PC-8000
Ethernet Power
Controller

User's Guide

PC-8000 Digital Logger Features
Congratulations on your purchase. The PC-8000 power controller is a rack mount network-based power switch used to remotely control and reboot systems. The PC-8000 offers these features:

Web Interface
The internal web server is accessible from any standard web browser. Simply enter an IP address, and the power controller may be configured and controlled entirely over the web.

16 Switched Outlets
Eight switched circuits are provided, each with a pair of 110VAC outlets. Each pair of outlets can be controlled independently. The outlets are spaced properly to allow the use of AC adapters and large plugs.

Two Unswitched Outlets
Two unswitched circuits are provided for connection to "always on" devices.

Manual Override Controls
Front panel controls are provided to manually override software settings. Each outlet can be set on or off manually, or to "REM" for remote software control.

Password Security
Multiple levels of password security are provided to limit access to the power controller.

Sequenced "On Timer"
A programmable delay timer allows outlets to be switched on in sequence, rather than simultaneously. Using this timer, more equipment can be attached to a single circuit without overloading.

Standard Package Contents

1. PC-8000 Ethernet Power Controller
2. Ethernet Cable – Straight Through
3. Power Cord

Please contact the shipping carrier immediately if your package appears opened or damaged in transit. Call CSC at (408) 588-1110 if you would like technical support or replacement components for this product.

Important Factory Defaults

IP ADDRESS

The factory default IP address is 192.168.1.250

ADMINISTRATOR LOGIN

User name: admin   (lower case)

Password: admin   (lower case)

To reset the unit to factory defaults, press and hold the red button on the back of the power controller for sixty seconds while turning the power on an off.

Quick Setup

Use these shortcuts if you are an experienced installer. If you are unfamiliar with the installation of power controllers, please contact CSC for technical support and installation services.

1. Remove the power controller from its shipping carton. Save the crate and protective packing, in case the controller ever requires service.
2. Make sure that the rear-panel power switch is in the OFF position. Switch all front-panel switches to the OFF position.
3. Attach the power cord to a fused 110VAC power source with a capacity of at least 15 amperes.
4. Attach the cable from the controller to a 10Mbit port (or switched 10/100Mbit port on your network). If the default IP address of http://192.168.1.250 is not compatible with your network, a crossover cable may help during initial configuration.
5. Switch the power switch on and wait 60 seconds. If you are connected to a 10/100 switch, you may need to cycle power on and off to establish the port speed on the switch. Note that this power controller is a 10MBps device, and it will not function on a 100Mbit hub that does not support switching. You will need either a 10Mbps port, or a 10/100Mbps port to use this device.
6. Ping the default address http://192.168.1.250 to confirm that a good network connection has been established. If you do not get a response, use a crossover cable to troubleshoot the connection.

7. Log in to the power controller using the default user name "admin" and the password "admin" Note that this must be entered in lower case.
8. Click on the "Settings" link to reach the main configuration page.
9. Complete the configuration information as described below in each section. After each section is completed, click the "Submit" button at the bottom of that section before proceeding to the next section.
10. Set the front panel switches to ON for always on, OFF for always off, or REM for remote control via Ethernet.
11. Test the power controller first with a lamp or other small appliance before connecting your equipment. This will ensure that the controller has been configured properly.

Basic Operation

After applying power and switching the unit on, the PC-8000 will automatically perform a sequence of self-tests to ensure the reliability of the system.

After testing is completed, the system will automatically assign an IP address if DHCP has been selected and a DHCP server has been located. If DHCP is selected and no server is located, the power controller will default to the IP address specified by the administrator on the network settings page.

The power controller may then be operated by the user or administrator via a web browser. To access the power controller, simply enter the IP address of the power controller in the URL field of your web browser.

Multiple users may be assigned separate passwords to limit each users control to only certain outlets. This is useful in an ISP setting where the administrator may want only a certain individual to be able to reboot specific machines.

Home Page

To access the power controller home page, first enter the IP address of the controller in the URL field of your web browser, then log in using your user name and password. If you are the administrator, you will have access to all features of the power controller. If you are a user, you will have access only to the outlets assigned to you by the administrator. If you are configuring the power controller for the first time, use the default "admin" username and "admin" password.

The home page for the PC-8000 power controller contains eight links to other pages. The first four links are fixed:

Outlets Control

Clicking "Outlets Control" links you to a page used for manually switching outlets on and off. The access to outlets is determined by your security level.

View Log

Clicing "View Log" links you to a time stamped event log that is stored by the power controller. This event log records logins and major system events.

Settings

Clicking "Settings" links the administrator to a configuration page which is used to set outlet names, power on features, network settings, as well as user information and passwords.

Outlets Control Page

The outlets control page lets you switch any pair of outlets (except the always-on pair) on or off. A master setting also allows users with security access to switch all outlets on or off. The sequence in which outlets will be switched on is determined by settings on the Admin page.

