

Congratulations on purchasing the best network controlled power switch available. The iBoot-WiFi provides you the ability to reboot crashed devices with the click of a mouse. Be sure to read up on all the features of the iBoot-WiFi Including:

- **Web Based** setup and control
- **Telnet** setup and control
- **Event Scheduling** for real-time power control.
- **AutoPing:** Automatic monitoring and action for failed equipment.
- **Discovery Utility:** Find and manage all the iBoots on your network.
- **Easy Software Integration:** Use the DxP Protocol to build your own custom applications.
- **New iBoot Cloud Service** Control all your iBoots from one web portal.



## 1. Table of Contents

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## 2. Important Safety Instructions

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**When using this product, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:**

1. Read and understand all instructions.
2. Follow all warnings and marked on the product.
3. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this product in an outdoor environment or near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
6. Slots and openings in this product and the back or bottom are provided for ventilation to protect it from overheating; these openings must not be blocked or covered. The openings should never be blocked by placing the product on the bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.
7. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your dealer or local power company.
8. This product is equipped with a three wire grounding type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug. Do not use a 3-to-2 prong adapter at the receptacle; use of this type adapter may result in risk of electrical shock and/or damage to this product.
9. Do not allow anything to rest on the power cord. Do not locate this product where the cord will be abused by persons walking on it.
10. Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.
11. Never push objects of any kind into this product through slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electrical shock. Never spill liquid of any kind on the product.
12. To reduce the risk of electrical shock, do not disassemble this product, but take it to a qualified serviceman when some service or repair work is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect re-assembly can cause electric shock when the appliance is subsequently used.
13. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - a) When the power supply cord or plug is damaged or frayed.
  - b) If liquid has been spilled into the product.
  - c) If the product has been exposed to rain or water.
  - d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions because improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
  - e) If the product has been dropped or has been damaged. If the product exhibits a distinct change in performance.
14. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
15. Do not use the telephone to report a gas leak in the vicinity of the leak.
16. Do not exceed the maximum output rating of the auxiliary power receptacle.

**Save These Instructions**

### 3. General Description

The iBoot-WiFi is a wireless, IP addressed, web controlled AC power switch. Anyone with a web browser can access iBoot-WiFi to perform power On, Off or Power Cycle (Reboot or Power Burst). iBoot-WiFi uses two levels of password for security.

A simple Web browser interface makes it easy to control power from anywhere in the world with a click of a mouse. You can access the iBoot-WiFi directly from your browser or through the iBoot Cloud Service. iBoot-WiFi also supports Telnet for text commands, as well as Dataprobe's Exchange Protocol (DxP) for interfacing to a variety of Dataprobe products and custom software development.

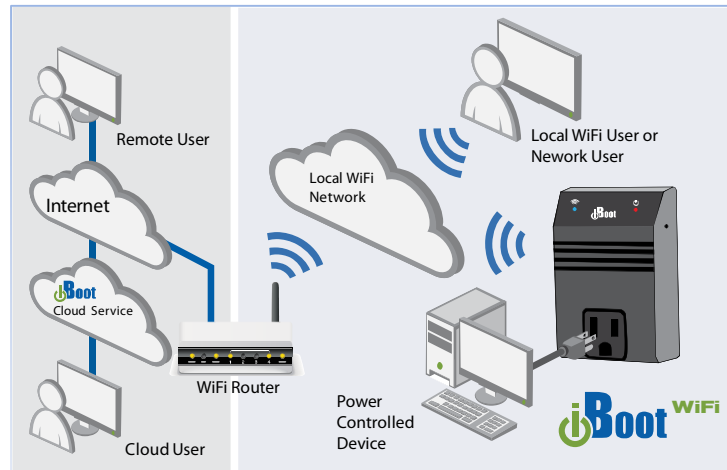


Figure 1 iBoot Application Diagram

#### 3.1. Uses for iBoot

- Remote reboot of any device, routers, servers, kiosks, etc. The device to be rebooted need not be network attached.
- Secure sensitive devices by keeping them powered off when not in use. This prevents hackers from seeing them at all times.
- Power down equipment when not needed for power savings and to save on wear and tear.
- Power up alert devices like sirens, lamps, signage; or control environmental system like heaters, coolers pumps, etc.

#### 3.2. Multiple Control Options

In addition to the Web control capabilities, iBoot-WiFi features several other means to operate automatically or under computer control.

**AutoPing:** The AutoPing feature allows iBoot-WiFi to automatically detect failed equipment and perform a timed reboot or other power control function (like turning on an indicator or siren). You set 1 or 2 IP addresses to be periodically pinged. When iBoot-WiFi no longer detects a response from the address(es), the programmed power control function is actuated.

**Telnet:** iBoot-WiFi's Command Line Interface (CLI) allows direct control and setup through Telnet.

**Dataprobe Exchange Protocol:** iBoot-WiFi supports the Dataprobe Exchange Protocol (DxP). This protocol allows Dataprobe products to communicate across networks, and allows developers to design custom applications to integrate iBoot-WiFi into custom applications. For more information about DxP, contact Dataprobe Applications Engineering and Support.

## 4. Hardware Installation

### 4.1. Orientation

iBoot Plugs directly into a NEMA 5-15 outlet. It provides a switched NEMA 5-15 receptacle. Up to 12 Amps can be switched through the iBoot-WiFi. See Specification for complete details.

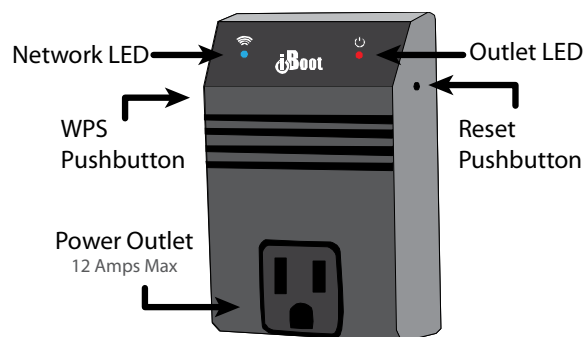


Figure 2 iBoot-WiFi Major Features

### 4.2. LEDs

<b>Outlet LED Red</b>	On	Outlet Power On.
	On with momentary Off (1.2 /.1)	Power On – Cycle in Progress
	Slow Flash (.5s)	Reset to Factory Defaults in Progress
	Off with Momentary On (1.2 /.1)	Power Off – Reboot in Progress
	Off	Outlet Power Off
<b>Network LED Blue</b>	On	Network Connected
	On with momentary Off (1.2 /.1)	Micro Access Point Only Mode
	Slow Flash (.5s)	Network Connection in Progress
	Fast Flash (.1s)	Network Connection Attempt Failed
	Off	Unit not receiving power

### 4.3. Switches

<b>WPS Pushbutton</b>	Push and Hold 7 sec.	Initiate WiFi Protected Setup (WPS)
<b>Reset Pushbutton</b>	Momentary Press	Restart iBoot-WiFi (no effect on outlet)
	Press and Hold 10 Seconds	Reset Factory Default

### 4.4. Power

Connect the iBoot-WiFi to a grounded three prong outlet. The maximum switching capacity of the iBoot-WiFi is 12 Amps.

