RPC Series
Remote DC Power Control Switches

Products Covered:

RPC-4850 Series
RPC-40L8A4 Series

Hardware Guide

wti

Power & Console Solutions | wti.com

Warnings and Cautions:
Installation Instructions

Secure Racking

If Secure Racked units are installed in a closed or multi-unit rack assembly, they may require further evaluation by Certification Agencies. The following items must be considered.

1. The ambient within the rack may be greater than room ambient. Installation should be such that the amount of air flow required for safe operation is not compromised. The maximum temperature for the equipment in this environment is 60°C. Consideration should be given to the maximum rated ambient.

2. Installation should be such that a hazardous stability condition is not achieved due to uneven loading.

Input Supply

Check nameplate ratings to assure there is no overloading of supply circuits that could have an effect on overcurrent protection and supply wiring.

Grounding

Reliable earthing of this equipment must be maintained. Particular attention should be given to supply connections when connecting to power strips, rather than direct connections to the branch circuit.

No Serviceable Parts Inside; Authorized Service Personnel Only

Do not attempt to repair or service this device yourself. Internal components must be serviced by authorized personnel only.

- **Shock Hazard - Do Not Enter**

- **Lithium Battery**
  CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

Disconnect Power

If any of the following events are noted, immediately disconnect the unit from the power source and contact qualified service personnel:

1. If the power wire becomes frayed or damaged.

2. If liquid has been spilled into the device or if the device has been exposed to rain or water.

Two Power Supplies

Note that RPC series units feature two separate power circuits and a separate power supply cable for each power inlet. Make certain to disconnect all power supply cables from their power source before attempting to service or remove the unit.

Table of Contents

1. Introduction

This Hardware Guide covers set-up and installation for our RPC Series Network Power Switches. RPC Series units are designed to simplify the process of remotely managing vital network elements located at distant network equipment sites and off-site facilities by providing secure remote access to DC power switching and reboot functions at the remote network equipment site.

> **Note:** *For instructions regarding configuration and operation of the RPC Series Device, please refer to the WTI Firmware Guide.*

Model Numbers Covered

This Hardware Guide discusses all WTI RPC Series products. Throughout this Hardware Guide, all of these units are referred to as the "RPC."

2. Unit Description

2.1. Front Panel Components - RPC-4850 Series
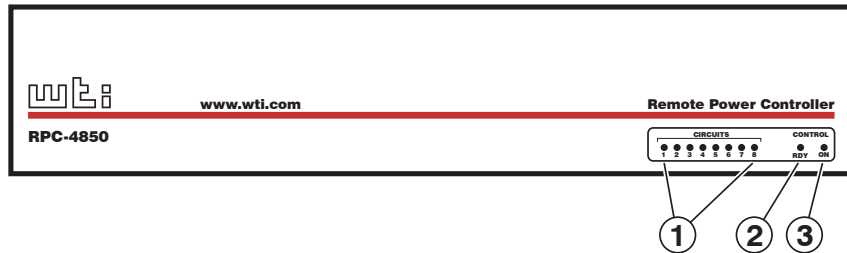
Figure 2.1: Front Panel (Model RPC-4850-48V Shown)

As shown in Figure 2.1, the RPC-4850 Series Front Panel includes the following:

1. **Circuit Status Indicators:** A series of eight LED indicators, which light when power to the corresponding circuit is Switched On.

2. **RDY Indicator:** Flashes when the RPC is ready to receive commands.

3. **ON Indicator:** Lights when power is applied to the Control Section.

2.2. Back Panel Components - RPC-4850 Series

Figure 2.2: Back Panel (Model RPC-4850-48V Shown)

As shown in Figure 2.2, the RPC-4850 Series back panel includes the following:

1. **Ground Screw**

2. **Default Button:** Toggles circuits On/Off or resets unit to factory default parameters as described in Section 2.5.
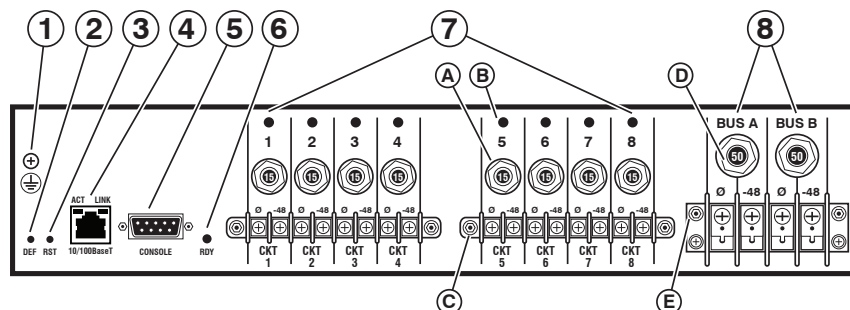
3. **Reset Button:** Reboots and/or resets the RPC to factory defaults as described in Section 2.5.

