

RPS Series Manual



REMOTE POWER SENSOR

Single-PHASE

WITH or WITHOUT

DIRECT IP

BayTech Manual Publication

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RPS with or without Ethernet

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ABOUT THIS OWNER'S MANUAL

This document provides information required for installing and operating your Bay Tech equipment. It should allow the user to connect, power up, and access an applications menu where peripheral equipment can be controlled. We recommend reading this manual carefully, while placing special emphasis on correct cabling and configuration. If you have any problems with your installation, please contact a BayTech Applications Engineer at **228-563-7334**, or toll free from anywhere in the United States using **1-800-523-2702** or contact us at our Web Site, www.baytech.net.

BayTech manufactures many remote site management products, data switches, data collection multiplexers, remote power controllers, and peripheral print sharers. If you would like information on any of these products, please contact BayTech Customer Service at the above numbers or visit our web site.

Conventions used in this manual include:

CAUTION: This term is used to denote any condition that could possibly result in physical harm to personnel or damage to equipment.

IMPORTANT: This term is used to denote conditions that could result in the loss of communications or to highlight the proper functioning of equipment.

NOTE: This term is used to denote items of interest to the user.

<cr>: Carriage Return or ENTER

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BayTech units are in accordance with the general requirements of *Standard for Information Technology Equipment* (ETL listed, conforms to ANSI/UL STD 60950-1-2003 CERTIFIED CAN/CSA C22.2 NO. 60950-1-03, UL STD 231 8TH EDITION, UL STD 1950 3RD EDITION CERTIFIED CAN/CSA 22.2 NO. 950-95, CE conforms to IEC 60950-1).

Model number description: RPS28 ADEN -30NC

RPS28 = base unit RPS28 group A = High Voltage

D = LCD E = Environmental Ports front panel

N = Network, Ethernet port F = Front panel LCD

L = LED S = Sensor = Environmental port

-30 = Unit rated Amperage NC = Normally Closed Relays upon initial and default power on.

We welcome any comments you may have about our products, and we hope that you will continue to look to BayTech for your remote management needs.

RPS with or without Ethernet

Connection Description

BayTech's RPS Series unit provides a Serial EIA232 interface that controls user access and outlet controls to the power strip.

CAUTION: All power should be removed from the BayTech unit prior to removing or installing cables and /or adapters.

EIA-232 SERIAL CONNECTION

The RPS has an RJ-45 port which uses an 8-pin crossed modular cable to connect to a local EIA-232 device such as a computer terminal or external modem. Most serial computers do not have RJ-45 connections; therefore an adapter is provided with this unit to convert from a DE-9 connector to an RJ-45 connector (Bay Tech Part No. 9FRJ45PC-4). An adapter to convert from a DB-25 connector to an RJ-45 connector is also available from Bay Tech, upon request (Bay Tech Part No. 25FRJ45PC-4). The 8-pin crossed modular cable is configured to operate with these adapters.

INSTALLATION

UNPACKING

Compare the unit and serial number of the equipment you received to the packing slip located on the outside of the box. Inspect equipment carefully for damage that may have occurred in shipment. If there is damage to the equipment or if materials are missing, contact BayTech technical support at **228-563-7334** or call toll free inside the United States at **800-523-2702**. At a minimum, you should receive the following:

1. The RPS unit.
2. Manual insert describing the location of the User's Guide on BayTech's website at www.baytech.net.
3. Power Cords that may be attached to the unit (if order requested detachable cords).
4. 1 ea. DE-9 (9 pin) PC com port adapter -- 9FRJ45PC (with Cisco Interface) or 9FRJ45PC-1.
5. 1 ea. RJ-45 Roll over cable -- RJ08X007.

NOTE: Keep the shipping container and packing material in the event future shipment is required.

PREPARING THE INSTALLATION SITE

The installation area should be clean and free of extreme temperatures and humidity. Allow sufficient space behind the RPS unit for cabling and receptacle connections.

POWER

- **120 VAC Model:** Internal 120 VAC 60 Hz (15, 20 or 30 Amps Maximum Load).
- **230 VAC Model:** Internal 230 VAC 60 Hz (10, 15, 16, 20, 30, or 32 Amps Maximum Load).

CAUTION: This unit is intended for indoor use only. Do not install near water or expose this unit to moisture. To prevent heat buildup, do not coil the power cord when in use. Do not use extension cords. Do not attempt to make any internal changes to the power source. Do not attempt to modify any portion or component of an RPS Series Unit unless specifically directed to by BayTech personnel. BayTech must perform any internal operations.