## 5. Initial Configuration

### 5.1. Using the Micro Access Point (uAP)

The iBoot-WiFi generates its own WiFi hotspot to assist you in easy configuration. Through this uAP, you can access iBoot-WiFi and join it to your local wireless network. This hotspot is always available and serves as a back-up means of access, should the primary network not be available.

#### Step 1. Access the Micro Access Point

- Plug iBoot-WiFi in and wait for blinking blue Network LED.
- Connect to WiFi hotspot iBootxxxx. (xxxx is the last 4 digits of the MAC Address, located on the bottom of the unit. The password is **wifi-admin**
- Open browser to 192.168.10.1
- Login to iBoot with user: admin password: admin
- Access WiFi Setup Page. From Home page click Setup. Then click Set WiFi
- Select desired network. You may Click Scan Networks to update list if needed.
- Fill-in Passphrase and click Connect. Wait 30 seconds for the iBoot to join the network and obtain an IP Address.
- iBoot-WiFi will display IP Address of the selected network under the heading IP Settings.

**Note this IP Address for Step 2**



Figure 3 uAP Setup

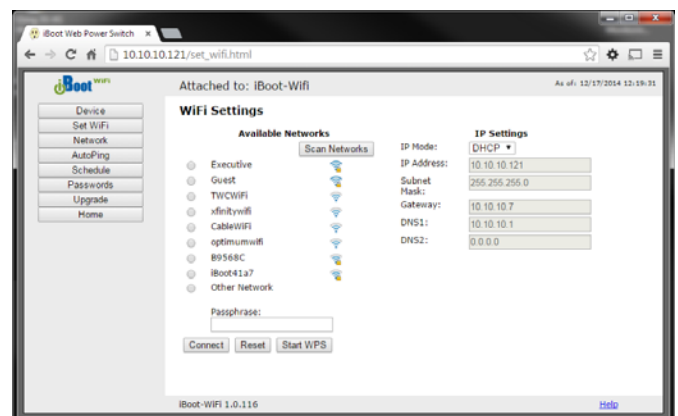


Figure 4 WiFi Setup Page

#### Step 2. Connect to Local Network

- Connect the computer to the WiFi Network selected for iBoot-WiFi
- Open browser and connect to IP Address from Step 1
- Login to iBoot-WiFi with **user: admin password: admin**
- Congratulations. Now you can configure your iBoot-WiFi and enjoy improved network reliability.

## 5.2. Using WiFi Protected Setup (WPS)

If your router supports WPS, you can easily connect your iBoot-WiFi to the network. Refer to your router documentation for how to initiate WPS. Some routers use a pushbutton, and others use a button on the router management web page. iBoot-WiFi only supports routers that do not require a PIN code to connect.

- Initiate WPS on the router either with the pushbutton or web button. Generally you have a few minutes to complete the process from this point.
- Press and hold the WPS pushbutton for 3 seconds on the iBoot-WiFi, then release it to initiate the connection. The blue LED on the iBoot-WiFi will blink to indicate WPS is attempting contact. Alternately you may use the WPS button on the Set WiFi web setup page of the iBoot-WiFi.
- When the WPS process is complete and is successful, the blue LED on the iBoot-WiFi will be steady on.
- If the process did not complete successfully the blue LED will flash rapidly. To try again press the Reset button to reset the iBoot-WiFi, when the Blue light is steady initiate WPS again by pressing and holding the WPS button for 3 seconds then releasing as noted above.

Once WPS process is complete, you need to determine the IP Address that was set by the router. You can either check the IP Address using the routers client table, or use Dataprobe's Device Management Utility to discover the IP Address.

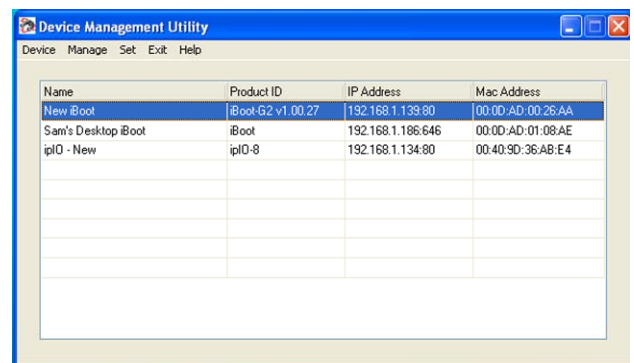
## 5.3. IP Address Discovery

The Device Management Utility (DMU), available online at [http://dataprobe.com/support\\_iboot-wifi.html](http://dataprobe.com/support_iboot-wifi.html), provides the easiest means to find all the iBoots (and other Dataprobe devices) on your network.

Install and run the Device Management Utility:

1. Download DMUSetup.exe
2. Run DMUSetup.exe
3. Run the DMU

Once the DMU is run, click on Device | Discover to display all the iBoots on your network. The DMU will display the Location Name of the iBoot-WiFi, The product ID and Version Number, the current IP Address, and the MAC Address.



The screenshot shows the 'Device Management Utility' window with a menu bar (Device, Manage, Set, Exit, Help) and a table of discovered devices. The table has four columns: Name, Product ID, IP Address, and Mac Address. The first three rows are highlighted in blue.

Name	Product ID	IP Address	Mac Address
New iBoot	iBoot-G2 v1.00.27	192.168.1.139:80	00:00:AD:00:26:AA
Sam's Desktop iBoot	iBoot	192.168.1.186:646	00:00:AD:01:08:AE
ipIO - New	ipIO-8	192.168.1.134:80	00:40:9D:36:AB:E4

Figure 5 DMU Discovers Dataprobe Devices

## 6. Web Browser Operation

### 6.1. Password Protection

iBoot-WiFi uses two username/password credential sets, one for power control only (User) and one that also provides access to the setup functions (Admin). This configuration can be changed to require Administrator credentials at all times or allow unsecured User level control. See Section 7.7.

#### Default Credentials:

Role	Username (fixed)	Password (settable)
Administrator	admin	admin
User	user	user

Open your browser and enter the IP address of iBoot-WiFi into the address bar.

Enter the username and password when prompted. When the proper username/password is received the Control and Status Page is displayed.

iBoot-WiFi uses an inactivity timer for security. This timeout is user selectable from 0 to 99 minutes. Setting to zero disables the timeout feature. When there is no activity for the set time in minutes, the user is automatically logged out and the username and password will need to be entered again for access. This is to prevent accidental lockout by leaving the user logged in.



As the iBoot-WiFi allows only one Web user logged in at any time, use caution when disabling the timeout feature, as it is possible to lock out other users by forgetting to logout. Closing the browser will not log the user out and will lock out web access. If you do become locked out, access the iBoot-WiFi via Telnet and reboot the unit, or press the reset button (see Section 11).