4. **Network Port:** An RJ45 Ethernet port for connection to your 10/100/1000Base-T, TCP/IP network. Note that the Network Port also includes two, small LED indicators for Link and Data Activity. For information on Network Port configuration, please refer to the WTI Firmware Guide.

5. **Console Port:** A DB9, RS232 serial port (DTE), for connection to a local terminal or external modem, as described in Section 4.6.

6. **RDY Indicator:** (Ready) Flashes to indicate that unit is ready to receive commands.

7. **Switched Output Circuits:** A series of eight DC, 15 Amp circuits divided into two terminal blocks.

    A. **15 Amp Circuit Breakers:** Each circuit includes a 15 Amp breaker.

    B. **Status Indicators:** Each circuit includes a Status Indicator, which lights when the circuit is switched On.

    C. **Mounting Screw Receptacles:** Each terminal block includes two mounting screw receptacles, which are used to install the protective cover (not shown.)

8. **Power Input:** Two DC input Buses.

    • RPC-4850-48V Units: -48 V DC
    • RPC-4850-24V Units: +24 V DC

    D. **50 Amp Circuit Breakers:** Each power input bus includes a 50 Amp breaker.

    E. **Mounting Screw Receptacles:** The power input terminal block includes two mounting screw receptacles, which are used to install the protective cover (not shown).
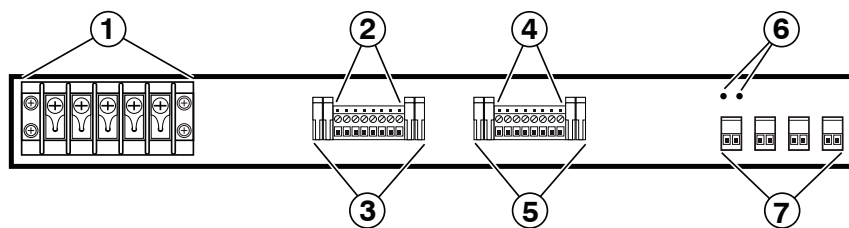
2.3. Front Panel Components - RPC-40L8A4 Series
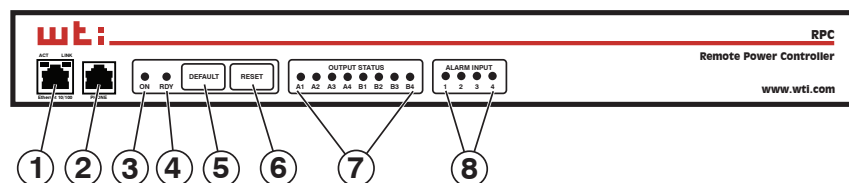
Figure 2.3: Front Panel (Model RPC-40L8A4 Shown)

As shown in Figure 2.3, the RPC-40L8A4 Series Front Panel includes the following:

1. **Network Port:** An RJ45 Ethernet port for connection to your 10/100Base-T, TCP/IP network. Note that the Network Port also includes two, small LED indicators for Link and Data Activity. For more information on Network Port configuration, please refer to the WTI Firmware Guide.

2. **Console Port:** A DB9, RS232 serial port (DTE), for connection to a local terminal or external modem, as described in Section 4.6.

3. **ON Indicator:** Lights when power is applied to the Control Section.

4. **RDY Indicator:** Flashes when the RPC is ready to receive commands.

5. **Default Button:** Toggles circuits On/Off or resets unit to factory default parameters as described in Section 2.5.

6. **Reset Button:** Reboots and/or resets the RPC to factory defaults as described in Section 2.5.

7. **Circuit Status Indicators:** A series of eight LED indicators, which light when power to the corresponding circuit is Switched On.

8. **Alarm Input Indicators:** A series of four LED indicators which light when the corresponding Alarm Input has generated an alarm. For more information on Alarm Input functions, please refer to Section 4.5 and the WTI Firmware Guide.

2.4. Back Panel Components - RPC-40L8A4 Series

Figure 2.4: Back Panel (Model RPC-40L8A4 Shown)

As shown in Figure 2.4, the RPC-40L8A4 Series Back Panel includes the following:

1. **Power Input:** Two 40 Amp DC input Buses that share a common chassis ground line. The power input terminal block also includes two mounting brackets, which are used to hold the protective cover (not shown).

2. **Switched Output Circuits - Bus A:** Four ten amp DC circuits in a Euro Style output terminal fed by power input bus A. DC output voltages for RPC-40L8A4 series units are as follows:

    * RPC-40L8A4-48 = ± 48 V DC, 10 Amps
    * RPC-40L8A4-24 = + 24 V DC, 10 Amps
    * RPC-40L8A4-12 = + 12 V DC, 10 Amps

3. **Output Circuit Fuses - Bus A:** Four ten amp DC GMT fuses that protect the circuits on Output Bus A. Ships with 10 Amp fuses; for custom fuses, please contact WTI.

