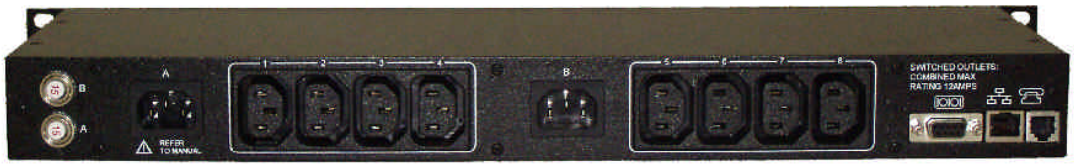
iBootBar

Installation and Operations
Version 1.20

Scope of this Document:

This document covers the installation and operations of Dataprobe's iBootBar series of remote power control units. The following models are covered in this document:

Model	Power Feed / Total Capacity	Outlets	Control
iBB-N15	NEMA 15 Amp	8 x NEMA 5-15	IP Control, Serial Control
iBB-N15-M	NEMA 15 Amp	8 x NEMA 5-15	IP Control, Serial Control, Internal Modem
iBB-2N15	2 x NEMA 30 Amp	8 x NEMA 5-15	IP Control, Serial Control
iBB-2N15-M	2 x NEMA 30 Amp	8 x NEMA 5-15	IP Control, Serial Control, Internal Modem
iBB-N20	NEMA 20 Amp	8 x NEMA 5-15	IP Control, Serial Control
iBB-N20-M	NEMA 20 Amp	8 x NEMA 5-15	IP Control, Serial Control, Internal Modem
iBB-2N20	2 x NEMA 40 Amp	8 x NEMA 5-15	IP Control, Serial Control
iBB-2N20-M	2 x NEMA 40 Amp	8 x NEMA 5-15	IP Control, Serial Control, Internal Modem
iBB-C10	IEC C14 10 Amp	8 x IEC C13	IP Control, Serial Control
iBB-C10-M	IEC C14 10 Amp	8 x IEC C13	IP Control, Serial Control, Internal Modem
iBB-2C10	2 x IEC C14 20 Amp	8 x IEC C13	IP Control, Serial Control
iBB-2C10-M	2 x IEC C14 20 Amp	8 x IEC C13	IP Control, Serial Control, Internal Modem
iBB-C20	IEC C20 20 Amp	8 x IEC C13	IP Control, Serial Control
iBB-C20-M	IEC C20 20 Amp	8 x IEC C13	IP Control, Serial Control, Internal Modem
iBB-2C20	2 x IEC C20 40 Amp	8 x IEC C13	IP Control, Serial Control
iBB-2C20-M	2 x IEC C20 40 Amp	8 x IEC C13	IP Control, Serial Control, Internal Modem



Ref: iBootBar_v1.20

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Important Safety Information

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:

Disconnect all power cords before servicing!

1. Read and understand all instructions.

2. Follow all warnings in the manual 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.

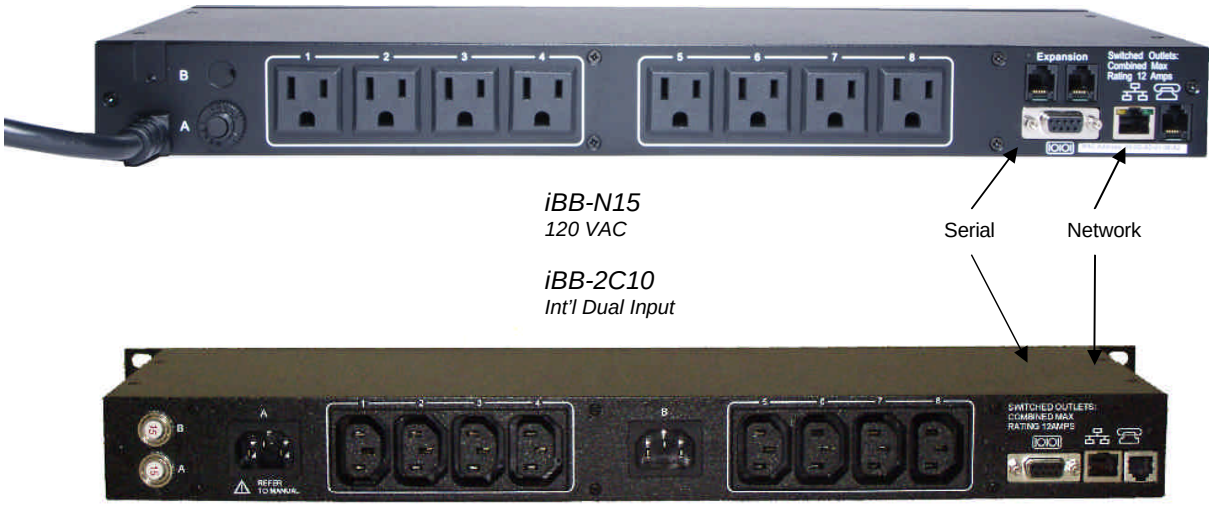
f) If the product exhibits a distinct change in performance.

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.

Quick Start



Default IP address 192.168.0.254
Default User Credentials

Username: admin
Password: admin

General Overview

The iBootBar (iBB) series is designed to provide power distribution and remote power control. Each iBB allows eight outlets to be independently switched on and off for reboot, energy management and security. The iBB has many features to make the management of power distribution simple and cost effective:

- 8 Independently controllable outlets
- Dual power inputs for redundant power feeds
- Support for dual redundant powered devices
- Naming of outlets for easy identification
- Grouping of outlets for simultaneous management
- Time and Date event based control of outlets
- Current monitoring with over and under alarm notification
- Multiple users with assigned rights and simultaneous control
- Web Browser Control
- Telnet/Serial CLI control
- Direct UDP via SNMP control
- SNMP manageable
- AutoPing for automatic reboot of crashed systems
- SSL Security (web only)
- Internal Modem Option, Data or DTMF Control

Installation

Rack Mounting

The iBootBar is designed for mounting in a standard 19" equipment cabinet.

