

6. Advanced Configurations

The B092-016 console server offers many more advanced access and monitoring functions which are introduced below:

- The *Alerts & Logging*: Alerts facility can be configured to monitor serial ports, hosts, user logins, UPS and RPCs. Trigger events (such as data patterns or temperature and battery levels) can be specified and in the event of such a trigger, a warning email, SMS, Nagios or SNMP alert is sent to a selected destination.
- Your B092-016 can also manage Tripp Lite and third party Uninterruptible Power Supplies (UPS's) and RPCs (PDUs and IPMI devices) using open source NUT and Powerman tools. The *Manage*: Power facility enables both users and Administrators to monitor and switch attached power strips and servers with embedded IPMI BMCs.
- The console server maintains historical logs of all communications with serial and network attached devices, all system activity, UPS and PDU power status, status of environmental monitors, etc. The level of logging is set as ports and devices are configured and *Alerts & Logging: Port Log* allows this history to be saved locally or remotely. From the Status menu, the logs can be viewed as tables and many can be viewed graphically using the embedded *RRDtool*.
- There are a host of other advanced features which you may wish to use (such as Serial Cascading, Authentication, Trusted Networks, Dial-out Failover, Secure Tunneling, Distributed Nagios, Command Line Control) – these are covered in detail in the User's Manual on the CD-ROM.

SDT Connector

On the CD-ROM, you will find the SDT Connector software tool, which provides you with secure, point-and-click access to the console server and all the attached devices. Refer to the SDT Connector Quick Start Guide for setup details.

VirtualPort

On the CD-ROM, you will find VirtualPort software, which enables applications on your Windows PC (or Windows server or virtual server) to control serial port devices attached to a remote console server.

- To use VirtualPort, configure the serial port in Console Server Mode and specify the appropriate protocol to be used (either RFC2117 or RAW)
- Install the VirtualPort client on your Windows® PC
- Refer to the VirtualPort Quick Start Guide for setup details

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Quick Start Guide

16-Port Console Server with Power Alert

Model: B092-016

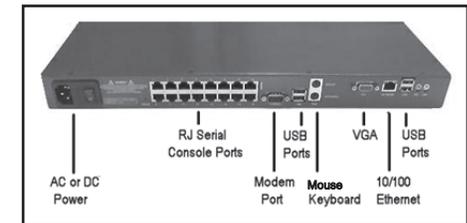


This Quick Start Guide will take you through basic installation, configuration and local operation of the B092-016. For more detailed information, refer to the User's Manual on the CD-ROM.

1. Connecting the Hardware

- 1 Using the included power adapter cord, plug the console server into the power source. We recommend plugging the console server into a Tripp Lite UPS, PDU or Surge Suppressor.
- 2 Connect any Serial and USB devices.
- 3 Connect the Network port to your management network.
- 4 Connect the Keyboard, Monitor and Mouse to the console server.

Note: If you plan to use out-of-band (OOB) dial-in access, connect the console's serial port to an external modem.



2. Setting Up the Console Server

- 1 Power up the B092-016 Console Server.
- 2 Using the connected monitor and keyboard, login with the default system user name: *root* and the default system password: *default*.
- 3 Click **Configure** to launch the Management Console and login using the default user name and password: (*root*, *default*).
- 4 From the Management Console, select **System: Administration**, confirm a new **System Password** and click **Apply**.
- 5 From the Management Console, select **System:IP**.
 - To assign the B092-016 a static IP address, check **Static** and enter the *IP address* and *Subnet Mask* for your management LAN. (Leave the **Gateway** and **DNS** fields blank.)
 - To use a DHCP server to assign network settings to the B092-016, check **DHCP**.



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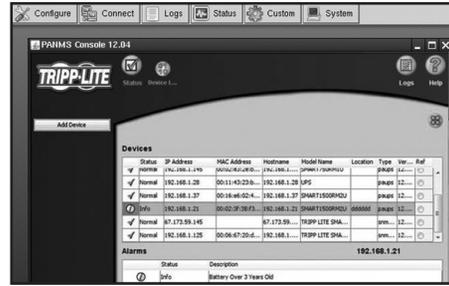
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3. Configuring PowerAlert

To automatically launch PowerAlert on startup, go to *System-Services*. Place a check in the *PowerAlert Console* box. To connect to PowerAlert, click **Connect**, then **PowerAlert Console**. PowerAlert will detect any UPS's connected to the B092-016's Serial and USB ports.

The PowerAlert Console launches when you login to the B092-016 using a connected monitor and keyboard (or remotely using VNC) allowing you to monitor power conditions, control your UPS system and enable automatic shutdown during power failures.

