backup configuration before making any changes to avoid losing important settings.

8. Network

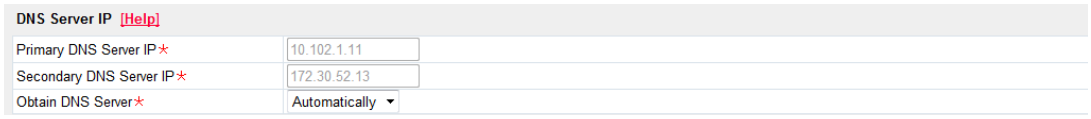


8.1. IP Address



Hostname	Assigns a name to the WattBox so that it can be easily identified when viewing through the web interface. This will appear as the browser tab name when logged in. This hostname can be used to access the WattBox from an internal network by typing the name into the web broswer's address bar. This will allow for easier access as an IP address will not need to be remembered.	
IP Address	IP address assigned to the WattBox. This can be static or dynamic depending on the setting for Obtain IP Address. ***Note:*** *Always use a static IP address.*	
Subnet Mask	Network router's subnet mask.	
Default Gateway	IP address of the router for the network.	
Obtain IP Address*	**Using DCHP**	Automatically set the IP address based on the router's IP table. The address may change if the router loses power.
	Manually	Assign a static IP address that will not automatically change based on the condition of the router table.

8.2. DNS Server IP



Primary DNS Server IP*	Address of the Primary DNS server. Note: This is usually the address of the Default gateway.	
Secondary DNS Server IP*	Address of the secondary DNS Server.	
Obtain DNS Server*	Manually	Allows for assignment of DNS servers to use.
	Automatically	Set the DNS servers to match the router. Overrides manual settings

8.3. Port Number

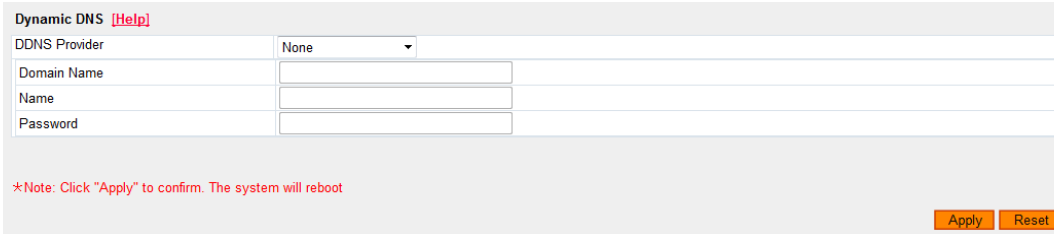
HTTP Port Number*	Default setting is 80, and is not required in the browser to access the WattBox. When a number other than the default is set, the port number is required at the end of the WattBox address. Example: http://192.168.1.55:90

8.3.1. Configuring Ports for Remote Access

1. Configure port forwarding for the IP address in the network router (default: 80; changing the port is recommended). Each router is different, so refer to the manual for your model to configure port forwarding.
2. Repeat step 1 for all WattBox devices on the network.
3. Configure the WattBox for Dynamic DNS as defined in section 8.4 Dynamic DNS on pg. 10.

   Note: *After a port number is assigned, it must be included at the end of the address in order to access the WattBox from a web browser. Example: 192.168.1.200:5000 (for HTTP port 5000)*

8.4. Dynamic DNS



This setting provides access to the WattBox from outside the network through a web browser. If outside access is not desired, leave this at the default setting.

Note: *To access a WattBox device from the web, port forwarding must be configured within the router. See the section 8.3* ***Port Number*** *on pg. 9 for more information.*

DDNS Provider	Service provider for the DDNS. While any preferred DDNS provider can be used, we recommend the use of our free WattBoxDNS.com service.
Domain Name	Name to identify and access the WattBox from anywhere. To avoid confusion this should be the same name set under Hostname if it is available. Chose a name that will easily identify the WattBox.