CAUTION: High-voltage surges and spikes can damage this equipment. To protect from such power surges and spikes, this unit must have a good earth ground or good power surge

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protection.

CAUTION: Do not exceed the AC current rating for the selected model. (See <http://www.baytech.net/products/RPSseries.shtml> for each RPS model).

CAUTION: In order to be absolutely removed from the power supply, the power cord must be unplugged from the power source.

CAUTION: For PERMANENTLY CONNECTED EQUIPMENT, a readily accessible disconnect device (Circuit Breaker rated not to exceed the amperage rating of the unit) shall be incorporated in the fixed wiring between the power source and the Baytech unit. For PLUGGABLE EQUIPMENT, the socket-outlet shall be installed near the equipment and easily accessible. The outlets providing power to the unit shall be protected against over current and short circuit by suitable rated protective devices.

Applying power illuminates a green LED on the front panel of the RPS. When the power switch is off, devices connected to the unit are not receiving power.

CIRCUIT BREAKER

Depending on if the unit has circuit breakers, in the case of power overload, the circuit breaker automatically trips. Determine the cause of the tripped circuit breaker, correct the problem then reset the circuit breaker by depressing the circuit breaker switch. If an overload condition occurs, the RPS status menu is still accessible. If all circuits are closed, the circuit breaker status menu will indicate "On." If the circuit breaker is tripped, the circuit breaker status will indicate "Off." If no power cord is attached to the "IN" receptacle, the circuit breaker status will indicate "Off", indicating there is no power available to the "OUT" receptacle.

CABLING

RJ-45 Cable

RPS RJ-45 pin Signals

Pin	EIA 232 Signal	Signal Direction	Description
1	DTR	Out	+10V when activated by DCD. Toggles on logout for modem disconnect.
2	GND		Signal Ground
3	RTS	Out	+10 V when power is applied. Not used as a handshake line.
4	TX	Out	Transmit (Data Out)
5	RX	In	Receive (Data In)
6	N/C	In	No Connection.
7	GND		Signal Ground
8	DCD	In	DCD into the RPS.

Adapter signals

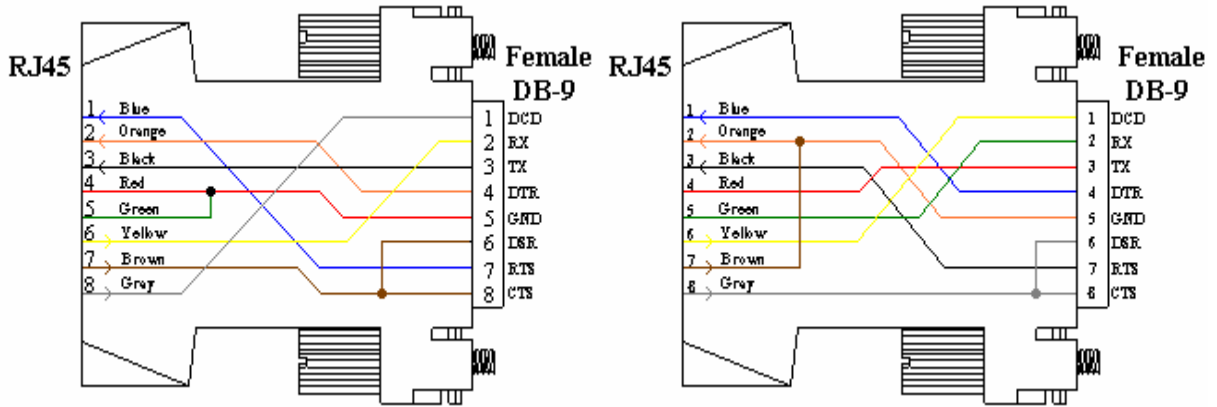
Listed are the pin specifications for the BayTech cable and adapters and the terminal COM ports:

Signal	RS-232 Port (DS)	RS-232 Port (RPS)	COM Port DE-9 Pin	COM Port DB-25 Pin	Signal
DTR	1	1	4	20	DSR
GND	2	2		1	GND
RTS	3	3	7	5	CTS
TXD	4	4	3	2	RXD
RXD	5	5	2	3	TXD
DSR	6	N/C	6	6	DTR
GND	7	7	5	7	GND
CTS	8		8	4	RTS
DTR			4		DCD
DCD		8	1	8	DTR
RI	9			22	

