




User Manual

Ablerex PowerMaster

Linux v1.0.1






The information presented in this manual is not warranted by Alerex to be authoritative, error free, or complete. Alerex assumes no liability for damages, violations of codes, improper installation, system failures, or any other problems that could arise based on the use of this publication.

Alerex reserves the right to make changes or updates with respect to or in the content of the publication or the

format thereof at any time without notice.

Copyright, intellectual, and all other proprietary rights in the content (including but not limited to software, audio, video, text, and photographs) rests with Alerex or its licensors. All rights in the content not expressly granted herein are reserved.

No rights of any kind are licensed or assigned or shall otherwise pass to persons accessing this information.



1.	Installation Instructions	2
1.1	System requirements	2
2	Install AblereX PowerMaster	2
2.1	Uninstall AblereX PowerMaster	4
3	Main Menu	5
4	Monitoring UPS Information	6-7
5	Control	8
6	Email Configuration	9-10
7	Schedules	11-12
8	Event Log	13
9	Data Log	14
10	General Setting	15-16
11	Communication Settings	17
12	About	18

1.**Installation Instructions**

The free software is available for all single-phase UPS models and downloadable from www.ablerex.eu/download

1.1**System requirements**

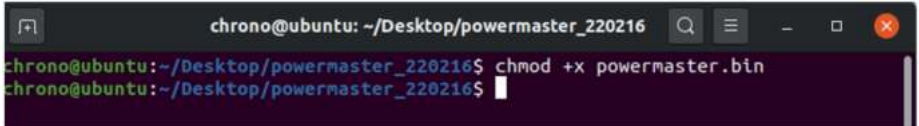
Support OS:		
O.S	x86/x64	Version
Ubuntu	x64	14.04.6/16.04/18.04/20.04/21.1
Ubuntu	x86	16.04.6
Debian	x64	9/10
Debian	x86	9
Mint	x64	20.3
SUSE Linux Enterprise	x64	12/15
Red Hat Enterprise	x64	8
CentOS	x64	8
Deepin	x64	23
Peripherals: Com Port(RS-232) or USB		

2.1

Install AblereX PowerMaster

Install AblereX PowerMaster

Step 1. Input command: `chmod +x powermaster.bin`

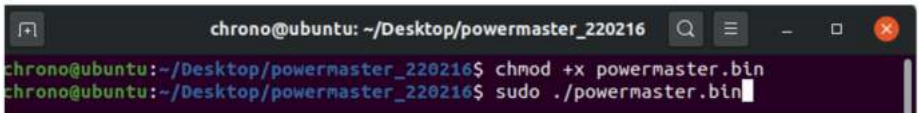


```

chrono@ubuntu: ~/Desktop/powermaster_220216
chrono@ubuntu:~/Desktop/powermaster_220216$ chmod +x powermaster.bin
chrono@ubuntu:~/Desktop/powermaster_220216$