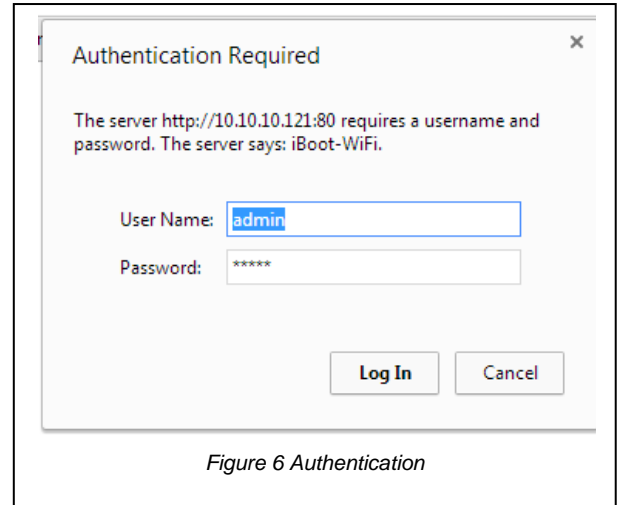


Figure 6 Authentication

### 6.2. Mobile Browser Support

The standard web pages illustrated in this manual are for screen sizes 700 pixels wide and greater. For devices with screen widths below 700 pixels, the iBoot-WiFi uses a set of mobile browser pages. The iBoot-WiFi automatically detects the screen size and redirects automatically to the mobile pages. The mobile pages do not support the setup functions. To access the setup functions, or to view the full desktop site, click on the Full Site button.

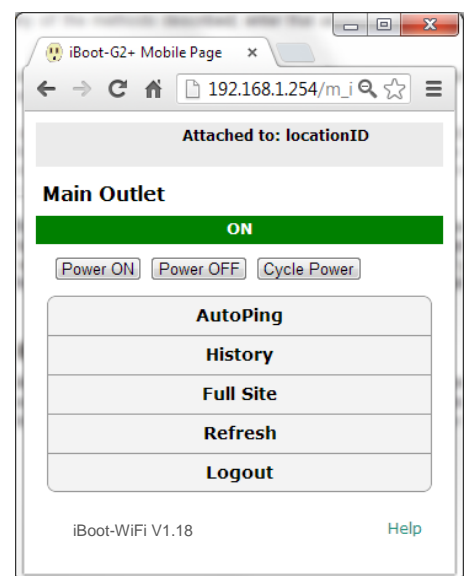


Figure 7 Mobile Browser Pages



### 6.3. Control and Status Page

Once the user is validated, the Control and Status page is displayed.

This page provides automatic updates every .5 seconds.

To control the power, click on the appropriate button. During power cycling, the Power Status bar will indicate the temporary status, with a blue background. Once the cycle is complete, the status bar will revert to its original condition. To abort a power cycle, click on either Power On or Power Off buttons.

If the AutoPing feature is in use, the page will also display the current status, OK or Failed, for each AutoPing in use, with a counter of how many times action was triggered. If connecting with the Admin credentials, reset buttons for the Trigger counters are provided.

If the iBoot-WiFi is connected to a time server (see Section 7.6), The Home page will also show the five most recent history events, including the Outlet, Action, User and Time/Date of each event. The iBoot-WiFi holds the last 32 events in memory. The user can access a complete history webpage, download the history in a .csv file, or clear the history.

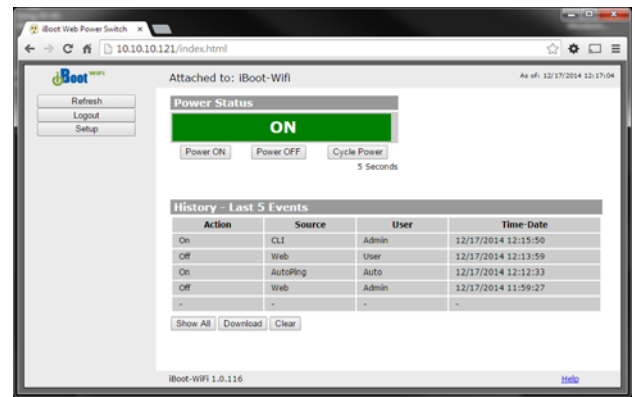


Figure 8 Home Page for Status and Control

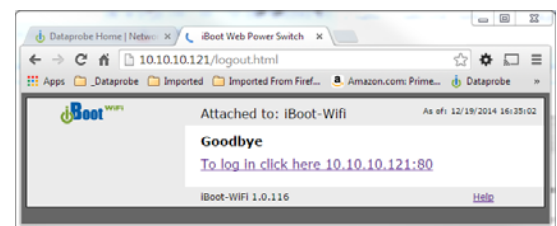


Figure 9 Goodbye Page

#### Navigation Buttons:

**Refresh:** Use the Refresh button to obtain the latest status of iBoot. Using your browser's refresh button can lead to inadvertent power switching. If an NTP server is being used, the time of the last refresh will be shown in the upper right corner.

**Logout:** When you are finished with iBoot, click on Logout. A Goodbye page will be displayed. This page has a URL link to re-connect with the iBoot. The linkback URL is user settable. If no linkback is set, the hyperlink will be the unit's IP Address.

**Setup:** To access the Setup page, the administrator credentials are required. When logged in as User, the challenge for Administrator credentials will be displayed.



## 7. Web Setup

iBoot-WiFi setup section consists of several pages. Access any page via the buttons on the left of the page. Each time a setting is changed click on the Save button for that page to save the changes before moving to the next page.

### 7.1. Device Settings

**Location ID:** Set a 20 Character name to be displayed on the top of the Home page. This assists in identifying which iBoot-WiFi is being accessed.

**Cycle Time:** 1 to 999 seconds power cycle time. This is the length of time the power will be off during a reboot, or on during a power burst.

**Initial State:** The outlet can be set to the state it will assume when the iBoot-WiFi is powered up or reset. The choices are: On, Off and Last, meaning the state it was in when the power was removed or reset commenced.

**Auto Logout:** This setting sets the automatic logout for inactivity on both the web and telnet users. It can be set from 0 to 99 minutes. 0 disables the Auto Logout feature.



As the iBoot-WiFi allows only one Web user logged in at any time, use caution when disabling the timeout feature, as it is possible to lock out other users by forgetting to logout. Closing the browser will not log the user out and will lock out web access. If you do become locked out, access the iBoot-WiFi via Telnet and reboot the unit, or press the reset button.

**Reboot Button:** This button restarts the iBoot-WiFi.



The power condition after the reset will be based on the Initial State setting (ON, OFF or LAST). The outlet state may change upon restart.

### 7.2. WiFi Settings

The Set WiFi page allows review and control over the WiFi network (hotspot) to attach the iBoot-WiFi. You can also lock or alter the IP Address and other basic network settings.



Take care when altering IP Address settings. It is normally best to allow the WiFi router control these settings.

If you accidentally make settings that cause loss of access to the iBoot-WiFi re-connect using the Micro Access Point (see Section 5.1) or reset factory defaults.

This page displays all of the WiFi hotspots available to the iBoot-WiFi. If the hotspot you are looking for is not visible, use the Scan Networks button to refresh the selection.