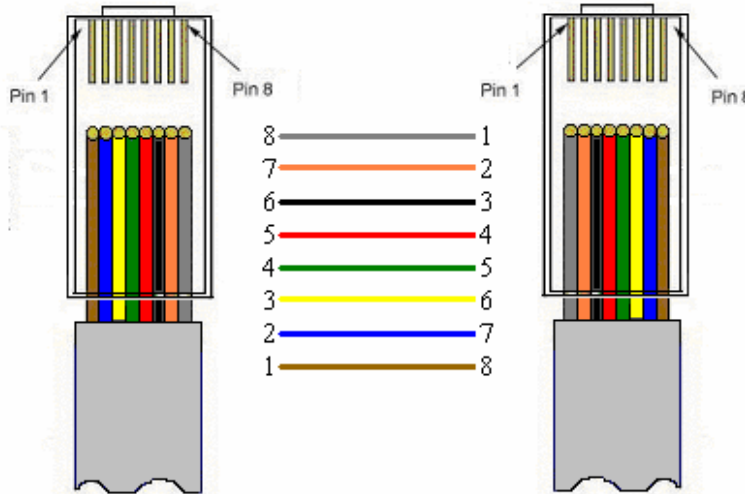
Adapters

9FRJ45PC (With Cisco Interface)

9FRJ45PC-1 (Without Cisco Interface)



RJ08X007



Figures 1 and 2 provide visual representation of an RJ-45 receptacle and plug.

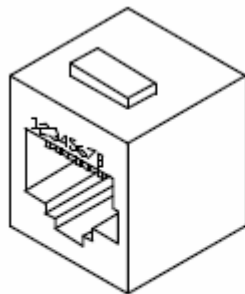


Fig. 1: RJ-45 Receptacle

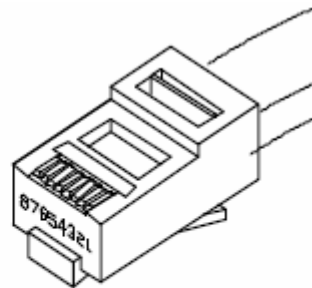


Fig. 2: RJ-45 Plug

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Serial Setup

- Connect the *9FRJ45PC-4* adapter to the user's computer
- Connect the RPS EIA-232 port to the adapter via the *RJ08X007* rolled flat ribbon cable.
- Use terminal emulation software to access the unit, **9600 bps, 8 data bits, 1stop bit and no parity, B/C switch set to 'B'**.

NOTE: At any time during the session you need to go to another menu, use the **Attention Character = semi-colon (;)**. Press the attention character key 5 consecutive times to get back to the main status menu.

NOTE: Password feature is case sensitive. (Default is user/password is **root/baytech**)

Operation Important:

When operating remotely, do not send the command to turn "off" a receptacle that has a host terminal or modem attached. Doing so will result in the host terminal or modem being powered down creating a "locked-out" condition. You will not be able to reestablish a connection until the receptacle has been turned "on" through the serial port.

IMPORTANT: If you send the command to "reboot" a receptacle with a host terminal or modem attached, active connection to that terminal or modem is lost and will have to be reestablished.

IMPORTANT: An assigned user is allowed one active session. The admin user is allowed four sessions running concurrently.

The green LED's correspond to the RPS receptacles. An illuminated LED signifies the corresponding outlet has power turned on, thus the attached equipment has power to it. No lit LED signifies any power to the receptacle.

Outlet Status Menu

The RPS Series are multi-user units, supporting one admin user and up to twenty-four outlet users. (Maybe more than 24 outlet users in future models) The admin user has access to all outlets, user and system configuration options, unit status, and unit reset capabilities. The outlet user's status menu displays only those outlets assigned to the user's outlet list, as set by the admin user.

NOTE: The RPS Series supports one admin user. The admin user may have four sessions running concurrently. Default user name is '**root**'. User names are case sensitive.

NOTE: Each session has an inactivity timeout of ten minutes, if there is no option to set the timeout. After ten minutes of no activity elapses, the session terminates.

NOTE: The RPS26ADE Series menu is used for demonstration through out this manual. There will be some differences in the menus dependent on the firmware revision and the number of outlets on your unit.

Detail Operations and Configurations

Opening Menu Status

IMPORTANT: The Factory default serial communications parameters are **9600 bps, 8 data bits, 1 stop bit, and no parity; B/C switch set to 'B'**.