```

Step 2. Input command: `sudo ./powermaster.bin`

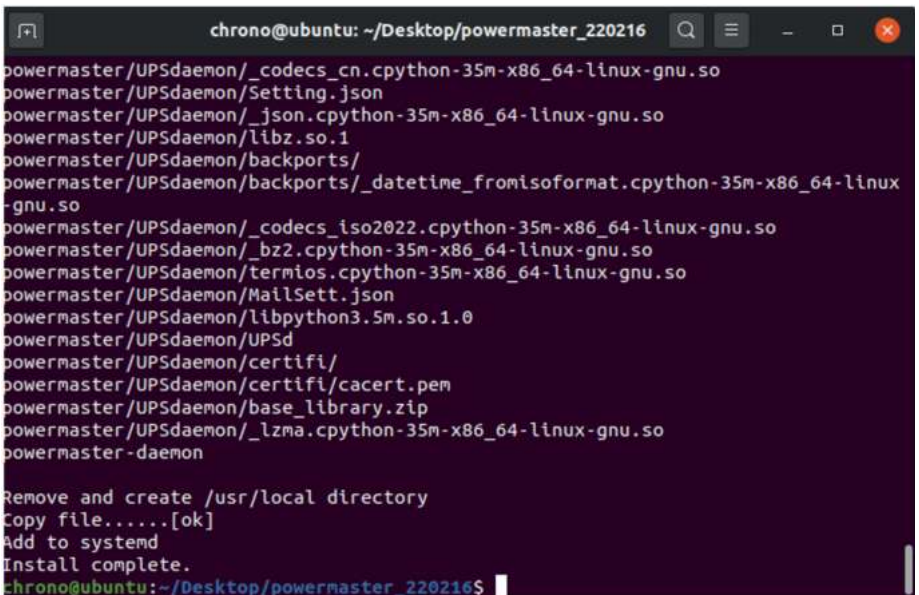


```

chrono@ubuntu: ~/Desktop/powermaster_220216
chrono@ubuntu:~/Desktop/powermaster_220216$ chmod +x powermaster.bin
chrono@ubuntu:~/Desktop/powermaster_220216$ sudo ./powermaster.bin

```

Step 3. Install Complete



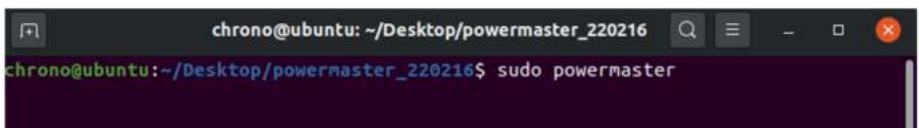
```

chrono@ubuntu: ~/Desktop/powermaster_220216
powermaster/UPSdaemon/_codecs_cn.cpython-35m-x86_64-linux-gnu.so
powermaster/UPSdaemon/Setting.json
powermaster/UPSdaemon/_json.cpython-35m-x86_64-linux-gnu.so
powermaster/UPSdaemon/libz.so.1
powermaster/UPSdaemon/backports/
powermaster/UPSdaemon/backports/_datetime_fromisoformat.cpython-35m-x86_64-linux
-gnu.so
powermaster/UPSdaemon/_codecs_iso2022.cpython-35m-x86_64-linux-gnu.so
powermaster/UPSdaemon/_bz2.cpython-35m-x86_64-linux-gnu.so
powermaster/UPSdaemon/termios.cpython-35m-x86_64-linux-gnu.so
powermaster/UPSdaemon/MailSett.json
powermaster/UPSdaemon/libpython3.5m.so.1.0
powermaster/UPSdaemon/UPSd
powermaster/UPSdaemon/certifi/
powermaster/UPSdaemon/certifi/cacert.pem
powermaster/UPSdaemon/base_library.zip
powermaster/UPSdaemon/_lzma.cpython-35m-x86_64-linux-gnu.so
powermaster-daemon

Remove and create /usr/local directory
Copy file.....[ok]
Add to systemd
Install complete.
chrono@ubuntu:~/Desktop/powermaster_220216$

```

Step 5. Click "Next" to next step



```

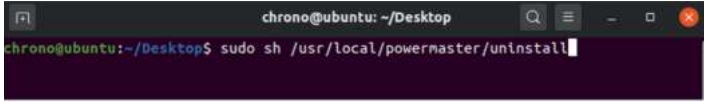
chrono@ubuntu: ~/Desktop/powermaster_220216
chrono@ubuntu:~/Desktop/powermaster_220216$ sudo powermaster

```

2.2

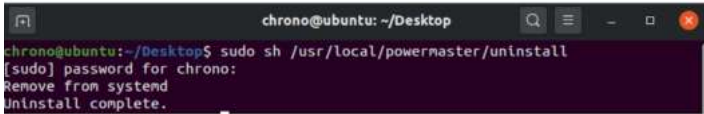
Uninstall Ablerex PowerMaster

Step 1. Input command: `sudo sh /usr/local/powermaster/uninstall`

A terminal window titled 'chrono@ubuntu: ~/Desktop' showing the command 'sudo sh /usr/local/powermaster/uninstall' being entered at the prompt. The cursor is at the end of the command line.

```
chrono@ubuntu: ~/Desktop
chrono@ubuntu:~/Desktop$ sudo sh /usr/local/powermaster/uninstall
```

Step 2. Uninstall Complete.