To change the WiFi hotspot:

- Select the new hotspot using the radio buttons



Figure 10 Device Setup

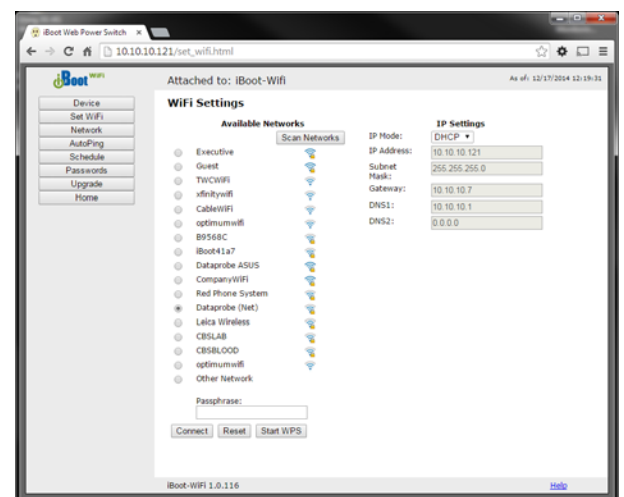


Figure 11 WiFi Setup

- Enter the Passphrase associated with the hotspot
- Press the Connect button to initiate the connection.

A “Connecting” page is displayed while the iBoot-WiFi connects to the selected hotspot.

The iBoot-WiFi now has a new IP Address from the new network. Use the DMU (see Section 5.3) or access your router management page to discover the new IP Address of the iBoot-WiFi.



Figure 12 Connecting Page

## IP Settings

The IP Settings section of this page displays the current IP Address, Subnet Mask, Gateway and DNS Entries. The Administrator can select the IP Mode; either DHCP – where the router controls these settings or Static – Where the Administrator can make these settings manually.

## 7.3. Network Settings

**IP Mode:** Select Static to set the IP address using the fields below, or DHCP to allow a DHCP server to set the IP Address.

**IP address:** Enter a static IP address. This will be automatically set if using DHCP

**Subnet Mask:** Enter the Subnet Mask. This will be automatically set if using DHCP

**Gateway:** Enter the Gateway. This will be automatically set if using DHCP

**HTTP Port:** This setting is used to allow access to iBoot-WiFi on a port other than the Web standard Port 80. If the port is changed, you will need to identify the port number when you enter iBoot's IP address into your browser. If the new port is 8080 then use the address <http://192.168.1.254:8080>.

**Linkback URL:** This setting allows control of the hotlink displayed on the Goodbye page. It allows use of the public IP address or DNS name instead of the internal IP Address of the iBoot-WiFi, which is the default setting. If this setting is left blank, the hotlink will be the IP Address of the unit. Enter up to 128 characters.

**Telnet Port:** This setting is used to allow access to the iBoot-WiFi via telnet by ports other than standard 23.

**DxP Port:** This setting is used to allow access to the iBoot-WiFi via Dataprobe Exchange Protocol (DxP) via ports other than standard 9100.

**Enable Cloud Services:** This setting enables the iBoot-WiFi for iBoot Cloud Services (iBCS). iBCS allows the iBoot-WiFi to be monitored and controlled from a web portal from any browser. It allows multiple iBoots to be managed from a single portal. For a complete description of iBCS and setup instructions, see Section 8.



**Note:** All of the TCP/IP Settings require a reboot of the iBoot-WiFi, after clicking Save. A Reboot button will appear at the bottom of the page. The new settings will not take effect until the unit is rebooted. Reboot will not affect the power position of the iBoot-WiFi. Upon Clicking Reboot, the Goodbye page is displayed with a link to re-login.

## 7.4. AutoPing

The AutoPing feature allows iBoot-WiFi to automatically detect failed equipment and perform a timed reboot or other power control function (like turning on an indicator or siren). You set one or two IP addresses to be periodically pinged. When iBoot-WiFi no longer detects a response from these addresses, the programmed power control function is actuated. The two addresses can be AND or OR linked so that both (AND) or either (OR) need to fail in order to take the selected action.

Examples:

Use AutoPing as server monitor: iBoot-WiFi is installed with the device it monitors and automatically reboots if there is no response. Ideal for: Kiosks & Servers

Use AutoPing as service monitor: iBoot-WiFi is installed with the device to be rebooted, but pings a remote host to test the communication channel. Ideal for: DSL & Cable Modem Verification.

iBoot-WiFi monitors network device and powers up alarm or redundant system when there is no response Ideal for: Hot Standby Servers, Environmental Control, Alert for any Network Failure.

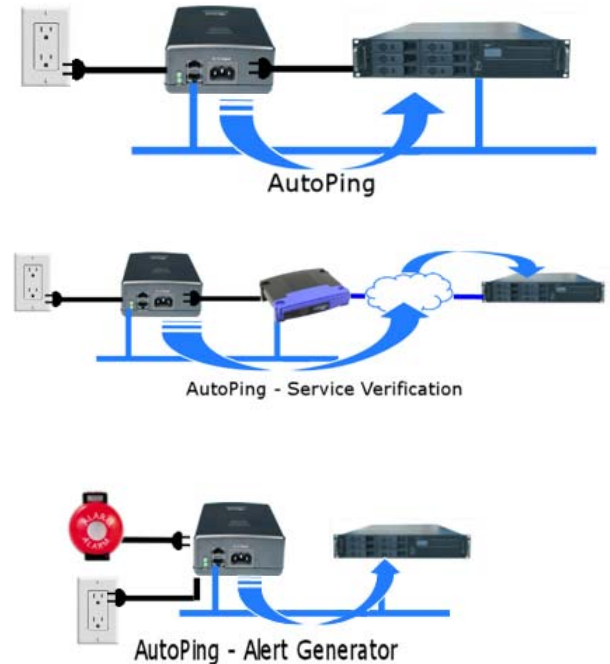


Figure 13 Auto Ping Use Cases

## 7.5. AutoPing Settings

**IP Address** Enter the IP address of the device to be pinged.

**Ping Frequency:** Enter 1 to 999 seconds. The ping will go out to the selected device this often.

**Fail Count:** Enter 1-999 times the ping needs to fail consecutively before the selected action is taken. When the fail count has been reached, the AutoPing action will be triggered.

**Mode:** Select from

Single	Only AutoPing 1 is used.
AND	Both AutoPings 1 and 2 must fail for the action to occur.
OR	Either AutPing 1 or Autoping 2 failing triggers the action.

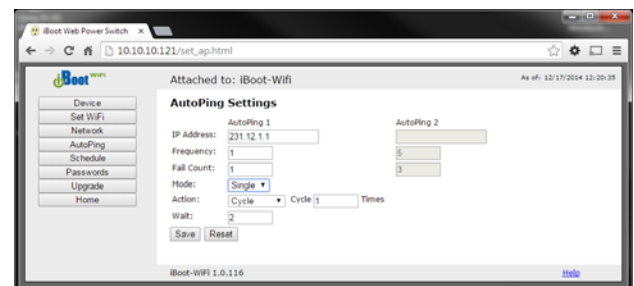


Figure 14 AutoPing Setting Page

**Control:** Select Main for the internal power outlet, or Exp1, Exp2 for either of the two expansion ports.

Action: Select from

None	AutoPing will not take any action upon Fail.
Power On – Latch	Upon triggering, iBoot-WiFi will power on and remain so until changed via the web, telnet, DxD, etc.
Power On – Follow	Upon triggering, iBoot-WiFi will power on. When the ping response returns, iBoot-WiFi will power off.
Power Off – Latch	Upon triggering, iBoot-WiFi will power off and remain so until changed via the web, telnet, DxD, etc.
Power Off – Follow	Upon triggering, iBoot-WiFi will power off. When the ping response returns, iBoot-WiFi will power on.
Power Cycle Times	Upon triggering, iBoot-WiFi will cycle the power. If Power Cycle does not result in the ping response the iBoot-WiFi can cycle again. The number of times the iBoot-WiFi will cycle is set by the <b>Times</b> setting. To have the iBoot cycle power 3 times to get the system to respond again, set the Times to 3.