With a proper connection to the unit upon power-up or unit reset, the following initialization and Status menu will be displayed except the number of outlets will be dependent on the specific RPS unit:

```
Unit ID: BT RPS26ADEN-16

-----
| Phase | True RMS | Peak RMS | True RMS | Average | Volt- |
| Group | Current  | Current  | Voltage  | Power   | Amps  |
-----
| Phase A1 | 0.2 Amps | 1.3 Amps | 209.9 Volts | 0 Watts | 43 VA |
| Phase A2 | 0.3 Amps | 0.4 Amps | 209.9 Volts | 0 Watts | 75 VA |
| Phase B1 | 0.2 Amps | 0.2 Amps | 1.5 Volts   | 0 Watts | 4 VA  |
| Phase B2 | 0.2 Amps | 0.2 Amps | 1.4 Volts   | 0 Watts | 4 VA  |
-----

Int. Temp: 92.3 F

Switch 1: Open 2: Open

1)...Outlet A/B 1    2)...Outlet A/B 2    3)...Outlet A/B 3
4)...Outlet A/B 4    5)...Outlet A/B 5    6)...Outlet A/B 6
7)...Outlet A/B 7    8)...Outlet A/B 8    9)...Outlet A/B 9
10)...Outlet A/B 10  11)...Outlet A/B 11  12)...Outlet A/B 12
13)...Outlet A/B 13  14)...Outlet A/B 14  15)...Outlet A/B 15
16)...Outlet A/B 16  17)...Outlet A/B 17  18)...Outlet A/B 18
19)...Outlet A/B 19  20)...Outlet A/B 20  21)...Outlet A/B 21
22)...Outlet A/B 22  23)...Outlet A/B 23  24)...Outlet A/B 24

Type Help for a list of commands

RPS-26>help
```

NOTE: The outlet user sees only those outlets as assigned to him by the admin user.

Type 'HELP' at the RPS prompt will display a list of commands to change the state of the outlets, unit configuration, and internal sensor measurements.

HELP Options

```
Status <cr>  --RPS-26 Status
Config <cr>  --Enter configuration mode
Current <cr> --Display True RMS Current
Voltage <cr> --Display True RMS Voltage
Power <cr>   --Display Average Power
Clear <cr>   --Reset the maximum detected current
Temp <cr>    --Read current temperature
Logout <cr>  --Logoff
Logoff <cr>  --Logoff
Exit <cr>    --Logoff
Password <cr> --Changes the current user password
Whoami <cr>  --Displays the current user name
Unitid <cr>  --Displays the unit ID

Type Help for a list of commands

RPS-26>config
```

Configuration Menu

The Outlet Configuration Menu allows the ‘admin’ user to manage the Users, Outlet Name, Confirmation menu, Status menu, Unit ID, and Alarm threshold.

Display Current Electrical Characteristics:

Type ‘*current*’ at the prompt to show the unit’s True RMS Current and Peak RMS Current, and the RPS will display the following:

Phase Group	True RMS Current	Peak RMS Current
Phase A1	0.2 Amps	1.3 Amps
Phase A2	0.3 Amps	0.4 Amps
Phase B1	0.2 Amps	0.2 Amps
Phase B2	0.2 Amps	0.2 Amps

Type ‘*clear*’ at the prompt to reset the Peak RMS Current, the RPS will redisplay the status menu with the new maximum detected current.

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Unit ID: BT RPS26ADEN-16

Phase Group	True RMS Current	Peak RMS Current	True RMS Voltage	Average Power	Volt-Amps
Phase A1	0.2 Amps	0.2 Amps	209.7 Volts	0 Watts	54 VA
Phase A2	0.3 Amps	0.3 Amps	209.6 Volts	0 Watts	67 VA
Phase B1	0.2 Amps	0.2 Amps	1.3 Volts	0 Watts	4 VA
Phase B2	0.2 Amps	0.2 Amps	1.3 Volts	0 Watts	4 VA

Type *'voltage'* at the prompt to display the unit's True RMS Voltage, and the RPS will display the following:

Phase Group	True RMS Voltage
Phase A1	209.6 Volts
Phase A2	209.5 Volts
Phase B1	1.3 Volts
Phase B2	1.4 Volts

Type *'power'* at the prompt to show the unit's Average Power and the RPS will display the following:

Phase Group	Average Power	Volt-Amps
Phase A1	0 Watts	52 VA
Phase A2	0 Watts	67 VA
Phase B1	0 Watts	4 VA
Phase B2	0 Watts	4 VA

Type *'temp'* at the prompt to show the unit's current temperature, the RPS will display the following:

Internal Temperature: 87.8 F Ext. 2: 70.0 F

NOTE: RPS units with external sensor ports will be displayed as Ext 1 and/or Ext 2.