NOTE: *These settings require clicking apply to confirm, this will be followed by a system reboot.*

8.4.1. Configuring Dynamic DNS for Remote Access

A Dynamic DNS allows for a named address to be used to access the WattBox remotely even if the WAN IP address of the network changes. We recommend our built-in WattBoxDNS Service. It is maintained by WattBox, easy to set up inside the Web interface, and totally free. There are other free and paid third-party services available. Consult with the DDNS service provider to set up other DDNS service types.

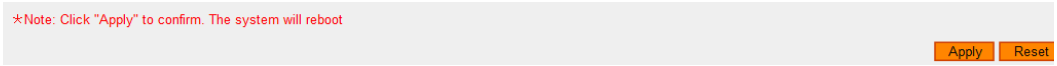
Note: *Before configuring DDNS, a port must be assigned to the WattBox and port forwarding configured in the router. See section* ***8.3 Port Number on pg. 9.***

1. Select "WattBoxDNS.com" from the DDNS Provider drop down box.
2. Enter a Domain Name. Example: JonesWattBox.
3. Click **Apply** to save the settings.
4. Open the Event Log (See Section: 12 Event Log), and verify that the chosen name is available.
5. If the name is available, a log entry stating: “Registration with DDNS Server ns2.wattboxdns.com completed” will appear in the log. The WattBox can now be accessed remotely.

   If the name was NOT available, a log entry stating: “Registration completed. The name is already in use. The new name is 'JoneWattBox100'” will appear in the log. Repeat steps 2-5 using the name provided in the log or continue to enter names until an acceptable one is registered.

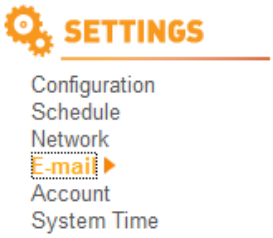
After the DDNS is configured the WattBox may be accessed remotely from any browser by entering the server name that was entered. See Section: 4.2 Accessing from a Remote Location on how to access from a remote location. Only 1 DDNS address is needed for multiple WattBox’s on a single network, individual access requires the address followed by the port.

8.5. Apply and Reset

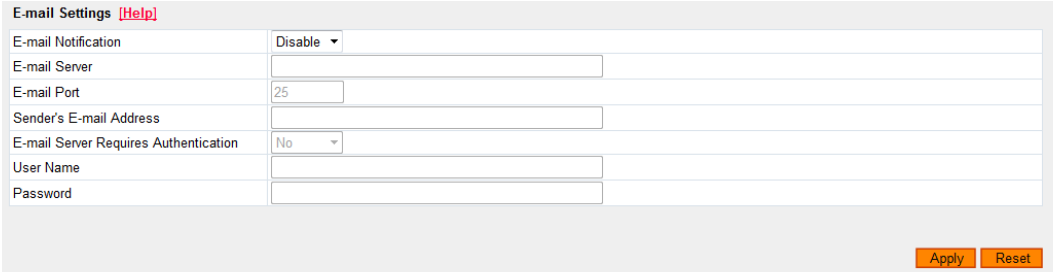


Apply	Applies changes made to settings for the entire screen.
Reset	Resets all settings to last applied state. This does not perform any changes to the WattBox settings.