Wait: This is the length of time the iBoot-WiFi allows for a response to a ping. (Default is 2 Seconds)

With AutoPing operational, the main iBoot-WiFi page will display the current status of this feature. The status will be OK to indicate that iBoot-WiFi is receiving responses to the ping, or that the fail counter has not yet been exceeded.

If the fail count has been exceeded, the status will change to FAIL. The Trigger Counter indicates the number of times the AutoPing action has been triggered. A counter reset button is provided.



**Note:** All of the AutoPing Settings require a reboot of the iBoot-WiFi, after clicking Save. A Reboot button will appear at the bottom of the page. The new settings will not take effect until the unit is rebooted. Reboot will not affect the power position of the iBoot-WiFi. Upon Clicking Reboot, the Goodbye page is displayed with a link to re-login.

## 7.6. Event Scheduling

iBoot-WiFi can schedule up to eight reoccurring power events. Set the starting date and time, plus the action to be taken and any repeat cycle for each.

To enable the time scheduling function:

Enable the Time Server with the checkbox under the Time Setup section, then set your Time Zone offset from GMT.

If the default setting [time.nist.gov](http://time.nist.gov) is not accessible from your location, find an alternative time server. A list of public time servers is available at <http://www.ntp.org/> and other sites.

Once the time server is active, scheduled events can occur. Up to eight independent scheduled events can be programmed.

Date: Set the initial date for the event. The format for the date is mm/dd/yyyy.

Time: Set the initial time for the event. The format for the time is hh:mm with hours in 24 hour format.

Repeat: Set the repeat multiplier, if desired. Set the number from 0 to 999 and either Days, Hours, or Minutes. To have the schedule repeat every two days, set this number to 2.

Action: Set the event Action; On, Off or Cycle.

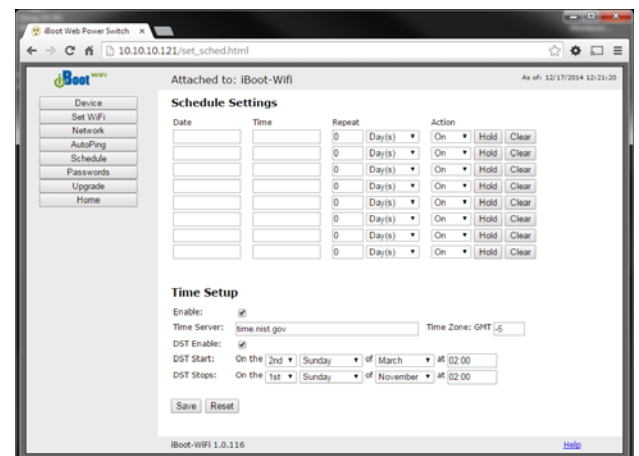


Figure 15 Scheduling Page

**Hold/Run:** Click Hold to pause the scheduled event. Click Run to re-start the scheduled event.

**Clear:** Delete the scheduled event.

Click Save to save the current settings. Click Reset to delete any unwanted changes.

When one or more scheduled events have been programmed, the Home page will display an icon of a clock next to the power status.

## 7.7. Password Settings

The iBoot-WiFi supports three modes of user and password operation.

**Login Required:** This mode supports both User and Admin users. Each user has a settable password. This is the factory default mode.

**Auto Login:** This mode does not require a username of password for the User level operation. No login challenge will be required for any mode of operation, until any setup function is requested. The Admin username and password is required for any admin functions.

**User Disabled:** There is no User account. The Admin username and password will be required for operation and setup functions across all modes of operation.

Two passwords are used by iBoot. In the Login Required mode, The User Password allows access to the control of iBoot, but not to the Setup functions. Clicking on the Setup button allows the Administrator to log in. Passwords can be up to 20 characters long and are case sensitive.

Enter the current password then the new password twice to confirm.

### Default Credentials

Role	Username (fixed)	Password (user set)
Administrator	admin	admin
User	user	user

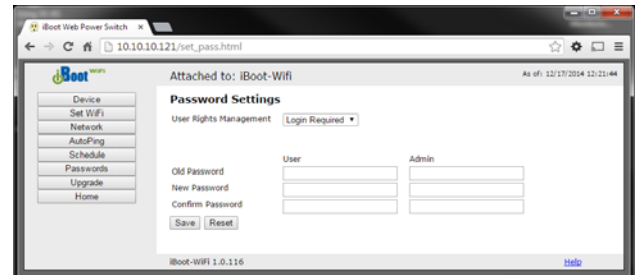


Figure 16 Password Setting Page

## 7.8. Firmware Upgrade

The Firmware upgrades for both the core iBoot-WiFi application and the associated web pages are easily upgraded through the browser interface. Click on the Upgrade button from any setup page.

Firmware files are available from the Dataprobe website. The latest firmware is always available from location

Address: [dataprobe.com/upgrade/iboot-wifi](http://dataprobe.com/upgrade/iboot-wifi)  
firmware: [iboot-wifi-latest.bin](#)  
webpages: [iboot-wifi-latest.ffts](#)

Files can also be downloaded from the iBoot-WiFi support page and placed on any web server. If this is done, change the Server Address field to the new address.

iBoot-WiFi web pages are in a compressed format. To create and install your own custom web pages, contact Dataprobe Technical Support.

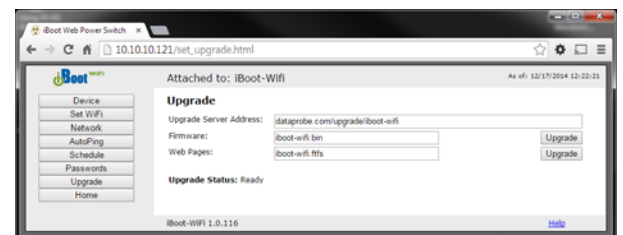


Figure 17 Firmware Upgrade Page

## 8. iBoot Cloud Service – BETA

iBoot Cloud Service (iBCS) allows customers with iBoot to access and control multiple iBoots in multiple locations from a single portal with a single sign-on.

iBCS will not only make using iBoots easier, by consolidating all units into one sign-on and interface, it will also enhance the number of situations where iBoot can be deployed.

- Users with Dynamic IP addressing will always be able to access their iBoot from any location.
- Users that do not allow in-bound connections can access their iBoots.
- Service providers can manage multiple customer accounts with diverse security configurations

iBoot Cloud service is currently in development and is made available to our current users free of charge. Please note that as at this beta stage, service interruptions may occur or new versions of the iBoot firmware may be made available and necessary to keep current with the cloud development. The full Terms of Service of the iBoot Cloud Service is [available here](#).