PowerAlert allows connected UPS's to appear as SNMP-manageable devices on your network, enabling remote monitoring and control using another system running PowerAlert software or third-party management software programs. (For more details, refer to the PowerAlert User's Guide.)

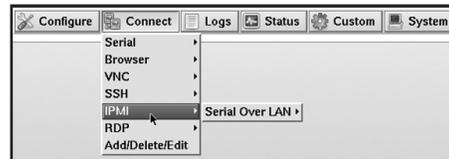


4. Configuring Thin Client Connections

The B092-016 can function as a thin client, running local client software to connect to serial devices and network hosts.

To add a connection to a network host:

1. From the Control Panel, select *Connect: Add/Delete/Edit*.



2. Select the client protocol from the left hand column and click **Add**.

3. Enter connection details network host (e.g. *Hostname, Username*) and a *Label*, then click **Add**.

Once all hosts have been added, click **Save**.

4. Once a host has been added you may tailor the command executed to connect to it by selecting *Connect: Add/Delete/Edit* and clicking **Edit**.



You can now launch the connection from the *Connect* menu.

The B092's sixteen serial ports are pre-configured with RS232 settings of 9600 baud, no parity, 8 data bits and 1 stop bit. If you wish to change these settings:

1. Click **Configure** to load the Management Console, select *Serial & Network: Serial Port* and click **Edit** for the relevant Port number.

2. Set the *Common Settings (Baud Rate, Parity, Data Bits, Stop Bits and Flow Control)* to match those of the device being controlled.

3. You can also select the *Console Server settings (Telnet, SSH, TCP, Unauthenticated Telnet or RFC2217)* for the remote networks connection to this serial port – a *Logging Level* may also be set to specify the level of information to be logged for this port.

4. Click **Apply**.

You can now access the B092-016 locally with the connected monitor and keyboard and use the local thin client software to manage all the computer, networking and power devices in your rack.



5. Remote Control

There are two options to remotely manage network hosts and serial devices via the B092-016.

The first is to run the thin client management software on the B092-016, connecting directly to the network host or serial device – then use VNC from a remote PC to remotely control the B092-016:

1. From the Management Console, select *System: Services*, check **VNC Server** and/or **Secure VNC Server**.
2. You may also want to enable other services for remotely accessing and configuring the console server (and connected devices) – by default, HTTPS and SSH provide access to the B092-016 and HTTP and Telnet are disabled.
3. Click **Apply**.
4. On the remote PC, launch a web browser and login to the B092-016 Management Console (in the address bar, enter **https://** followed by the IP address of the B092-016, e.g. **https://192.168.0.1**).
5. Select *Manage: KVM Console Server: Connect* and launch the Remote Control connection. Your browser will download and run a VNC client Java Applet.
6. You may also use a VNC client of your choice (RealVNC, TightVNC, UltraVNC) on the remote PC to connect to the B092-016's IP address.

The second option is to run the client management software on the remote PC, and securely tunnel the connection to the network host or serial device through the B092-016.

This is particularly useful when you have proprietary applications on the remote PC (such as Dell Open Manage or VMware VDI client) that you want to use to manage a DRAC service processor or VMware virtual device on one of your servers:

1. Select *Serial & Network: Network Hosts* and click **Add Host**.
 2. Enter the *IP address/DNS Name* of the host.
 3. Edit the *Permitted Services* used for accessing this host, (e.g. HTTPS [TCP port 443], VNC [TCP port 5990]), or add custom TCP or UDP port numbers – only the services specified here are tunneled through to the host, all other services are blocked.
 4. At this stage you may also specify the level of information to be logged and monitored for each host access.
 5. Click **Apply**.
 6. Select *Serial & Network: Users & Groups* and click **Add User**.
 7. Enter a *username*, enter and confirm a password and select the newly added host under *Accessible Host(s)*.
 8. Click **Apply**.
- Note:** You will find the SDT Connector Java application on the CD-ROM. This tool is simple to configure and will provide you with secure, point and click access to the console server and all the attached devices as described. (**Refer to the provided SDT Connector Quick Start for more details.**)
9. Install the *SDT Connector* Java application on the remote PC. Click **File: New Gateway**.
 10. Enter the B092-016's IP address as the *Gateway Address* and the newly added username and password as *Gateway Username* and *Gateway Password*. Click **OK**.
 11. Click **Retrieve Hosts** to retrieve the user's accessible hosts and permitted services from the B092-016.
 12. Under the B092-016's *Gateway*, select at the host access the service to launch – a tunneled connection through the B092-016 is established and the local management client software is launched.