4. **Switched Output Circuits - Bus B:** Four ten amp DC circuits in a Euro Style output terminal fed by power input bus B. Voltages for each RPC-40L8A4 model are described under item 2 above.

5. **Output Circuit Fuses - Bus B:** Four ten amp DC GMT fuses that protect the circuits on Output Bus B. Ships with 10 Amp fuses; for custom fuses, please contact WTI.

6. **Optional Grounding Lug Location:** Mounting holes for optional grounding lug for 6 gauge ground wire. For more information, please contact WTI.

7. **Alarm Inputs:** Four Euro style alarm inputs, which are designed for connection to door open alarms or other dry contacts. Each alarm input supplies 0.4 Amps of positive DC current at the same voltage that is used to power the unit (e.g., ± 48 V DC units provide +48 V DC, +24 V DC units provide +24 V DC and +12 V DC units provide +12 V DC.) For more information, please refer to Section 4.5.

2.5.   Additional Button Functions

The Default and Reset buttons on the RPC front panel can be used to perform the functions described below:

Notes:

• *All Front Panel Button functions can also be disabled via the System Parameters menu, as described in the* <u>WTI Firmware Guide</u>.

• *When the RPC is reset to factory defaults, all user-defined configuration parameters will be cleared, and the default "super" user account will also be restored.*

1. **Reboot Operating System:**

    a) Press and hold the Reset button for five seconds, and then release it.

    b) The RPC will reboot it's operating system; all circuits will be left in their current On/Off state.

2. **Set Parameters to Factory Defaults:**

    a) Simultaneously press both the Default button and the Reset button, hold them for five seconds, and then release them.

    b) All RPC parameters will be reset to their original factory default settings, and the unit will then reboot. All circuits will be left in their current On/Off state.

3. **Toggle/Default All Circuits:**

    a) Press the Default button, hold it for five seconds, and then release the Default Button.

    b) The RPC will switch all circuits to the Off state. If all circuits are already in the Off state, then the unit will reset all circuits to their user defined default states.

3. Getting Started

This section describes a simplified bench test procedure for the RPC, which will allow you to communicate with the unit in order to demonstrate basic features and check for proper operation.

Notes:

- *There are separate Hardware Installation procedures for RPC-4850 series units and RPC-40L8A4 series units. RPC-4850 series units are discussed in Section 4.1 and RPC-40L8A4 series units are discussed in Section 4.2.*

- *For more information regarding installing the RPC hardware in a working network environment, please refer to Section 4.*

- *For instructions regarding configurations options and advanced operating features, please refer to the WTI Firmware Guide.*

3.1. Apply Power to the RPC Unit

3.1.1. Connecting RPC-4850 Series Units to Power

Refer to power rating nameplate on the back panel, and then connect the RPC-4850 series unit to an appropriate power source

The RPC-4850 features two separate DC inputs; connect power wires to the unit's Circuit "A" and/or Circuit "B" terminal blocks, then connect the wires to an appropriate power supply. The ON LED should light, and the RDY LED should begin to flash. This indicates that the RPC-4850 is ready to receive commands.

Notes:

- *For more information regarding connecting power to RPC-4850 Series Units, please refer to Section 4.1.*

- *For the purpose of this bench test procedure, it is not necessary to connect power to both input circuits; either circuit will supply power for operation and control functions. However, when power is connected to both circuits, this allows the second circuit to function as a back-up in the event of a power outage.*

- *Each individual output circuit will support up to 15 Amps maximum. The total for all eight circuits cannot exceed 50 Amps.*

Warning: *An exposed wire lead from a DC input power source can conduct harmful levels of electricity. Make certain that no exposed portion of the DC input wire extends from the terminal block.*

3.1.2. Connecting RPC-40L8A4 Series Units to Power

Refer to power rating nameplate on the back panel, and then remove the protective cover from the terminal block and connect the RPC-40L8A4 unit to an appropriate power source.

Notes:

* *For more information regarding connecting power to RPC-40L8A4 Series Units, please refer to Section 4.2.*

* *RPC-40L8A4 series units feature two completely independent buses, and for each circuit, voltage is connected to the +/- terminal (for negative 48 or positive 48 volt units, power is connected to the +/- terminals and for positive 24 and 12 volt units, positive power is also connected to the +/- terminals.)*

Warning: *An exposed wire lead from a DC input power source can conduct harmful levels of electricity. Make certain that no exposed portion of the DC input wire extends from the terminal block.*

3.2. Connect your Computer to the RPC

In the default state, communication with the RPC via Telnet, HTTP and HTTPS are disabled. Although communication via Telnet, HTTP and/or HTTPS can be enabled as described in the WTI Firmware Guide, during this bench test procedure, the RPC will be controlled via the Command Line Interface (CLI) using a local PC, connected to either the Serial SetUp Port or Network Port:

* **Serial SetUp Port:** Use the Ethernet Cable and Adapter supplied with the RPC. In the default state, the Serial SetUp Port is configured for 9600 bps.