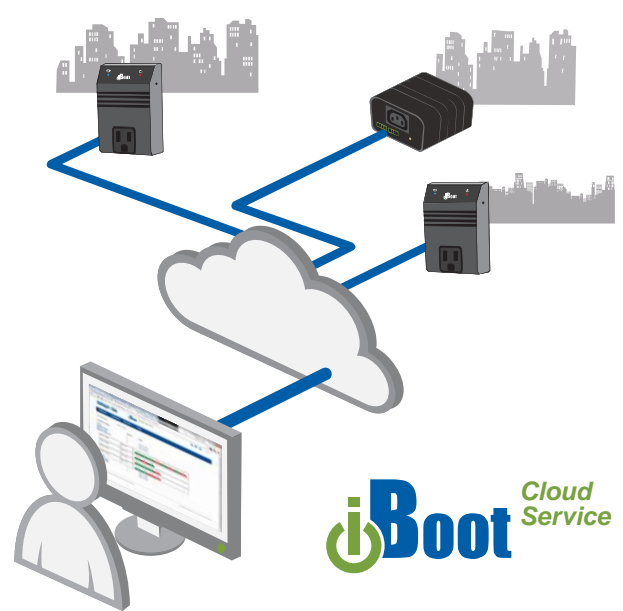


Figure 18 iBoot Cloud Service

While the Cloud Service is in Beta stage, the firmware in the iBoot-WiFi is fully tested and released by Dataprobe. If you do not enable the cloud capabilities of the iBoot, you can expect continuous and dependable operation.

### 8.1. iBoot Cloud Users Forum

Dataprobe has established a special users' forum for iBoot Cloud Service Beta. Please use this forum to post any questions, comments and ideas about the iBoot Cloud Service. Registration is required to post to the forum. Find the iBoot Cloud Users Forum [here](#).

### 8.2. iBCS Setup & Operation

Use of the iBoot Cloud Services requires the iBoot to be configured to access the Internet. Please review the installation and configuration procedures to insure proper setup.

#### a. Establish Account with iBoot Cloud Server

- Visit <http://iboot.co> from your browser
- Click on Register
- Complete the information
- Confirm Registration by clicking on the link provided in the email.

#### b. Enable Cloud Services on iBoot-WiFi

Log into the iBoot-WiFi with Administrator rights

Go to the Network Setup page

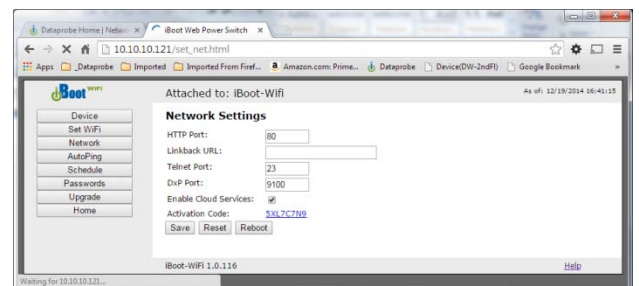


Figure 19 network Setting Page



Click on the checkbox Enable Cloud Services:

Within 30 seconds, an 8 character activation code will appear.

This code is also a hotlink to the Cloud Service.

### c. Register iBoot-WiFi with Cloud Account

Click on the Activation code to register the iBoot with the Service.

You will be re-directed to the iBoot Cloud Service. Log-in with your account and the iBoot-WiFi will be automatically registered with your account.

Alternatively, you can log in to the Service and click on Add Device and enter the activation code in the field provided.

**Congratulations. You are now on the cloud.**

### d. iBCS Main Page

The iBCS main web page provides a menu bar with the following options:

**Devices:** List all registered iBoot units, ordered by their Name. Click on any iBoot line to manage that unit.

**Locations:** Group all iBoots by location. Click on any location to display or hide all the iBoots at that location.

**Account:** Display and edit account information and obtain account access history.

**Help:** Links to the iBoot Cloud Forum and Dataprobe support pages.

### e. Control Power from the Cloud

The status screen will detail all the iBoots registered with the cloud. You can add locations and group iBoots by location.

Each iBoot displays the power status and AutoPing if configured.

Click on the box that holds the Activation Code for the device you just entered. A modal box will appear with options to rename the device, move the device to a defined location or delete the device.

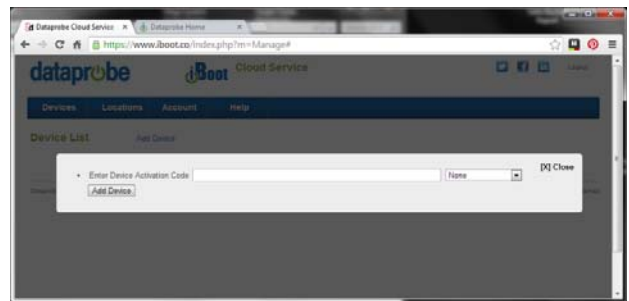


Figure 20 Cloud Activation Page

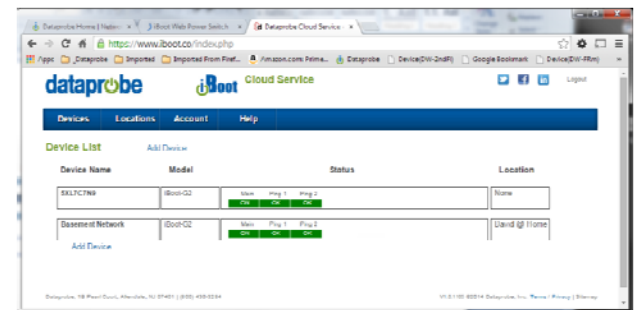


Figure 21 Cloud Device Listing

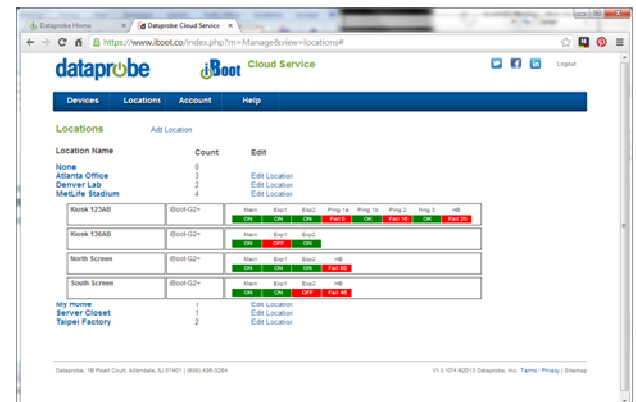


Figure 22 Cloud Location Listing

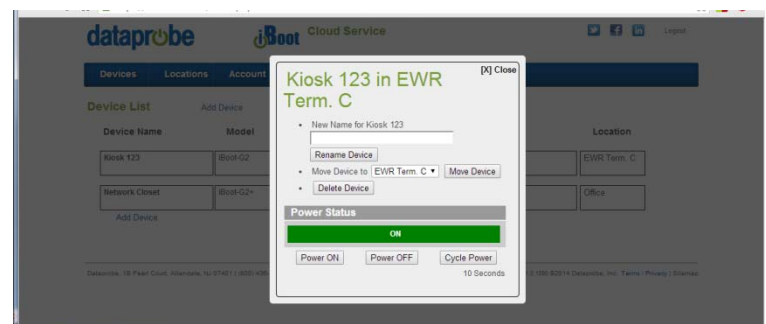


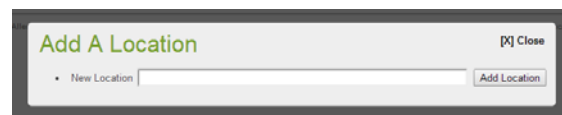
Figure 23 Device Control via Cloud



Give the device a name, and Click Rename Device.