A terminal window titled 'chrono@ubuntu: ~/Desktop' showing the output of the command. The prompt asks for the password, and the output indicates the removal from the system and successful uninstallation.

```
chrono@ubuntu:~/Desktop$ sudo sh /usr/local/powermaster/uninstall
[sudo] password for chrono:
Remove from system
Uninstall complete.
```

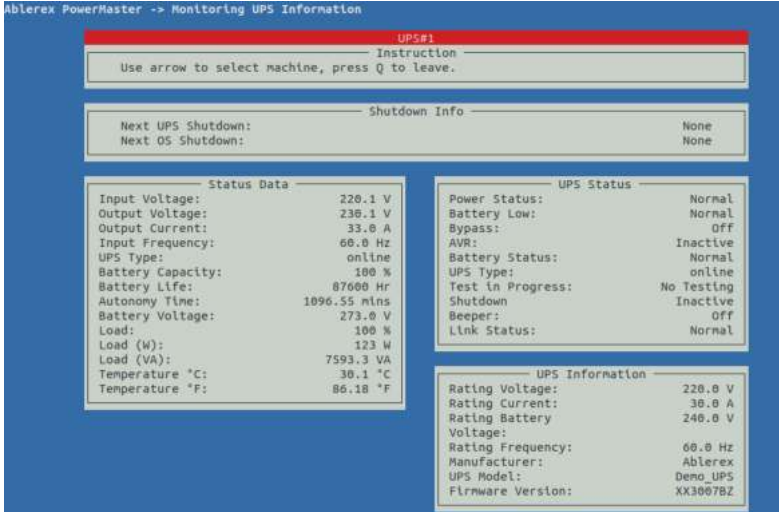
3

Main Menu



Press “Up” or “Down” key and then press “Enter”Key to into each function. The following chapters introduce each function.

Monitoring UPS Information



The function will be divided into four blocks.

a. Shutdown Info

That will be shown the shutdown time of UPS or OS when UPS has events occurs (e.g., Power Failed).

b. Status Data

The real-time information for UPS e.g., Input Voltage, Output Voltage, Frequency...etc.

c. UPS Status

The real-time status for UPS e.g., Power status, Battery Low...etc.

d. UPS Information

The rating and information for UPS e.g., Rating Voltage/Current, Manufacturer, UPS Model...etc.

a. Shutdown Info

Function	Function Describe	Remark
Next OS Shutdown	That will be shown the shutdown time of UPS or OS when UPS has events occurs.	
Next UPS Shutdown		

b. Status Data

Function	Function Describe	Remark
Input Voltage	UPS Input Voltage	
Output Voltage	UPS Output Voltage	
Output Current	UPS Output Current	

