Automatic Shutdown Software

for OMRON Uninterruptible Power Supply

(UPS) PowerAttendant Lite for Linux 8

Users Manual

Precautions for Correct Use

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4. Some screens shown in this software may differ from the actual ones.
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How to Use this Manual

Using notations in the manual

The signs, terminology, and quotation marks below are used in the manual.

Notations	Meaning
<Caution>	Indicates a point the user is requested to observe or an item requiring attention during operation is described. Carefully read the description and be sure to do as instructed.
<Hint>	Indicates that useful information or information giving some hint is described. Also indicates that pages where related information is described or other manuals etc are described.
This product	Indicates OMRON "PowerAttendant® Lite" (PAL).
[ ]	Among the items displayed on window, the items to be operated (buttons to be clicked, etc.) are written. Example: [Next >] button.
" "	Among the items displayed on screen, the window name and setting value are written. Example: “Shutdown Parameter” tab

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1. Function Overview

The automatic shutdown software PowerAttendant Lite (hereafter called as "this product") monitors the UPS unit (hereafter called as the "UPS") connected to the computer at all times and shuts down the computer normally when an AC line failure (such as a power outage) to prevent damage to the OS or hard disk unit.
This product has the following features.

1-1 Main features

■ Automatic computer shutdown

When an AC line failure (such as a power outage) occurs, terminates the application software and OS and powers off the UPS. Datas and softwares are protected safely in occurrence of abnormality too.

■ Monitoring UPS Status

Monitors the status of the UPS and records a log of monitoring results into the computer.

■ Control of the UPS

Possible to set schedule action, shutdown immediately operation, self test, and UPS.

■ Control of Computers on Network

By using the script function, when shutting down the computer due to such a cause as an AC line failure, possible to shut down other computers on the network.

1-2 Operation Procedures

Take the following procedure to start operating this product. See the corresponding page about operation procedures.

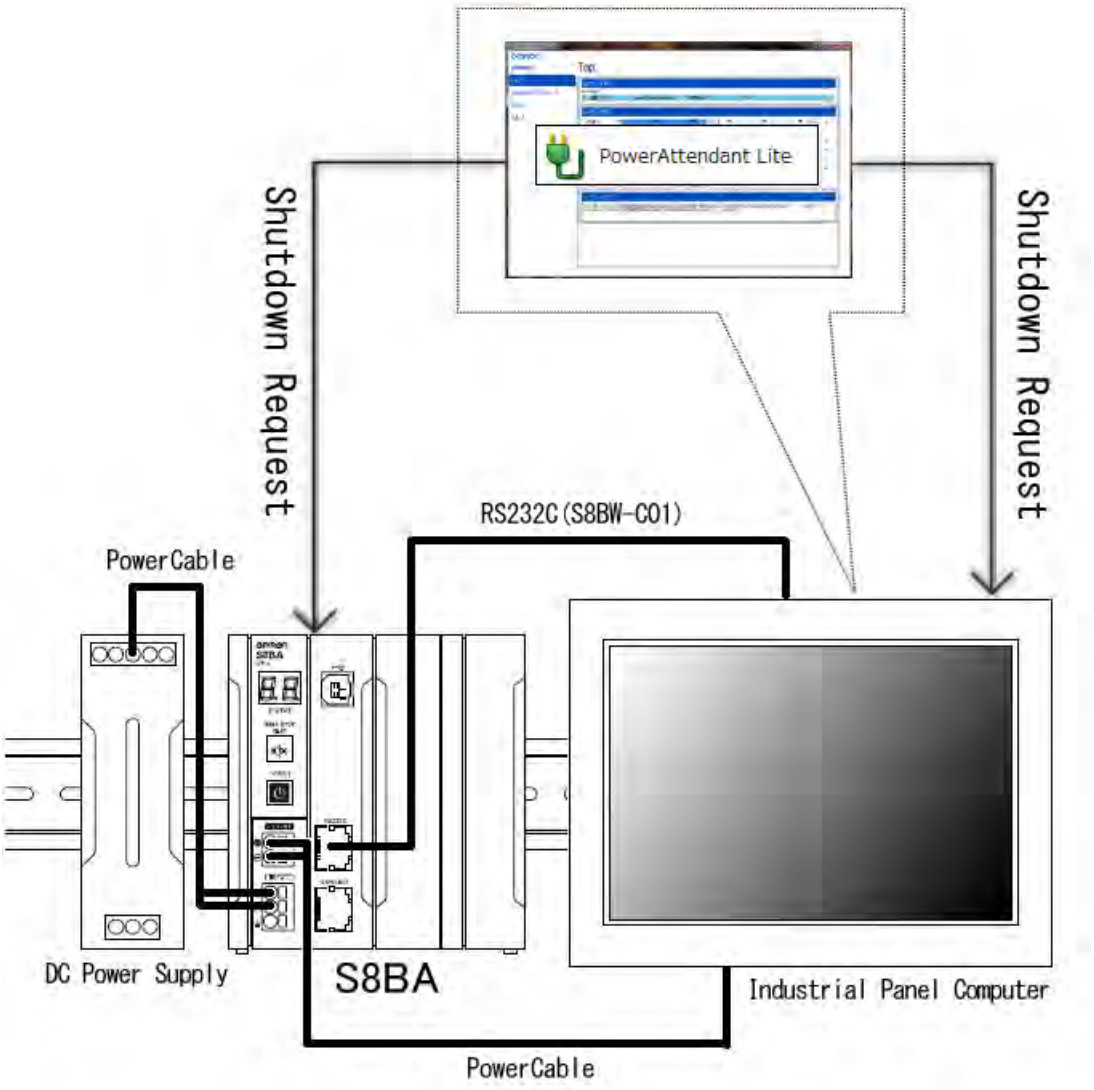
UPS Setting	Set a UPS correctly by referring a manual of each UPS.
Connection of UPS to Computer	Connect the UPS to your computer with a USB or RS232C cable.
Install	Install this product in the computer.
Startup	Start up this product and log in to the Agent.
Setup	Set up this product.
Operation Check	Perform a shutdown operation check test.
Start operation	Start operation.

1-3 System configuration example

This section describes a system configuration for controlling the UPS and the computer by using this product.

■ The UPS is connected to the computer.

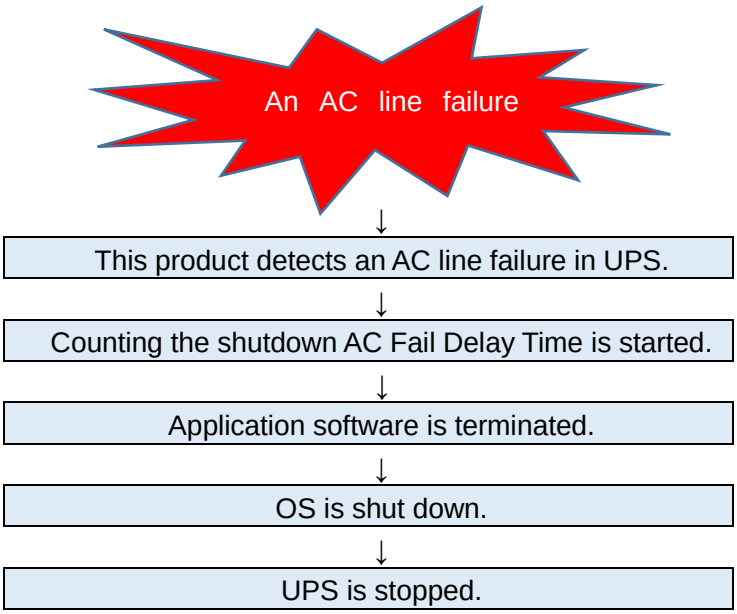
If a shutdown event such as an AC line failure and schedule action,
the computer and the UPS are automatically shut down.



Connection example: S8BA-24D24D120LF

1-4 Operation flow

Shutdown operation in the event of an AC line failure goes on according to the following flow.



1-5 Software structure

This product consists of the Agent, the task tray icon, and the Monitor screen.

• Agent

Monitors the UPS status by staying resident in the computer.

• Task tray icon

Displays the UPS status with an icon by staying resident in the task tray provided by the OS.

• Monitor screen

Helps check the statuses of the UPS and the computer and set up this product.

1-6 Types of shutdown

When an error such as an AC line failure and communication error is detected, and on the date set with a schedule,
the computer is shut down automatically according to the settings.
This product provides the following types of shutdown operation.

Types of Shutdown	Description
AC line Failure Shutdown	Execute shutdown when an AC line failure occurs (such as a power outage, voltage fluctuation, and frequency change).
Schedule Shutdown	Execute shutdown according to the preset schedule.
Shutdown Immediately	Execute shutdown through manual operation by the user. According to the sequence in the shutdown parameter settings, the OS can be shut down or the UPS can be stopped automatically. * When shutdown operation is executed with this operation, the UPS must be rebooted by turning on/off the power switch on the UPS main unit.
Emergency Shutdown	If the battery level of the UPS becomes low (Battery Low state) when an AC line failure occurs, cancel all the set operations and bring the OS into the hibernate state. (Execute shutdown in an environment that does not allow hibernation.) * No script is executed during this operation.
AC Fail Delay Time Cancel Shutdown	During "AC Fail Delay Time" for an AC line failure, if the battery level of the UPS becomes lower than the sum of the set times ("Shutdown Start Delay Time" + "Script Execution Time" + "Shutdown Need Time"), cancel the AC Fail Delay Time operation and start shutdown.
Shutdown at the time of abnormality occurrence	Execute shutdown if an error occurs in the UPS.
Shutdown at the time of warning occurrence	Execute shutdown if a warning occurs in the UPS.
Communication Error Shutdown	Execute shutdown if an error occurs in the communication with the UPS.

<Hint>

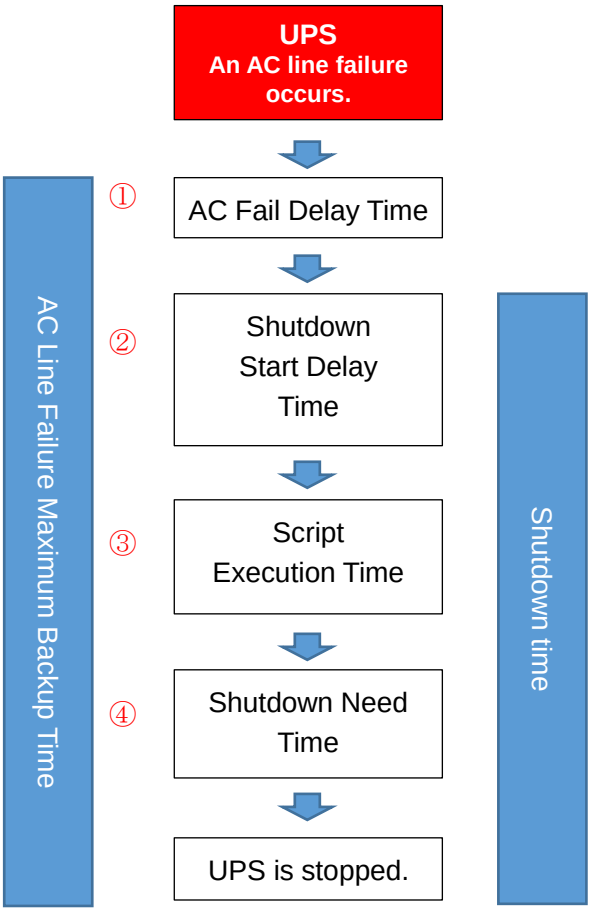
- "Shutdown parameter settings" → See "4-4 Shutdown Parameter Setting" p.17.
- The following types of shutdown are set in "Shutdown Option setting".

  Emergency Shutdown, AC Fail Delay Time Cancel Shutdown, Abnormality Occurrence Shutdown,

  Warning Occurrence Shutdown, Communication Error Shutdown
- "Shutdown Option Settings" → See "Shutdown Option Setting" p.30.

■ Shutdown flow

Shutdown is executed according to the flow shown below.



	Item name	Description
①	AC Fail Delay Time	Period of time from when this product detects an AC line failure until it starts shutdown processing (period of time to wait and see if the power condition recovers). * If you set the AC Fail Delay Time long without taking into account the possible UPS backup time, the battery may finish, causing the UPS to stop before the OS shuts down. Be careful.
②	Shutdown Start Delay Time	Set this delay time if you want to delay the start of OS shutdown operation after the AC Fail Delay Time elapses. (When a script is set, after this time elapses, the execution of that scrip starts.)
③	Script Execution Time	Set a period of time long enough for a scrip to be processed completely. OS shutdown operation will not start until this time elapses. Set "0" when not using a script.
④	Shutdown Need Time	Set the time necessary for processing OS shutdown operation. When "Yes" is selected for UPS Auto Stop, the UPS automatically stops (powers off) after this time elapses.

1-7 Operation environment

The operation environment for this product is shown as follows.

■ Supported OS

Compatible OS name
Red Hat Enterprise Linux 8.5 / 8.4 / 8.3 / 8.2 / 8.1 / 8.0
Alma Linux 8.5
Rocky Linux 8.5
Miracle Linux 8.4
Oracle Linux 8.5
CentOS 8.4 / 8.3 / 8.2 / 8.1 / 8.0

■ Supported UPS model

Series name	Type
S8BA	S8BA-24D24D480LF S8BA-24D24D360LF S8BA-24D24D240LF S8BA-24D24D120LF S8BA-24D24D480SBF S8BA-24D24D960SBF

■ Communication interface

Interface
USB
RS232C

2. Connecting with UPS

Connect your computer to the UPS with a USB or RS232C cable.

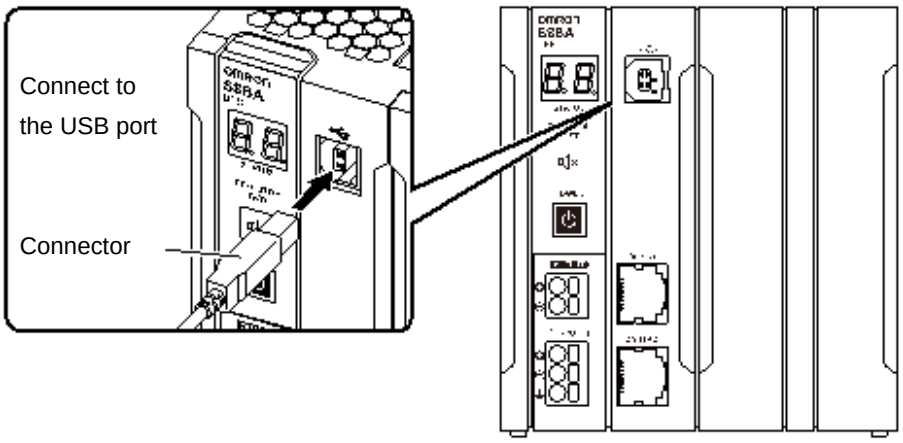
2-1 USB connection

Connect the computer and UPS by a USB cable.

① Turn the power of your computer off.

② Connect the computer and the UPS with a USB cable provided with the UPS.

Connection example (for S8BA-24D24D120LF)



③ Turn on the UPS and then the computer.

<Hint>

There is no problem connecting a USB cable after the computer starts up.

2-2 RS232C connection

Connect your computer to the UPS with an RS232C cable.