Logging Out

Type *Logout*, *Logoff*, or *Exit* at the prompt to logoff from the unit.

Current User Password:

Type *'password'* at the prompt to change the current user's password and the RPS will display the following:

Enter new Password:
Re-Enter new Password:

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If the current user already has a password the RPS will display the following:

```
Enter old Password:
Enter new Password:
Re-Enter new Password:
```

NOTE: If you do not have the user's current password, delete the user. Reinstall user. Select option to change password and the RPS will respond asking for a new password.

Identify Current User

Type '*whoami*' at the prompt to determine the current user, the RPS displays the following:

```
Current User: root
```

To change the user logout of the unit and log back in using the new user name.

Unit Identification

Type '*unitid*' at the prompt to determine the Unit ID, the RPS displays the following:

```
Unit ID: BT RPS26ADEN-16
```

To change the unit ID, go the Outlet Configuration menu and select 'Change Unit ID' option. The maximum field length is 32 or 16 for older units.

RPS Configuration Menu

To select the configuration menu, type '**config**' at the prompt.

```
Unit ID: BT RPS26ADEN-16

1)...Manage Users
2)...Change Outlet Name
3)...Enable/Disable Status Menu
4)...Change Unit ID
5)...Change Alarm Threshold
X)...Exit
Enter Request:
```

User Management

The User Menu allows the admin user to add and delete users, change passwords, and change the outlet list that displays a user's access to prescribed outlets. Select "Manage Users," from the configuration menu and the following menu appears if the unit has been reset or initial setup:

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```

-----
|           User           |           Assigned Outlets           |
| 1| 2| 3| 4| 5| 6| 7| 8| 9|10|11|12|
-----
A)...Add User
D)...Delete User
R)...Rename User
G)...Change Outlet Group

Enter user number to assign Outlets, A, D, G or R.

Enter Request: a

```

If optional outlet users have been added, the following User Menu will show the users.

NOTE: the first assigned user will be the ‘admin user’ for the outlets.

NOTE: Older units will not display the ‘delete’ option until a user is added.

```

-----
|           User           |           Assigned Outlets           |
| 1| 2| 3| 4| 5| 6| 7| 8| 9|10|11|12|
-----
1)...root                | Y| Y| Y| Y| Y| Y| Y| Y| Y| Y| Y| Y|
2)...user1                | Y| Y| Y| Y| N| N| N| N| N| N| N| N|
3)...user2                | N| N| N| N| Y| Y| Y| Y| N| N| N| N|
4)...user3                | N| N| N| N| N| N| N| Y| Y| Y| Y| Y|
-----
A)...Add User
D)...Delete User
R)...Rename User
G)...Change Group

```

Add a User:

If the “Add user” option is **NOT** present then the maximum number of users have been assigned. You may get a message saying ‘*No more users can be added*’.

Select A), “Add user,” from the User Management Menu. The RPS Unit will display the following:

```

Enter user name:

```

Enter the name of the user to be added, followed by <cr>. The RPS will display the User Menu with the added user.

NOTE: User name is case sensitive.

Delete a User:

Select D), “Delete user,” from the User Management Menu. The RPS Unit will display the following:

```

Enter number for user to delete:

```

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Type the number of the user to be deleted, followed by <cr>. The RPS will display the User Menu minus the deleted user.

NOTE: If an outlet user is deleted and is logged in at the time, the outlet user will be disconnected. If you delete the user in the first position, the RPS will display the following:

You are deleting the current admin user. The next user will become the admin user, do you want to continue. (Y/N)?

WARNING: If the unit has not had a power cycle or unit reset command performed recently, before you delete the user in the first position, perform a unit reset command from the main menu. This action will prevent the unit from having **NO Admin** user assigned even though the first position user was deleted and there is a second user assigned. If the **NO Admin** condition occurs, *reset the unit to factory defaults*.

Rename a User:

Select R), “Rename user”, from the User Management Menu, the RPS unit will display the following:

Enter user number to rename:

Type the number of the user to be renamed, followed by <cr>. The RPS unit will display the following:

Enter user name:

The RPS Series redisplay the User Menu with the renamed user.

Change Outlet Branch:

Select G). “Change Outlet Group”, from the User Management Menu, the RPS displays the other Group of outlets

Assigned Outlets

The Assigned Outlet Menu displays the outlets a user can access.

Select a user number from the User Management Menu, the RPS unit will display the Assign Outlet Menu:

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User	Assigned Outlets											
	1	2	3	4	5	6	7	8	9	10	11	12
root	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

1)...Add Outlet(s)
2)...Remove Outlet(s)
3)...Add All Outlets
4)...Remove All Outlets
G)...Change Group

Enter Request:

NOTE: If an outlet user's list is changed while the user is logged in, their outlet list changes dynamically. If enabled, an updated outlet status report will be issued. 'Y' means the outlet is assigned to the user. 'N' means the outlet is NOT assigned to the user.

Select 1) Add Outlet(s) to assign outlets to a user. The RPS will display the following:

Enter Outlet number(s):

Type the number of the outlet to be assign. For example, if you want engineer to have access to Outlet 2, enter the number 2, followed by <cr>. If you want engineer to have access to Outlets 2, 5, and 8 enter the numbers 2, 5, and 8 separated by commas: 2, 5, 8, followed by <cr>.

The RPS Unit redisplay the Assigned Outlet Menu of the user with a 'Y' for the assigned outlets.

Select 2) Remove Outlet(s) to remove an outlet from a user. The RPS will display the following:

Enter Outlet number(s):

Type the number of the outlet to be removed from the user's access. For example, if you want to remove Outlet 2 from the engineer's access, enter the number 2, followed by <cr>. If you want to remove Outlets 2, 5, and 8 enter the numbers 2, 5 and 8 separated by commas: 2,5,8, followed by <cr>. The RPS Unit redisplay the Assigned Outlet Menu of the user with an 'N' for the outlets NOT assigned.

Select 3) Add All Outlets, to user access. The RPS will display the user access with 'Y' for all outlets.

Select 4) Remove All Outlets from user access. The RPS will display the user access with 'N' for all outlets.

Select G) Change Outlet Group will display the next group of outlets to be added or removed from the user access.

Change Outlet Name

Select "Change Outlet Name" from the main menu to change the name of the receptacles. The specific unit type determines the number of receptacle displayed. The following outlet names appear:

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```
1)...Outlet 1      2)...Outlet 2
3)...Outlet 3      4)...Outlet 4
5)...Outlet 5      6)...Outlet 6
7)...Outlet 7      8)...Outlet 8
9)...Outlet 9     10)...Outlet 10
11)...Outlet 11    12)...Outlet 12
13)...Outlet 13    14)...Outlet 14
15)...Outlet 15    16)...Outlet 16
17)...Outlet 17    18)...Outlet 18
19)...Outlet 19    20)...Outlet 20
21)...Outlet 21    22)...Outlet 22
23)...Outlet 23    24)...Outlet 24

Enter Request:
```

Type the number of the outlet to be changed. For example to change the name of Outlet 4, type the number 4 at the “Enter Request” prompt, followed by <cr>. The RPS will display the following:

```
Current Outlet: Outlet 4
Modify (Y/N)? y
```

Type ‘N’ to keep the same name, or type ‘Y’ to change the name. The RPS will display:

```
Enter :
```

Type a new receptacle name (maximum 16 characters), followed by <cr>. For example, change the name of Outlet 4 to Router 1 by typing Router 1 at the “Enter Request” prompt, followed by <cr>. The RPS redisplay the outlet menu with the new name to Outlet 4.

Enable/Disable Status Menu

Select “Enable/Disable Status Menu.” from the configuration menu, to enable the Status menu. The RPS will display the option to change the current status:

```
Enable Status Menu (Y/N)? y
```

Default setting is Enabled.

If this feature is disabled, only the RPS> prompt appears, else the following status menu appears.

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```
Unit ID: BT RPS26ADEN-16
-----
|      Group      | Current | Current | Voltage | Power  | Amps  |
|-----|-----|-----|-----|-----|-----|
| Phase A1        | 0.2 Amps | 0.3 Amps | 210.1 Volts | 0 Watts | 43 VA |
| Phase A2        | 0.3 Amps | 0.3 Amps | 210.1 Volts | 0 Watts | 70 VA |
| Phase B1        | 0.2 Amps | 0.2 Amps | 1.4 Volts   | 0 Watts | 4 VA  |
| Phase B2        | 0.2 Amps | 0.2 Amps | 1.4 Volts   | 0 Watts | 4 VA  |
|-----|-----|-----|-----|-----|-----|
Int. Temp: 95.9 F
Switch 1: Open 2: Open