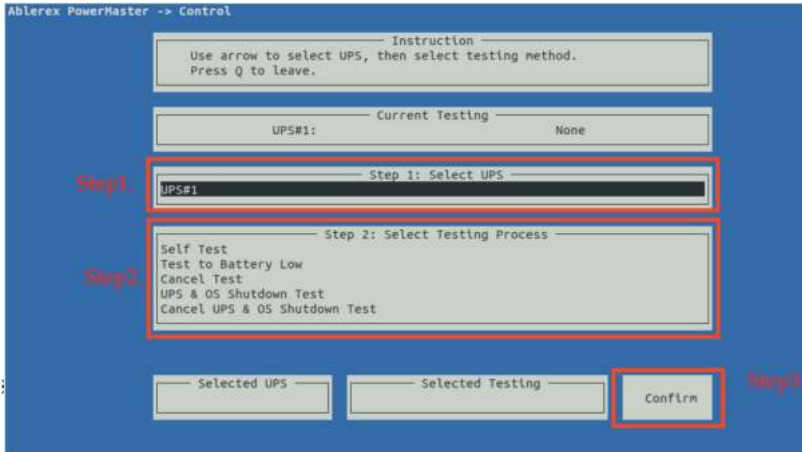
Function	Function Describe	Remark
Input Frequency	UPS Input Frequency	
UPS Type	UPS Type (e.g. On-Line/Off-Line)	
Battery Capacity	Battery capacity of UPS	
Battery Life	Battery Life of UPS	Battery Life Function need to Enable on configure menu.
Autonomy time	Autonomy time of UPS	Autonomy time Function need to Enable on configure menu.
Battery Voltage	Battery Voltage of UPS.	Additional Function need to Enable on configure menu.
Load	Load percentage of UPS.	
Load(W)	Output Active power of UPS	Additional Function need to Enable on configure menu.
Load(VA)	Output Apparent Power of UPS	
Temperature °C	Temperature of UPS(Celsius)	
Temperature °F	Temperature of UPS(Fahrenheit)	

c. UPS Status

Function	Function Describe	Remark
Power Status	Input utility normal or not	
Battery Low	Battery Low normal or not	
Bypass	Bypass mode status	
AVR	UPS Boost/trim status	
Battery Status	Battery damage/ Disconnection or not	
UPS Type	UPS type (On-Line/Off-Line)	
Test in Progress	Under test in Progress or not	
Shutdown	UPS shutdown status	
Beeper	UPS beeper status	
Link Status	UPS communication status	

d. UPS Information

Function	Function Describe	Remark
Rating Voltage	UPS Rating Voltage	
Rating Current	UPS Rating Current	
Rating Battery Voltage	UPS Rating Battery Voltage	
Rating Frequency	UPS Rating Frequency	
Manufacturer	Manufacturer information	
UPS Model	UPS Model information	
Firmware Version	UPS Firmware information	



Command UPS directly for the following test.

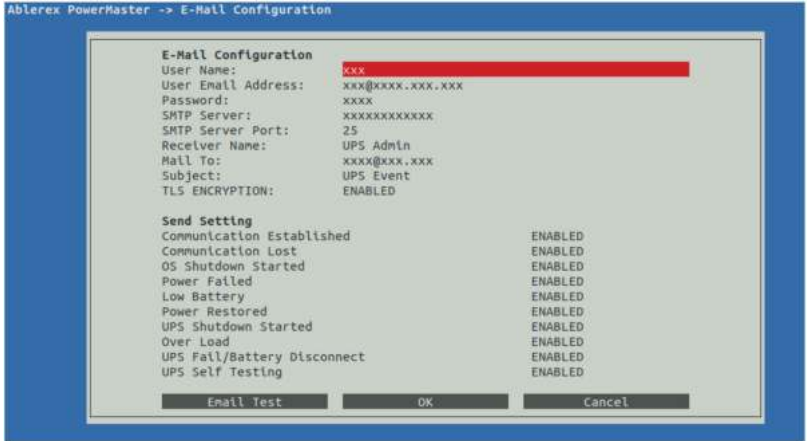
- UPS Self-Test
- UPS Test to Battery Low
- Cancel UPS Self-Test
- UPS & OS Shutdown Test
- Cancel UPS & OS Shutdown Test

Please follow the below procedure to do.

Step 1. Select which UPS to be tested

Step 2. Select which command to be sent

Step 3. Press "Confirm" to send command



Configure to send the event message (e.g., AC Power Fail) to specific one by email. The following section is for the detail configuration approach.