<Caution>

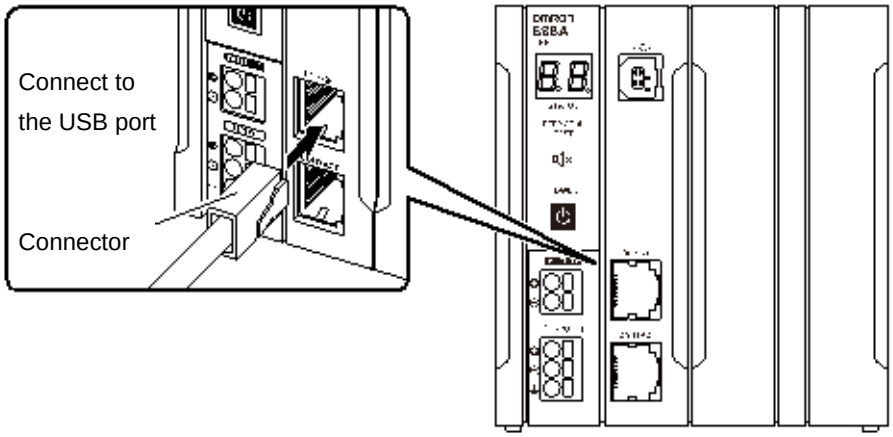
Be sure to use an optional communication cable (S8BW-C01).

Be sure not to use an RS232C cable provided with the UPS for connecting a communication device or UPS not manufactured by OMRON.

① Turn the power of your computer off.

② Connect the computer and the UPS with an RS232C cable provided with the UPS.

Connection example (For S8BA-24D24D120LF)



③ Turn on the UPS and then the computer.

3. Installation Procedures

This chapter describes the procedures for installing this product.

3-1 Before installation

- This product can be used only for OMRON UPS models.
- When using other automatic shutdown software, make sure to uninstall that software first, and restart the OS. For details on how to uninstall each software application, see its instruction manual.
- Check that the OS can shut down normally in your usage environment.
- Connect your computer to the UPS before installing this product.
- Log in to the computer with a username with administrator authority.
- Terminate other active applications.

3-2 Installation

<Caution>

XWindow is required for setting this product. If you are not using XWindow, please start XWindow with startx command before installation.

In order to use this product, the following program is necessary for Linux computer.

Program	Version
libusbx	after 1.0.22
mesa-libGL	after 18.3.1
telnet	after 0.17
openssh	after 7.8p1
expect	after 5.45.4
systemd	after 239-13
procps-ng	after 3.3.15
zip	after 3.0
unzip	after 6.0
coreutils	after 8.30
libxcb	after 1.13

Program	Version
mesa-libEGL	after 18.3.1
libSM	after 1.2.3
libxkbcommon-x11	after 0.8.2
xcb-util-keysyms	after 0.4.0
xcb-util-wm	after 0.4.1
xcb-util-image	after 0.4.0
xcb-util-renderutil	after 0.3.9

① Unzip the downloaded product from our website and right click in the "PALV101_Linux" folder and click "Open on terminal (E)" in the context menu.

② Enter the following command on the terminal screen and press the enter key.

rpm -i omron-pal-1.0.5-1.el8.x86_64.rpm

③ Since the software license agreement is displayed, if you agree, enter "y" and press the enter key. If you do not agree, enter "n" and finish the installation.

```
10. In a case of the customer violates this Agreement, OMRON may terminate the l
icense of the software by notifying so to the customer.
In such a case, the customer must return the software and all its copies to OMRO
N.

Do you agree this license? [ y/n ] y
```

④ Select the detection method of the connected UPS. Enter one of the choices 1 to 3 and press the enter key.

* For USB connection, select "1".

```
********************************************************************************
   Please select number to find OMRON UPS that is connected this computer
********************************************************************************

   1. Do not search for COM ports.
   2. Search for specified COM ports only.
   3. Search for all COM ports.
   Select Number -> 1
```

1. Do not search for COM ports.	Do not search for COM ports.
2. Search for specified COM ports only.	Search only the specified COM port.
3.Search for all COM ports.	Search all COM ports.

<Hint>

The option for how to detect the connected UPS can be also changed with "Communication Setting" in "Other Settings".

See "6-2 Communication Setting" p.50.

⑤ When the following display appears, the installation is completed.

```
   PowerAttendant Lite has been installed completely.

[root@OMRON-1 PALV100_Linux]#
```

Now the installation of PowerAttendant Lite is completed.

4. Basic Items and Operation Check

4-1 Task tray icon

When this product is installed, the Agent stays resident in the computer to monitor the UPS.
The operating statuses of this product and the UPS can be checked from the icon in the Windows task tray.

up to Red Hat Enterprise Linux 8.0 / CentOS 8.0

4-2 Task tray icon display details

Icon Display	Display Contents	Description
	Commercial Operation and Normal	The Agent is monitoring the UPS. The UPS is in normal operation.
	Agent Stop	The Agent is not monitoring the UPS.
	Backing Up	The UPS is in backup operation (battery output) due to an AC line failure. Shutdown starts after the AC Fail Delay Time.
	Communication Error	A communication error occurred between the UPS and this product. * Check that the UPS and the computer are connected with a communication cable (RS232C or USB) provided with the UPS securely. * For RS232C connection A UPS unit whose model name starts with BU or BA (on-line type power supply system) has two D-sub 9-pin ports. Check that the computer is connected to the side where "RS232C" is written.
	Hardware Abnormality	A problem occurred in the UPS or power supply. Check the problem with its event log. * For details on how to check event logs, see "5-3 Top screen" p.26 and "Event log" p.40. * Types of errors that can be detected are different depending on the model. For details on hardware errors, see the manual for the UPS.

4-3 Monitor screen startup and login procedures

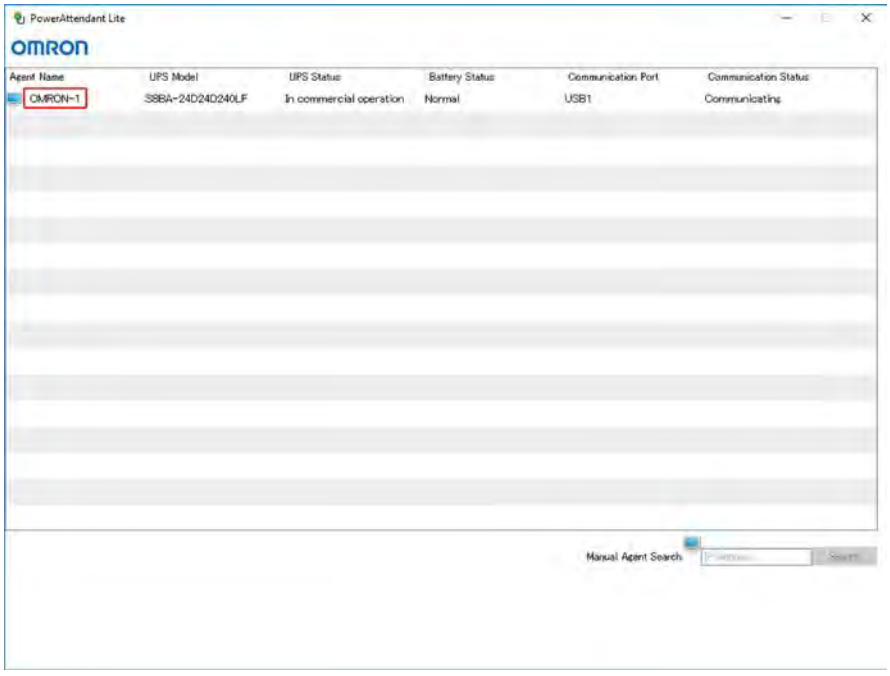
The Monitor screen is used for setting up this product.
Take the following procedure to start the Monitor screen and log in to the Agent.

① When this product is installed, a shortcut icon for [PowerAttendant Lite] is created on Desktop. Use this icon to start the Monitor screen.

<Hint>

- Since the [PowerAttendant Lite] icon is a desktop entry file, it can be deleted.
- You can also open the monitor screen from "Application" on the top bar.
  [Applications] → [Accessories] → [PowerAttendant Lite]

② Click the agent name (computer name) in the Agent List screen.



<Hint>

Agents detected on the network are displayed in the Agent List screen.

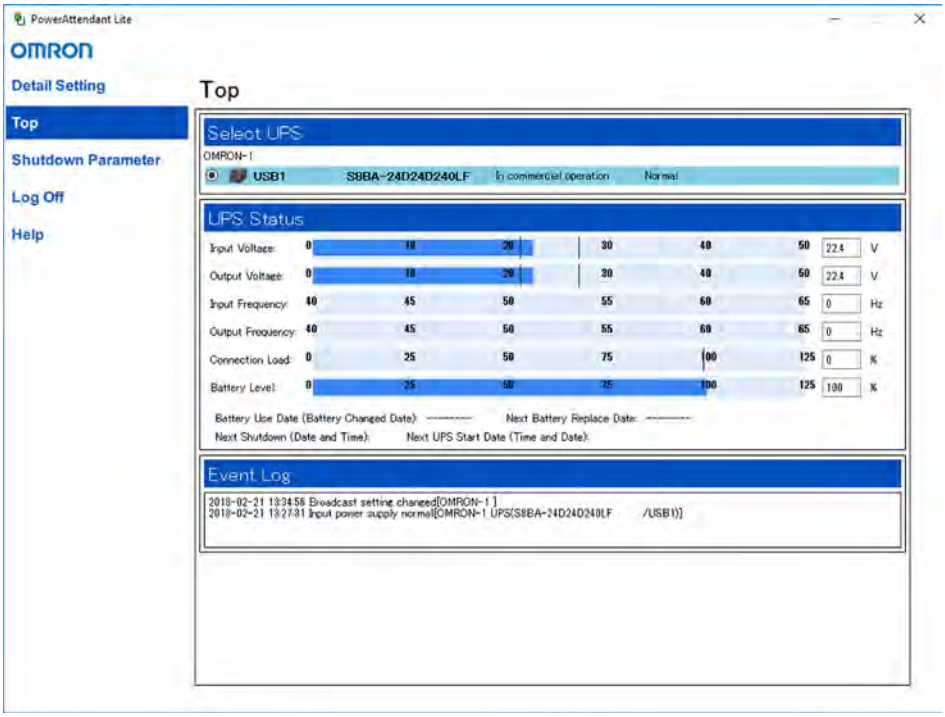
③ Enter “login ID” and “Password” and click the “OK” button.

*Initial settings: Login ID=Admin/Password=omron

<Hint>

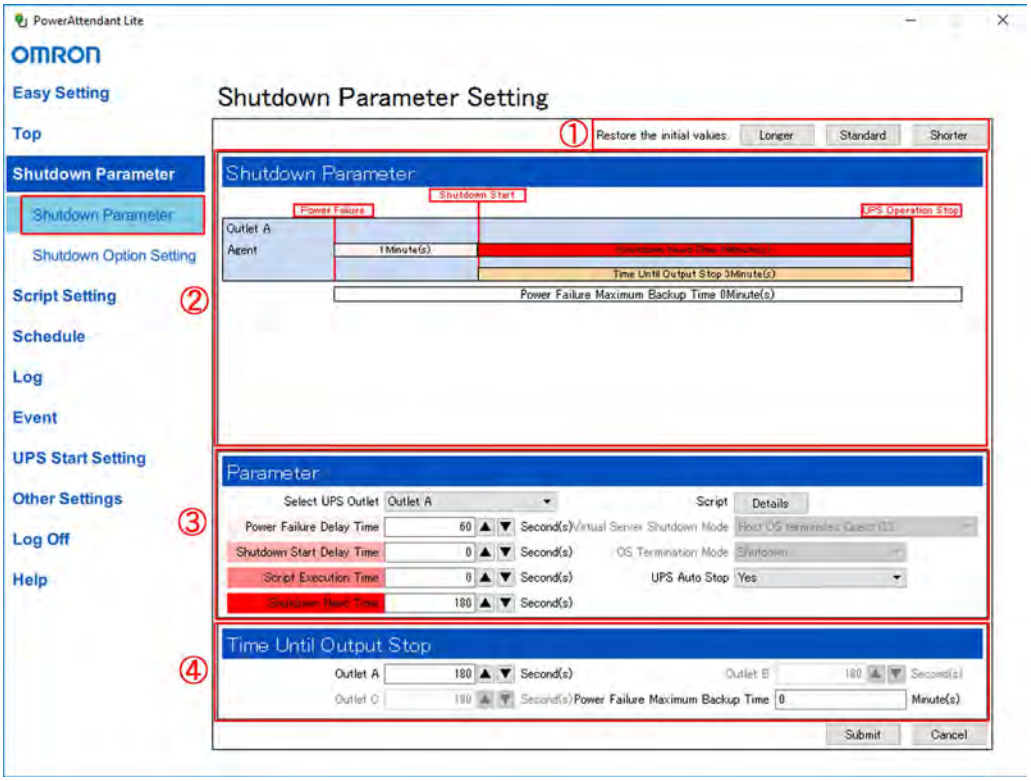
Register a new user by selecting "Detail Setting" - "Other Settings" - "User Access Right Setting". See "6-5 User access right setting" p.55.

④ The top screen for the Agent logged in to appears.

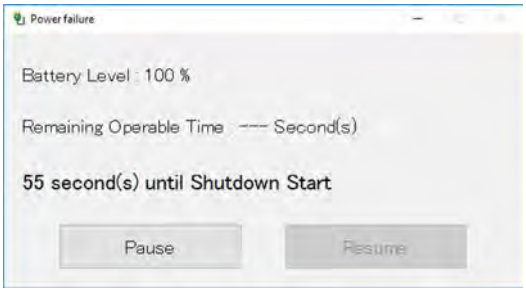


4-4 Shutdown Parameter Setting

Set the shutdown operation when an AC line failure occurs (power outage).



	Item name	Description
①	Restore the initial values.	Select a pattern for the shutdown parameters. According to the length of "AC Fail Delay Time", there are three patterns (Longer: 10 minutes, Standard: 1 minute, and Shorter: 10 seconds). "Shutdown Need Time" is 3 minutes for all patterns. * The initial value in this product is "Standard" (AC Fail Delay Time: 1 minute, Shutdown Need Time: 3 minutes, and UPS Auto Stop: "Yes").
②	Shutdown Parameter	Times set in "Parameter" and "Time Until Output Stop" are displayed in graph form.
③	Selecting UPS Outlet	When using a UPS model with the outlet control feature, select the outlet group (A, B, or C) to which the power cable of the computer is connected. For a UPS model without the outlet control feature, only "Outlet A" is displayed.

	Item name	Description
③	AC Fail Delay Time	Set the time from when this product detects an AC line failure until shutdown starts (0 to 36000 seconds). * This is the time to wait and see if power is recovered after the AC line failure. * When power is restored within this period of time, shutdown operation does not start. * The following warning screen is displayed during the AC Fail Delay Time. In the warning screen, you can operate [Pause] and [Resume] for the countdown. 
	Shutdown Start Delay Time	Set this delay time if you want to delay the OS shutdown start time. (Setting value: 0 to 7200 seconds/Initial value: 0 seconds) Example: If you want to start shutting down the OS one minute after the shutdown start time (when the AC Fail Delay Time elapses), set this delay time to 60 seconds. * When not applying a delay, set it to "0" seconds.
	Script Execution Time	Set a period of time long enough for a scrip to be processed completely. (Setting value: 0 to 7200 seconds/Initial value: 0 seconds) * OS shutdown operation will not start until this time elapses. * Set "0" seconds when not using a script. * When using Hyper-V, to select "PAL terminates Guest OS", set the time required for the guest OS to terminate by using "Script Execution Time".
	Shutdown Need Time	Set the required time from when the shutdown operation of the OS starts until it becomes complete. (Setting value: 0 to 1,800 seconds/Initial value: 180 seconds) * If the set time is short, the UPS may stop outputting (power off) in the middle of OS shutdown operation. Be careful.
	Using Script	The [Details] button allows you to check "Script Execution List". * For details on a script, see "5-7 Script setting" p.32.