1. There are two L-shape brackets marked as "L" and "R", install the "L" bracket on the left side of the iBB chassis then the "R" bracket on its right side.

Installed L bracket:

Installed R bracket:

2. Install the iBB to the standard 19-inch rack.

Ethernet

The iBootBar has a 10/100 Ethernet port. The default address is 192.168.0.254

Serial Port

The iBootBar has a 9 pin D subminiature connector for RS-232 serial control. The connector is configured as DCE for direct connection to a laptop or other terminal device. Default serial parameters are 115,200 bps, 8 data, no parity, 1 stop bit (115200,8,n,1).

Serial Port pinout:

Pin No	Description
1	Data Carrier Detect
2	Receive Data
3	Transmit Data
4	Data Terminal Ready
5	Signal Ground
6	Data Set Ready
7	Request to Send
8	Clear to Send
9	Ring Indicator

Dial Line

Models with suffix –M have an internal modem. This modem supports both data and DTMF control. The modem is approved for use in 36 countries

Expansion

For future applications.

Power Source

The **iBB-N15 <and iBB-N15-M>** provides a linecord for connection to a 15 Amp 115VAC service. The total maximum current load for all outlets on the iBB-N15 cannot exceed 12 Amps.

The **iBB-2N15<-M>** provides two linecords for connection to 15 Amp 115VAC services. The total maximum current load for outlets on any linecord cannot exceed 12 Amps. Each linecord distributes power to four outlets.

The **iBB-N20<-M>** provides a linecord for connection to a 20 Amp 115VAC service. The total maximum current load for all outlets on the iBB-N20 cannot exceed 16 Amps.

The **iBB-2N20<-M>** provides two linecords for connection to 20 Amp 115VAC services. The total maximum current load for outlets on any linecord cannot exceed 16 Amps. Each linecord distributes power to four outlets.

The **iBB-C10<-M>** is for international applications and can be used on 100V to 240VAC. The iBB-C10 provides an IEC 320 style universal inlet for connecting a detachable power cord. A standard IEC to CEE7 European cord set is supplied with the unit for use on 10 Amp 240VAC service*. The total maximum current load for all outlets cannot exceed 12 Amps at 115VAC or 10 Amps when used at 240VAC.

The **iBB-2C10<-M>** is for international applications and can be used on 100V to 240VAC. The iBB-2C10 provides two IEC 320 style universal inlets for connecting a detachable power cord. Two standard IEC to CEE7 European cord sets are supplied with the unit for use on 10 Amp 240VAC service*. The total maximum current load for outlets on any linecord cannot exceed 12 Amps at 115VAC or 10 Amps when used at 240VAC. Each linecord distributes power to four outlets.

The **iBB-C20<-M>** is for international applications and can be used on 100V to 240VAC. The iBB-C20 provides an IEC 320 style universal inlet for connecting a detachable power cord. A standard IEC to CEE7 European cord set is supplied with the unit for use on 20 Amp 240VAC service*. The total maximum current load for all outlets cannot exceed 16 Amps.

The **iBB-2C20<-M>** is for international applications and can be used on 100V to 240VAC. The iBB-2C20 provides two IEC 320 style universal inlets for connecting a detachable power cord. Two standard IEC to CEE7 European cord sets are supplied with the unit for use on 16 Amp 240VAC service*. The total maximum current load for outlets on any linecord cannot exceed 16 Amps. Each linecord distributes power to four outlets.

* Power cords for other countries are available from your local source. If a power cord with a different terminating plug is required, be sure it is properly rated and meets all the required local electrical standards.