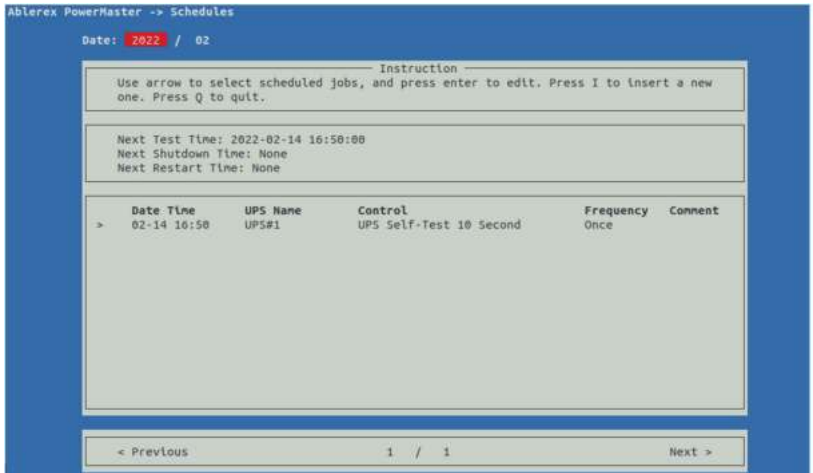
Function	Function Describe
User Name	Sender
User email Address	select a sender email
Password	Password of your email server
SMTP Server	SMTP server or IP address
SMTP Server Port	SMTP Server port
Receiver Name	name of receiver
Mail To	Mail address of receiver If you want to send an email to more than 1 email address, you must use “,” to separate email addresses.
Subject	Subject of email
TLS ENCRYPTION	Enable TLS encryption or not
When it is Enable, it can be sent by E-mail if detects an abnormality event in the UPS	

Function	Function Describe
Communication Established	UPS Communication Established
Communication Lost	UPS Communication disconnection
OS Shutdown Started	Operating OS will start shutdown
Power Failed	Input utility abnormal
Low Battery	UPS Battery Low
Power Restored	Input utility normal
UPS Shutdown Started	UPS will start shutdown
Over Load	UPS over loading
UPS Fail/Battery Disconnect	Battery damage or Disconnection
UPS Self Testing	UPS test in Progress

After setting, you can press “Email Test” to confirm that have received test mail or not. If received, press “OK” to save

7

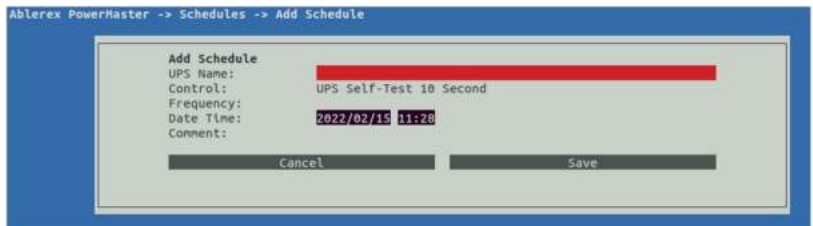
Schedules



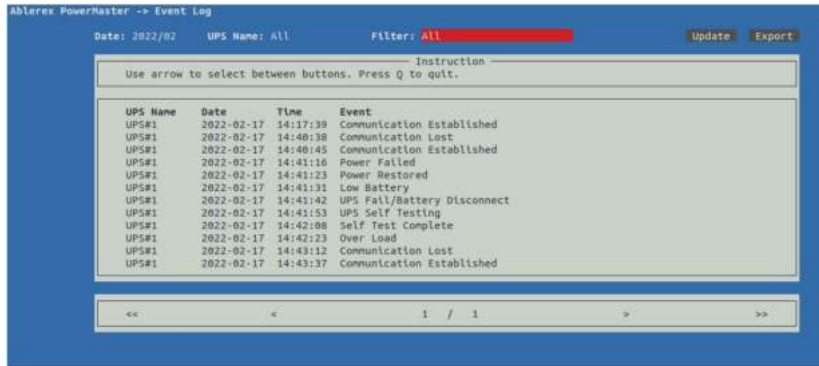
PowerMaster supports the scheduling self test, turn-off function for UPS. The following section is for the detail configuration approach.