9. Email



9.1. Email Settings



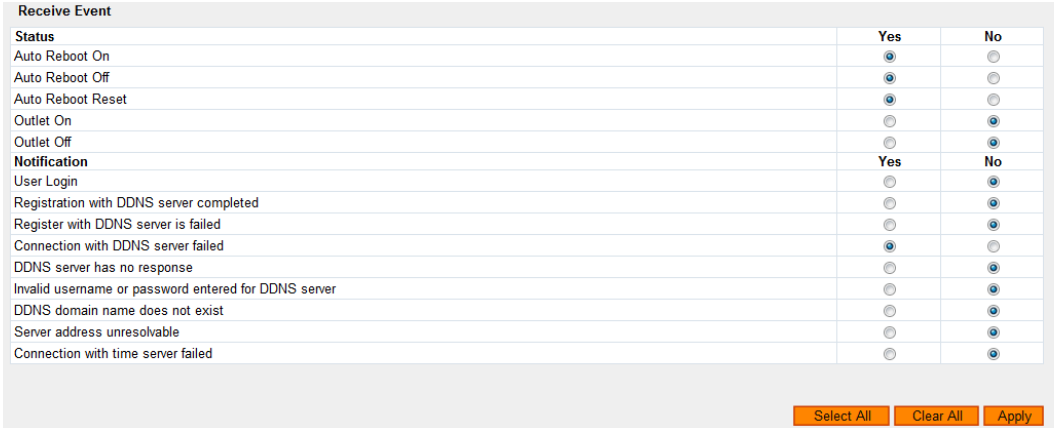
E-Mail Notification	Enable or Disable E-Mail notifications.
E-Mail Server	Enter the name of the server used for sending emails. **Corporate Exchange Accounts** — Contact the network admin for server information. **Personal Web Accounts** — Enter the smtp server used to send emails. Example: smtp.gmail.com Note that IMAP and POP must be turned on within a Gmail account. Refer to the email provider for details on using SMTP.
E-Mail Port	Default port 25 may be used for most accounts, however if this does not work 587 works for most providers. Refer to the email provider for details on using SMTP. Corporate accounts require contacting the network admin for port information as the ports above may be blocked within the Company's firewall.
Sender's E-Mail Address	This is used for notification purposes only and does not need to be the email account being used to send emails. We recommend that a name be used that identifies the WattBox sending the emails. The text entered does not have to be an email address. Example: JonesWB600Main
E-Mail Server Requires Authentication	Most web based email providers require this to be set to Yes.
Username	Enter the name used to log into the email being used to send emails. Some email servers may require that this be only the username; others require a full email address. Consult with email provider to determine the best settings. Example: SnapAVtechDocs@gmail.com
Password	Enter the password used to access the email account being used to send emails.
Apply	Applies settings in the fields above.
Reset	Resets all settings to last applied state. This does not perform any changes to the WattBox settings.

9.2. Test Email

Note: *This screen will only appear when Email is Enabled.*

Send a test Email	Enter an email address to send a test email to and select Send Now. Note that the settings in Email Settings section must be saved before sending a test email.

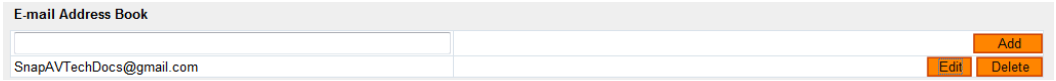
9.3. Receive Event



Select the events to include within notification emails to a particular recipient. After selecting, click “Apply” to save the settings. These will be used when an email address is added to the address book. Select Yes to include and No to exclude.

Note: *The events configured here have no effect on Email addresses added to the address book. Events must be changed using the Edit function for each Email address in the address book.*

