

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
iBP-N15	NEMA 15 Amp	8 x NEMA 5-15	IP Control, Serial Control
iBP-N15-M	NEMA 15 Amp	8 x NEMA 5-15	IP Control, Serial Control, Internal Modem
iBP-2N15	2 x NEMA 30 Amp	8 x NEMA 5-15	IP Control, Serial Control
iBP-2N15-M	2 x NEMA 30 Amp	8 x NEMA 5-15	IP Control, Serial Control, Internal Modem
iBP-N20	NEMA 20 Amp	8 x NEMA 5-15	IP Control, Serial Control
iBP-N20-M	NEMA 20 Amp	8 x NEMA 5-15	IP Control, Serial Control, Internal Modem
iBP-2N20	2 x NEMA 40 Amp	8 x NEMA 5-15	IP Control, Serial Control
iBP-2N20-M	2 x NEMA 40 Amp	8 x NEMA 5-15	IP Control, Serial Control, Internal Modem
iBP-C10	IEC C14 10 Amp	8 x IEC C13	IP Control, Serial Control
iBP-C10-M	IEC C14 10 Amp	8 x IEC C13	IP Control, Serial Control, Internal Modem
iBP-2C10	2 x IEC C14 20 Amp	8 x IEC C13	IP Control, Serial Control
iBP-2C10-M	2 x IEC C14 20 Amp	8 x IEC C13	IP Control, Serial Control, Internal Modem
iBP-C20	IEC C20 20 Amp	8 x IEC C13	IP Control, Serial Control
iBP-C20-M	IEC C20 20 Amp	8 x IEC C13	IP Control, Serial Control, Internal Modem
iBP-2C20	2 x IEC C20 40 Amp	8 x IEC C13	IP Control, Serial Control
iBP-2C20-M	2 x IEC C20 40 Amp	8 x IEC C13	IP Control, Serial Control, Internal Modem



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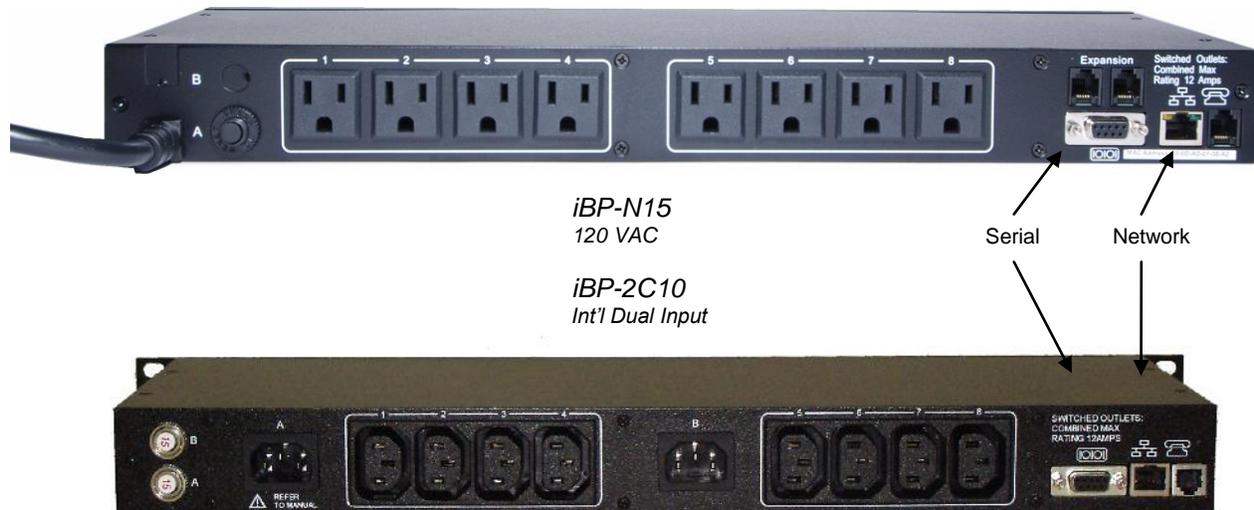
Important Safety Information

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

This manual is applicable for firmware version 1.41.32

The iBootBar Precision Version (iBP) series is designed to provide power distribution and remote power control. Each iBP allows eight outlets to be independently switched on and off for reboot, energy management and security. The iBP 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
- Multi Outlet control of outlets for simultaneous management
- Current monitoring with over and under alarm notification
- Multiple users with assigned rights and simultaneous control
- Telnet/Serial CLI control
- Direct UDP via SNMP control
- SNMP manageable
- AutoPing for automatic reboot of crashed systems
- 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 iBP chassis then the "R" bracket on its right side.

