

Automatic Shutdown Software for

OMRON Uninterruptible Power Supply (UPS)

PowerAttendant Lite for Windows

**Users Manual** 

### **Precautions for Correct Use**

### Intended uses

The software is designed and manufactured with the purpose of being used on computers in use within the average office or family environment. Never use it in applications where extremely high reliability or safety is required, such as:

- 1. Applications such as medical equipment that are directly related to the safety of human life.
- 2. Use that could cause injuries
  - Example: Use directly related to the service, operation, or control of aircraft, ships, trains, or elevators.
- 3. Use for mission-critical computer systems, trunk line communication systems, or public transportation systems.
- 4. Use for any devices applicable to any of the above.

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Be sure to read the following matters with care before using the software.

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# How to Use this Manual

# What's in this Manual

This manual consists of the followings.

Overviews of the software	"Chapter 1 Overviews"	
	Describes the main function, operation procedures, system	
	configuration example, how to it works and operating environment	
	of the software.	
Connection and installation	"Chapter 2 Connection and installation"	
method of equipment	Describes the connection method of UPS and computer and	
	installation method of the software.	
The usage and setting	In "Chapter 3 The simple usage and operation test", after basic	
procedure of the software	usage and connection, test if the shutting down operation is run	
	normally.	
	In "Chapter 4 Setting procedure of PAL", all settings are explained.	
Various settings examples	"Chapter 5 Setting examples"	
	Practical setting examples are explained.	
Various materials and Q&A	"Chapter 6 Appendix"	
	Technical materials and Q&A for trouble are published.	

## 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	
CAUTION	attention during operation is described. Carefully read the description and be	
	sure to do as instructed.	
Litera	Indicates that useful information or information giving some hint is	
Hint	described. Also indicates that pages where related information is described or	
	other manuals etc are described.	
The software	It means "Power Attendant Lite" (PAL) of OMRON.	
[]	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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# Chapter 1

# Overviews

In this chapter, describes the features, the operation procedures and the system configuration of the software.

-1 Features 1-1-1 Main Functions

# 1-1 Features

Shutdown software Power Attendant Lite for UPS (hereafter called as the software) always monitors the status of an Uninterruptible Power Supply (hereafter called as "UPS") connected to a computer and when an input power supply abnormality (power failure, etc.) occurs, shuts down a computer normally to protect from breakages of OS and hard discs.

The software has following features.

### 1-1-1 Main Functions

### Normal Shutdown of a Computer

When an input power supply abnormality (power failure, etc.) occurs, automatically saves the files currently created and edited, ends the application software or the OS and stop the power supply of UPS. Datas and softwares are protected safely in occurrence of abnormality too.

### Monitoring UPS Status

The status of UPS connected a computer is monitored and various operations are executed according to a state.

In addition, it is possible to record the UPS status to logs.

#### Tests and Schedule Control of UPS

Operation and control functions such as schedule operations and shutdown immediately, and self diagnosis functions are loaded.

### Control of Computers on Network

Using the script command function, it is possible to shut down other computers on network when power supply abnormality occurs.

1-2 Operation 1-2-1 Operation Procedures

# 1-2 Operation

Start the operation of the software using the following procedure. See the corresponding page about operation procedures.

# 1-2-1 Operation Procedures

UPS Setting	Set a UPS correctly by referring a manual of each UPS.
Connection of UPS and a computer	Connect the UPS and a computer with USB or RS-232C.
Install	Install the software in the computer.
Start	Start the software and login the agent.
Setting	Set the software.
Operation Check	Test if the shutdown operation is executed normally.
Start operation	Start normal operation.

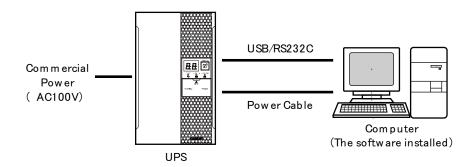
#### 1-3 System Configuration Examples

Describes the system configuration that controls a UPS and computer using the software.

There are configurations by connecting a computer and UPS with one-to-one and a configuration by connecting plural computers through network.

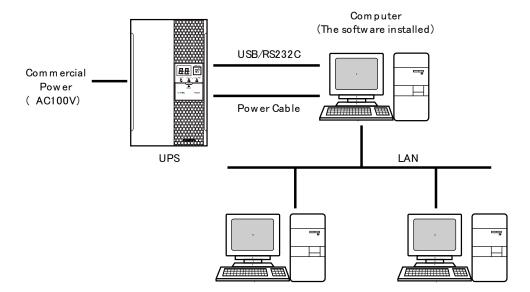
#### 1-3-1 Connecting One Computer to UPS

When power supply abnormality and events such as planned shutdown occur, the computer connected with USB or RS-232C is shut down.



#### 1-3-2 Connecting Plural Computers Through Network

Shutdown is controlled by sending script commands from the computer connected to UPS to computers on network.