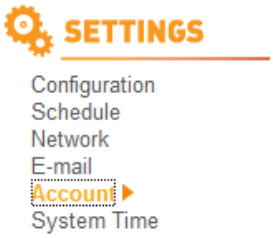
9.4. Email Address Book



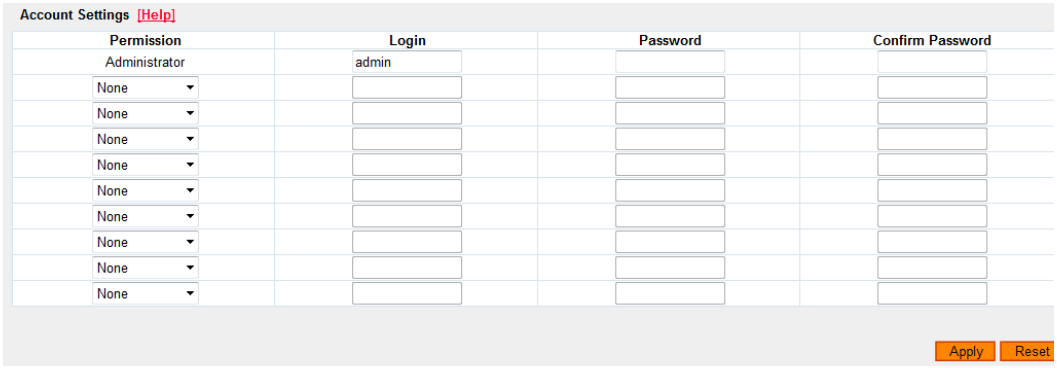
Enter an email address to send notifications to that will include the settings for receive event. Note that these settings can be edited once the email has been added to the address book.

Edit	Allows for Receive Events settings to be change for a particular email recipient. A pop window will a matches Receive Event above.
Delete	Removes the email address from the address book.

10. Account

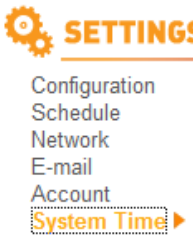


10.1. Account Settings

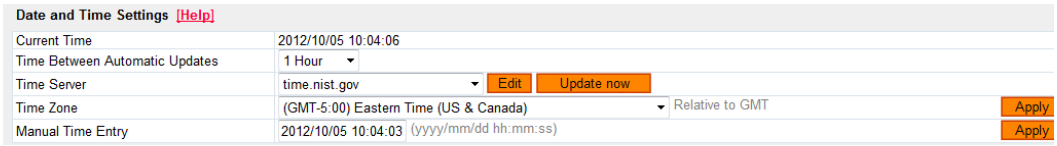


Permission	Sets the permision level of the account.
Administrator	Access to Control and configure all settings for the WattBox.
User	Access to Control the WattBox outlets, but cannot adjust settings. User accounts will only see the Control page when logged in. This would be used for the customer to turn outlets On or Off.
Login	Name of the account used to log into the WattBox.
Password	Password for the account.
Apply	Applies settings in the fields.
Reset	Resets all settings to last applied state. This does not perform any changes to the WattBox settings.

11. System Time

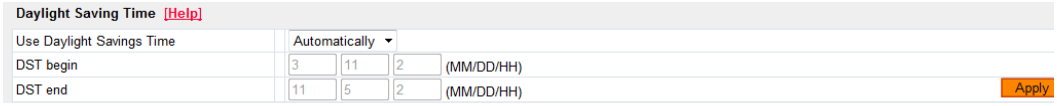


11.1. Date and Time Settings



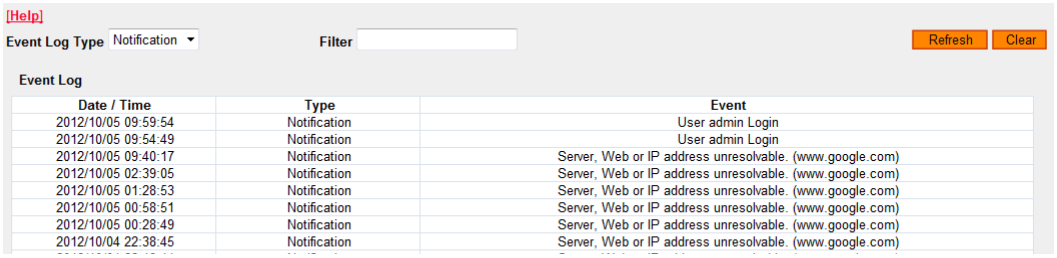
Current Time	Current date and time.
Time Between Automatic Updates	Sets the time to pull time updates from the time server.
Time Server	Time information is pulled from the selected server. Default of time.nist.gov works best, however other servers are available should problems setting the system time arise.
Time Zone	Time Zone the WattBox is located.
Manual Time Entry	Manual entry of system time.