* **Network Port:** Use the Ethernet Cable supplied with the unit. The default IPv4 address for the Network Port is 192.168.168.168.

3.3. Communicating with the RPC

Notes:

* *Default serial port parameters are set as follows: 9600 bps, RTS/CTS Handshaking, 8 Data Bits, One Stop Bit, No Parity. Although these parameters can be easily redefined, for this bench test procedure, it is recommended to configure your communications program to accept the default parameters.*

* *The RPC features a default IP Address (192.168.168.168) and a default Subnet Mask (255.255.255.0.) This allows network IPv4 access to the Command Line Interface, providing that you are contacting the RPC from a node on the same subnet.*

1. **Access the User Interface:** Start your communications program, (e.g., Tera Term, PuTTy, etc.,) then press **[Enter]**.

2. **Username / Password Prompt:** A message will be displayed, which prompts you to enter your username (Login) and password. The default username is "`super`" (all lower case, no quotes), and the default password is also "`super`". If a valid username and password are entered, the RPC will display either the Port Status Screen (CLI) or Main Menu (Web Browser Interface.)

3.4. Controlling Power Circuits

If you wish to verify that the RPC is operating properly before deploying the unit in a working network environment, proceed as follows to connect ports and switch circuits:

1. **Review the Help Menu:** At the Text Interface command prompt, type **/H** and press **[Enter]** to display the Help Menu.

2. **Controlling Power Circuits:** You may wish to perform the following tests in order to make certain that the switched circuits are functioning properly.

   a) **Reboot Circuit:** At the command prompt, type **/BOOT 1** and press **[Enter]**. The status indicator for Circuit 1 should go Off, pause for a moment and then go back On, indicating that the boot cycle has been successfully completed.

   b) **Switch Circuit Off:** At the command prompt, type **/OFF 1** and then press **[Enter]**. The status indicator for Circuit 1 should go Off, indicating that the command has been successfully completed. Leave Circuit 1 in the "Off" state, and then proceed to the next step.

   c) **Switch Circuit On:** At the command prompt, type **/ON 1** and press **[Enter]**. The status indicator for Circuit 1 should then go back On, indicating that the command has been successfully completed.

3. **Exit from User Interface:** To exit the user interface, type **/X** and press **[Enter]**.

This completes the Quick Start Guide for the RPC. Prior to placing the unit into operation, it is recommended to refer to the remainder of this User's Guide for important information regarding advanced configuration capabilities and more detailed operation instructions. If you have further questions regarding the RPC unit, please contact WTI Customer Support as described in Appendix C.

4. Hardware Installation

4.1. Applying Power to RPC-4850 Series Units

> **Note:** *This procedure differs for RPC-40L8A4 series units. For instructions on connecting power to RPC-40L8A4 series units, please refer to Section 4.2.*

Refer to power rating nameplate on the back panel, and then connect the RPC-4850 series unit to an appropriate power source as shown in Figure 4.1.

RPC-4850 series units features two separate DC inputs; connect power cables to the unit's Circuit "A" and/or Circuit "B" terminal blocks, then connect the cables to an appropriate power supply. Note that it is not necessary to connect power to both input circuits; either circuit will supply power for operation and control functions. However, when power is connected to both circuits, this allows the second circuit to function as a back-up in the event of a power outage.

Note that each individual output circuit will support up to 15 Amps maximum, and that the total for all eight circuits cannot exceed 50 Amps.

CAUTIONS:

- *Before attempting to install this unit, please review the warnings and cautions listed at the front of the user's guide.*

- *This device should only be operated with the type of power source indicated on the instrument nameplate. If you are not sure of the type of power service available, please contact your local power company.*

- *Reliable earthing (grounding) of this unit must be maintained. Particular attention should be given to supply connections when connecting to power strips, rather than directly to the branch circuit.*

Warning: *An exposed wire lead from a DC input power source can conduct harmful levels of electricity. Make certain that no exposed portion of the DC input wire extends from the terminal block.*

Input voltages for RPC-4850 units are described in the table below:

Model Number	Voltage
RPC-4850-48V	- 48 VDC
RPC-4859-24V	+24 VDC

When you have finished connecting power lines to the RPC-4850 unit, make certain to replace the protective input terminal block cover.
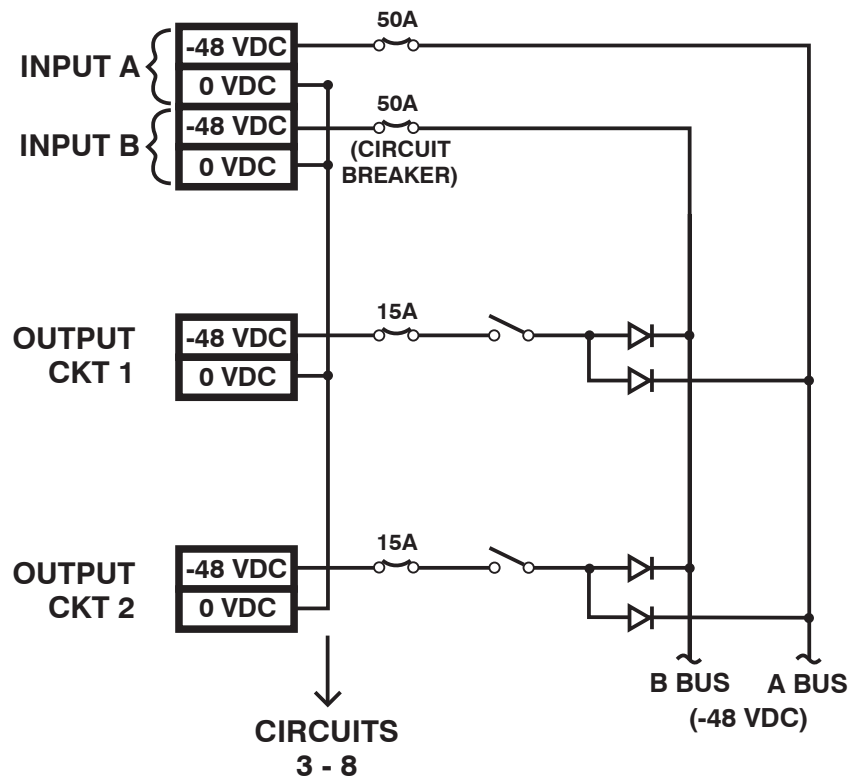
Figure 4.1: Model RPC-4850 Series Block Diagram (Model RPC-4850-48V Shown)

4.2. Applying Power to RPC-40L8A4 Series Units

Note: *This procedure differs for RPC-4850 series units. For instructions on connecting power to RPC-4850 series units, please refer to Section 4.1.*

Refer to power rating nameplate on the back panel, and then remove the protective cover from the terminal block and connect the RPC-40L8A4 unit to an appropriate power source as shown in Figure 4.2 and Figure 4.3.

CAUTIONS:

- *Before attempting to install this unit, please review the warnings and cautions listed at the front of the user's guide.*

- *This device should only be operated with the type of power source indicated on the instrument nameplate. If you are not sure of the type of power service available, please contact your local power company.*

- *Reliable earthing (grounding) of this unit must be maintained. Particular attention should be given to supply connections when connecting to power strips, rather than directly to the branch circuit.*

Warning: *An exposed wire lead from a DC input power source can conduct harmful levels of electricity. Make certain that no exposed portion of the DC input wire extends from the terminal block.*

Note: *RPC-40L8A4 series units feature two completely independent buses, and for each circuit, voltage is connected to the +/- terminal (for negative 48 or positive 48 volt units, power is connected to the +/- terminals and for positive 24 and 12 volt units, positive power is also connected to the +/- terminals.)*

Input voltages for RPC-40L8A4 units are described in the table below:

Model Number	Voltage	Voltage Range
RPC-40L8A4-48	+48 or - 48 VDC	18 to 72 VDC
RPC-40L8A4-24	+24 VDC	18 to 72 VDC
RPC-40L8A4-12	+12 VDC	9 to 36 VDC