	Item name	Description
③	Select Virtual Server Shutdown Mode	Select how to terminate the guest OS among the following options. • The host OS terminates the guest OS. → Set the operation of the guest OS when the host OS shuts it down by using Hyper-V Manager. • PAL terminates the guest OS (shutdown). → Set the time required for the guest OS to terminate by using "Script Execution Time". • PAL terminates the guest OS (hibernation). → Set the time required for the guest OS to terminate by using "Script Execution Time". * This item is not displayed on the "Easy Setting" menu. * This item is not enabled in an environment where Hyper-V is not used.
	OS Shutdown Mode	Select a shutdown status of OS. Two options are available: "Terminates by "Shutdown."" and "Hibernates.". * When "Hibernates." is selected, the OS terminates after the state of Desktop is stored in the hard disk. When the OS restarts, the state of Desktop before hibernation is restored. "Hibernates." is recommended in any of the following cases. → When the OS terminates, data you want to save exists. → You want to terminate the OS in the shortest time. * "Hibernates." is enabled only when it is supported by the OS. (Otherwise, "Terminates by "Shutdown."" is selected for the operation.)
	UPS Auto Stop	Set UPS Auto Stop after the computer shuts down. * When "Yes" is selected for UPS Auto Stop, even if power is recovered in the middle of shutdown operation, the UPS always terminates after the specified time. * When "No" is selected for UPS Auto Stop, the UPS stops when the battery runs out. If power is recovered before the battery runs out, the UPS keeps on operating.
④	Time Until Output Stop	This item is used for a UPS model with the outlet control feature. Set data for "Time Until Output Stop" for an outlet group (A/B/C) not connected to the computer in which this product is installed. Set time from when OS shutdown starts until the outlet group stops its output (stops supplying power to the connected device). (Setting value: 0 to 1800 seconds/Initial value: A: 180 seconds, B: 180 seconds, C: 180 seconds) * Depending on the settings in "Parameter", the time required until the UPS stops changes. The time from when the OS shutdown is determined (after the "AC Fail Delay Time" elapses) until the UPS stops is the sum of the values for "Shutdown Start Delay Time", "Script Execution Time", and "Shutdown Need Time". * If a value longer than the value for the "Shutdown Need Time" parameter is set in "Time Until Output Stop", the time from when the OS shutdown is determined (after the "AC Fail Delay Time" elapses) until the UPS stops is the sum of the values for "Shutdown Start Delay Time", "Script Execution Time", and "Time Until Output Stop".

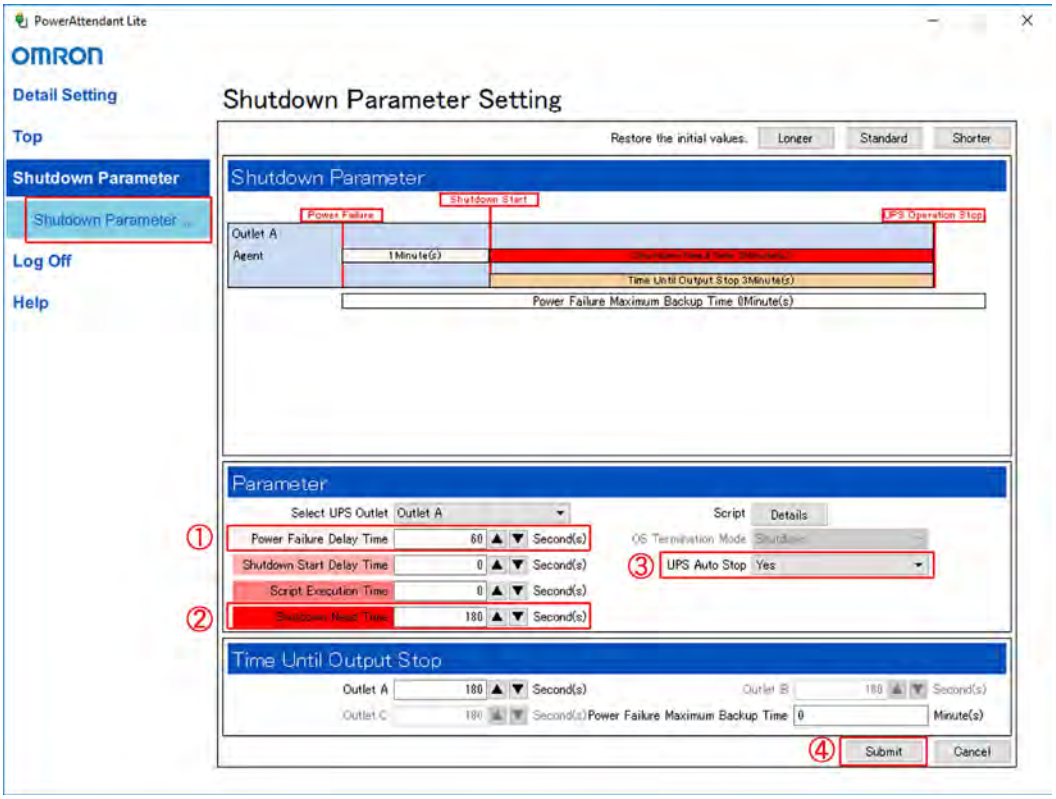
	Item name	Description
④	When input power supply abnormality, Maximum Backup Time	This function is used for automatically stopping the UPS after a certain time period of backup operation when an AC line failure occurs. (Setting value: up to 9999 seconds/Initial value: 0 seconds) * When 0 seconds are set, this function is disabled. In this product, this function is used as an alternative setting method if you want to set a value longer than 1800 seconds for "Shutdown Need Time". * For this setting, set the sum of the values for "AC Fail Delay Time", "Shutdown Start Delay Time", "Script Execution Time" and "Shutdown Need Time". * When stopping the UPS with this setting, set the "UPS Auto Stop" parameter to "No". * Restrictions on this function When the UPS is stopped with this setting, if power is recovered before the UPS stop time elapses, the UPS continues its operation without stopping. Setting example: Operation: It is desired that the UPS stop one hour after OS shutdown starts. Times to be set until the start of shutdown are as follows. AC Fail Delay Time: 60 seconds Shutdown Start Delay Time: 0 seconds Script Execution Time: 0 seconds Setting: Parameter → UPS Auto Stop "No" AC Line Failure Maximum Backup Time→"61" minutes * "AC Fail Delay Time: 60 seconds" + "Shutdown Start Delay Time: 0 seconds" + "Script Execution Time: 0 seconds" + "Time from OS shutdown start to UPS stop: 60 minutes" = 61 minutes

<Hint>

Check the distribution of the set times and the flow with the graphs in the "Shutdown Parameter" area.

4-5 Shutdown Setting

① Click [Shutdown Parameter] - [Shutdown Parameter Setting].
Select "AC Fail Delay Time" in "Parameter". The initial value is "60" seconds.
* When "60" seconds are set, the shutdown of the computer starts 60 seconds after this products detects a power outage.



② Select "Shutdown Need Time". The initial value is "180" seconds.
* Set a length of time longer than the time required for OS shutdown completion.

③ Select "UPS Auto Stop". The initial value is "Yes".
* Since this test checks the operation up to the stop of the UPS, select "Yes".

→With the graphs in the Shutdown Parameter area,
check the distribution of times and the flow from the occurrence of an AC line failure (power outage) to OS shutdown start and UPS operation stop (power-off), and correct a problem, if any.

④ Click the [Submit] button.

Then, the setting operation is completed.

4-6 Executing an operation test

Put the UPS into an outage-simulated state (commercial power stopped) to check that this product can shut down the computer normally.
Stop power supply to check the normal shutdown of the computer and the stop operation of the UPS.

<Caution>

As a precaution, save a data being generated.

<Hint>

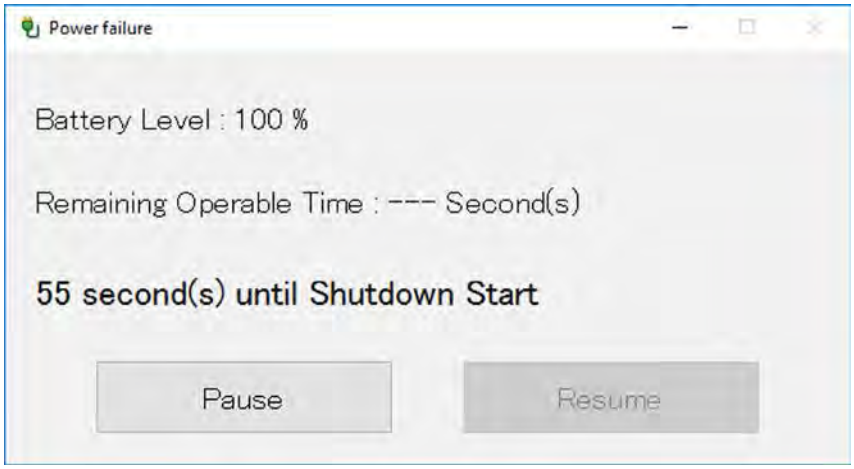
Check that the UPS and the computer are connected with a communication cable (USB or RS232C), and that the status of the task tray icon is "Commercial Operation and Normal".

See "4-2 Task tray icon display details" p.14.

① Check that the status of the task tray icon is "Commercial Operation and Normal".
Pull out the AC input plug of the UPS from an outlet.

② When this product detects an AC line failure,
the displayed status of the task tray icon changes to "Backing up".

③ The following warning screen appears, and the "AC Fail Delay Time" countdown starts.



* The countdown can be temporarily stopped and resumed with the [Pause] button and the [Resume] button on the warning screen.

④ When the "AC Fail Delay Time" countdown finishes, the computer starts shutting down.

⑤ When "Shutdown Need Time" elapses after the computer starts shutting down, the UPS automatically stops.
* Be sure to wait without doing any operation until the UPS stops automatically.

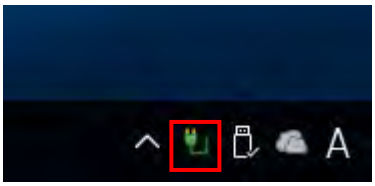
⑥ After confirming that the UPS is stopped automatically (powered off), put the AC input plug of the UPS back into the outlet
and let the UPS reboot automatically.

* Our UPS is set to automatically reboot after power is recovered when shipped. If you do not want to let it start automatically, see the manual for the UPS and change the relevant setting.

⑦ Start the computer.

* In the BIOS settings of the computer, if the computer is set to automatically start when power is supplied, in conjunction with the startup of the UPS, the computer also starts up.
For details on the BIOS settings, check the manual for the computer.

⑧ For the task tray icon, check that the Agent icon display is "Commercial Operation and Normal".



Then, the shutdown test is completed.

<Caution>

Precaution on operation when setting "Yes" for UPS Auto Stop

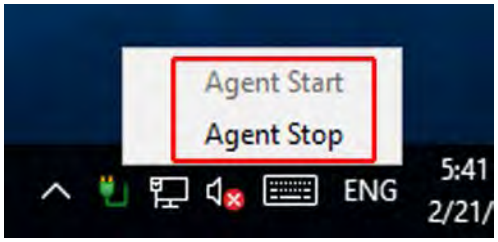
When power is recovered in the middle of OS shutdown operation, if the computer is powered on before the UPS stops, the UPS may stop outputting power while the computer is in the process of starting up.

When "Yes" is set for UPS Auto Stop, be sure to power on the computer after the UPS stops/reboots.

5. Operation and Detail Setting

5-1 Stopping/stating the Agent

Right-click the task tray icon and you can operate "Agent Stop" or "Agent Start".

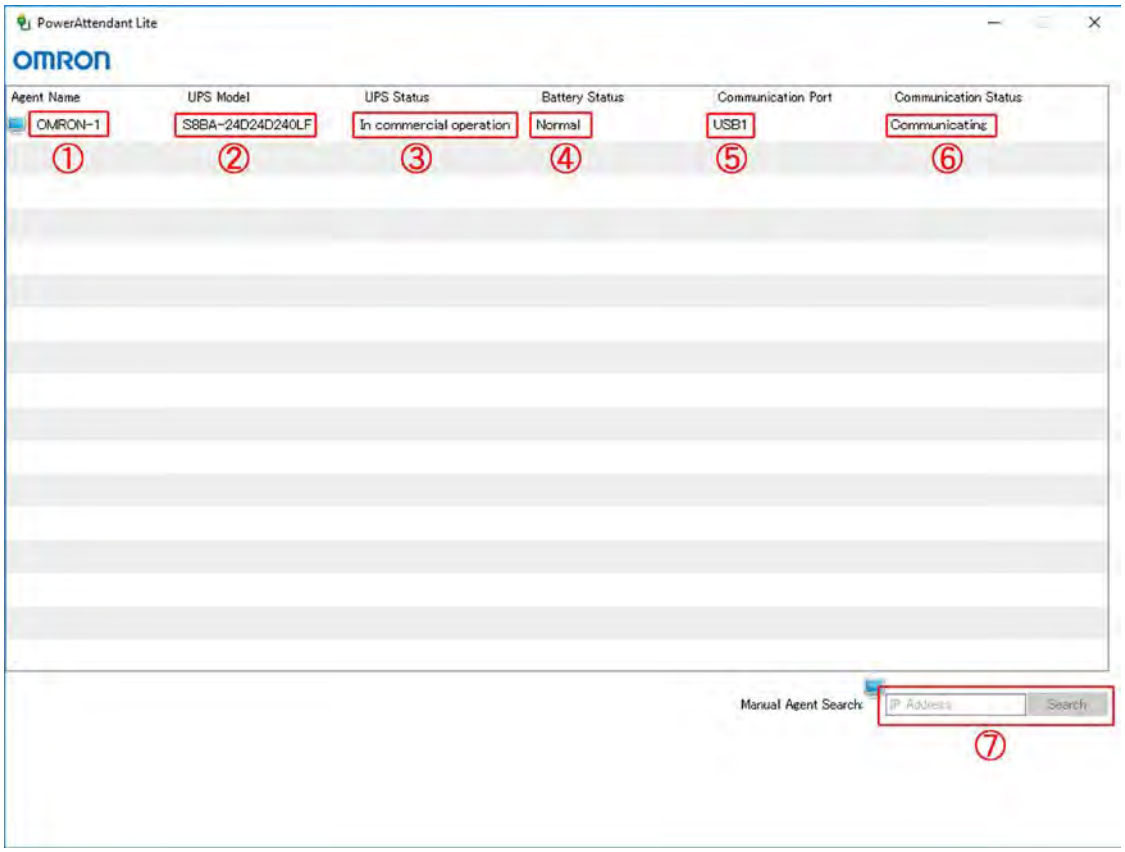


<Hint>

For details on how to interpret the task tray icon display condition, see "4-2 Task tray icon display details".

5-2 Explanations of the Agent List screen

Double-click the "PowerAttendant Lite" shortcut on Desktop, and the Monitor screen starts, and the Agent List is displayed.