11.2. Daylight Savings Time



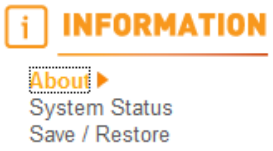
Use Daylight Savings Time	Automatically	Daylight time is generated based on the date of the system.
	Manually	Allows for manual entry of a start and end date to use for Daylight Savings Time.
	Disabled	Daylight Savings will not be used.

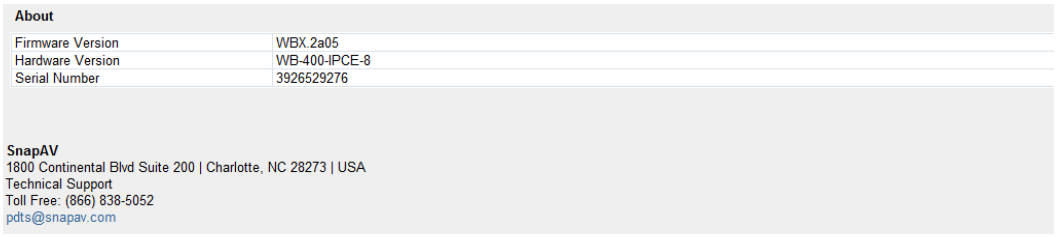
12. Event Log



Event Log Type	Allows for selecting the different types of log entries, All, Status, or Notification.
Filter	Allows for a search of the current log type. This can be any text that is included in the event column. ***Note:*** *Any text in the filter field must cleaered to remove the filter.*
Refresh	Refresh the log to see the latest entries.
Clear	Clears all entires in the log.

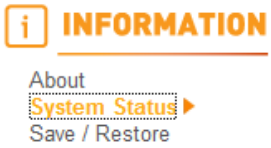
13. About





Firmware Version	Current firmware version installed in the WattBox.
Hardware Version	Current Hardware Version installed on the WattBox.
Serial Number	Serial Number of the WattBox.

14. System Status



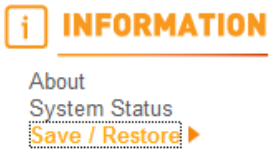
14.1. System Information

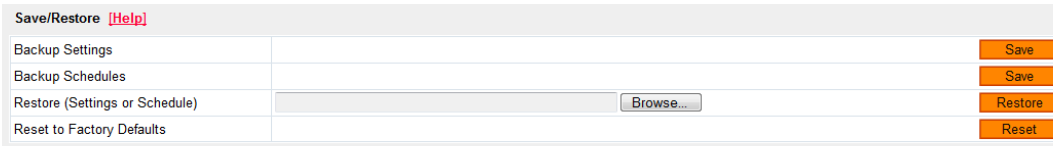
System Information			
Hardware Version	WB-400-IPCE-8	System Time	2012/10/05 10:04:31
Firmware Version	WBX.2a05	Last Auto Reboot on	--
Serial Number	3926529276		
Uptime	22:26:41		

14.2. Network Status

Network Status			
Hostname	WattBox	Primary DNS Server	10.102.1.11
IP Address	10.102.102.126	Secondary DNS Server	172.30.52.13
Default Gateway	10.102.0.1	Time Server	time.nist.gov
MAC Address	00:03:EA:0A:14:FC		

15. Save / Restore





Backup Settings	Saves a backup file of all the settings for the WattBox. We recommend that all settings are saved when setting up or changing any setting within the WattBox.
Backup Schedules	Saves a backup file of all the schedules in the WattBox. We recommend that all schedules are saved when setting up or changing any schedule within the WattBox.
Restore (Settings or Schedule)	Select browse to select the settings/shedule files to download and select Restore. This will overwrite any settings or schedules current saved.
Reset to Factory Defaults	Select reset to remove all custom settings within the WattBox. We recommend that Backup Settings and Backup Schedule are used prior to restoring to factory defaults. ***Note:*** *Always Backup settings and schedule prior to performing a firmware update.*

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