The remainder of the modal is very similar to the iBoot web page.

Select Power ON, Power OFF or Cycle Power.



*Figure 24 Add Location to Cloud*

#### **f. Assign Names and Locations**

You can establish multiple locations and assign each iBoot to a location. You can also name each iBoot independently from the Device Name that is displayed on the iBoot web page. To add locations, click on the Locations button on the menu bar, and then click Add Location. Name the location and click the Add Location button.

## 9. Command Line Interface

The iBoot-WiFi Command Line Interface (CLI) provides a text based method for communicating with the iBoot. The syntax of the CLI uses a basic Set (change a variable) and Get (retrieve a variable). The CLI is accessed either through the Telnet protocol, which requires a Telnet client program, or via USB which requires a serial communications program like Hyperterminal. Dataprobe also provides a simple terminal program (EZ Term) at [http://dataprobe.com/support\\_iboot-wifi.html](http://dataprobe.com/support_iboot-wifi.html).

### 9.1. CLI Access

#### Via Telnet

Open the Telnet client and connect to the IP address set for the iBoot.

The CLI uses the same security options as the web browser. See Section 7.7 for an explanation of the options for user setup and security.


When connection is successful, the User> prompt is displayed. Enter user or admin and press Enter. The prompt will change to Password>. Enter the admin or user password and press Enter. The prompt will change to iBoot>. This indicates successful login. Enter commands as needed. When done, enter the logout command.

### 9.2. iBoot-WiFi CLI Syntax

Command	Description	Factory Default
---------	-------------	-----------------

<u>Control Commands</u>	These commands are used to monitor and control the outlet.	
set outlet <on   off   cycle>	This command controls the outlet.	
get outlet	This command returns the current status of the outlet.	

<u>Device Commands</u>	These commands are available to the administrator only	Factory Default
get location	This command returns the iBoot-WiFi's location ID.	iBoot-WiFi
set location <20 char. max>	This command is used to set the iBoot-WiFi's location ID.	
set cycle <1-999>	This command is used to set the cycle time, in seconds	10
get cycle	This command returns the current cycle time	
login	Prompts for admin credentials when logged in as user	
logout	Terminates the session	
reboot	This command reboots the iBoot-WiFi.	

<u>WiFi Commands</u>	All set commands require a reboot before they take effect. These commands are only available to the administrator.	
get wifi network	This command will return all the WiFi network settings as shown below SSID: MyCompanyWi Fi Security: WPA2 Mode: DHCP IP Address: 192. 168. 1. 254 Subnet: 255. 255. 255. 0 Gateway: 192. 168. 1. 7 DNS1: 192. 168. 1. 1 DNS2: 8. 8. 8. 8	
get wifi ssids	Displays the SSIDs from the most recent scan	
set wifi scan	Initiates a scan of available WiFi SSIDs	
set wifi ssid <32characters>	This command sets the SSID of the WiFi network. Requires connection to be initiated with set wifi connect command below	
set wifi passphrase <32characters>	This command sets the WiFi Passphrase	
set wifi security <wpa   wpa2   wep   mixed>	This command sets the WiFi security scheme.	
set wifi connect	Initiates wifi connection to selected SSID as set above.   <b>USE CAUTION WITH THIS COMMAND</b> <b>Not having correct SSID, Security and Passphrase will result in non-connection and require access via Micro Access Point.</b>	
set ipmode <static   dhcp>	This command sets the ip address setting mode. Static mode locks the address as set, dhcp mode allows DHCP server to assign address.	
set ipaddress <dotted decimal>	This command is used to set the iBoot-WiFi's ip address. Used only when IP Mode: Static	
set subnet <dotted decimal>	This command is used to set the iBoot-WiFi's subnet mask. Used only when IP Mode: Static	
set gateway <dotted decimal>	This command is used to set the Gateway Used only when IP Mode: Static	
set dns1 <dotted decimal>	These commands set the DNS IP Addresses Used only when IP Mode: Static	
set dns2 <dotted decimal>		

<u>Network Commands</u>	All set commands require a reboot before they take effect. These commands are only available to the administrator.	Factory Default
get network	This command will return the network settings as shown below:  HTTP Port: 80 Linkback URL: 192. 168. 1. 254: 8080 Telnet Port: 23 DXP Port: 9100 Timeout: 20	
set http port <0-65535>	This command sets the port that the iBoot-WiFi's web server listens for incoming connections on. When set to 0 the web server is disabled.	80
set telnet port <0-65535>	This command sets the port that the iBoot-WiFi's Telnet server listens for incoming connections on. When set to 0 the Telnet server is disabled	23
set dxp port <0-65535>	This command sets the port that the iBoot-WiFi's DXP protocol service listens for incoming connections on. When set to 0 the Protocol service is disabled.	9100

	Note: At least one of the above MUST NOT be 0. The CLI will protect against all 3 from being set to 0.	
set linkback <url>	This command sets the linkback URL displayed on the logout page.	
set timeout <0-999>	This command sets the automatic network timeout in minutes	2

<u>Autoping Commands</u>	These commands require a reboot before they will take effect. These commands are available to the administrator only.	Factory Defaults
get autoping	This command returns all of the AutoPing settings as shown below.  <div style="display: flex; justify-content: space-around;"> <div> AutoPing 1  IP Address: 192.168.233.254  Frequency: 10  Fail Count: 3 </div> <div> AutoPing 2  192.168.233.154  10  3 </div> </div> <hr style="width: 50%; margin: 10px auto;"/> Mode: Single Action: Cycle Once	
set autoping <1   2> ipaddress <dotted decimal>	This command is used to set the IP address of AutoPing 1 or AutoPing 2	
set autoping <1   2> frequency <1-999>	This command is used to set the frequency (how often the iBoot-WiFi sends the ping) for each of the AutoPings.	10
set autoping <1   2> failcount <1-999>	This command is used to set the number of consecutive failures the AutoPings must detect before the AutoPing considers the pinged device to be failed.	3
set autoping mode <single   and   or>	Sets single AutoPing (AutoPing 1) or two AutoPing relationship And or Or.	Single
set autoping action <none   on-latch   on-follow   off-latch   off-follow   cycle>	This command is used to set the action that the iBoot-WiFi will perform when the autoping triggers.	None
set autoping cycle <0-999>	This command sets the maximum number of power cycles when the AutoPing triggers. 0 = Unlimited	1
set autoping wait <1-999>	This command sets the time, in seconds for the device to respond to a ping.	2

<u>User Commands</u>	These commands are only available to the administrator.	
set user account <yes   no>	This command sets whether or not a user account is used. If <n> only the administrator account is active	n
set login required <yes   no>	This command sets whether or not a login is required for user level operation. A login is always required for admin functions.	y
set password <user   admin> <old> <new> <repeat>	This command is used to set the password of either the user or administrator.	user admin