Add Schedules:

Press "I" key to add new schedule.

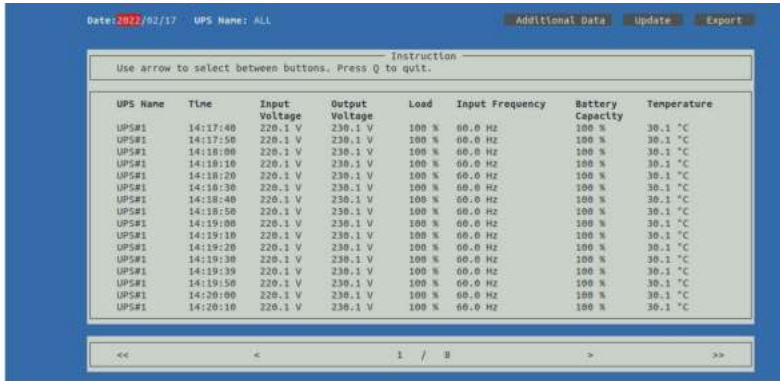


Function	Function Describe
UPS Name	Select which UPS to be tested
Control	Select which command of schedule UPS Self-Test 10 Second Self Test (1-99)Minutes(The test time can be define by the user) UPS Self-Test Until Battery Capacity UPS Self Test Until Low Battery Condition Shutdown Operating System and UPS, then Turn on UPS Shutdown Operating System and UPS
Frequency	Set execute cycle of the schedule
Date Time	Date and time for schedule setting



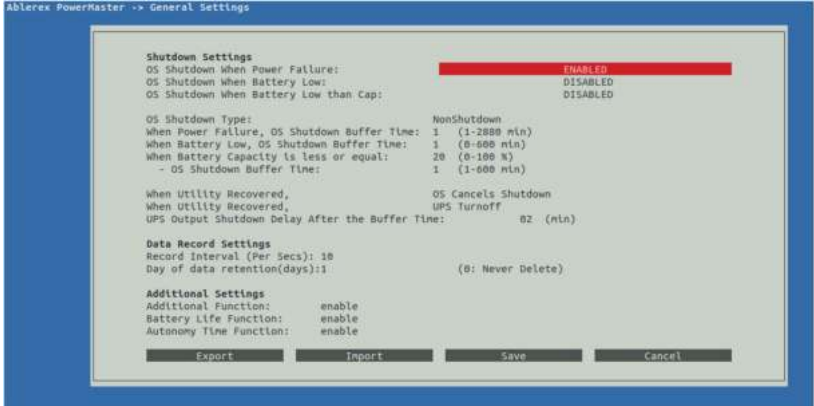
The event log can be read directly via PowerMaster or export to an file with txt format for application. The following chapter is for the detail operation.

Function	Function Describe
Date	Select which date to be view
UPS Name	Select which UPS to be view
Filter	Select which Event to be view
Update	For data refreshing
Export	Export data save to below folder: /usr/local/powermaster/UPS/
< , >	Select Previous/Next page
<< , >>	Select First/Last page



Set the file to be executed before the system shutdown. The selectable time is from 0 min. to 20 min.

Function	Function Describe
Date	Select which date to be view
UPS Name	Select which UPS to be view
Additional Data	Press" Additional Data" to see additional data of UPS. Additional Function need to Enable on configure menu.
Update	For data refreshing
Export	Export data save to below folder /usr/local/powermaster/UPS/
< , >	Select Previous/Next page
<< , >>	Select First/Last page



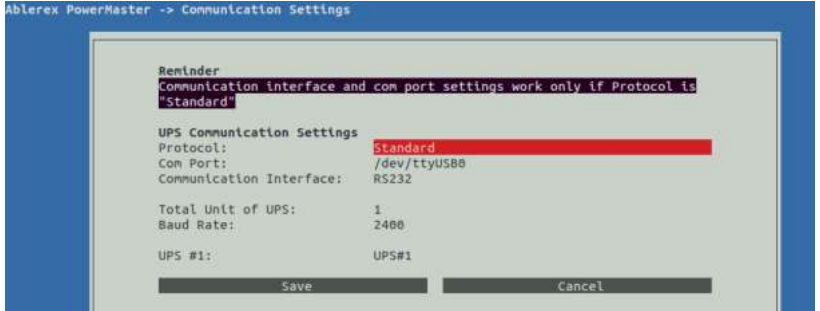
Allows user to select and set to Data Log function and set to turn of UPS or OS condition etc.