When you have finished connecting power lines to the RPC-40L8A4 unit, make certain to replace the protective input terminal block cover.
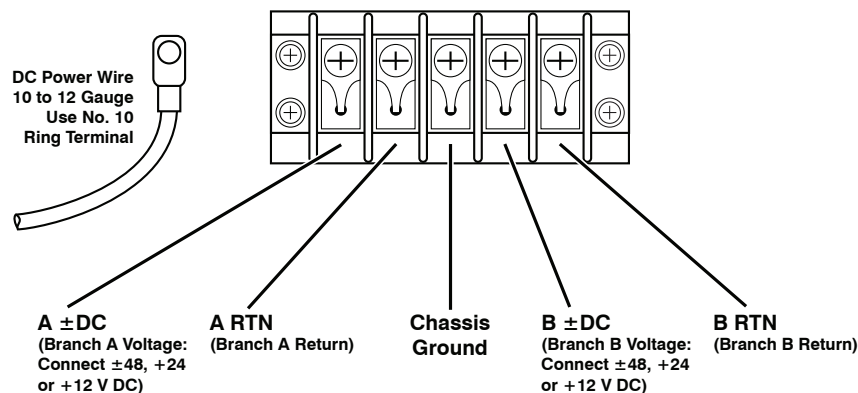
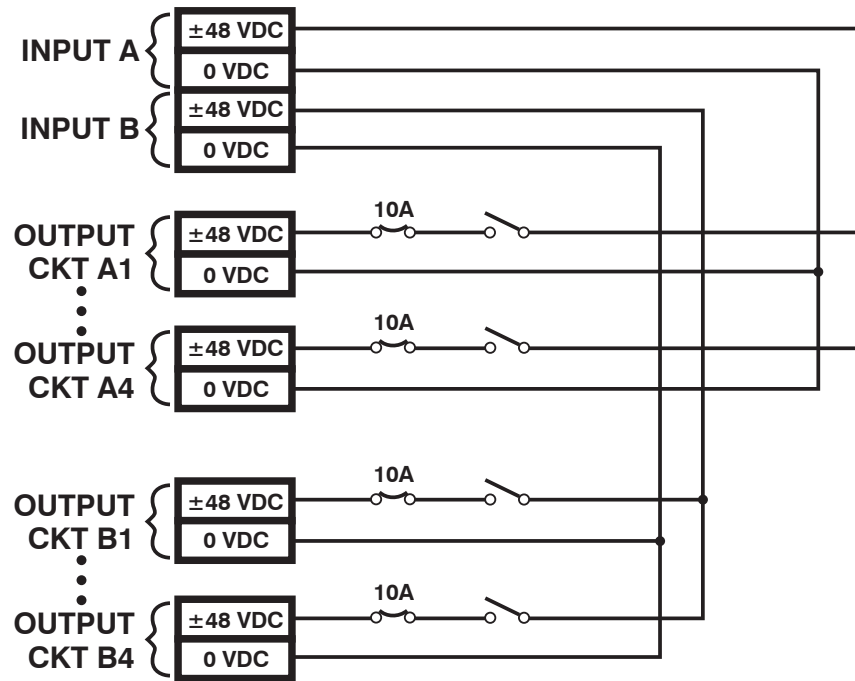**Figure 4.2: DC Input Block Terminal (RPC-40L8A4 Series - Protective Cover Not Shown)**

Figure 4.3: RPC-40L8A4 Series Units; Block Diagram

4.3.   Connecting Switched Devices to RPC-4850 Series Units

Note: *This procedure differs for RPC-40L8A4 series units. For instructions on connecting switched devices to RPC-40L8A4 series units, please refer to Section 4.4.*

Make certain that the power supply to the RPC-4850 series unit is switched Off, and then connect the supply cables from your DC powered devices to the Switched Output Circuits on the RPC-4850 back panel. Check to make certain that cables are securely attached, and then install the protective covers over each output terminal block. The protective covers are held in place by screws that pass through the holes in the cover and then thread into the screw receptacles at the end of each Output Terminal Block.

4.4.   Connecting Switched Devices to RPC-40L8A4 Series Units

Note: *This procedure differs for RPC-4850 series units. For instructions on connecting switched devices to RPC-4850 series units, please refer to Section 4.3.*

The output terminals on the RPC-40L8A4 back panel are used to connect DC voltage to each switched device. Each output terminal includes eight connectors (four circuits.) To connect wires to the DC output terminal block, refer to Figure 4.4 below and proceed as follows:

Notes:
• *Each individual output circuit will support up to 10 Amps maximum; the total for all four circuits on either bus cannot exceed 40 Amps.*

• *When tightening or loosening the terminal block retaining screws, use a screwdriver with a 3mm wide blade.*

Warning: *An exposed wire lead from a DC input power source can conduct harmful levels of electricity. Make certain that no exposed portion of the DC input wire extends from the terminal block.*
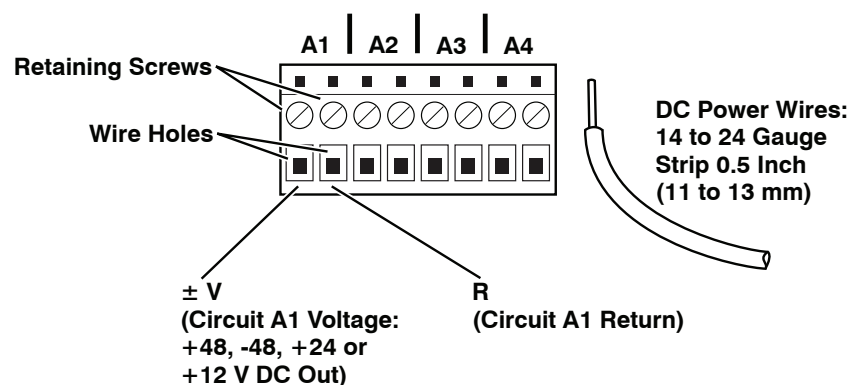

Figure 4.4: DC Output Terminal Blocks (RPC-40L8A4 Series - Fuses Not Shown)

1. Prior to inserting a wire into the the DC terminal block, you must use loosen the retaining screw in order to allow the wire to enter the wire hole. Use a screwdriver with a 3mm wide blade to turn the retaining screw all the way to the left (counter-clockwise.)