1)...Outlet A/B 1      2)...Outlet A/B 2      3)...Outlet A/B 3
4)...Outlet A/B 4      5)...Outlet A/B 5      6)...Outlet A/B 6
7)...Outlet A/B 7      8)...Outlet A/B 8      9)...Outlet A/B 9
10)...Outlet A/B 10    11)...Outlet A/B 11    12)...Outlet A/B 12
13)...Outlet A/B 13    14)...Outlet A/B 14    15)...Outlet A/B 15
16)...Outlet A/B 16    17)...Outlet A/B 17    18)...Outlet A/B 18
19)...Outlet A/B 19    20)...Outlet A/B 20    21)...Outlet A/B 21
22)...Outlet A/B 22    23)...Outlet A/B 23    24)...Outlet A/B 24

Type Help for a list of commands

RPS-26>
```

Change Unit ID

Select “Change Unit ID” from the configuration menu. The RPS will display the following:

```
Current Unit ID: BT
Modify (Y/N)? y
Enter New Unit ID: BT RPS26ADEN-16
```

The default ID is the unit’s number, in this case **RPS26ADEN**

Change Alarm Threshold

The Current Alarm Threshold allows the user to set the current level for the internal alarm to sound. This setting is only available on units with current monitoring circuitry.

Select “Change Alarm Threshold.” from the configuration menu, The RPS will display the following:

```
Phase A1 buzzer alarm value : 8.0 Amps
Modify (Y/N)? Y

Phase A2 buzzer alarm value : 8.0 Amps
Modify (Y/N)? 10

Phase B1 buzzer alarm value : 8.0 Amps
Modify (Y/N)? 10

Phase B2 buzzer alarm value : 8.0 Amps
Modify (Y/N)? 10
```

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Type 'N' to keep the current value or type 'Y' to change the value and enter the new value, followed by <cr> and the RPS will display next outlet group.

Default setting is approximately 75% of unit's maximum current.

Troubleshooting:

Diagnostic LED Indications

To detect hardware, cabling, or configuration problems upon initialization of power, the RPS Series go through a diagnostic sequence. To help determine the cause of the problem, the RPS Series have a CX LED located on the front, right side of the unit. Upon initialization of power, refer to the table below for interpretation.

INDICATION	INTERPRETATION
Not lit	Normal unconnected operation
Brief flash followed by a solid illumination	Established connection on network port or serial port
Flashes 1 time per cycle	Hardware or NIC problem
Flashes 2 times per cycle	Configuration error
Flashes 3 times per cycle	Cable or hub connection fault
Flashes 4 times per cycle	Duplicate IP address
Remains lit without a brief flash prior to illumination	Memory error

NOTE: Diagnostic indications override a connection indication.

Functional Solutions:

1. No menu serial port:

- a. RPS power is on and cable connected to EIA232 serial port.
- b. Verify the cable and adapter has the correct pin out, RJ08X007 and 9FRJ45PC-1.
- c. Cisco Rollover cables have the same pin out as RJ08X007.
- d. Type 5(;), the Attention Character will not echo to the screen, if it does than it may have been changed to a character other than the semi-colon.

2. Password not Work:

- a. Password is case sensitive, check for Caps Lock.
- b. Have the admin user delete the user and add back
 - i. Refer to RPS Configuration/User Management ‘Delete a User’ and ‘Add a User’ section.
 - ii. Refer to Network Access Configuration/Login Setup/Manage Users

3. No Access to Configuration Menu:

- a. Only the first user in the ‘Manage User’ menu is considered the admin user.
- b. If the admin user is not known, reset to factory default is required.

4. No Outlets displayed for User:

- a. Outlets have to be assigned to the user, refer to ‘RPS Configuration User Management Assigned Outlets’ section.

BayTech Product Warranty

Bay Technical Associates (BayTech) warrants that its products will be free from defects in materials and workmanship under normal use for a period of two years from date of purchase (or from date of shipment from BayTech if proof of purchase is not provided).

During this warranty period, BayTech shall, at its discretion, either repair or exchange any defective product at no charge for labor and materials, or refund the amount paid for the product, less shipping and handling charges. Any replacement and/or repaired products are warranted for the remainder of the original warranty.

The customer is responsible for properly packaging the product and for shipping costs for returns. The customer is liable for loss or damage to the product during shipping, as well as any other fees or charges associated with transporting the product back to BayTech. BayTech will pay return costs for delivery within the Continental United States.

All repair and return shipments must be approved by BayTech and must be accompanied by an RA (return authorization) number. Please refer to our Repair and Return Policy below.

For the initial 30 days from the original date of shipment, any unopened product may be returned to BayTech, accompanied by an RA number. Full purchase price will be refunded, provided that the product is in excellent condition. A product may not be returned after 30 days from the original date of shipment unless approved by BayTech management.

Replacements for defective products may be cross-shipped to the customer at no cost if requested within 30 days of date of purchase. At BayTech's discretion, this period may be extended to 90 days. For additional information or more specific warranty issues, contact BayTech's Technical Support Department at **(800) 523-2702** or **(228) 563-7334**.

Exceptions

This warranty does not cover misuse or minor imperfections that fall within design specifications or that do not materially alter functionality. BayTech does not warrant and is not responsible for damages incurred in shipping and handling or caused by disasters (such as fire, flood, wind, earthquake, lightning, power surges or water).

The warranty will be voided regarding products that have been neglected, altered, abused, misused, or used for purposes other than those for which it was designed.

Under no circumstances shall BayTech be liable for any special, incidental, or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability, or any other legal theory. Such damages include (but are not limited to) loss of profits, loss of the product or associated equipment, cost of capital, cost of substitute or replacement equipment, facilities or services, down time, purchaser's time, the claims of third parties, including customers, and injury to property.

BayTech Extended Warranty

Extended warranties and overnight replacements are available for purchase, but only at the time of product purchase. The extended warranty cost will not exceed 7% per year of the product list price unless otherwise stated in the customer contract or approved by BayTech management. Contact BayTech for further details on this.

Technical Support

BayTech offers Tech Support for the lifetime of the product. A staff of Applications Engineers is on duty to assist with installation, set up or operation issues. Support is available from **8:00 a.m. to 5 p.m.** (CST or CDT), Monday through Friday at the phone numbers or website provided below.

Please have the following information available to help the Applications Engineers answer questions efficiently:

1. BayTech model type
2. Unit serial number
3. Firmware version (if accessible)
4. A list of devices connected to the BayTech unit
5. A general description of the application being used and the intended outcome
6. Information about cables and adapters being used (type, length, place of purchase)
7. The name of the software emulation program being used
8. Printout of the configuration status (if possible)

Bay Technical Associates, Inc.

5239 A Avenue

Long Beach Industrial Park

Long Beach, MS 39560

Telephone: 800-523-2702 or 228.563.7334

FAX: 228.563.7335

Email: support@baytech.net

Website: www.baytech.net

Repair and Return Policy

(Return policy refers to BayTech products purchased and returned for credit or repair.)

A Return Authorization (RA) number must be obtained in all cases before returning the BayTech product. Have the serial number and reason for the return or description of the problem handy.

Customers in the Continental U.S. can call 1-800-523-2702 or international customers can call 228.563.7334 to obtain an RA number.

If a product is being returned for credit (based on BayTech approval), the credit will not include shipping and handling charges. Determination of credit amount will be made after BayTech receives the product.

Returns on BayTech products older than 3 months are subject to a 15% re-stocking fee of the list price of the product and will be evaluated on a case-by-case basis. BayTech does not allow returns on products out of warranty or for any type of custom product.

Before dismantling equipment or returning the unit for any reason, always contact BayTech. Attempting to repair a product without BayTech authorization may result in voiding the warranty.

Follow the instructions below for repackaging and shipping. NOTE: ***Power should be disconnected from the power source before servicing or dismantling.***

Return Authorization Process:

1. Contact BayTech to get a Return Authorization (RA) Number. **IMPORTANT:** *BayTech will not accept any returns without an RA number.*
2. Package the unit carefully in its original packaging or similar packaging. The warranty does not cover damage sustained during shipment. Enclose a letter with name, address, RA number, daytime phone number and description of the problem.
3. Mark the RA number clearly on the outside of the package.

NOTE: If the RA number is not on the outside of the box, the package will be returned back to the sender or will sit in Receiving until the customer calls in regarding status of RA.

4. Ship the unit by insured, prepaid carrier to the following address:

**Bay Technical Associates
5239 A Avenue
Long Beach Industrial Park
Long Beach, MS 39560
RA #: 140-xxxxx**

5. Surround your unit with a minimum of two inches of insulation.
6. Be sure to seal the box securely with strapping or packing tape. We do not recommend masking tape or cellophane tape.