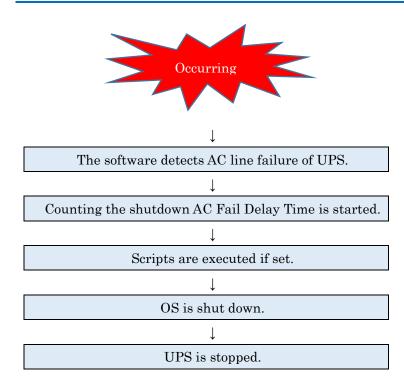


1-4 Operation Flow 1-4-1 Operation Flow

# 1-4 Operation Flow

Describes shutdown operations when power supply abnormality occurs.

### 1-4-1 Operation Flow



# 1-5 Configuration of the Software

The software is configured with an Agent, system tray icon and setting window.

### 1-5-1 Configuration of the Software

· Agent

The status of the UPS is always monitored by residing on the computer.

· System tray icon

The status of the UPS is displayed with icons by residing on a system tray of Windows.

· Setting window

Status check of the UPS and computers and all settings of the software are conducted.

1-6 Shutdown Operations 1-6-1 Types of Shutdown

# 1-6 Shutdown Operations

When abnormality such as AC line failure and communication error of UPS is detected or the time set by schedule is reached, the computer is shut down automatically depending on the setting.

### 1-6-1 Types of Shutdown

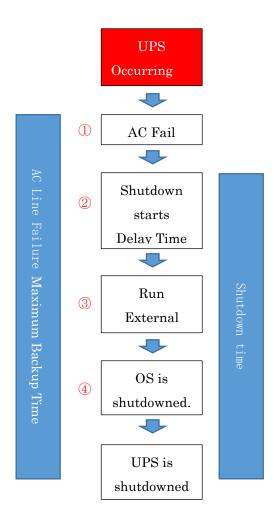
The software has the following shutdown operations. These are applied according to the setting in the setting window.

Types of Shutdown	Description
Emergency Shutdown	If Battery Level of UPS becomes low from when power is not supplied
	to UPS, all other operations are canceled and shutdown is started.
AC Fail Delay Time Cancel	If Battery Level of UPS becomes low during AC Fail Delay Time from
Shutdown	when power is not supplied to UPS, AC Fail Delay Time is canceled
	and shutdown is started.
AC line Failure Shutdown	Shutdown for when power is not supplied to UPS because power
	failure occurs
Schedule Shutdown	Shutdown by preset schedule
Shutdown at the time of	Shutdown for when abnormality occurs.
abnormality occurrence	
Shutdown at the time of warning	Shutdown for when warning occurs.
occurrence	
Shutdown Immediately	Shutdown by user operation
Communication Error Shutdown	Shutdown for when error of communication with UPS occurs.

1-6 Shutdown Operations 1-6-2 Shutdown Flow

### 1-6-2 Shutdown Flow

Shutdown is executed by the following flow.



	Item	Description
1	AC Fail Delay Time	The time until starting to process after detecting AC line failure
		Caution
		If AC Fail Delay Time is set longer, electric power of UPS is
		run out and it stops before OS shuts down.
2	Shutdown Start Delay Time	The time until starting to run External Command after AC Fail
		Delay Time
3	Run External Command	The enough time until completing Run External Command
	Executed Time	Executed
4	OS shutdown	OS shutdown specified by Shutdown Mode is processed.

1-7 Operating Environment 1-7-1 Compatible OS

# 1-7 Operating Environment

The operating environment of the software is the followings.

# 1-7-1 Compatible OS

Compatible OS name			
Windowsl	Windows10		
Windows	3. 1/8		
Windows7	7		
Windows	Server 2016		
Windows	Storage Server	2016	
Windows	Server 2012R2		
Windows	Storage Server	2012R2	
Windows	Server 2012		
Windows	Storage Server	2012	
Windows	Server 2008R2		
Windows	Storage Server	2008R2	
Windows	Server 2008		
Windows	Storage Server	2008	

1-7 Operating Environment 1-7-2 Compatible UPS

# 1-7-2 Compatible UPS

Series name	Туре		
BZ	BZ35LT2, BZ50LT2		
BX	BX35F, BX50F		
BX-W	BX50FW, BX75SW		
BY-S	BY35S, BY50S, BY80S, BY120S		
BY-W	BY50FW, BX75SW		
BN-T	BN50T, BN75T, BN100T, BN150T, BN220T, BN300T		
BN-R	BN75R, BN150R, BN300R		
BN-XR	BN150XR		
BA-T	BA75T, BA100T		
BA-R	BA100R		
BU-RS	BU100RS		
BU-SW	BU50SW, BU75SW, BU100SW, BU150SW		
BU-RW	BU75RW, BU100RW, BU200RW, BU300RW		
BU-RE	BU60RE, BU100RE		
BU-2SW	BU1002SW, BU3002SW		
BU-2SWG	BU1002SWG, BU3002SWG		
BU-2RW	BU1002RW		
BU-2RWL	BU2002RWL, BU3002RWL, BU5002RWL		
BU-2RWLG	BU2002RWLG, BU3002RWLG, BU5002RWLG		
BU-R	BU150R		
S8BA	S8BA-24D24D120LF, S8BA-24D24D240LF		
	S8BA-24D24D360LF, S8BA-24D24D480LF		

# 1-7-3 Communication Interface

Interface
USB
RS-232C

# Chapter 2

# Connection and Installation

This chapter describes the connection of UPS and computer and installation method of the software.