<u>Event Commands</u>	These commands are only available to the administrator.	Factory Defaults
get events	This command displays all scheduled events as shown below. Example:  <div style="display: flex; justify-content: space-between;"> <div> Date      Time      Repeats  1. 01/13/2013 16:00 every  2. 01/13/2013 16:15 every  3. 01/15/2013 17:00 every  4. 02/16/2014 12:00 every  5. 02/16/2014 12:10 every  6. 02/17/2013 01:05 every  7. 02/18/2013 01:00 every </div> <div> Action  1 Day(s) On Run  0 Day(s) On Run  1 Hour(s) Cycle Run  1 Day(s) Off Run  1 Day(s) On Run  0 Day(s) On Run  0 Day(s) On Run </div> </div>	

	8. 03/18/2014 01:00 every 0 Day(s) On Run	
set time enable <yes   no>	This command enables or disables the use of the time server and scheduled events.  <b>Note:</b> When Adding new events through the CLI. Set this to no to prevent unintended power switching	No
set time server <dotted decimal or name>	This command is used to set the address (IP or name) of a network time server.	time.nist.gov
get time	Displays the current time and time server  Current Time: 16:10:41 01/27/2010 Server: 64.90.182.55	
set event <1-8> <run   hold>	This command is used to all the event to run, or put the event on hold	run

set event <1-8> date <mm/dd/yyyy>	This command is used to set the scheduled action's start date.
set event <1-8> time <hh:mm>	This command is used to set the time the scheduled action will occur in 24 hour format.
set event <1-8> action <on   off   cycle>	This command is used to set the scheduled action.
set event <1-8> repeat <day   hour   minute>	This command is used to set how often the scheduled action will repeat.
set event <1-8> mult <0-999>	This command sets how often the event will repeat, the number of increments (as set by the command above) before the next event.
del event <1-8>	This command deletes the specified event

Prompts	The CLI will use the following prompts:
User>	This prompts the user to enter his user name (user or admin). This is the first prompt that the user is presented with.
Password>	This prompts the user to enter his password.
iBoot >	This is the prompt that will be displayed after the user has successfully logged in.
iBoot Reboot Required>	This is the prompt that will be displayed whenever there have been changes made that require a reboot. This prompt will remain the active prompt until the iBoot-WiFi has been rebooted.
iBoot Reconnect Required>	This is the prompt that will be displayed whenever there have been changes made to Wi-Fi configuration settings that require reconnection to take effect. This prompt will remain the active prompt until the iBoot-WiFi has reconnected using the "set wifi connect" CLI command – detailed above – or using the standard web page interface.

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## 10. DxP Protocol

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iBoot-WiFi supports the Dataprobe Exchange Protocol (DxP) for inter device communications and to allow software developers to integrate Dataprobe product into custom applications. Through the DxP protocol, the developer can:

- Turn on and off power to the Outlet
- Pulse the Power On or Off for a specified about of time.
- Read the status of the Outlet

The DxP Protocol, as well as example code and scripts in a variety of languages are available at [http://dataprobe.com/support\\_iboot-wifi.html](http://dataprobe.com/support_iboot-wifi.html)

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## 11. Troubleshooting

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The iBoot-WiFi has a recessed pushbutton switch in the event the unit is not performing as expected. Use the pushbutton as follows:

Action	Result
Momentary	Soft Reset. Will not change outlet status.
5 Seconds push	Reset to Factory Defaults. Hold the button in until the Outlet LED is blinking, then release.

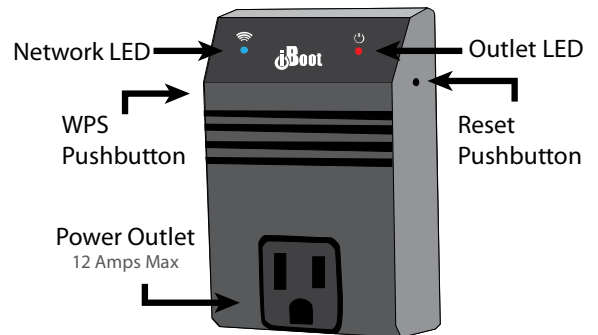


Figure 25 iBoot-WiFi Orientation

## 12. Specifications



### 12.1. Physical

Height	1.42" (36.07mm)
Width	2.63" (66.80mm)
Depth	3.90" (99.06mm)
Weight	4.8 Oz (136.01 G)
MTBF	TBD
Temperature	0 – 60 Deg C (32 - 140 Deg F)

### 12.2.AC

Input	NEMA 5-15 Plug
Voltage Range	Auto Sensing 105-125 VAC
Switched Receptacle	NEMA 5-15 Outlet
Switching Capacity	12 A Max at 105-125 VAC

### 12.3.Compliance

Safety	Pending: UL 60950-1, 1st Edition, 2007-10-31 CSA C22.2 No. 60950-1-03, 1st Edition, 2006-07
Emissions	Pending: FCC Part 15 / IECS 0003 Class B Device IECS RSS-201
<div></div>	

### 12.4.Network

WiFi 802.11 bgn
IP Addressed, DHCP assigned or Static
Internal HTTP Web Server
Forms Processing Browser required
Telnet Server

### User Settings    Record your Setup here for reference

Location:		SSID	
HTTP Port		Passphrase	
MAC Address:		Auto-Ping Address:	
IP Address:		Auto-Ping Port:	
Subnet Mask:		Heartbeat Port:	
Gateway:			



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## 13. Technical Support and Warranty

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Seller warrants this product, if used in accordance with all applicable instructions, to be free from original defects in material and workmanship for a period of **Three Years** from the date of initial purchase. If the product should prove defective within that period, Seller will repair or replace the product, at its sole discretion. Repairs may be made with new or refurbished components and replacements may be new or refurbished at the Sellers sole discretion. Repaired or replaced units shall be warranted for the balance of the original warranty, or 90 days, whichever is greater.

**If Purchased from Dataprobe Inc.;** Service under this Warranty is obtained by shipping the product (with all charges prepaid) to the address below. Seller will pay return shipping charges within the United States. Call Dataprobe Technical Service to receive a Return Materials Authorization (RMA) Number prior to sending any equipment back for repair. Include all cables, power supplies, accessories and proof of purchase with shipment.

**If purchased from an Authorized Dataprobe Reseller;** Service under this Warranty is obtained by contacting your Authorized Dataprobe Reseller.

**THIS WARRANTY DOES NOT APPLY TO NORMAL WEAR OR TO DAMAGE RESULTING FROM ACCIDENT, MISUSE, ABUSE OR NEGLIGENCE. SELLER MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY EXPRESSLY SET FORTH HEREIN. EXCEPT TO THE EXTENT PROHIBITED BY LAW, ALL IMPLIED WARRANTIES, INCLUDING ALL WARRANTIES OF MERCHANT ABILITY OR FITNESS FOR ANY PURPOSE ARE LIMITED TO THE WARRANTY PERIOD SET FORTH ABOVE; AND THIS WARRANTY EXPRESSLY EXCLUDES ALL INCIDENTAL AND CONSEQUENTIAL DAMAGES.**

Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from jurisdictions to jurisdiction.

**WARNING:** The individual user should take care to determine prior to use whether this device is suitable, adequate or safe for the use intended. Since individual applications are subject to great variation, the manufacturer makes no representation or warranty as to the suitability of fitness for any specific application.

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