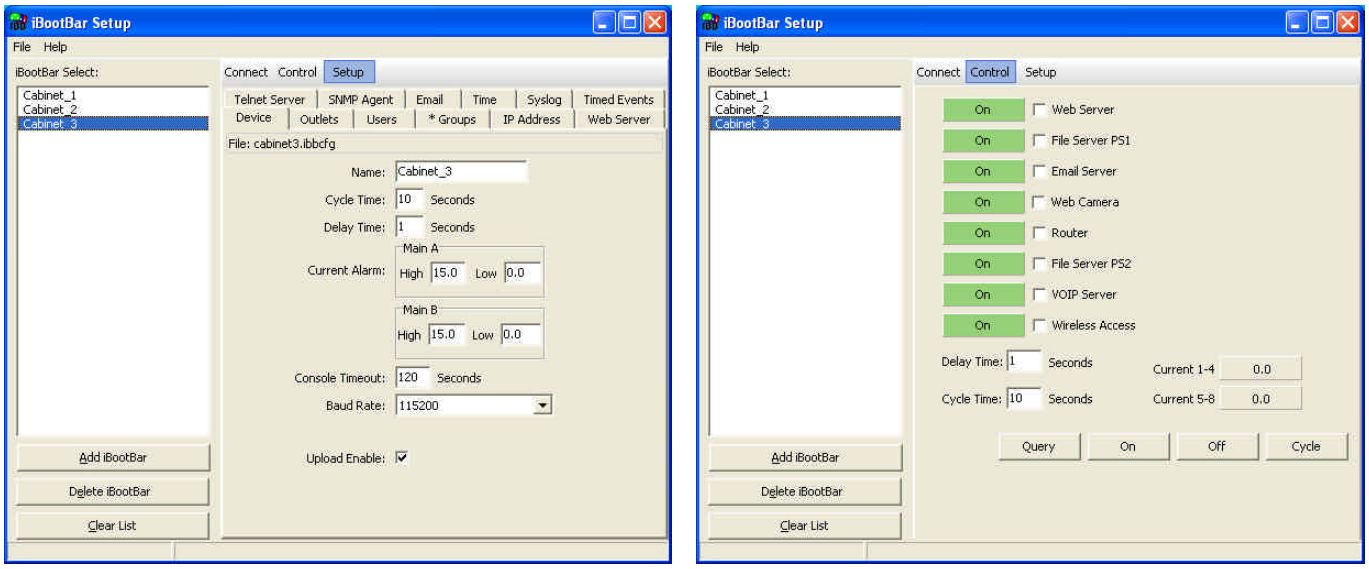
Configuration

Setup & Control Utility

An iBootBar Setup and Control Utility (SCU) utility provides the easiest means to find and configure your iBootBar for use. The SCU can:

1. Automatically discover multiple iBootBars on a local network
2. Adding additional iBootBars, not on the local network
3. Download existing configurations from installed iBootBars
4. Save existing configurations for later use or as backup
5. Open saved configurations for change management
6. Clone saved configurations for replication of similar configurations in multiple iBootBars
7. Upload modified configurations to iBootBars
8. Control Power Outlets on one or more iBootBars throughout the network

The iBootBar Setup and Control utility is available on the iBootBar CD or download it from **http://dataprobe.com/ibootbartools.html**



iBootBar Setup and Control Utility

Command Line Interface

All configuration parameters are set using the Command Line Interface (CLI). The CLI is accessed through the network, using a telnet client, or through the serial port, or data modem using a terminal client.

Open a telnet client and point it to the current IP Address. (Factory Default is **192.168.0.254**)

Connect to the Serial port or via dial modem (-M versions) (Factory Default is **115200,8,n,1**)

Upon connection, press Enter, then enter the username and password when prompted
(Factory Default for both is **admin**)

A complete list of commands and syntax is found on page 12 through 16.

Setting the IP Address

iBootBar comes with factory installed IP address 192.168.0.254

There are three techniques to setting the IP address of the iBootBar.

1. Terminal Client software via Telnet, Serial, Modem.
2. Automatically from a DHCP Server
3. ARP / Ping

To configure the mode to set the IP address, access the iBootBar command line interface (CLI) and use the set ipmode command as indicated below.

Setting the IP address using CLI

The following commands are used to set the IP parameters

set ipaddress <dotted decimal> **ex. 192.168.0.125**
set subnet <dotted decimal> **ex. 255.255.255.0**
set gateway <dotted decimal> **ex. 192.168.0.2**

If you wish to prevent DHCP or ARP-Ping from altering the IP Address, also enter the following command

set ipmode static

Changing any of these values will require a reboot of the unit. Type the command “reboot” as indicated, press the reset pushbutton on the front panel, or remove and restore all power to the iBootBar.

Setting the IP address from a DHCP Server

A DHCP server will automatically assign an IP address (dynamic address) as well as Subnet Mask and Gateway to the iBoot.

To enable this feature, configure the iBootBar with the command **set ipmode dhcp**
Then power cycle the iBootBar, or enter the command **reboot**

To find the address of the iBootBar you will need to query your DHCP server and locate the MAC address of the iBootBar in the DHCP server’s IP / MAC table. You can also access the CLI and use the **get network** command.

Setting the IP address using ARP / Ping

The ARP / Ping technique uses a PC running a command line (DOS Window) to set the IP Address. To set the IP address using ARP, connect the iBootBar to your local network and apply power. The IP address to be assigned to iBootBar must be use the same network segment as the computer assigning the address. ARP does not work across routed or switched networks.

To set the IP address using ARP, the hardware (MAC) address must be known. This address is located on the bottom of the unit. The syntax for the MAC address is: nn-nn-nn-nn-nn-nn

Windows (98 and Later)

1. Access the iBootBar CLI and enter the **set ipmode arp-ping** command
2. On a PC, open a DOS window. (Run: Command)
3. Type the following command:
   arp -s <IP Address> <MAC Address>
   Where <IP Address> is the desired IP address (in dotted decimal) for the iBootBar and the <MAC address> is the MAC Address of the iBootBar. The MAC Address of the iBootBar is located on the rear of the unit.

   Example: **arp -s 63.211.86.165 00-50-c2-05-01-c1 <enter>**
   |new IP addr| |---MAC addr----|

4. Ping the iBootBar to program the IP address into the iBootBar.
   Type: ping <IP Address>

   Note: If the ping command returns "host not responding" 4 times then the address has not been programmed properly. Check the IP or MAC Address for typographical errors. Repeat step 2. If the problem persists, contact the Dataprobe Tech Support.
5. Delete the entry from the ARP cache by typing:
   arp -d <IP Address>
6. Ping the iBootBar to confirm that it has been programmed.
   If the iBootBar fails to respond, repeat steps 2-4 above. If the problem persists, contact Dataprobe Tech Support.