2. Firmly insert the wire into the wire hole and push the wire into the hole until resistance is felt.

3. While holding the wire in place, use a screwdriver with a 3mm wide blade to tighten the retaining screw. The screwdriver that is used to tighten the retaining screw must be narrow enough to reach the retaining screw unobstructed. Note that in order to properly secure the wire, you must push down on the screwdriver while tightening the retaining screw until the screw is firmly seated.

    Note: *If you have difficulty securing the wire to the terminal block, make certain that you are using a screwdriver with a 3 mm wide blade (or narrower,) and that the retaining screw and is tight enough to hold the wire in place.*

    Caution: *Do not over tighten the retaining screws. The recommended maximum torque is 4.5 lbf-in (72 ozf-in.)*

4.   Tug on the wire to make certain that the wire is firmly held in place.

4.4.1.   Output Terminal Fuses

Note that each output terminal includes four fuses; one for each circuit on the output terminal. If a fuse is blown, a red dot will appear in the clear cap as shown in Figure 4.5. To remove a fuse, use a pair of pliers to grasp the black body of the fuse, and then gently pull the fuse loose from the RPC-40L8A4 unit. The RPC-40L8A4 ships with 10 Amp fuses; for custom fuses, please contact WTI.
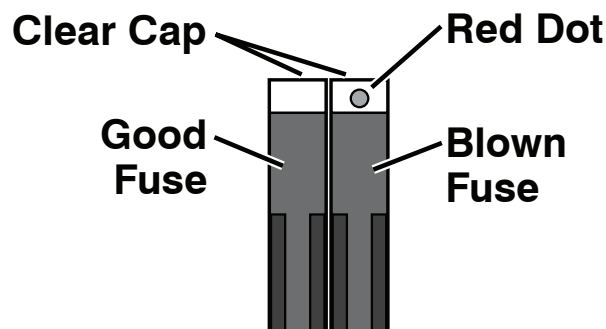

Figure 4.5: DC Output Terminal Block Fuses (RPC-40L8A4 Series Units Only)

4.5.   Connecting to the Alarm Inputs (RPC-40L8A4 Units Only)

The RPC-40L8A4 back panel includes four alarm inputs, designed for connection to door open alarms or other dry contact alarms. Each + pin supplies positive DC voltage at the same voltage that is used to power the unit (i.e., ± 48 V DC units provide +48 V DC, +24 V DC units provide +24 V DC and +12 V DC units provide +12 V DC.)

Note that when the RPC-40L8A4 unit is shipped from the factory, the removable alarm input connectors are enclosed in separate plastic bag, included in the shipping box and must be installed by the user.

When connecting wires to alarm inputs, make certain each wire is properly seated and firmly held in place by the retaining screw. As shown in Figure 4.6, in order to properly seat the wire the retaining screw must be turned counter-clockwise until the metal "gate" in the wire hole is open. If the metal gate is closed, the wire will not seat properly. After inserting the wires, tighten both screws to secure the wires to the connector and snap the connector in place on the back panel of the RPC-40L8A4 unit.

Caution: *Do not over tighten the retaining screws. The recommended maximum torque is 4.5 lbf-in (72 ozf-in.)*

Note: *For instructions regarding configuration of the Alarm Input Alarm, please refer to the WTI Firmware Guide.*
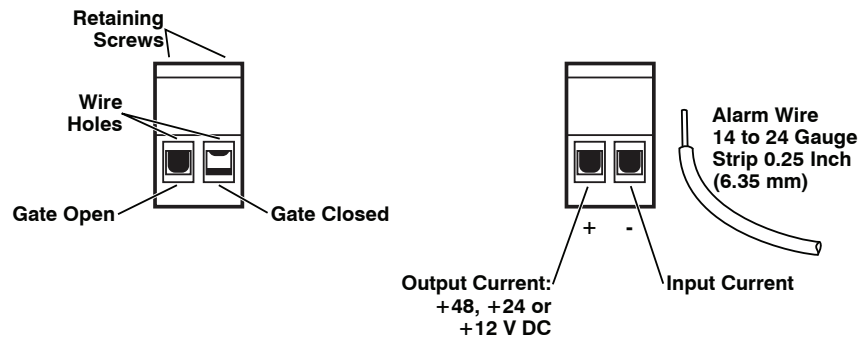

Figure 4.6: Connecting to the Alarm Inputs (RPC-40L8A4 Series Units Only)

4.6.   Serial Console / RS232 Port Connection

The Serial Console Port can be connected to either an external modem or a local PC, but not both items at the same time. In the default state, the Console port is configured for 9600 bps, no parity, 8 data bits, 1 stop bit. Appendix B describes the Console Port interface. Note that RPC-4850 series units differ from RPC-40L8A4 series units as follows:

• **RPC-4850 Series Units:** The RPC-4850 SetUp Port is a male, RS232C DB9 connector.