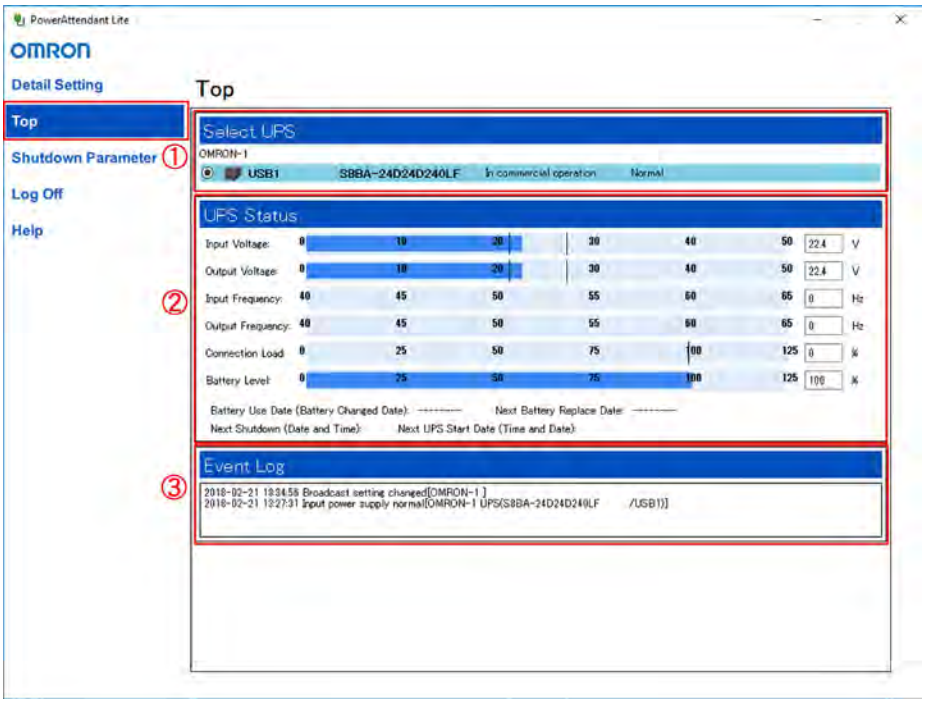
	Item	Display Contents
①	Agent Name	Displays the computer name of a computer in which this product is installed. Click the relevant Agent name to log in to the Top screen.
②	UPS Model	Displays the model of a connected UPS unit.
③	UPS Status	Displays the status of a UPS unit (see below). Communication error/Standby/Awaiting Shutdown/Awaiting Rebooting /Shutting down/Backing up/Testing/In commercial operation
④	Battery Status	Displays the battery status (see below). Battery Disconnected/Battery Low/Battery Weak/Testing/Charging/Discharging/Battery Error/Normal
⑤	Communication Port	Displays the communication port to which a UPS unit is connected. USBx or COMx（x＝Port number）
⑥	Communication Status	Displays the status of communication between a computer and the UPS unit connected to it. Communicating/None
⑦	Manual Agent Search	Enter the IP address to directly log in to the target Agent. Enter the IP address and click the [Search] button.

5-3 Top screen

When you log in to the Agent, the Top screen appears.
The Top screen displays information about the status of the connected UPS, events that occurred, and others.

<Hint>

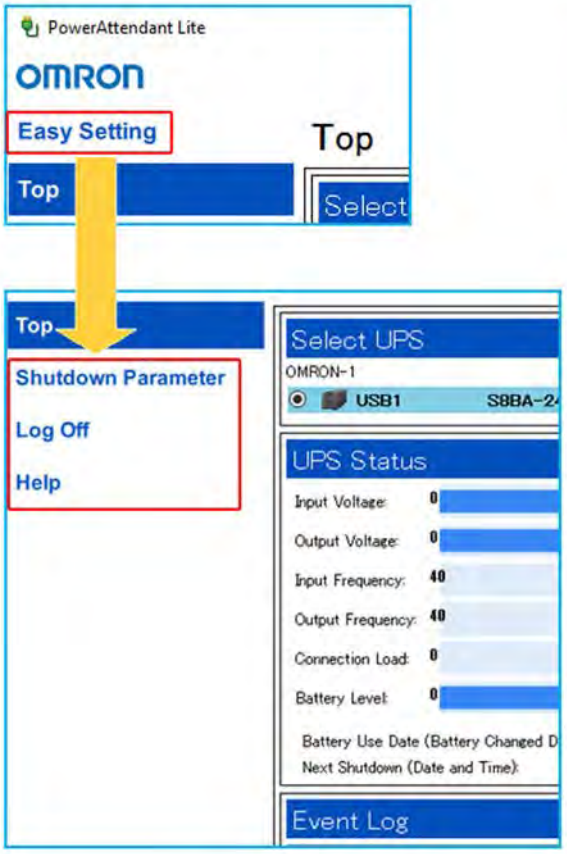
* Account initial setting values: Login ID=Admin/Password=omron



	Item name	Description
①	Select UPS	Display an overview of the UPS connected to the Agent.
②	UPS Status	Display "Input Voltage", "Output Voltage", "Input Frequency", "Output Frequency", "Connection Load", and "Battery Level" using graphs and numerical values.
		"Battery Use Date (Battery Changed Date)" displays the date the battery currently in use started to be used. For "Next Battery Replace Date", data is displayed when the battery replacement schedule is set on this product in advance based on the life expectancy of the UPS battery, usage, and others. See "6-1 UPS setting" p.48.
		"Next Shutdown (Date and Time)" and "Next UPS Start Date (Time and Date)" display schedules for the next schedule actions. See "Schedule Registration" p.37.
③	Event Log	Among the events that occurred, display the two newest events.

5-4 Easy Setting Menu and Detail Setting Menu

Two types of setting menus are available: "Easy Setting", which displays only basic items, and "Detail Setting", which display all items.



Easy Setting Menu

Detail Setting Menu

5-5 Setting Menu List

Menu Items	Setting Option		Menu Display	
			Easy	Details
Top	• Selecting UPS • UPS Status • Event Log		○	○
Shutdown Parameter	Shutdown Parameter Setting	• Shutdown Parameter • Parameter • Time Until Output Stop	○	○
	Shutdown Option Setting	• Emergency Shutdown • AC Fail Delay Time Cancel Shutdown • Communication Error Shutdown • Shutdown at the time of abnormality occurrence • Warning Occurrence Shutdown		○
Script Setting	Script Setting	• Script Setting information • Script Setting		○
Schedule	Schedule Registration	• Registered Schedule • Schedule Registration		○
	Schedule Setting	• Schedule Shutdown Warning Start Setting		○
Log	Event Log	• Period Setting • Log Option • Event Occurrence Situation (chart)		○
	Data Log	• Selecting UPS • Period Setting • Log Option • AC Line Status (graph)		○
Event	Action Setting	• Action Information • Event List		○

Menu Items	Setting Option		Menu Display	
			Easy	Details
UPS UPS Start Setting	UPS Start Setting	• UPS Reboot Setting • Output Start Delay Time of UPS Boot Up • UPS Cold Start		○
Other Settings	UPS Setting	• Select UPS • Battery Auto Test • Input/Output Setting • Battery Use Date (Battery Replace Date)		○
Other Settings	Communication Setting	• UPS Communication Port • Network Setting • Data Update Time • Logoff Time		○
	Manual Operation	• Selecting UPS • Buzzer • Shutdown Immediately • Self Test • Outlet B • Outlet C • Setting Information		○
	Command Transmission	• Selecting UPS • Command		○
	User Access Right Setting	• Registered User • Log • User Access Right Setting (Register/Modify/Delete)		○
	Synchronization Setting	• Synchronization Setting		○

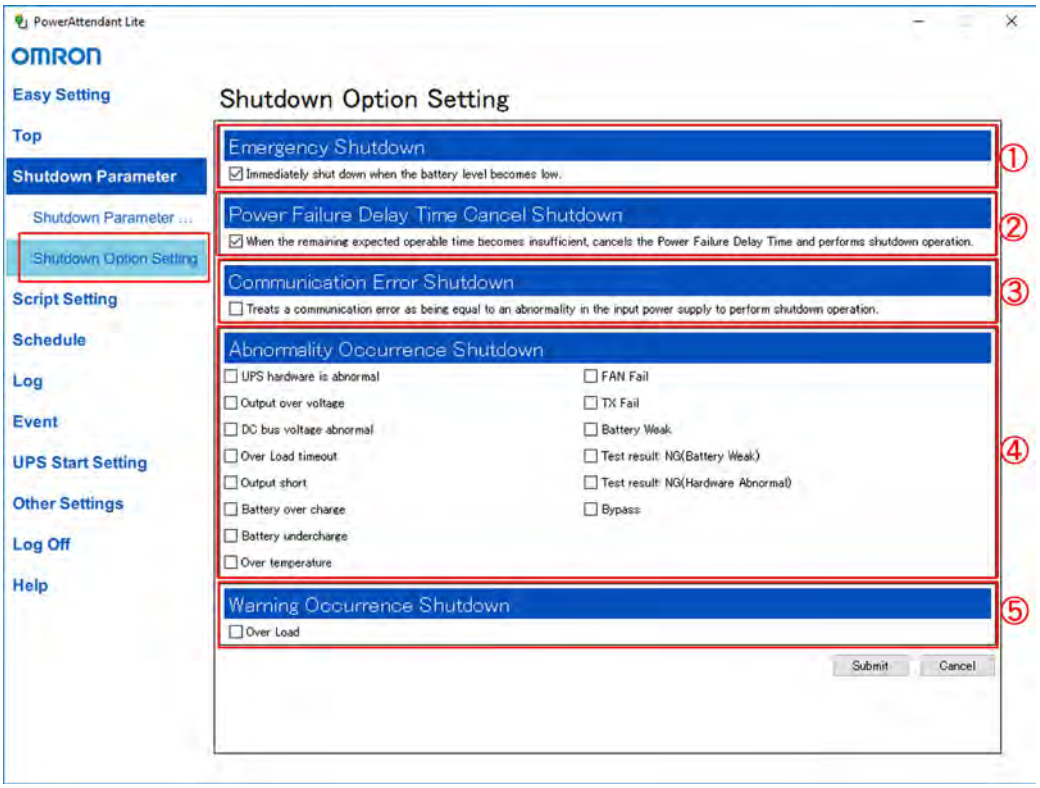
5-6 Shutdown Parameter

Set the shutdown Operation.
"Shutdown Parameter Setting" and "Shutdown Option Setting" are available.

■ Shutdown Parameter Setting

For details on the shutdown parameter settings, see "4-4 Shutdown Parameter Setting" p.17.

■ Shutdown Option Setting



<Hint>

- When the settings have been changed, be sure to click the [Submit] button.

	Item name	Description
①	Emergency Shutdown	When an AC line failure occurs, if the battery level of the UPS becomes low (Battery Low state), cancel all the operations set in the shutdown parameter settings and bring the OS into the hibernate state. When in an environment that does not allow hibernation, execute shutdown. (Initial value: Checkbox selected) * No script is executed during this operation.
②	AC Fail Delay Time Cancel Shutdown	During "AC Fail Delay Time" for an AC line failure, if the value for the remaining expected operable time (the assumed battery level of the UPS) becomes smaller than the sum of the values for the times in the shutdown parameter settings ("Shutdown Start Delay Time" + "Script Execution Time" + "Shutdown Need Time"), cancel the AC Fail Delay Time operation and start shutdown. (Initial value: Checkbox selected)
③	At the time of Communication Error Shutdown	When a communication error lasting more than 10 seconds occurs, in the same way as when an AC line failure occurs, start shutdown. (Initial value: Checkbox cleared) * A 10-second error recovery detection time is provided. If recovery is made from the error within this time, do not start shutdown.
④	At the time of Abnormality Occurrence Shutdown	Start shutdown if an error occurs in the UPS. (Initial value: Checkbox cleared) An applicable abnormality is selected from the following events. Hardware abnormality/Output over voltage/DC Bus Voltage abnormal /Over Load timeout/Output short/Battery over charge /Battery undercharge/Over temperature/FAN Fail/TX Fail /Battery Weak/Test result: NG(Battery Weak) Test result: NG(Hardware Abnormal)/Bypass
⑤	At the time of Warning Occurrence Shutdown	When this product detects an overload (Over Load), start shutdown. (Initial value: Checkbox cleared)

<Hint>

Differences between "Over Load timeout" and "Over Load"

- "Over Load timeout" for "Abnormality Occurrence Shutdown" is the state in which the output of the UPS is stopped due to overload (UPS displays "EO"/"Overload Stop").
- "Over Load" for "Warning Occurrence Shutdown" is the state in which while generating a warning because of overload, the UPS continues outputting power (UPS displays "OL"/"Over Load").

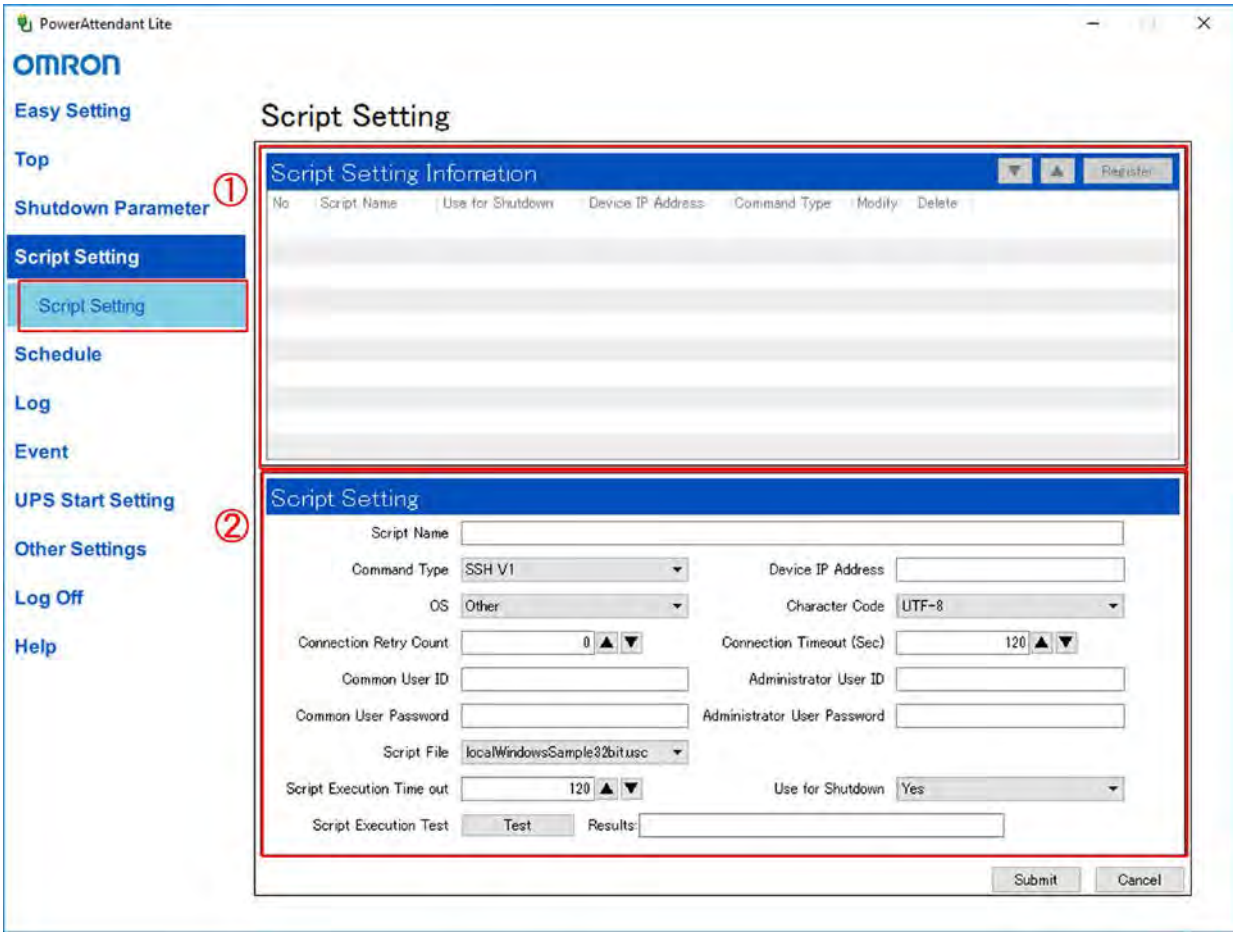
* How the UPS operates at the time of Over Load varies depending on the model. For details, see the manual for the UPS.

5-7 Script Setting

Scripts are command sets for executing tasks of OS.
This product can execute a registered script when an event occurs or when the OS shuts down.

<Hint>

- When the settings have been changed, be sure to click the [Submit] button.
- Script example
  When the OS is shut down by this product, a computer on the network is shut down.