Unix, Linux, MAC and others

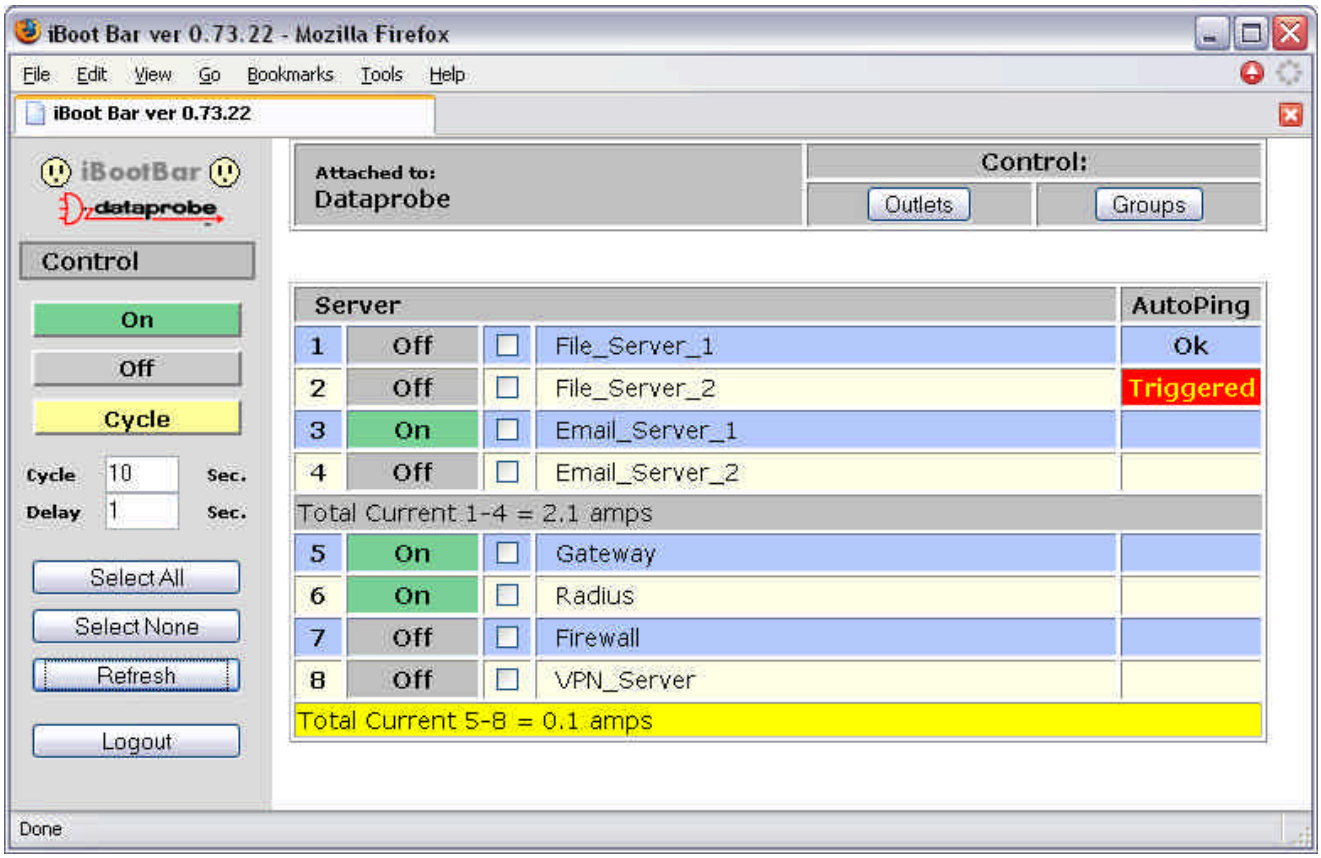
Consult your systems administrator for information on how to set an IP Address. The unit should be pinged after the IP Address has been set to confirm proper operation.

Other Configuration Settings

All parameters are set using the CLI. See Page 12 for a complete list.

Basic Operation

Web Interface



The iBootBar web interface provides the easiest means of operating the outlets and monitoring the current status of the units. One or more outlets can be simultaneously controlled with simple mouse clicks. The interface is divided into three sections Header, Control, and Status

Header The Header identifies the iBootBar currently being addressed. It displays the Device Name assigned to it in setup. Two buttons on the Header allow control of the iBootBar either by individual outlets, or by user assigned groups.

Status The Status panel displays the current state of each outlet, and provides a checkbox for each outlet to allow for selection for the next outlet change activity. The bottom of the Status panel shows the current draw of the A/C inputs. In iBootBars with dual inputs, the current draw will be displayed separately for outlets 1 – 4 (Main A) and 5-8 (Main B). If AutoPing is being used, the current status of AutoPing is displayed. Click on the AutoPing status message for more details.

Control The Control panel provides the clickable buttons to cause a change of outlet condition. Once one or more outlets are selected, click on the On, Off, or Cycle button. Cycle will perform a timed change in outlet state (either Reboot for On-Off-On, or Cycle Off-On-Off) depending on the current state of the outlet.

The Cycle timer box allows selection of the length, in seconds of all cycle or reboot operations. Entries of 1 to 99 seconds are valid.

The Delay timer box allows selection of the delay between turning on of each outlet whenever more than one outlet is turned on at the same time. This can be used to prevent over-current draw on initial power up of devices. Entries of 0 to 99 seconds are valid.

The Select All and Select None buttons allow selection or de-selection of all outlets.

Refresh provides an update of the status page to display current outlet conditions.

Logout terminates the session.

Web Operation

To operate any outlet, select it with the checkbox associated with that outlet and then click the On, Off, or Cycle button as required. The page will reload with the current status. If multiple outlets are selected, the page will refresh several times until all outlets have completed their operation.

User Privileges

Each user can be assigned one or more outlets and groups of outlets to manage. The Web interface will only display those outlets that the user has been authorized for.

Grouping Outlets

Outlets can be grouped into logical arrangements to provide simultaneous management. Two outlets can be grouped together to provide control of a single server with dual redundant power supplies. When powering on multiple outlets in a group, there will be a delay between outlets, based on the Delay Time setting. This prevents unwanted current draw. If no delay is desired set the Delay Time to 0.

