WTI Part No.: 12452

RPB-115

Remote Power Boot Switch



User's Guide



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1. Introduction

The RPB-115 Remote Power Boot Switch provides a convenient means to reboot AC powered devices from a remote location. When a peripheral device locks up, the RPB-115 can be used reset the device by toggling AC power On and Off, regardless of where the device is located.

This eliminates the need for the device to be manually rebooted by on-site personnel. When the appropriate command is sent to the RPB-115, the boot switch will toggle the AC power to five separate devices connected to the ports on the back of the unit.

The RPB-115's RS-232 Control Port will accept ASCII character command strings to select the desired port and initiate the reboot routine. The RPB-115 can either be connected directly to a control device such as a PC or WTI's CPM-1600 Control Port Manager, or connected to a modem and controlled from a remote location. The "RPB OK" response feature can be used to verify proper communication with the command device, assuring the user that commands have been received and enacted.

A bank of dip switches allows the user to define the duration of the reset cycle, enable or disable the Quiet Mode, and select the appropriate baud rate for communication with the unit.

Features:

- Remotely toggles AC power to five separate outlets.
- Serial RS-232 control port can interface directly with a PC or with WTI's CPM-1600 Control Port Manager.
- RJ11 connector allows control via modem.
- User selectable reboot cycle duration (TIME OFF).
- User selectable Quiet Mode to suppress status messages from the unit.

2. Unit Description

2.1. Front Panel

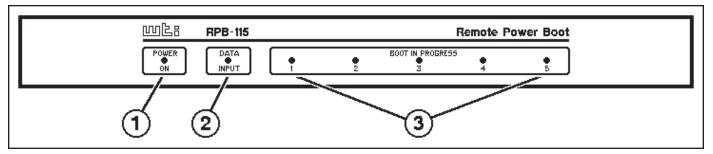


Figure 1: Front Panel

The front panel of the RPB-115 (Figure 1) includes a series of LED indicators which function as follows:

- ① **POWER ON:** Indicates that AC Power is applied to the RPB-115 and the unit is ready to receive commands.
- ② **DATA INPUT:** Flashes when command data is received by the Control Port.
- 3 BOOT IN PROGRESS (Ports 1 5): Lights when a reboot cycle is in progress at the corresponding AC Port.

2.2. Back Panel

The back panel of the RPB-115 (Figure 2) includes Five AC outlets for connection to controlled devices, a Control Port for connection to the command device, and a Master Power Switch.

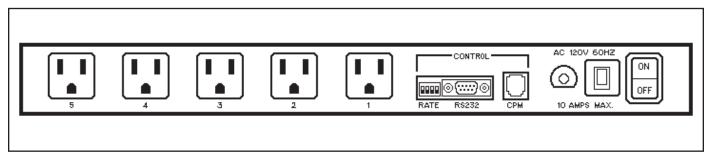


Figure 2: Back Panel

3. Installation

3.1. Control Port Connection

The Control Section, located on the rear panel, consists of a 9 pin male connector and an RJ11 jack. The 9 pin male connector is labeled "RS232" and the RJ11 jack is labeled "CPM". Use either of these inputs to connect to the controlling device. Figure 3 below shows interface schematics for both connectors. Figure 4, on the following page, summarizes the cable layout for a typical RPB-115 installation.

RS232 Port

This DB9 connector is wired in a DTE configuration similar to that of an AT computer. Use standard AT to Modem cable to connect directly to a modem.

CPM Port

This RJ11 jack is wired to connect directly to the RJ11 jack on various WTI equipment, including the CPM-1600 Control Port Manager and the INCS-64 Data Switch. Use a 6 conductor straight wired RJ11 cable such as WTI P/N AC-LL.

Note: Do not connect to both the RS232 Port and the CPM Port at the same time.

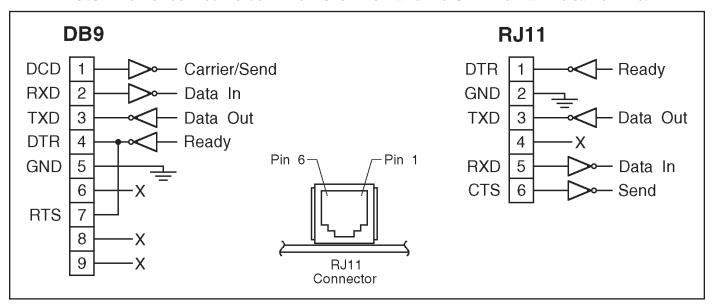


Figure 3: RS-232 Interface Schematics

3.2. Power Connection

The Master Power Switch located on the back panel of the unit applies AC Power to the RPB-115. The Master Power Switch must be ON in order for the RPB-115 to operate. Each time that the RPB-115 is powered ON, the five AC outlets will all be set in the ON condition.

Each AC outlet is capable of switching up to 5 Amps of AC power. The total for all 5 outlets cannot exceed 10 Amps.

Figure 4 below summarizes the cable layout for a typical RPB-115 installation.