	Item	Description
①	Information of Script Setting	Displays a list of registered scripts and their overviews. • By clicking the [Register] button, the “Script Setting” field is displayed, and you can create the new scripts. - If there is a registered script, the [Modify] and [Delete] buttons are displayed, allowing you to edit or delete a script. * A maximum of 20 entries can be registered as script setting information.
②	Script Name	Enter a script name * Up to 100 bytes
	Command Type	Set a script communication method by using the pull-down menu. None/Command Line/SSH V1/SSH V2/Telnet * When "None" is applied, disable the registered script. * Select "Command Line" when executing a batch file in the local computer. * Select "SSH V1", "SSH V2", or "Telnet" when controlling a computer across the network. * In SSH, this product supports the following encryption methods. AES256-SDCTR/AES192-SDCTR/AES128-SDCTR/AES256-CBC /AES192-CBC/AES128-CBC
	OS	Set OS of a computer that executes scripts. Other/Windows/Linux/Mac
	Connection Retry Count	Select the number of retries when you fail to log in. (Setting value: 0 to 9/Initial value: 0)
	Login Common User ID	Specify the login user ID (Common) for the computer that executes a script. Write $u1 in a script, and it is replaced with the value entered for this item when that script is executed.
	Login Common User Password	Specify the login password (Common) for the computer that executes a script. Write $p1 in a script, and it is replaced with the value entered for this item when that script is executed.
	Login Administrator User ID	Specify the login user ID (Administrator) for the computer that executes a script. Write $u2 in a script, and it is replaced with the value entered for this item when that script is executed. *For Linux/Mac/Unix, enter a value if necessary. For Windows, no entry is required for this item.
	Login Administrator User Password	Specify the login password (Administrator) for the computer that executes a script. Write $p2 in a script, and it is replaced with the value entered for this item when that script is executed. *For Linux/Mac/Unix, enter a value if necessary. For Windows, no entry is required for this item.
	Script File	Select a script to be executed, with the pull-down menu. * Files saved with the extension "usc" in the following level are displayed as options. /var/opt/OMRON/PAL//SHARED * For details on how to create a script file, see "5-8 Script file creation" p.35.

	Item	Description
②	Script Execution Timeout (Sec)	Set the timeout time for script execution. (Setting value: 0 to 7200 seconds/Initial value: 120 seconds) When "0" is set, the script does not time out.
	Script Execution Test	Click the [Test] button to execute the script. The execution result is displayed in the "Results:" field as follows. Success/Connection Timeout/Command Timeout
	Device IP Address	Enter an IP address of a computer that executes scripts.
	Character Code	Set character codes of scripts. Set the code according to the OS on which a script is executed.
	Connection Timeout (Sec)	Set the timeout time for login. (Setting value: 0 to 120 seconds/Initial value: 120 seconds) When "0" is set, the script does not time out.
	At the time of Shutdown, Use	"Yes" Execute a script when shutting down the OS with this product. "No" Do not execute a script when shutting down the OS with this product.

5-8 Script Creation

Create scripts as text files by text editor software such as Notepad.

Scripts are 2 lines as a unit and describe “when receiving what, what is sent”.

For example, to send the command "su" when a string containing "$" is received from the connection destination,

write as follows.

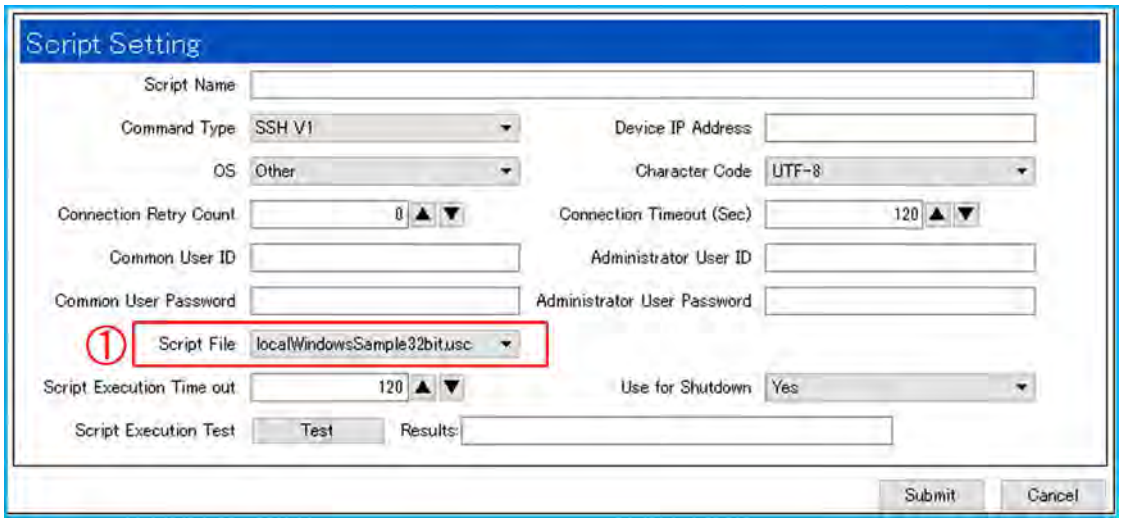
rcv=$

snd=su

Save the created script with the extension "usc" in the following folder.

/var/opt/OMRON/PAL/SHARED

The script files saved in the above folder are displayed in the "Script File" pull-down list in the "Script Setting" area (①).



■ Special Script Commands

$U1,$p1,$u2,$p2 is available as special parameters. Each can be used as the followings.

Parameter	Contents	Description
$u1	Login Common User ID	To be replaced with the value for "Login Common User ID" in "Script Setting".
$p1	Login Common User Password	To be replaced with the value for "Login Common User Password" in "Script Setting".
$u2	Login Administrator User ID	To be replaced with the value for "Login Administrator User ID" in "Script Setting".
$p2	Login Administrator User Password	To be replaced with the value for "Login Administrator User Password" in "Script Setting".

■ Script Examples

The following is an example of a script for executing shutdown.

```
rcv=login as:
snd=$u1
rcv=password:
snd=$p1
rcv=$
snd=su
rcv=:
snd=$p2
rcv=#
snd=init 0
```

■ Precautions for Creating Scripts

- From line feed to next line feed is regarded as one line.
- A blank is regarded as one character.
- Character strings that are received before “rcv=” command are ignored.
- Double-byte characters are NOT available. A scrip must be written only with ASCII characters without control code.
- It is case sensitive.
- A blank line can not be included.
- If the character string “<CR>” is described to “snd=”, a new line is started.
- Note that you cannot send "$u1", "$u2", "$p1", "$p2", or "<CR>" as a string.
- You can NOT specify the character strings including “<CR>” to “rcv=” pattern.
- There is no limit of the number of lines and characters per line.
- Timeout operation of reception waiting is NOT executed in “rcv=”. It is cut by the timeout of connection of - Telnet or SSH.

<Caution>

Execution-prohibition of multiple scripts

While one script is running, no other scrip can be executed.

→ When multiple scripts to be executed for shutdown are registered, they are executed one by one in the order in which they were registered.

→ While one scrip is running, even if another script is called, it is ignored.

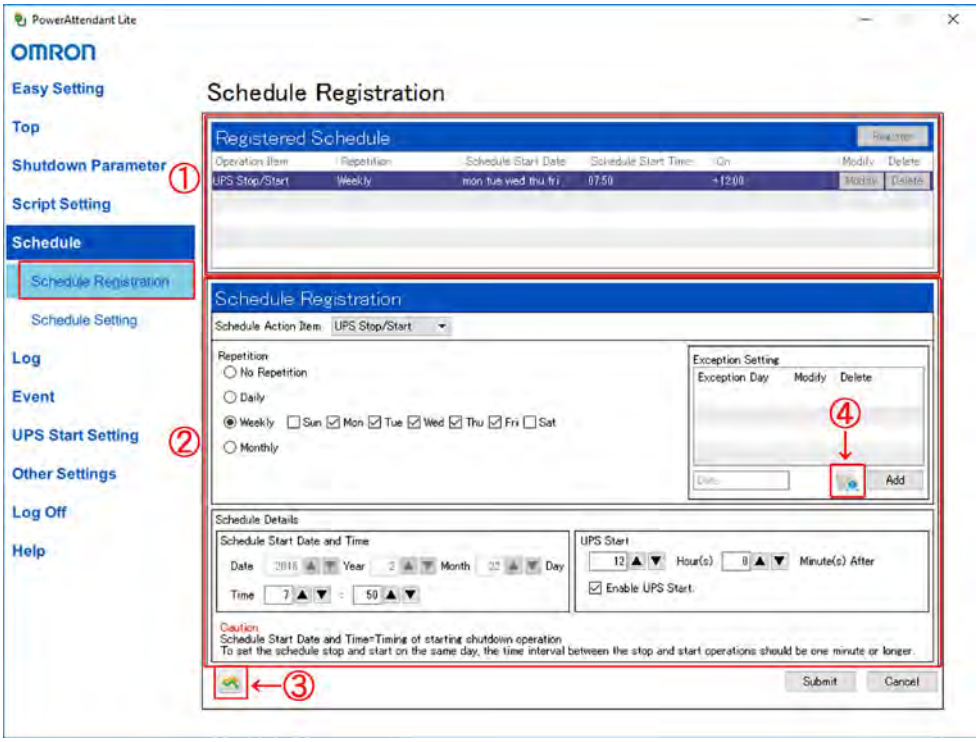
5-9 Schedule

Set a schedule action for the UPS.
Using two menus, namely "Schedule Registration" and "Schedule Setting", you can execute a schedule for "UPS Stop", "UPS Stop/Start", or "Self Test".

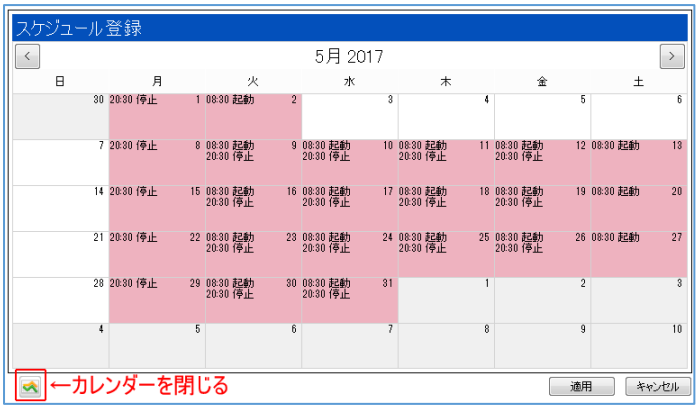
<Hint>

- When the settings have been changed, be sure to click the [Submit] button.
- "UPS Stop" shuts down the OS according to the shutdown parameter settings, and then stops the UPS.
- "UPS Stop/Start" automatically starts the UPS when the specified time elapses after the stop operation of the UPS (OS shutdown and UPS stop).
- "Self Test" executes a self test (a 10-second discharge test) for the UPS.

■ Schedule Registration



	Item name	Description
①	Registered Schedule	Display a list of registered schedules and their overviews. - Click the [Register] button, and the "Schedule Registration" area (②) in the lower part of the screen is displayed, allowing you to create a new schedule. - A registered schedule can be edited or deleted with the [Modify] or [Delete] button. * A maximum of 50 schedules can be registered.
②	Schedule Action Item	Select an action for scheduled execution between "UPS Stop/Start" and "Self Test".

	Item name	Description
②	Repetition	Set the schedule repeat action. No Repetition: Only once, with the date specified Daily: To be repeated for 365 days. Weekly (a day of the week specified): To be repeated every week on the specified day of the week. Monthly: To be repeated every month on the specified day of the month.
	Exception Setting	Set a day on which the schedule is not executed (Exception Day) among the days to which Repetition is set as Daily/Weekly/Monthly. Click the calendar button (④), select an exception day, and register it with the [Add] button. - A registered exception day can be edited or deleted with the [Modify] or [Delete] button. * An exception day can be applied to a schedule start date (UPS stop date). Exception Days are NOT available to the start day. * A maximum of 30 exception settings can be registered.
	Schedule Start Date and Time	Set the date and time for starting USB Stop (OS shutdown).
	UPS Start	Set the UPS to automatically reboot after it stops based on a schedule. To reboot the UPS, select the "Enable UPS Start." check box, and set the time from the schedule start time to the start of the UPS. * Set the time so that the interval between UPS Stop and Start becomes one minute or longer.
③	Schedule check button	Click the "Schedule Check" button (③), and you can check the current schedule setting status in the calendar. To close the calendar, click the "Schedule Check" button. 

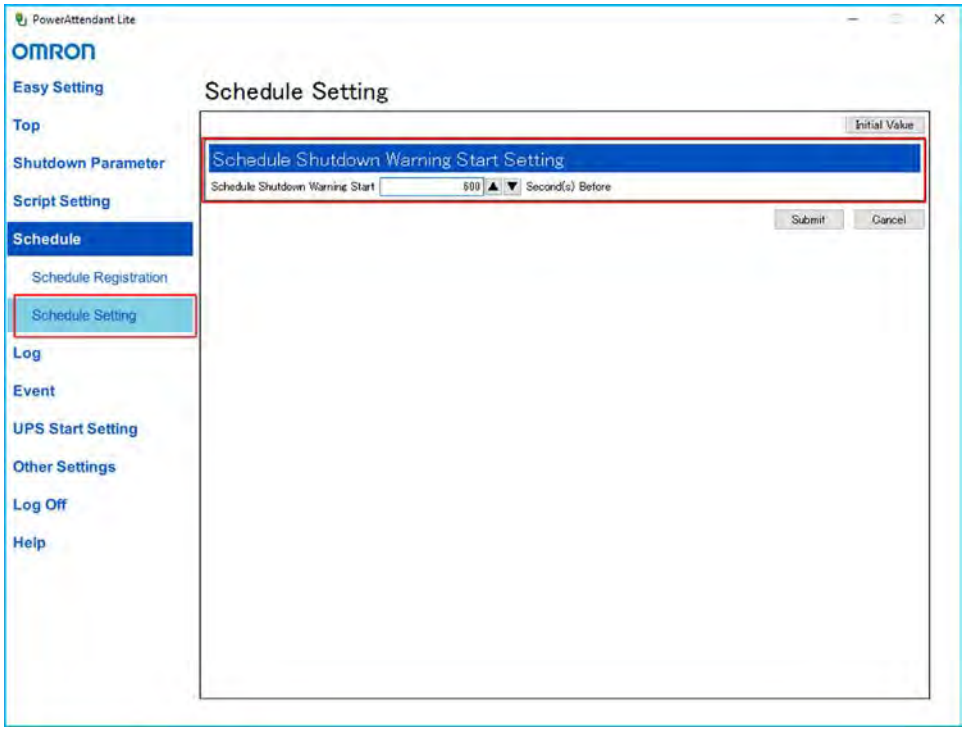
<Caution>

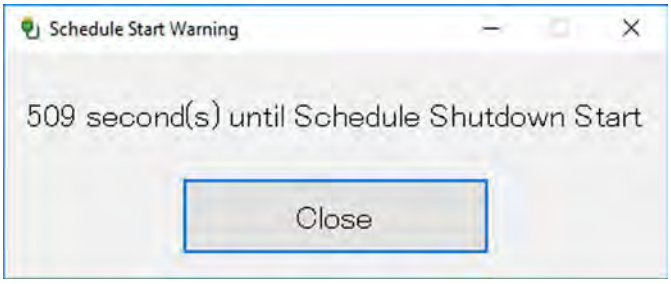
Schedule operation

- Even while the setting screen is being operated, a schedule is executed.
- When "No Repetition" is selected, even if a schedule has been executed, it remains in the "Registered Schedule" list. Delete unneeded schedules.
- When multiple schedules are registered for "UPS Stop/Start" at the same time of day, the schedule registered last becomes valid.

■ Schedule Setting

Set a warning to be generated before starting scheduled shutdown.



Item name	Description
Schedule Shutdown Warning Start	Set the time when the warning screen for the start of schedule shutdown is displayed. (Setting value: 0 to 600 seconds before/Initial value: 600 seconds before) * When the [Initial Value] button is clicked, the initial value "600" seconds before is set. 