Command Line Interface

The Command Line Interface follows a set/get syntax similar to SNMP.

iBBar configuration can be performed from the CLI or by using the Control and Setup Utility (CSU.exe). The CLI can be accessed via Telnet Client, Serial Port and Dial-up Modem, using a Terminal client. Below is a listing of all interface commands and syntax.

	Device Commands	**Description**
	get device name	Each iBootBar can have a name assigned. 20 characters Max, no spaces.
	set device name <name>	
	get current	Returns the current draw for each Main in Amperes
	set password <oldpass> <newpass> <confirm>	Sets the password for the current user
	get cycle	The cycle time is the length of the reboot or power on. In seconds 1 – 99
	set cycle <n>	
	get delay	The delay time is the pause between power up of each outlet when multiple outlets are powered on. 0 – 99
	set delay <n>	
	logout	Ends the session
	The following commands require administrative rights	
	get current alarm	High and Low alarms are used to monitor current conditions and send an alert by email or SNMP when the high or low thresholds are exceeded. From 0.0 to 15.0 (20.0 in 20 amp units) in 0.0 amp increments. Main A and Main B are set separately, but displayed together with the get command.
	set main <a/b> highalarm <nn.n>	
	set main <a/b> lowalarm <nn.n>	
	get console	Display current console configuration
*	set console timeout <30-3600/disable>	Console can be set to automatically logout with no activity for 30 seconds to 1 hr in seconds, or disabled.
*	set console baudrate <baud>	2400, 4800, 9600, 19200, 38400, 57600, 115200
	get modem	Returns all modem parameters
	set modem countrycode<countrycode>	Set the country code. See Appendix for a list of country codes and approvals.
	set factory defaults	Reset all parameters, including IP address and passwords to factory defaults. Can only be executed from the serial port. Confirmation required.
	reboot	Reboots the iBootBar itself. Use after firmware upload, changing IP or SNMP Manager settings. The status of the outlets will NOT be effected

	Outlet Commands	Description
	get outlets	Returns the status of each outlet the user has rights to.
	get outlet <n>	Returns the status of outlet n
	set outlet <n> <on/off/cycle>	Commands outlet n to power on/off or cycle (reboot or power pulse)
	The following commands require administrative rights.	
	set outlet <n> name <name>	Each outlet can be named for easy identification. 20 characters, no spaces.
	get outlet <n> initial.state	Set/Get the initial state of each outlet when the iBootBar is first powered up.
	set outlet <n> initial.state <last/on/off>	
	get outlet <n> autoping	Returns the current AutoPing configuration for outlet <n>
	set outlet <n> autoping ipaddress <dotted decimal>	Set the IP address to be pinged for AutoPing
	set outlet <n> autoping action <action>	Set the action to be performed when AutoPing is triggered. none / on-latch / on-follow / off-latch / off-follow / cycle / cycle-once
	set outlet <n> autoping frequency <1-999>	Set the delay between ping attempts
	set outlet <n> autoping count <1-99>	Set the number of failures to respond to ping before the AutoPing feature is triggered

	Timed Event Commands	Description
	add event <name >	The default time and date will be the time and date that the event is added. The default action is none, and the default repeat is never.
	del event < name >	This command removes a scheduled event from the event list. This command functions the same as the DEL USER and DEL GROUP commands.
	ren event < name > < new name >	This command is used to rename an event that has been scheduled.
	set event < name > year < 2007 - 2050 >	This command sets the year of the event.
	set event < name > month <1 - 12>	This command sets the month of the event.
	set event < name > day <1 - 31>	This command sets the day of the event.
	set event < name > hour < 0 - 23 >	This command sets the hour of the event.
	set event < name > minute <0 - 59>	This command sets the minute of the event.
	set event < name > action < on / off / cycle >	This command sets the action to take place when the event is executed.
	set event < name > repeat < never / daily / weekly / monthly / annually >	This command sets the repeat pattern for the event.
	set event < name > control < outlet / group > < n / name >	This command sets the outlet or group that will be controlled.

	get events	This will display a list of all events as shown: Events: EventOne EventTwo EventThree EventFour Events will be displayed in the order they are in the list. They will NOT be sorted.
	get event < name >	This command is used to get the details of a single event. The format is as followes: Date: 11/27/2007 at 12:00 Action: On Control: Outlet1 Repeats: Never

	Network Commands	**Description**
	The following commands require administrative rights	
	get network	Display current ipmode, ipaddress, subnet, gateway parameters
*	set ipmode <arp-ping/static/dhcp>	Set the mode of setting the IP address of the iBootBar.
*	set ipaddress <dotted decimal>	Set the current IP address. ipmode must be set to static to use this command.
*	set subnet <dotted decimal>	Set the Subnet Mask
*	set gateway <dotted decimal>	Set the Gateway.
	get web	Display current web enable, web port and ssl enable parameters
*	set web enable <yes/no>	Enable or Disable the Web Server.
*	set web port <1-65535>	Change the Web Server IP port.
*	set web ssl <yes/no>	Select SSL security for the Web Server. Setting to yes requires https:// access and defaults port to SSL standard 443. Setting to no requires http:// access and defaults port to HTTP standard 80.
	get telnet	Display current telnet enable, telnet port parameters
*	set telnet enable <yes/no>	Enable or Disable Telnet Server
*	set telnet port <1-65535>	Change the Telnet Server IP port.
	get snmp	Display current SNMP parameters
*	set snmp writecommunity <name>	32 characters max
*	set snmp readcommunity <name>	32 characters max
*	set snmp <n> ipaddress <dotted decimal>	Set up to <n>=1-4 SNMP manager addresses
*	set snmp <n> enable <yes/no>	Enable or Disable SNMP for manager <n>
	get upload enable	Enable or Disable firmware uploading capability.
*	set upload enable <yes/no>	
	get email	Setup email delivery of status and alarm changes. Set the server address, return address, username

	set email server <dotted decimal>	
	set email address <return address>	
	set email username <user name 64 char max>	
	set email password <password 64 char max>	
	get time	Returns the current time
	set time server <dotted decimal>	Set the time manually or use a time server. If a timeserver is used, provide the time zone offset.
	set time usents <yes\no>	
	set time zone <time zone -12 to 13>	
	set time hour <0-23>	
	set time minute <0-59>	
	set time day <1-31>	
	set time month <1-12>	
	set time year <2006-2047>	