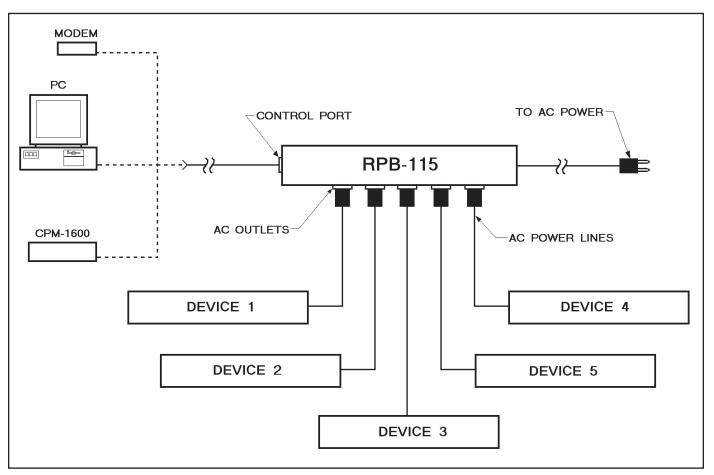


Figure 4: RPB-115 Cable Layout

3.3. Dip Switch Settings

The bank of dip switches on the back of the unit is used to set the communication speed and various options. The unit is transparent to parity and will accept 7 or 8 bit characters.

Off Time

Switch 3 is used to select the "Off Time" or reboot cycle duration. When a reboot cycle is initiated, the "Off Time" feature determines the length of time that the device will remain off before power is restored.

Quiet Mode

When Switch 4 is set in the "Up" position to enable the Quiet Mode, the unit will suppress all status messages that are normally sent from the RPB-115.

Swi	itch	
1	2	Baud
Down	Down	9600
Up	Down	2400
Down	Up	1200
Up	Up	300

Switch	Function	Up	Down
3	Off Time	5 Sec.	2 Sec.
4	Quiet Mode	Yes	No

4. Operation

The PC or controlling device connected to the Control Port must send ASCII characters at the same data rate as the unit. The unit accepts 8 bits/no parity or 7 bits even or odd parity, but will always answer back at 8 bits, no parity.

The RPB-115 will respond with "RPB-115 Ready" approximately 8 seconds after the unit is powered up. If the RPB-115 is connected to a modem, the "RPB-115 Ready" message will be sent approximately 8 seconds after carrier is established. This message indicates that the RPB-115 is ready to receive commands.

The command character string consists of eight contiguous characters. The first 6 characters are ASCII control codes, the seventh is the operation code followed by a Carriage Return.

Where:

- n = 0 No action, unit test. Unit sends "RPB OK" <CR>/<LF> to indicate proper
 operation. (unless dip switch is set for quiet mode)
- n = 1 5 Toggles Power (off/on) on selected outlet. Unit sends "Plug n Off" <CR>/<LF>
 "Plug n On" <CR>/<LF> (unless dip switch is set for quiet mode)
- n = 9 Reboot All. Toggles Power (off/on) on all plugs. Unit sends "Plug n Off" <CR>/<LF>, "Plug n On" <CR>/<LF> (unless dip switch is set for quiet mode)
- **^M** Is the ASCII code for a carriage return

For example, the command **^B^X^X^B^X^X3^M** would be used to toggle the power to AC outlet number 3.

Appendix A: Specifications

Switched Power Plugs: 5 code selectable plugs rated 115 VAC @ 10 amps max. Each. Total switched power for all plugs not to exceed 10 amps. Unit initially powers up to ON condition.

RS232 Port:

RJ11 Jack: Connects directly to WTI CPM-1600 Control Port Manager.

DB9 Connector: 9 Pin Male connector wired to a DTE configuration.

Pin	Signal	I/O
	D.CD.	
I	DCD	Carrier Detect
2	RXD	Data Input
3	TXD	Data Output
4	DTR	Ready Output
5	GND	Signal Ground
6	(NC)	Not Connected
7	RTS	RTS Output
8	(NC)	Not Connected
9	(NC)	Not Connected

Coding: Asynchronous. 7-8 bits, any parity

Data Rate: 300, 1200, 2400, 9600 BPS (Switch Selectable)

LEDs: Power ON, Control Input, Boot in Progress (5)

Temperature: 0°C to 30°C operating

Power: Internal 115 AC 60Hz (10 Amps Maximum load)

Size: 1.75" x 17.00" x 6.5" (H x W x D). Takes one rack space.

Mounting: Table top or rack mounting. 19" rack bracket included, 24" bracket optional.

Weight: 5 pounds shipping weight

Appendix B: FCC Statement:

This device complies with the limits for a Class A digital device pursuant to Part 15 of the FCC rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

Appendix C: Agency Approvals:

UL - 1950 cUL Canada

Appendix D: Customer Service

Customer Service hours are from 8:00 AM to 5:00 PM, PST, Monday through Friday. When calling, please be prepared to give the name and make of the unit, its serial number and a description of its symptoms. If the unit should need to be returned for factory repair it must be accompanied by a Return Authorization number from Customer Service.

WTI Customer Service 5 Sterling Irvine, California 92618 USA

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