<Hint>

- Within the schedule start warning time for one schedule, if the start time for the next schedule comes, the schedule whose start time comes later is ignored.
- While the schedule start warning is displayed, even if the value for the schedule start warning time is changed, it does not influence the schedule being executed.

5-10 Log

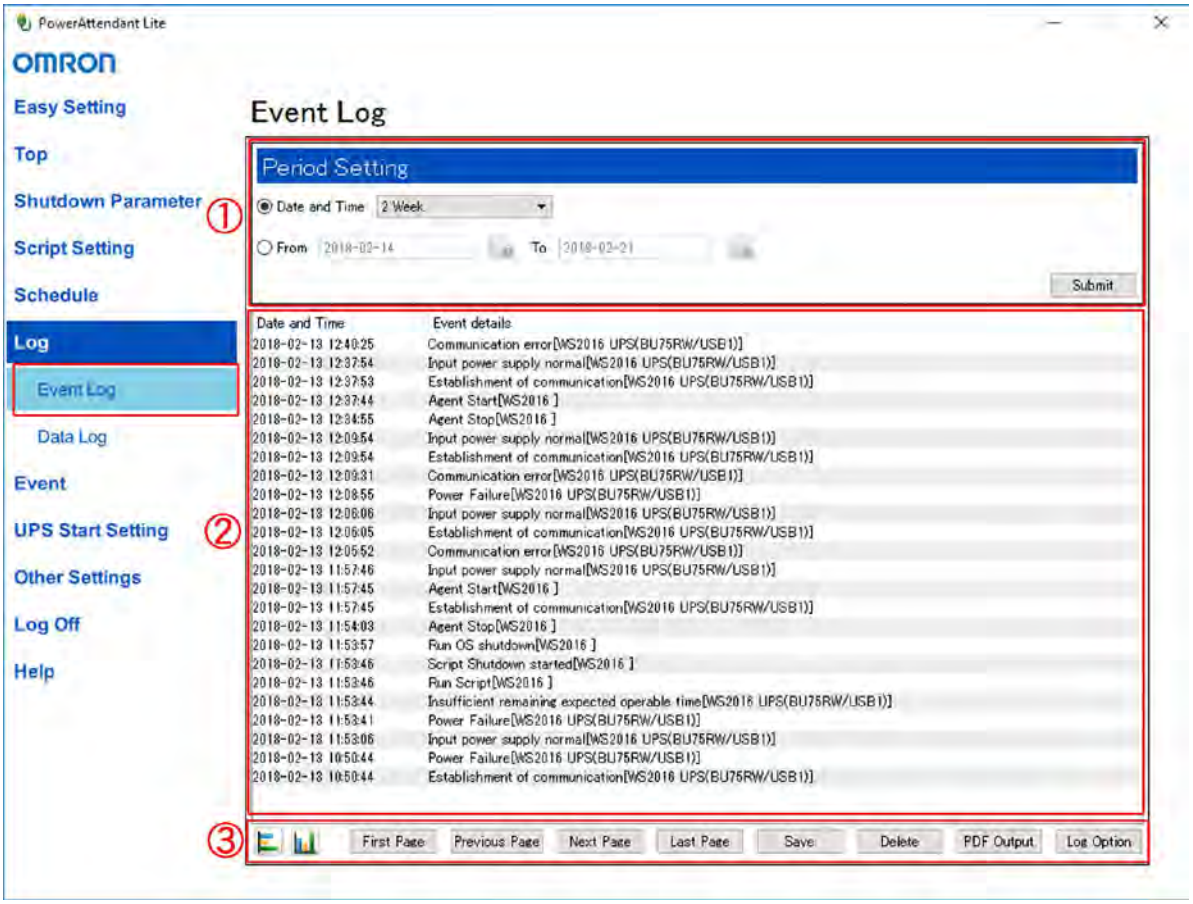
A log records the power status and events that occur.
There are 2 menus of “Event Log” and “Data Log”.

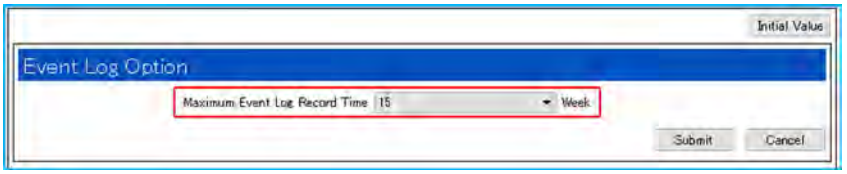
<Hint>

When the settings have been changed, be sure to click the [Submit] button.

■ Event log

This log displays and outputs events that occurred in this product and the UPS.



	Item name	Description
①	Period Setting	Set the time period to display event log. Set the date and time or the period by selecting the corresponding radio button. - Date and Time: Select a value from the pull-down menu in weeks. (1 to 15 weeks) - Period: Enter the start date (From) and the end date (To) each in the date format "YYYY-MM-DD" or select a value from the calendar by clicking the button. * When the [Submit] button is clicked, the event log list is displayed in the lower part of the screen.
②	Event Log List	Display the event logs for the specified period.
③	Chart 1 button ( )	Display the number of occurrences by event in a horizontal bar chart. For details on how to operate the chart, see "Chart display" on the next page.
	Chart 2 button ( )	Display the number of event occurrences by period in a vertical bar chart. For details on how to operate the chart, see "Chart display" on the next page.
	Navigation Button	If a chart is displayed over multiple pages, switch pages by using the [First Page], [Previous Page], [Next Page], and [Last Page] buttons.
	[Save] button	Save the event log (CSV format). When the [Save] button is clicked, the event log is compressed and saved with a name (EventLogCSVYYYYMMDDhhmm.zip) in the following level. /var/opt/OMRON/PAL/SHARED * A log is saved with a file name with YYYMMDDhhmm (year, month, day, hour) after being compressed as a zip file. If a file with the same file name exists, it is overwritten.
	[Delete] button	All saved logs are deleted.
	[PDF Output] Button	Output the event log in PDF format. When the [PDF Output] button is clicked, the event log is compressed and saved with a name (EventLogPDFYYYYMMDDhhmm.zip) in the following level. /var/opt/OMRON/PAL/SHARED * A log is saved with a file name with YYYMMDDhhmm (year, month, day, hour) after being compressed as a zip file. If a file with the same file name exists, it is overwritten.
	[Log Option] button	Set the event log recording period. Select a period in the pull-down menu, and click the [Submit] button. (Setting value: 1 to 15 weeks/Initial value: 15 weeks)  * When the [Initial Value] button is clicked, the initial value is restored.

■ Chart display

When the desired Chart button is clicked, the corresponding chart between the following charts is displayed.

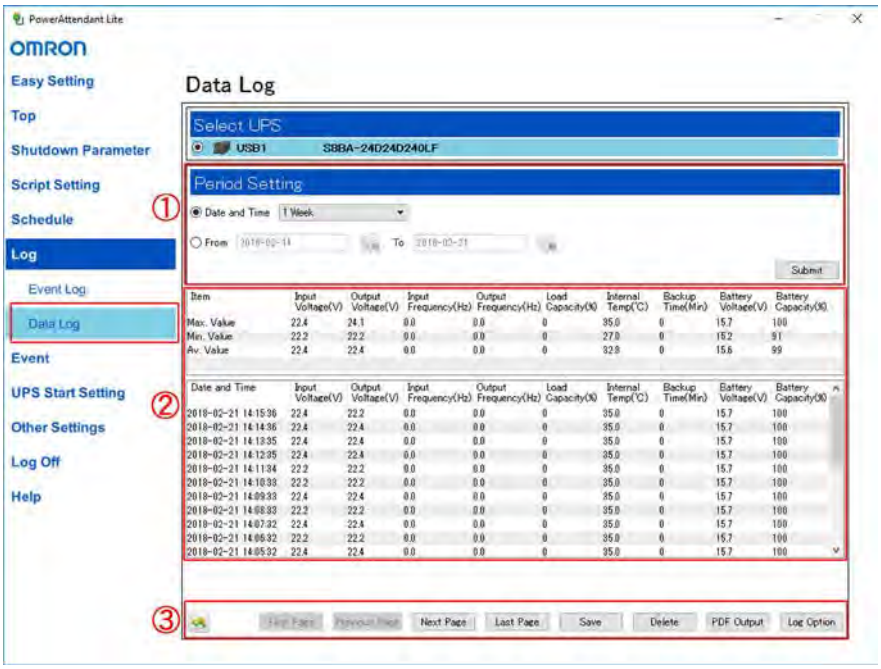
Cumulative total by event

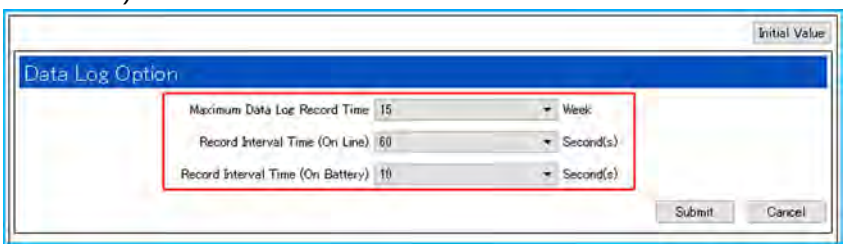
Weekly total

	Item name	Description
①	Create Chart	Select a period for recorded logs to be displayed in chart form in the pull-down menu. Select among "Past 1 week, Past 2 week, Past 3 week, and Past 4 week".
②	Event	Select an event to be displayed in chart form in the pull-down menu. Select among "All Events, Communication error, Over Load, AC line failure Battery Weak, Over temperature, and Battery Low".
③	[Setting] Button	When the [Setting] button is pressed, data is displayed as a chart.

■ Data log

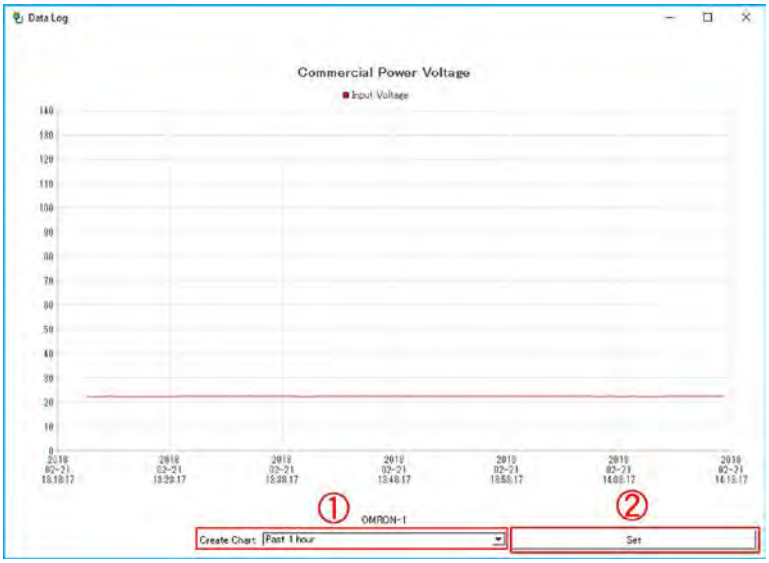
Display and output the statuses of AC line and UPS.



	Item name	Description
①	Period Setting	Set the period for displaying data logs. Set the date and time or the period by selecting the corresponding radio button. - Date and Time: Select a value from the pull-down menu in weeks. - Period: Enter the start date (From) and the end date (To) each in the date format "YYYY-MM-DD" or select a value from the calendar by clicking the button. * When the [Submit] button is clicked, the data log list is displayed in the lower part of the screen.
②	Data Log List	Display the data logs for the specified period. * At the top of the list, display the maximum value, minimum value, and average value for each data item.
③	Chart button ( )	The transition of commercial power voltage is displayed by a line chart. For operating charts, see the next page “Chart Display”.
	Navigation Button	If the displays extend over a plurality of pages, you can change the pages by the [First Page], [Previous Page], [Next Page] and [Last Page] buttons.
	[Save] Button	Save the data log (CSV format). When the [Save] button is clicked, the data log is compressed and saved with a name (DataLogCSVYYYYMMDDhhmm.zip) in the following level. /var/opt/OMRON/PAL/SHARED * A log is saved with a file name with YYYMMDDhhmm (year, month, day, hour) after being compressed as a zip file. If a file with the same file name exists, it is overwritten.
	[Delete] button	All saved logs are deleted.
	[PDF Output] Button	Outputs the data log in PDF format. When the [PDF Output] button is clicked, the data log is compressed and saved with a name (DataLogPDFYYYYMMDDhhmm.zip) in the following level. /var/opt/OMRON/PAL/SHARED * A log is saved with a file name with YYYMMDDhhmm (year, month, day, hour) after being compressed as a zip file. If a file with the same file name exists, it is overwritten.
	[Log Option] button	Set a recording interval and others for data logs. Select each value in the pull-down menu, and click the [Submit] button. • Maximum Data Log Record Time: Recording period of time for data logs (Setting value: 1 to 15 weeks/Initial value: 15 weeks) • Record Interval Time (On Line): Data recording interval during commercial operation (Minimum value: 5 seconds/Initial value: 60 seconds) • Record Interval Time (On Battery): Data recording interval during backup operation (Minimum value: 5 seconds/Initial value: 10 seconds)  * When the [Initial Value] button is clicked, each initial value is restored.

■ Chart display

When the [Chart] button is clicked, the following chart is displayed.



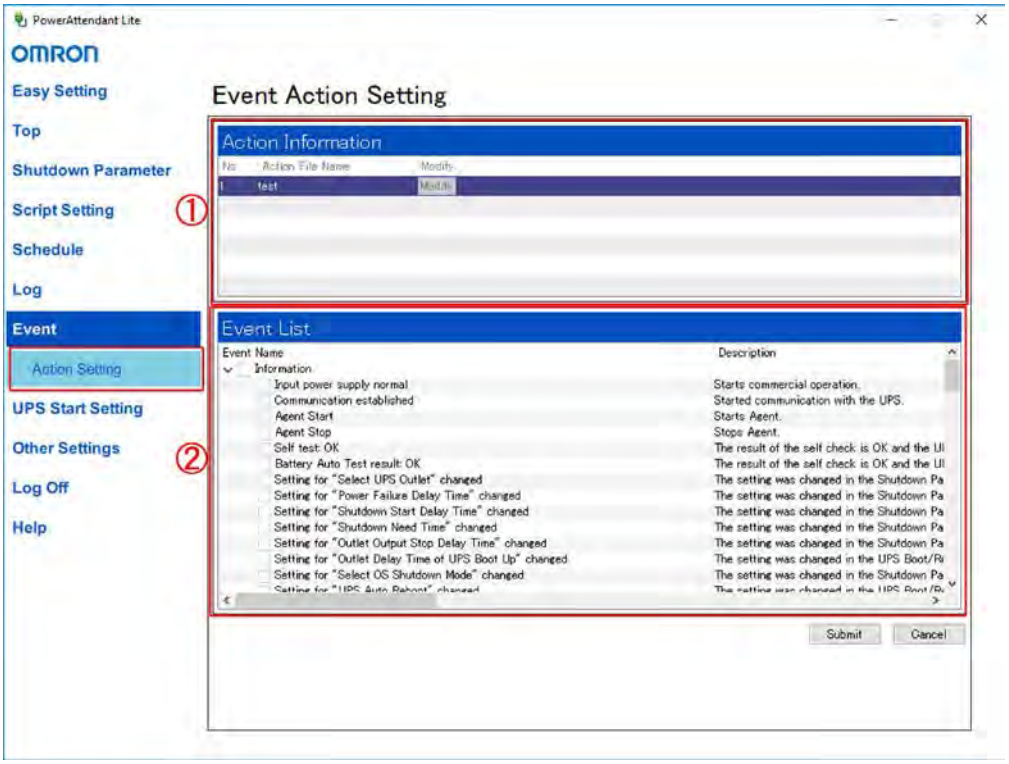
	Item	Description
①	Create Chart	Select a period for recorded logs to be displayed in chart form in the pull-down menu. Select among "Past 1 hour, Past 12 hours, Past 24 hours, and Past 1 week".
②	[Setting] Button	When the [Setting] button is clicked, data is displayed as a chart.