✱ - Reboot is required for these settings to take effect. (**reboot** command, reset button or power cycle unit.)

	User Commands	Description
	The following commands require administrative rights	
	get users	Returns a list of users.
	add user <name>	Adds a new user. the new password is automatically created to match the <name>
	get user <name>	Returns user <name>'s rights and settings.
	ren user <name> <newname>	Renames a user
	del user <name>	Deletes a user.
	set user <name> outlet <n/all> <yes/no>	Sets a user's rights to control one or more outlets.
	set user <name> group <group name> <yes/no>	Sets a user's rights to control one or more groups.
	set user <name> role <admin/user>	Sets a user's administrator privileges.
	set user <name> password <newpass> <confirm>	Sets a user's password. (default is same as name)
	set user <name> email <email address 64 char max>	Sets a users email address.
	set user <name> sendmail <yes/no>	Enables or Disables a user's receipt of email notifications.
	set user <name> pin <pin/0>	4-10 digits for DTMF control via modem. Each user's pin must be unique. set to 0 to clear dtmf control.

	Group Commands	Description
	get groups	Returns a list of groups
	get group <name>	Returns a list of outlets in a group
	set group <name> <on/off/cycle>	Sets a group's name
	The following commands require administrative rights	
	add group <name>	Adds a group
	set group <name> outlet <n/all> <yes/no>	Adds or Deletes an outlet to a group
	ren group <name> <newname>	Renames a group
	del group <name>	Deletes a group

Advanced Operations

DTMF Control

Models with an internal modem <-M suffix> can be controlled from dial up connections using handset dialing tones (touch tones). Use of DTMF control requires a unique PIN number set for each user. This PIN is set using the command line interface and must be 4 to 10 digits long. Program a PIN code of 0 to disable a users ability to use DTMF control.

DTMF Call Sequence:

1. Dial the phone number connected to the iBootBar. Upon connection a prompt tone will be heard.
2. Enter the PIN followed by the # key. Upon successful entry, a ready tone will be heard. If no PIN or incorrect PIN is received, an error tone and new prompt tone will be issued. After three unsuccessful attempts, the iBootBar will hang up.
3. At the ready tone, enter an outlet number 1-8. The current status of that outlet will be stated in English: i.e. “one on” or “six off”.
4. The # key is used to change the state of the outlet. The * key is used to reboot (or power cycle) the outlet for the time configured with the CLI command cycle time. The new status of the outlet is stated. If the * key is used, the iBootBar will also state ‘begin’ to indicate the reboot or cycle has begun.
5. A new prompt tone will indicate that new commands can be entered. While a reboot is in progress, additional outlets can be addressed and commanded.
6. The caller can hang up at any time to disconnect the call. Any reboots in progress will finish their cycle time as programmed.

   NOTE: Not issuing a command for 5 seconds will cause the iBootBar to hang up.

Notes:

1. The only outlets that a caller has access to are determined by the CLI command set user outlet.
2. While prompts and voice responses are being played, the iBootBar will not process DTMF tones. Wait for the status and prompts to complete before issuing new commands
3. Address an outlet with a number command before entering a control command (# or *) if unsure which outlet is being addressed, send the outlet number again.
4. Factory Default user admin has default PIN 23646. Change to desired PIN if maintaining this account. Resetting to factory defaults will restore this user and PIN.

Timed Events

The iBootBar provides the ability to turn On, Off or Cycle outlets based on time and date. Each individual outlet or group can be set to operate a selected command at a specific time and date. The Timed Events are programmed thru the Control &Setup Utility or the CLI interface

AutoPing

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

Up to eight IP addresses can be monitored by AutoPing. Each AutoPing monitor is assigned to an outlet.

Ping 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 Counter Enter 1-99 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.

Action: Select from

None	AutoPing not used
On – Latch	Upon triggering, iBootBar will power on the assigned outlet and remain so until changed via the web or telnet/serial interface.
On – Follow	Upon triggering, iBootBar will power on the assigned outlet. When the ping response returns, iBootBar will power the off the outlet
Off – Latch	Upon triggering, iBootBar will power off the assigned outlet and remain so until changed via the web or telnet/serial interface.
Off – Follow	Upon triggering, iBootBar will power off the assigned outlet. When the ping response returns, iBootBar will power the outlet on.
Cycle	Upon triggering, iBootBar will cycle the power to the assigned outlet. iBootBar will wait the Ping Frequency x Fail Count; if the response does not return, the power will be recycled again. This will continue until the ping response returns or AutoPing is turned off. Make sure your AutoPing frequency x Fail Count is longer than the time required to reboot your device.
Cycle Once	Upon triggering, iBootBar will cycle power one time. It will not cycle again automatically until the ping response returns and is lost again.