Shutdown Setting Block	
Function	Function Describe
OS Shutdown When Power Failure	Set the O.S shutdown operation after Power Failure
OS Shutdown When Battery Low	Set the O.S shutdown operation after Battery Low
OS Shutdown When Battery Low than Cap.	Set the O.S shutdown operation after Battery Low than Cap.
OS Shutdown Type	O.S shutdown options 1. Shutdown 2. NonShutdown 3. Hibernate
When Power Failure, OS Shutdown Buffer Time	Set the Buffer Time for O.S shutdown operation after Power Failure
When Battery Low, OS Shutdown Buffer Time	Set the Buffer Time for O.S shutdown operation after Battery Low
When Battery Capacity is less or equal	Set the Buffer Time for O.S shutdown operation after Battery Capacity is less or equal

-OS Shutdown Buffer Time	
When Utility Recovered	When utility Recovered O.S system can be set to: OS Continues Shutdown OS Cancels Shutdown UPS can be set to: Turn off UPS None
UPS Output Shutdown Delay After the Buffer Time	Set time interval from Windows shut-down to UPS turn-off
Data Record Settings Block	
Function	Function Describe
Record Interval (Per Secs)	Set Record timer interval
Day of data retention(days)	Set data storage retention(days) of the record list. The data base will be not deleted if set to 0
Additional Settings Block	
Function	Function Describe
Additional Function	PowerMaster will collect additional data(e.g., Output Current, Battery Voltage...etc.) from UPS ,if Enable Additional function Please check with your distributor to see if UPS has support
Autonomy Time Function	PowerMaster will collect Autonomy Time information, if Enable Autonomy Time function Please check with your distributor to see if UPS has support
Battery Life Function	PowerMaster will collect Battery Life information, if Enable Battery Life function Please check with your distributor to see if UPS has support
Export Setting	Export Setting save to below folder /usr/local/powermaster/UPS/
Import Setting	Select the Setting file which you want and Import the Settings to PowerMaster

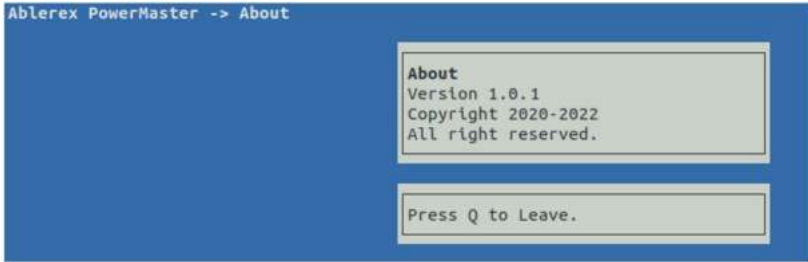
11

Communication Settings



Allows user to select and set the connecting RS-232/USB or Remote etc.

Function	Function Describe
Protocol	Standard: Communicate with UPS via Com Port/USB Remote: The " Remote " is for connecting the PowerMaster, which installed on another computer, and the IP address should be the master PC, which connected UPS.
Connect IP	Please refer to above describe
Com Port	Setting Serial port path (e.g.: /dev/ttyXRUSB0)
Communication Interface	Select which Interface of UPS to be communicated
Total unit of UPS	Setting amount of unit
Baud Rate	Setting Baud Rate of UPS
UPS #1	Setting UPS name



It displays copyright and version information of PowerMaster.