5-11 Event Action Setting

When an event occurs in this product or the UPS, the action specified for it can be executed.

<Hint>

- When the settings have been changed, be sure to click the [Submit] button.
- For details on scripts, see "5-7 Script setting" p.32.



	Item	Description
①	Action File Name	Display a "script name" registered in the Script Setting. See "5-7 Script Setting" p.32.
	[Modify] Button	* When the [Modify] button is clicked, the event log list is displayed in the lower part of the screen ②.
②	Events List	Specify an event that triggers the execution of an action. Events are classified into "Information", "Warning", and "Error", so that events are selected together by classification or on an individual basis. In addition, multiple events can be selected for a single action.

5-12 UPS startup settings

You can set conditions for UPS reboot or UPS operation.

<Hint>

When the [Initial Value] button is clicked, the initial setting values held by this product are restored.

The following are the initial values for this product (different from the factory-default values of the UPS before shipment).

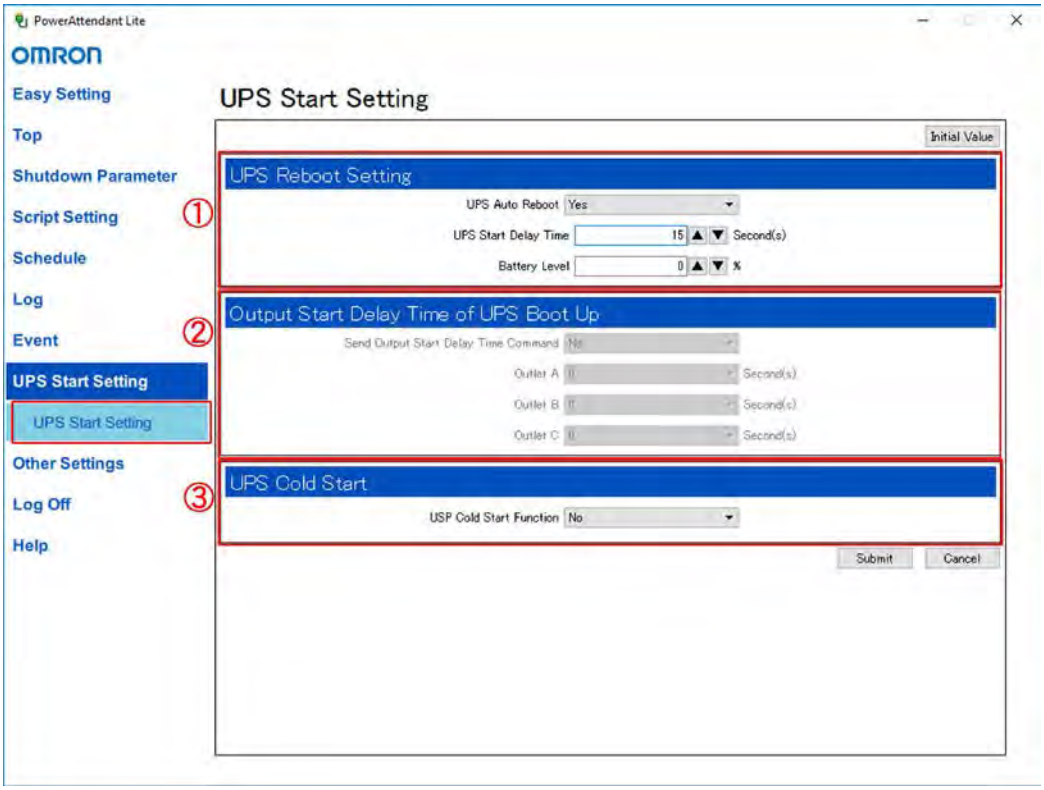
UPS Auto Reboot: Yes

UPS Start Delay Time: 5 seconds

Battery Level: 0%

Send Output Start Delay Time Command: Yes

USP Cold Start Function: Yes



<Hint>

When the settings have been changed, be sure to click the [Submit] button.

	Item name	Description
①	UPS Auto Reboot	Set the operation of the UPS when power is recovered after the UPS shuts down due to an AC line failure. * For a UPS model whose reboot setting is made with the setting switch on the main unit, this item is disabled.
	UPS Start Delay Time	Set the delay time from power recovery to the start of UPS startup operation. (Setting value: 0 to 999 seconds) * This feature is disabled for a model not having it.
	Battery Level	Set the UPS not to start up until the battery level becomes equal to or higher than the set level. (Setting value: 0 to 100%/in increments of 10%) * The factory default value on the UPS side is 0%. * This feature is disabled for a model not having it.
②	Output Start Delay Time of UPS Boot Up	Set a delay to the power supply output start time by outlet group for a UPS model with the outlet control feature. This setting is used when it is desired that a time interval be provided before the supply of power to the connected device starts. To set the delay time, select "Yes" for "Send Output Start Delay Time Command". * This feature is disabled for a model not having it.
③	UPS Cold Start	Set the Cold Start feature for the UPS. The Cold Start feature starts up the UPS (supplies power to the connected device) even where AC power is not available. When "Yes" is selected for Cold Start, without connecting to AC power, by turning the power switch of the UPS on, backup operation (battery output) starts. * When the UPS operates in Cold Start mode, the UPS stops when the battery becomes low. * This feature is disabled for a model not having it.

6. Other Settings

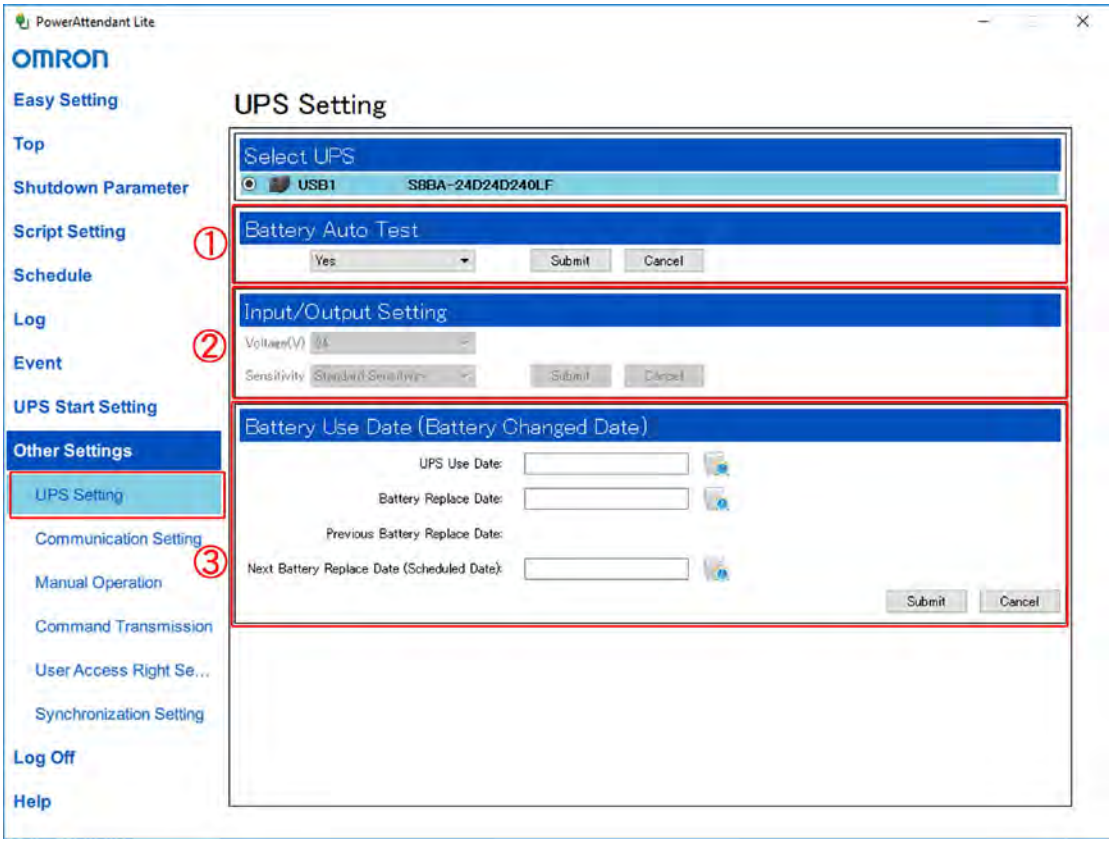
This chapter describes the "Other Settings" menu.

6-1 UPS Setting

Sets such items as a feature of the UPS itself and the battery replacement date.

<Hint>

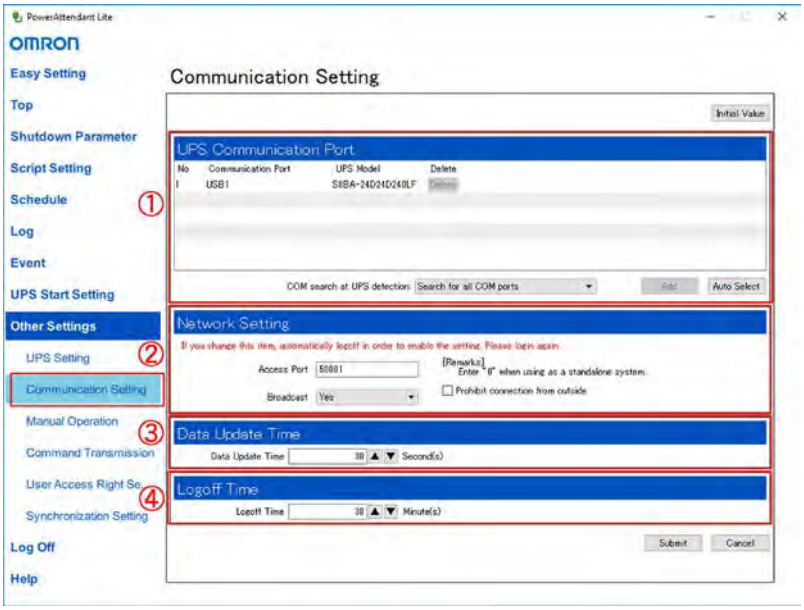
When the settings have been changed, be sure to click the [Submit] button.



	Item name	Description
①	Battery Auto Test	Set Battery Auto Test, which is executed every four weeks by the UPS. Battery Auto Test is a function for periodically checking the capacity of the built-in battery. * For a UPS model that changes the setting for this item with the setting switch on the main unit, this item is disabled.
②	Output Voltage (V)	Set the output voltage for the UPS. Bring the UPS into its standby state (AC input turned ON/power switch turned OFF), and then change the setting. * When power is fed to the computer from the UPS controlling that computer, start up the computer using another power source, power off the UPS, and then change the setting. * This feature is disabled for a model not having it.
②	Input Sensitivity	Set the input sensitivity for the UPS. Bring the UPS into its standby state (AC input turned ON/power switch turned OFF), and then change the setting. * When power is fed to the computer from the UPS controlling that computer, start up the computer using another power source, power off the UPS, and then change the setting. * This feature is disabled for a model not having it. * For details on the input voltage sensitivity, see the manual for the UPS.
③	UPS Use Date	Set the date when the use of the UPS started. Either enter the date in "YYYY-MM-DD" date format, or click the button to select a date from the calendar.
	Battery Replace Date	Set the date when the battery was replaced. Either enter the date in "YYYY-MM-DD" date format, or click the button to select a date from the calendar.
	Next Battery Replace Date (Scheduled dates)	Set the date by determining a battery replacement schedule from such data as the life expectancy of the UPS battery, usage environment, and usage. Either enter the date in "YYYY-MM-DD" date format, or click the button to select a date from the calendar.

6-2 Communication Setting

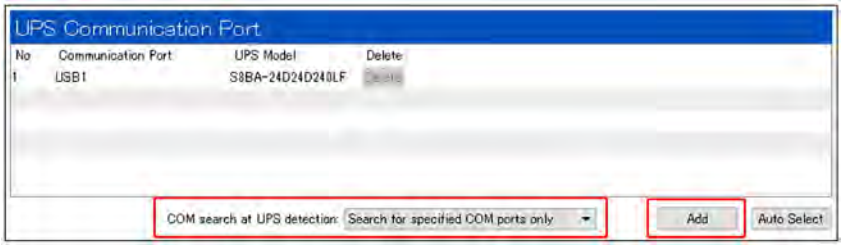
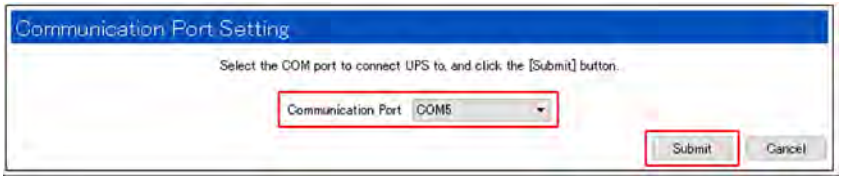
Configures settings related to communication between the UPS and this product.



<Hint>

- When the settings have been changed, be sure to click the [Submit] button.
- Click the [Initial Value] button to restore the initial values for Network Setting, Data Update Time, and Logoff Time.

	Item name	Description
①	Communications Port	Displays the communication port to which a UPS unit is connected.
	UPS Model	Displays the model of a connected UPS unit.
	[Delete] button	Deletes the communication port (COM port) to which a UPS unit is connected. * When a communications port is deleted, communication with the connected UPS is disconnected. * Note that a USB port cannot be deleted.
	COM search at UPS Detection	Set the search target port option for automatic UPS detection. The following table shows the operation of each option. Do not search for COM ports / Search among USB ports only Search among the specified COM ports only / Search among the registered COM ports, then USB ports Search among all COM ports / Search among USB ports, then COM ports
①	[Add] Button	When fixing a COM port, use this button for that setting. Select "Search for specified COM ports only" in the "COM search at UPS detection" field, and click the [Add] button.

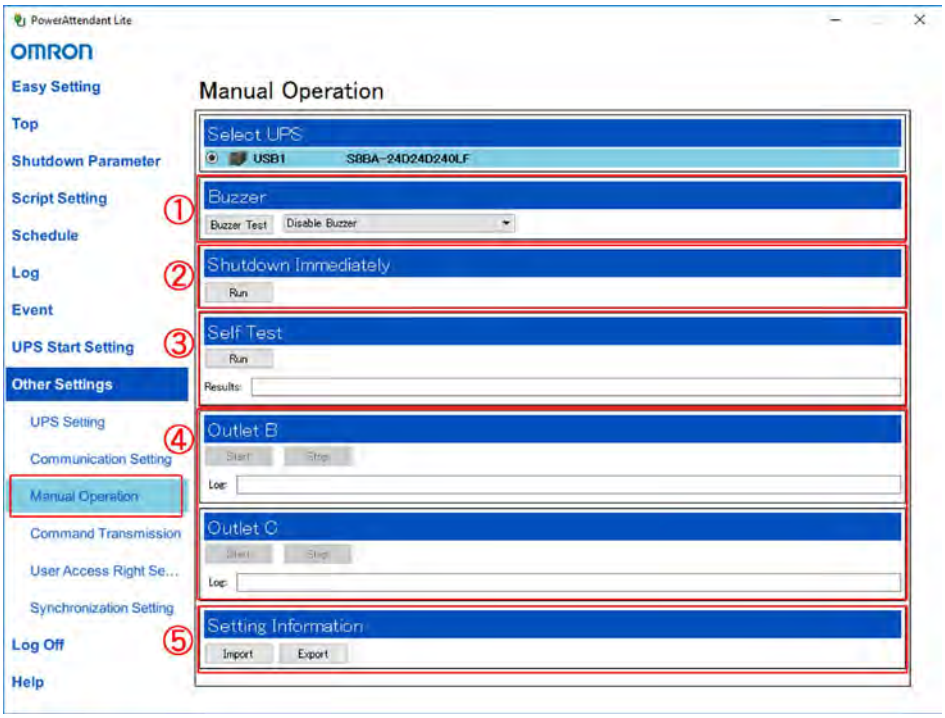
	Item name	Description
		 When the "Communication Port Setting" screen appears at the bottom, select a COM port, and click the [Submit] button. 
	[Auto Search] Button	The UPS is automatically detected based on the operation selected for "COM search at UPS detection".
②	Access Port	Set the access port number for this product. The initial setting is 50001 port. * When "0" is selected, the access port is closed. For use in stand alone mode, set "0".
	Broadcast	Set Broadcast for this product. * If Broadcast is set to be stopped, Agents other than yours are not displayed anymore in the Agent List screen.
	Prohibit connection from outside	Operation from remote computers is prohibited.
③	Data Update Time	Set the interval for updating data in the Monitor screen.
④	Logoff Time	Set the time for logging off from the Agent.