With AutoPing operational, the iBootBar page will display the current status of this feature. The status will be OK to indicate that iBootBar is receiving responses to the ping, or that the fail counter has not yet been exceeded. Click on the Status message to see greater details on the AutoPing status.

If the fail count has been exceeded, the status will change to Triggered. Click on the Status message to see greater details on the AutoPing status.

SSL

The iBootBar can provide Secure Socket Layer (SSL) encryption on the web interface. Enable this feature using the set web ssl yes command from the Telnet / Serial interface.

Certificate Upload Utility

The Certificate Upload Utility (CUU.exe) is designed to create and distribute Secure Socket Layer (SSL) certificates to iBootBars and the PCs that communicate them. Although the iBootBar comes from the factory with a certificate installed, this certificate common name is Dataprobe iBB, and will generate a warning message when connecting to the iBootBar when using SSL. For most customers, this error message can be easily ignored and secure connection to the iBootBar continues. For customers with special circumstances, the CUU was designed to facilitate creation and distribution of SSL Certificates tailored to a specific iBootBar, eliminating the error message entirely.

The CUU is available on the ibootbar CD or from the Dataprobe website: http://Dataprobe.com/ibootbartools.html

Email Notification

Email can be automatically sent for outlet changes, AutoPing triggers and current alarms. The necessary parameters for email are set using the Telnet / Serial Interface:

set email server <dotted decimal>

set email address <return address 64 char max>

set email username <user name 128 char max>

set email password <password 128 char max>

Each user is assigned an email address and email can be turned on or off for that user:

set user <name> email <email address 64 char max>

set user <name> sendmail <yes/no>

SNMP

Up to four SNMP managers can be set. Each manager will receive Trap notifications for outlet changes, autoping and current alarms. Set the SNMP manager IP addresses using the **set snmp <n> ipaddress <dotted decimal>** command. Enable or Disable SNMP for any manager with the **set snmp <n> enable <yes/no>** command.

Firmware Upgrades

The iBootBar can be upgraded via the network if the upload feature has been enabled using the **set upload enable yes** command on the console interface. To upgrade the iBootBar download the latest version of the firmware and upgrade utility from the Dataprobe website. **http://Dataprobe.com/ibootbartools.html**

Password Recovery

Holding the reset button on the front panel of the iBootBar for 5 seconds or longer will initiate a password recovery mode. Once the reset button is released, the user has 30 seconds to log in to the CLI using the username **admin** and password **admin**. Upon accessing the CLI, change the username and password for User 1 as desired.

iBootBar Setup and Control Utility

The iBootBar Setup and Control Utility is designed to facilitate installation, configuration and management of one or more iBootBars, Dataprobe's remote controlled power strip. With the Setup Utility, users can:

9. Automatically discover multiple iBootBars on a local network
10. Adding additional iBootBars, not on the local network
11. Download existing configurations from installed iBootBars
12. Save existing configurations for later use or as backup
13. Open saved configurations for change management
14. Clone saved configurations for replication of similar configurations in multiple iBootBars
15. Upload modified configurations to iBootBars
16. Control Power Outlets on one or more iBootBars throughout the network

The iBootBar Setup & Control Utility works securely through the network connection between a PC running Windows 98 or higher, and the iBootBar. Administrator rights are required on the iBootBar to properly use the Utility. All communication between the program and the iBootBars is encrypted using AES.

The iBootBar Setup and Control Utility is available on the iBootBar CD or from Dataprobe website at **http://Dataprobe.com/ibootbartools.html**

Specifications

Physical:

Height:	1U 1.75 in (4.5 cm)
Width:	19.0 in (48.25 cm)
Depth:	6.00 in (15.25 cm)
Weight:	7 lbs (3.25 Kg)

Environmental:

Temperature	
Operating:	0 to 40° C
Storage:	-10 to 85° C
Relative Humidity	0 to 95%
	Non-Condensing

Input Required	Model	Input	Output	Control
	iBB-N15	N15	8 x N15	I, S,
	iBB-N15-M	N15	8 x N15	I, S, M
	iBB-2N15	2 x N15	8 x N15	I, S, L
	iBB-2N15-M	2 x N15	8 x N15	I, S, M
	iBB-N20	N20	8 x N15	I, S
	iBB-N20-M	N20	8 x N15	I, S, M
	iBB-2N20	2 x N20	8 x N15	I, S
	iBB-2N20-M	2 x N20	8 x N15	I, S, M
	iBB-C10	C14	8 x C13	I, S
	iBB-C10-M	C14	8 x C13	I, S, M
	iBB-2C10	2 x C14	8 x C13	I, S
	iBB-2C10-M	2 x C14	8 x C13	I, S, M
	iBB-C20	C20	8 x C13	I, S
	iBB-C20-M	C20	8 x C13	I, S, M
	iBB-2C20	2 x C20	8 x C13	I, S
	iBB-2C20-M	2 x C20	8 x C13	I, S, M

Key:

Input:	N15	NEMA 5-15 Linecord 115VAC 15 Amps combined total switched
	N20	NEMA 5-20 Linecord 115VAC 20 Amps combined total switched
	C14	IEC320 C14 Receptacle 100-240VAC 10 Amps total at 240VAC Max
	C20	IEC320 C20 Receptacle 100-240VAC 20 Amps total at 240VAC Max
Outlet:	N15	NEMA 5-15 Receptacle 115VAC 12 Amps Max
	C13	IEC 320 C13 Receptacle 100-240VAC 10 Amps Max
Control	I	10/100 Ethernet. Web, Telnet, SNMP. Port Assignable for Web and Telnet. SSL on Web control.
	S	Serial Port. 115,200 bps. Command Line Interface
	M	Internal Modem. V.92 and below. Approved in 50 Countries Supports data and DTMF tone control (with voice response)

Compliance Statements

FCC Part 15 Regulation

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Plug the equipment into an outlet on a circuit that is different from the one used by the receiver.
• Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC rules. Operation of this device is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference that may cause undesired operation.