Installed L bracket:



Installed R bracket:



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

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

The **iBP-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 **iBP-C10<-M>** is for international applications and can be used on 100V to 240VAC. The iBP-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 **iBP-2C10<-M>** is for international applications and can be used on 100V to 240VAC. The iBP-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 **iBP-C20<-M>** is for international applications and can be used on 100V to 240VAC. The iBP-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 **iBP-2C20<-M>** is for international applications and can be used on 100V to 240VAC. The iBP-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

Accessing the Command Line Interface

All configuration parameters and outlet changes 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**)

It is possible to bypass the authentication requirements when used with direct RS-232 or on secure networks.

A complete list of valid commands and syntax is found on page 9 and 10.

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

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

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

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 10 for a complete list.

Command Line Interface

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

All configuration is performed from the CLI. It 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.

User Privileges

Each user can be assigned one or more outlets and groups of outlets to manage. Up to 8 users can be defined

Command Set

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 0 - 99
set cycle <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 autologin	Enabled will allow admin rights without use of login request. Connection will send iBootBar > prompt and not User Name: request
set autologin <enable/disable>	
logout	Ends the session
get modem	Returns all modem parameters
set modem <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 name and status of outlets with user rights
get outlet <n>	Returns the name and status of outlet n (with user rights)
set outlet <n> <on/off/cycle>	Commands outlet n to power on/off or cycle (reboot or power pulse)
set outlets <nnnnnnnn>	Controls outlets to on or off using binary place value. (n = 0 for off and n = 1 for on) see Multi Outlet Control
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. see Frequent Outlet Control
set outlet <n> initial.state <last/on/off>	Set/Get the initial state of each outlet when the iBootBar is first powered up.
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 <0-999>	Set the delay between ping attempts
set outlet <n> autoping count <0-99>	Set the number of failures to respond to ping before the AutoPing feature is triggered

Network Commands	Description
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 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. (default 23)
get protocol	Display the current direct messaging protocol
set protocol enable <ipal/rps/none>	Select direct messaging protocol, or none
set protocol port <1-65535>	set the port for the messaging protocol (default 9100)
get upload enable	Enable or Disable firmware uploading capability.
set upload enable <yes/no>	
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>	
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 email	Setup email delivery of status and alarm changes. Set the server address, return address, username and password needed to authorize email delivery.
set email server <dotted decimal>	
set email address <return address>	
set email username <user name 128 char max>	

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

Direct Messaging Protocols

iBootBar Precision provides two different methods of operating the outlets directly from machine to machine messages. These protocols are provided to provide backward compatibility with older discontinued Dataprobe products, and to facilitate new applications for direct control via software. Two different protocols are provided. Both use 'escape codes' to send commands and status requests. Only one protocol can be active at any time, selected using the `set protocol` command via the CLI. Here is a comparison of the two protocols.

	iPAL Protocol	RPS Protocol
Available channels	TCP port 9100 or as set	TCP Port 9100 or as set, Serial Port
Command Terminator Required	None	<CR>
Status Response	One Byte status for each outlets, all 8 Bytes of status for each command	Verbose. Status for controlled outlet only
Basic Syntax	<esc><pass><esc><outlet><cmd>	<esc><pass><outlet><cmd><CR>

iPAL Protocol **<esc><pass><esc><outlet><cmd>**

Syntax definitions:

<esc> ASCII Escape Character (Decimal 27 Hex 1B)
 <pass> Password (no username is required)
 <outlet> Outlet number, 1 – 8 A for All outlets
 <cmd> Command to be performed