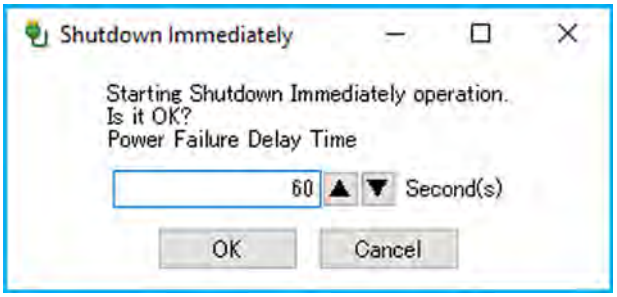
<Hint>

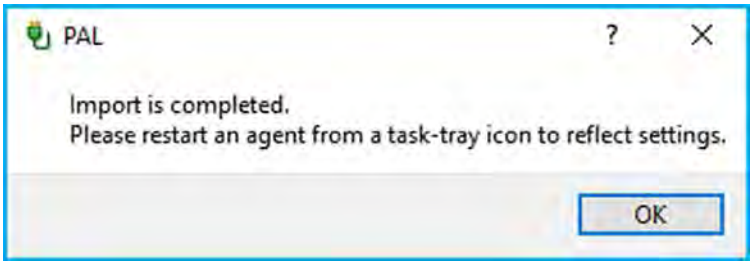
When the network settings are changed, to enable the settings, log off once. Log in again if necessary.

6-3 Manual operation

Describes various manual setting.



	Item name	Description
①	[Buzzer Test] Button	Buzzers of UPS are sounded.
	Setting Buzzers	Set buzzers sounding status. Disable Buzzer: Prevents all the buzzers from sounding. Disable the buzzer (during backup only): Prevents the buzzer from sounding when an AC line failure occurs and when a battery replacement notification is displayed. Causes the buzzer to sound when an error occurs in the UPS. Enable Buzzer: Causes all the buzzers to sound. (UPS factory default)
②	Shutdown Immediately	Executes the shutdown of the OS and the UPS with this product. In the following warning screen, when the [OK] button is clicked, after the set AC Fail Delay time (seconds), shutdown starts.  * When the UPS is stopped with "Shutdown Immediately", to reboot the UPS, turn ON/OFF the power switch of the UPS main unit.

	Item name	Description
③	Self Test	Executes a self test (a 10-second discharge test) for the UPS. The result is displayed as follows. • Success (yyyy/mm/dd hh:mm) • Test result: NG ("Hardware Abnormal") yyyy/mm/dd hh:mm • Test result: NG ("Battery Weak") yyyy/mm/dd hh:mm
④	Outlet	For a model with the outlet control feature, executes the start/stop (ON/OFF) of power output from outlet B/C. * For a model without the outlet control feature, this item is disabled.
⑤	Setting Information	Imports/exports the setting values of this product. Click the [Export] button to export the setting values into the following level. The file name is fixed as "APP_Settings.zip". /var/opt/OMRON/PAL/SHARED Click the [Import] button to import the saved setting information from the following level. /var/opt/OMRON/PAL/SHARED * After the setting values are imported, the Agent must be restarted.  When the warning screen appears, click the [OK] button, and restart according to the following procedure (See "Stopping/starting the Agent" p.24). ① Right-click the task tray icon and select "Agent Stop". ② Check that the red × mark is put onto the icon. ③ Right-click the icon and select "Agent Start". ④ Check that the red x mark on the icon disappears. Then, the restart of the Agent is completed.

<Caution>

Precautions when importing the UPS settings

To import the UPS setting values as a setting file, change the setting for "Synchronization Setting" to "Priority given to the PAL settings." in advance.

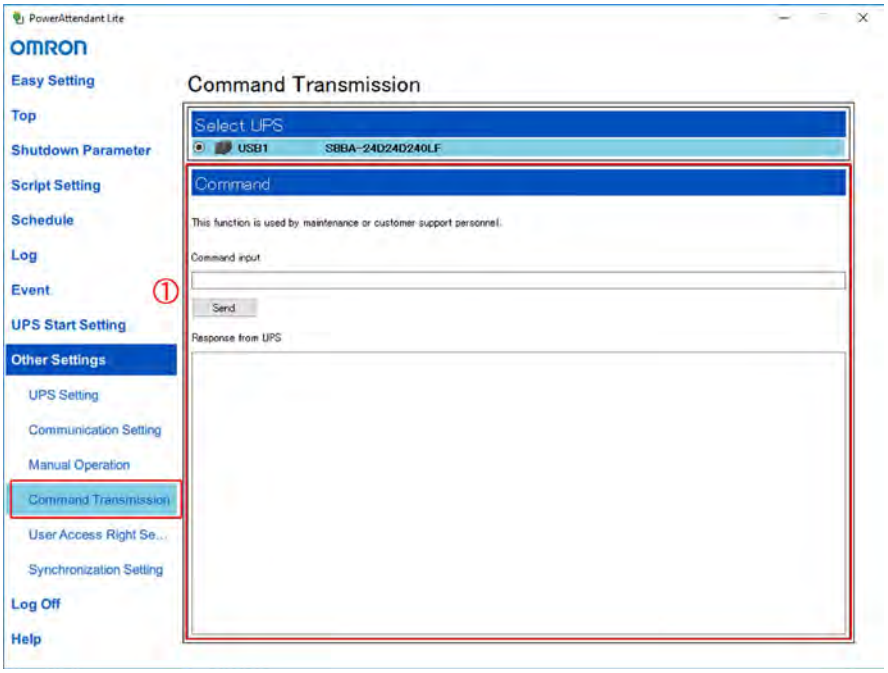
When "Priority given to the UPS internal settings." is set for "Synchronization Setting", the settings inside the UPS become valid. For details on Synchronization Setting, see "6-6 Synchronization Setting" p.56.

6-4 Command Transmission

Sends a command and checks a response from the UPS.

<Hint>

This function is used for maintenance or customer support.



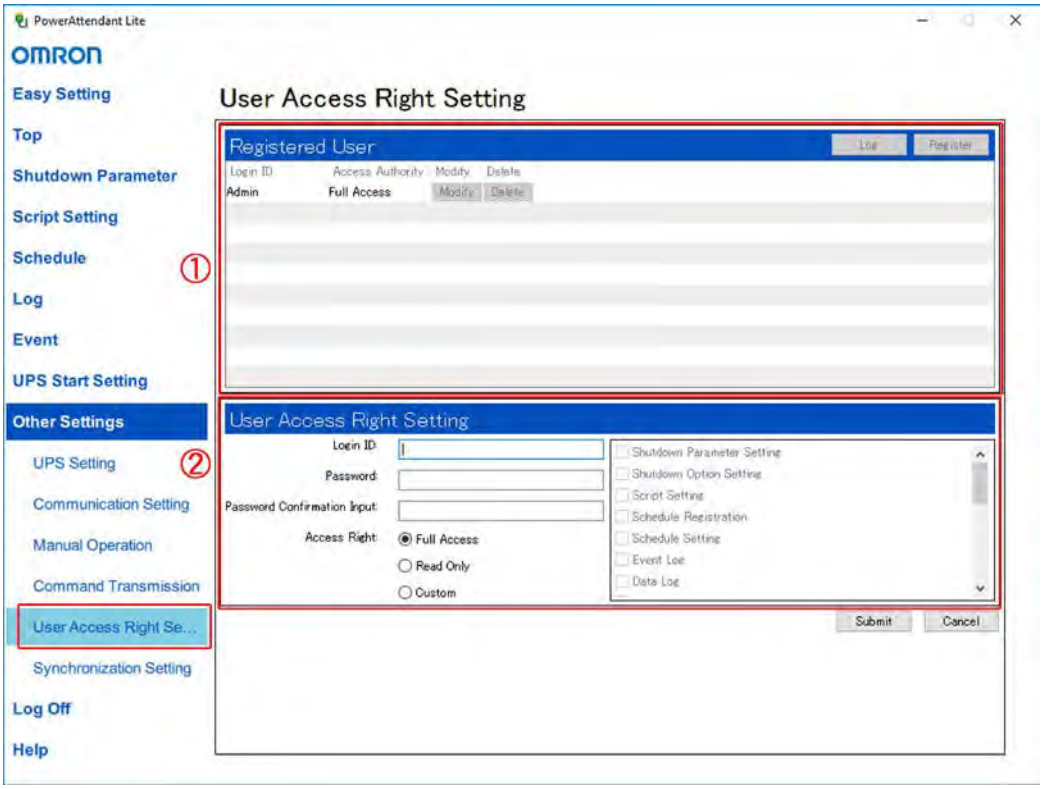
	Item	Description
①	Command Input	Enter the UPS command and click the [Send] button.
	Response from UPS ①	Response from UPS is displayed.

6-5 User Access Right Setting

Additionally registers, modifies, or deletes a user that can log in to the Agent (login ID).

<Hint>

When the settings have been changed, be sure to click the [Submit] button.



	Item	Description
①	Registered User List	Display a list of registered users. *A maximum of 10 users (10 IDs) can be registered.
	[Log] Button	Select the user and click the [Log] button. Display the operation logs ("Add Account", "Modify Account", and "Delete Account") for the selected user.
	[Register] Button	Click the [Register] button. In the "User Access Right Setting" screen (②) at the bottom, register a new account.
②	Login ID /Password	Set a new account.
	Access Right	Select an access right of the user with a radio button.

Full Access	Can set or modify all.
Read Only	Can only view setting content.
Custom	Set the right to be given on an item basis. Select the items that can be set or modified using the check boxes in the right pane.

6-6 Synchronization Setting

This product has a function for changing the settings inside the UPS. This item is used for setting priority between the setting values inside the UPS and the setting values in this product. If both setting values are not the same, those priority is given to (UPS or this product) overwrite the other setting values.

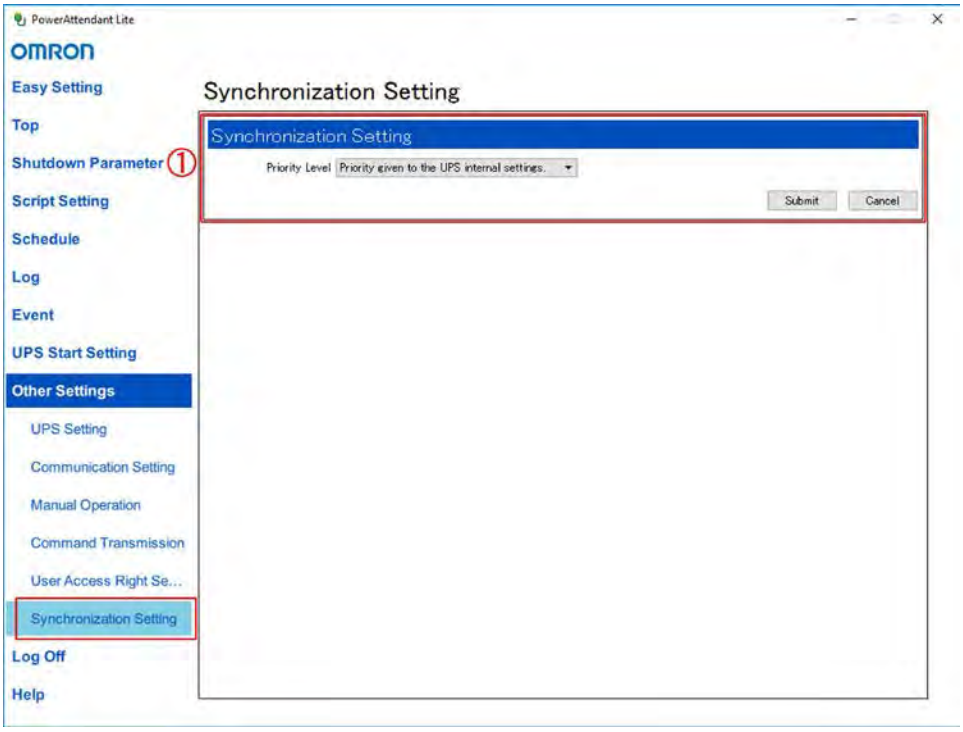
<Hint>

For the related settings inside the UPS, see the following items.

"4-4 Shutdown parameter setting" p.17 → "AC Line Failure Maximum Backup Time"

"5-12 UPS startup settings" p.46 → "UPS Reboot Setting", "UPS Cold Start"

"6-1 UPS setting" p.48 → "Battery Auto Test", "Input/Output Setting", "Battery Replace Date"



	Item	Description
①	Priority Level	Select between "Priority given to the UPS internal settings." and "Priority given to the PAL settings.", and click the [Submit] button. * When "Priority given to the PAL settings." is selected, the values held by this product are written into the UPS.

<Caution>

To change the settings inside UPS by using the setting information in this product, "submit" "Priority given to the PAL settings.", then import the setting information.

7. [Uninstallation procedure]

This chapter describes how to uninstall (delete) this product.

7-1 Before uninstallation

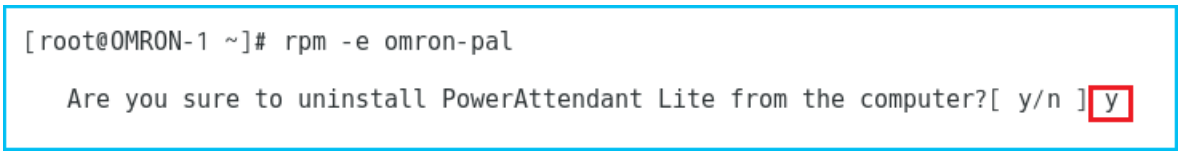
- Log in to the computer with the user name with root authority.
-Terminate other active applications.

7-2 Uninstallation

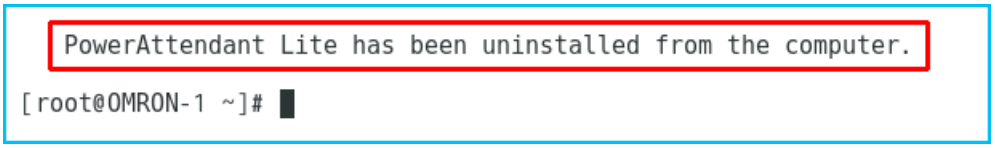
① Open the terminal screen and enter the following command.

rpm –e omron-pal

② Enter "y" and press the enter key.



③ Uninstallation is completed when the following message appears.



Now the deletion of PowerAttendant Lite is completed.

<Hint>

• When uninstalling, there is no specification of hierarchy to open the terminal screen.

• The above procedure completes the deletion of PowerAttendant Lite. However, the folder where such data as event logs, data logs, and script files is stored is left undeleted.

To delete such data completely, delete the "PAL" folder in the following level.

/var/opt/OMRON/PAL

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OMRON Corporation

K1M-D-21048B