WARNING: **Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment**

EMC, Safety, and R&TTE Directive Compliance

The CE mark is affixed to this product to confirm compliance with the following European Community Directives:

• Council Directive 89/336/EEC of 3 May 1989 on the approximation of the laws of Member States relating to electromagnetic compatibility;
And

• Council Directive 73/23/EEC of 19 February 1973 on the harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits;
and

• Council Directive 1999/5/EC of 9 March on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

Industry Canada

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe AB respecte toutes les exigences du Reglement Canadien sur le matériel brouilleur.

This product meets the applicable Industry Canada technical specifications

Modem Certifications

The following countries have certified the internal modem. In order to comply with local regulations, the countrycode must be set to the country of installation. To set the modem for the desired country use the CLI command **set modem countrycode <countrycode>.** Use the **get modem** command to display the current country setting.

Note: Use of the wrong countrycode violates local laws and the warranty of this product.

Country	countrycode
Argentina	07
Australia	09
Austria	253
Belgium	253
Canada	181
China	181
Cyprus	253
Czech Republic	253
Denmark	253
Finland	253
France	253
Germany	253
Greece	253
Hong Kong	153
Hungary	253
Iceland	253
Indonesia	153
Ireland	253
Italy	253
Japan	00
Korea	181
Liechtenstein	253
Luxembourg	253
Mexico	181
Netherlands	253
New Zealand	126
Norway	253
Philippines	181
Portugal	253
Slovak Republic	253
Spain	253
Sweden	253
Switzerland	253
Taiwan	254
United Kingdom	253
United States	181

SNMP MIB

Download at dataprobe.com\ibootbartools.html

```
enterprises [1.3.6.1.4.1]
   |
   ->  [1418] -MI- dataprobe
      |
      ->  [ 4] -BR- iBootBarAgent
         |
         ->  [ 1] -BR- systemSettings
            |
            ->  [ 1] *RW* DisplayString              deviceName
            ->  [ 2] *RW* INTEGER(Enum)ipMode
            ->  [ 3] *RW* DisplayString              ipAddress
            ->  [ 4] *RW* DisplayString              subnetMask
            ->  [ 5] *RW* DisplayString              gateway
            ->  [ 6] *RW* INTEGER(Enum)webEnable
            ->  [ 7] *RW* Integer32                  webPort
            ->  [ 8] *RW* INTEGER(Enum)sslEnable
            ->  [ 9] *RW* INTEGER(Enum)telnetEnable
            ->  [10] *RW* Integer32                  telnetPort
            ->  [11] *RW* INTEGER(Enum)              updateEnable
            ->  [12] *RW* Integer32                  cycleTime
            ->  [13] *RW* Integer32                  delayTime
         |
         ->  [ 2] -TB- snmpManagerTable
            |
            ->  [ 1] -TE- snmpManagerEntry
               |
               ->  [ 1] *RO* Integer32               snmpManagerIndex
               ->  [ 2] *RW* DisplayString           snmpManagerIPAddress
               ->  [ 3] *RW* INTEGER(Enum)           snmpManagerEnable
         |
         ->  [ 3] -TB- outletTable
            |
            ->  [ 1] -TE- outletEntry
               |
               ->  [ 1] *RO* Integer32               outletIndex
               ->  [ 2] *RW* OCTET STRING            outletName
               ->  [ 3] *RO* INTEGER(Enum)           outletStatus
               ->  [ 4] *RW* INTEGER(Enum)           outletCommand
               ->  [ 5] *RO* INTEGER(Enum)           outletAPStatus
         |
         ->  [ 4] -BR- info
            |
            ->  [ 1] *RO* Integer32                  currentLC1
            ->  [ 2] *RO* Integer32                  currentLC2
            ->  [ 3] *RO* INTEGER(Enum)              numberOfLineCords
         |
         ->  [ 5] -NT- outletChange
         ->  [ 6] -NT- autoPingFailed
         ->  [ 7] -NT- newNotifTyp01
```

Legend :
AC - Agent Capabilities
AN - Accessible for Notify
BR - Branch
MC - Module Compliance
MI - Module Identity
NA - Not Accessible
NG - Notification Group
NT - Notification Type
OG - Object Group
OI - Object Identity
RO - Read Only
RC - Read Create
RW - Read Write
TB - Table
TE - Table Entry

Technical Support, Returns and Warranty

Dataprobe Technical Support is available 8:30AM to 5:30PM ET to assist you in the installation and operation of this product. To obtain Technical Support call 201- 934-5111, or Email us at tech@dataprobe.com. Please have the following information available when you call:

- Model of Product
- Lot and Version Numbers
- Data of Purchase
- Name of Seller (if other than Dataprobe)

If you purchased this product through an Authorized Dataprobe Reseller, you should contact them first, as they may have information about the application that can more quickly answer your questions.

WARRANTY

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 One Year 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.

Service under this Warranty is obtained by shipping the product (with all charges prepaid) to an authorized service center. Seller will pay return shipping charges. Call Dataprobe Technical Service at (201) 934-5111 to receive a Return Materials Authorization (RMA) Number prior to sending any equipment back for repair. Include all cables, power supplies and proof of purchase with shipment.

THIS WARRANTY DOES NOT APPLY TO NORMAL WEAR OR TO DAMAGE RESULTING FROM ACCIDENT, MISUSE, ABUSE OR NEGLECT. 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.

Dataprobe Inc.