Commands:

E	Turn outlet OFF	
D	Turn Outlet ON	
P	Cycle Outlet	Cycle can be On-Off-On or Off-On-Off depending on starting status
T	Set Cycle Time	Cycle time in seconds. Valid range 1-99
O	Get Status	
C	Get Current Draw	

Examples:

<esc><pass><esc>1D	Turn on outlet 1
<esc><pass><esc>3P	Cycle Outlet 3
<esc><pass><esc>O	Returns the status of the outlets
<esc><pass><esc>C	Returns current draw
<esc><pass><esc>10T	Set Cycle time to 10 Seconds

Response: For Command C
 1 Byte with current draw x 10

'46' = 4.6 Amps

For all other Commands
 8 bytes. Each byte is the status of one outlet in ASCII

'0' = Outlet OFF
 '1' = Outlet ON

byte 0 = Outlet 1 Byte 7 = Outlet 8

RPS Protocol <esc><pass><outlet><cmd><enter>Syntax definitions:

<esc> ASCII Escape Character (Decimal 27 Hex 1B)
 <pass> Password (no username is required)
 <outlet> Outlet number, 1 – 8
 Omitted for ? Status Command
 <cmd> Command to be performed
 <enter> ASCII Enter or Carriage Return Character (Decimal 13 Hex 0D)

Commands: OFF Turn outlet OFF
 ON Turn Outlet ON
 C Cycle Outlet Cycle can be On-Off-On or Off-On-Off depending on starting status
 T Set Cycle Time Cycle time in seconds. Valid range 1-99
 ? Get Status Outlet number optional. No outlet number will respond with status for all outlets

Examples: <esc><pass>1ON<enter> Turn on outlet 1
 <esc><pass>3C<enter> Cycle Outlet 3
 <esc><pass>?<enter> Status for all Outlets
 <esc><pass>5?<enter> Status for Outlet 5

Response: <n> <status><LF><CR> (Cycle) Outlet number and Status ON or OFF. Will respond Cycle while processing Cycle command.

For Status of all outlets:

1 On
 2 OFF
 3 OFF CYCLE Indicates cycle in progress
 4 ON
 5 ON
 6 OFF
 7 ON
 8 OFF

Advanced Operations

Frequent Outlet Control

In its factory default usage, which allows the iBootBar to remember the last state of the outlets when power is restored to the device will result in a shortened product lifespan for customers who make frequent outlet changes. Each outlet change results in status being written to non-volatile memory, which has a write cycle maximum.

Users in applications such as automated product test, life cycle and stress testing are encouraged to change from the default setting to one that will not have these consequences.

For each outlet use the CLI command

```
set outlet <n> initial.state <last/on/off>
```

Set for either on or off to improve product life expectancy. for example:

```
set outlet 1 initial.state on
set outlet 4 initial.state off
```

Multi Outlet Control Command

This command is used to operate all eight outlets simultaneously.

```
set outlets <nnnnnnnn>
```

Where n is either 0 for off, or 1 for on.

The command once typed, reads from outlet eight to outlet 1 (most significant to least significant)

```
set outlets <8 status ,7 status ,6 status ,5 status ,4 status ,3 status ,2 status ,1 status>
```

Examples:

```
set outlets 00000001 ..... outlet 1 on and 2-8 off
set outlets 10000000 ..... outlet 8 on and 7-1 off
set outlets 10101010 ..... outlets 2,4,6,8 on and 1,3,5,7 off
set outlets 01010101 ..... outlets 1,3,5,7 on and 2,4,6,8 off
set outlets 11110000 ..... outlets 5-8 on and 1-4 off
set outlets 11111111 ..... outlets 1-8 on
```

All eight positions must be included in this command, or an error will result.

This control command will not write to memory, even when the set outlet initial state is set to last

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.

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.

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.

Other Utilities

Copies of this manual, firmware upgrade files and other resources are available on the Dataprobe website. Please visit http://Dataprobe.com/support_ibootbar.html for further information.

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%
 Humidity: Non-Condensing

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