To switch an outlet on or off, simply click to the right of the outlet name or number, and the switching will take place immediately.

Depending on your web browser settings, you may need to click the "refresh" button to update the on-screen status display after changing settings. Some browsers will update automatically after a few seconds.

View Log Page

The view log page records logins and major system events.
A sample log is shown below:

```
11/15/2002 13:41:34 User logged in
11/15/2002 13:41:24 admin Network
settings changed
11/15/2002 13:41:09 admin User defined
links changed
11/15/2002 13:40:51 admin User logged in
11/15/2002 13:40:49 User logged in
11/15/2002 13:37:01 admin User logged in
```

Settings Page

The settings page allows only the administrator to control the configuration of the power controller. The following settings are supported:

UNIT NAMES

Use the unit names fields to assign a Controller Name to the power controller itself. Examples are "Server Rack Power Strip" or "Plutonium Refinery Control". The Controller Name field appears on the top of the home page.

Assign a separate name to each outlet, such as "Missle Launcher" or "Test Bench" to make identification of each circuit simple.

DELAY

When a time value is entered in the "All ON sequence delay" field, the power controller will pause for a period of time before switching each outlet on in sequence. This delay prevents power surges and blown circuit breakers which can occur when multiple devices are switched on simultaneously. A value of 10 to 30 seconds is recommended.

You may also enter a screen refresh delay in this section. If "Enable screen refresh" is checked, and a delay value is entered, your browser should periodically update the status screen.

POWER LOSS RECOVERY MODE

The power loss recovery mode setting gives you three options for power control after a power failure has occurred:

1. You can turn all outlets off (all systems will be switched off until manually turned on later) by checking the first box.

2. You can automatically turn all outlets on using the "All ON sequence delay" described above. Check the second option to do this.

3. You can return to the same outlet settings that were used prior to the power loss. The "All ON sequence delay" will also be used in this instance. Check the third option if you would like to do this.

USER DEFINED LINKS

You may link to other power controllers, or remote web sites by entering up to four URLS and descriptions in the User Defined Link section.

An example might be "Site Two Power Controller" in the description field with a URL of "192.168.1.250" These links appear on the home page and are accessible to all users.

NETWORK SETTINGS

A fixed IP address, network mask, gateway, and subnet mask may be entered in this field.

For most applications, a fixed IP address is preferable. You may also check a box to use DHCP to automatically assign an IP address if you have a DHCP server on site. If DHCP

is selected and no DHCP server is detected, the power controller will revert to the fixed IP address setting.

When changing IP addresses, you may need to restart the unit and your network switch to validate the new IP on an autoconfiguring switch port.

Be sure to record the new IP address when changing the

DATE AND TIME

The date and time may also be changed on the settings page. Changing the time does not affect the previous activity log settings.

ADDING USERS AND CHANGING PASSWORDS

The administrator may add users and change passwords. If a password is forgotten, the administrator may view it on the admin page. If the administrator password is lost, the entire unit must be reset to factory defaults and then reconfigured using the procedure described on page 3.

Technical Support

To save time and effort, please read this manual completely before calling for tech support. You may FAX questions to (408) 541-8459. To contact tech support, dial (408) 330-5595 and please have the following ready so we can better serve you:

- A copy of your invoice and customer number.
- The firmware version level installed in the system. This information can be found on the home page.
- A description of the Ethernet device connected to your unit, for example, a 10/100 switching hub with a port set to 10Mbps.

Limited One Year Warranty

The terms of this warranty may be legally binding. If you do not agree to the terms listed below, return the product immediately in original unopened condition for a full refund. The purchaser assumes the entire risk as to the results and performance of the unit. CSC warrants this power controller to be free from major defects. No agency, country, or local certifications are included with this unit. It is the responsibility of the user to obtain such certifications if they are necessary. CSC's entire liability and exclusive remedy as to defective hardware shall be, at CSC's option, either (a) return of the purchase price or (b) replacement or repair of the hardware that does not meet CSC's quality control standards and has been returned through proper RMA procedures. CSC's liability for repair or replacement is to CSC's customer ONLY. No warranty service will be provided without an original invoice from CSCI and an RMA number provided by technical support. RMA material must be shipped prepaid to CSC. RMA numbers are valid for 15 days from date of issue. This warranty does not cover products modified, subjected to rough hanCSCng, or used in applications for which they were not originally intended. No oral advice or verbal warranties made by CSC's employees, dealers, or distributors shall in any way increase the scope of this warranty. CSC makes no warranty as to merchantability or fitness for any particular purpose. Due to the wide range of signal sources available, CSC cannot guarantee compatibility with all system configurations. CSC assumes no liability for incidental or consequential damages arising from the use or inability to use this product. This warranty gives you specific legal rights. You may also have other rights that vary from state to state. Since some states do not allow the exclusion of liability for consequential damages, some of the above limitations may not apply to you. CSC makes no representation as to the legality of recording conversations under any specific circumstances.

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