• **RPC-40L8A4 Series Units:** The RPC-40L8A4 SetUp Port is a female RS232C RJ45 connector.

4.6.1.   Connecting a Local Computer

Use the supplied null modem cable to connect your computer console port to the RPC SetUp (RS232) Port. Make certain that the Serial Port Mode is set to "Normal" (the default setting) as described in the WTI Firmware Guide.

4.6.2.   Connecting an External Modem

When connecting directly to an external modem, use a standard AT to Modem cable. Make certain that the modem is initialized at the same default parameters as the RPC Console Port. Make certain that the RPC Serial Port Mode is set to "Modem" or "Modem PPP" as described in The WTI Firmware Guide.

4.7.   Connecting the Network Cable

The Network Port is an RJ45 Ethernet jack, for connection to a TCP/IP network. Connect your Ethernet cable to the Network Port. Note that the RPC includes a default IP address (192.168.168.168) and a default subnet mask (255.255.255.0.) When installing the RPC in a working network environment, it is recommended to define network parameters as described in the WTI Firmware Guide.

> **Note:** *The RPC features a 10/100/1000Base-T auto-negotiating Interface; speed and duplex mode will be automatically negotiated. When connecting to an Ethernet interface, most router switches will autosense to determine if the device is 1000Base-T, 100Base-T or 10Base-T, and then configure the network interface accordingly. If your router switch does not autosense, the RPC will auto negotiate speed and duplex mode.*

4.8.   Emergency Shut Off Function

RPC Series units also include an Emergency Shut Off function, that can be used to immediately shut off all RPC power circuits in case of emergency. For more information regarding the Emergency Shut Off feature, please contact WTI Tech Support at service@wti.com.

This completes the RPC Hardware Guide. Prior to placing the unit into operation, it is recommended to refer to the WTI Firmware Guide for important information regarding advanced configuration options, security functions and more detailed operation instructions. If you have further questions regarding the RPC unit, please contact WTI Customer Support as described in Appendix C.

Appendix A.   Specifications

Physical/Environmental:
   RPC-4850 Series:
      Width: 19" (48.3 cm) (Including Rack Brackets)
      Depth: 9.5" (24.1 cm)
      Height: 3.5" (8.8 cm) Two Rack U
   RPC-40L8A4 Series:
      Width: 19" (48.3 cm) (Including Rack Brackets)
      Depth: 9.5" (24.1 cm)
      Height: 1.75" (4.5 cm) One Rack U

   Operating Temperature: 32˚F to 122˚F (0˚C to 50˚C)
   Humidity: 10 - 90% RH

Appendix B. Serial Interface Description

RPC

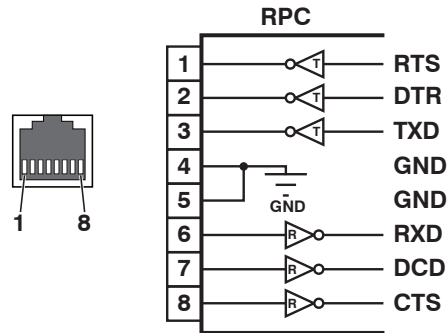| Pin	Signal
1	RTS
2	DTR
3	TXD
4	GND
5	GND
6	RXD
7	DCD
8	CTS

Figure B.1: RPC Series RS232 SetUpPort Interface (RJ45 - Standard Pinout)

B.1. Serial Port (RS232)

DCD and DTR hardware lines function as follows:

1. **When connected:**

   a) If either port is set for Modem Mode, the DTR output at either port reflects the DCD input at the other end.

   b) If *neither* port is set for Modem Mode, DTR output is held high (active).

2. **When not connected:**

   a) If the port is set for Modem Mode, upon disconnect DTR output is pulsed for 0.5 seconds and then held high.

   b) If the port is *not* set for Modem Mode, DTR output is controlled by the DTR Output option (Serial Port Parameters Menu.) Upon disconnect, Option 23 allows DTR output to be held low, held high, or pulsed for 0.5 seconds and then held high.

Appendix C.   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

Local Phone: (949) 586-9950
Toll Free Service Line: 1-888-280-7227
Service Fax: (949) 583-9514

Email: service@wti.com

Trademark and Copyright Information

Trademarks and Copyrights Used in this Manual