# 2-1 Connecting with UPS

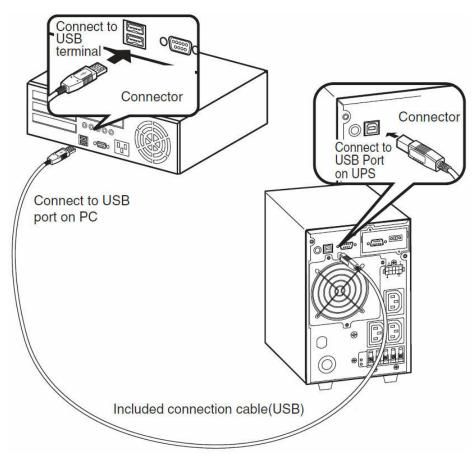
Connect the computer and UPS. Connect by a USB cable or RS-232C cable.

### 2-1-1 Connection via USB

Connect the computer and UPS by a USB cable.

- Turn off the computer and the UPS.
   Turn off the computer and then the UPS.
- ② Connect the computer and UPS by an accessory USB cable.

Connection Diagram (Example: BU1002SW)



3 Turn on the UPS and then the computer.

2-1 Connecting with UPS 2-1-2 Connecting RS-232C

### 2-1-2 Connecting RS-232C

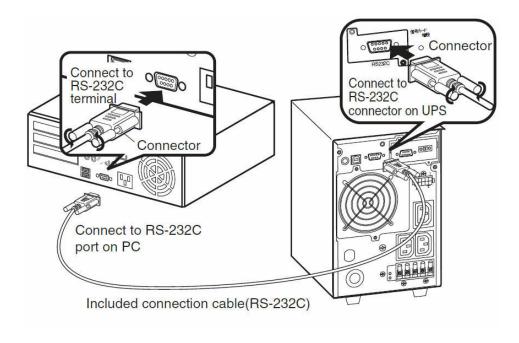
Connect the computer and UPS by a RS-232C cable.



Use a RS-232C cable of UPS accessories. In addition, do NOT connect communication equipment and UPS of other companies with the accessory cable.

- Turn off the computer and UPS.
   Turn off the computer and then the UPS.
- ② Connect the computer and UPS by an accessory RS-232C cable.

Connection Diagram (Example: BU1002SW)



- 3 Tighten fixing screws and fix the connector.
- 4 Turn on the UPS and then the computer.

# Hint

If communication is not available after connecting to a serial port, there is a possibility that the connected port is set to "Disable". Check the BIOS setting of the computer and change the setting to "Enable" and then, check the connection with UPS again. For checking the BIOS setting and changing method of the setting, see the instruction manual for each computer or contact the maker of the computer.

2-2 Installation Procedures 2-2-1 Before Installation

# 2-2 Installation Procedures

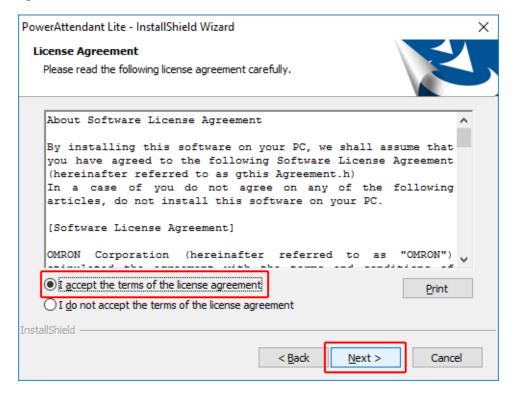
Describes installation procedure of the software.

### 2-2-1 Before Installation

- · The software can be used only on Omron's UPS and OEM-supplied Omron UPS.
- · Check that a username with administrator authority can log in to the computer.
- · Check that the OS can shutdown normally in your usage environment.
- 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.
- · Connect your computer to the UPS before installing the software.

### 2-2-2 Installation

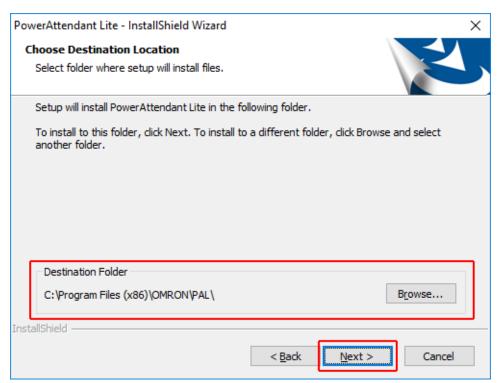
- ① Unzip the software downloaded from our homepage at any folder and double-click "Setup.exe" in the unzipped folder to start installing.
- 2 In License Agreement window, select the radio button for "I accept the terms of the license agreement", and click the [Next >] button.



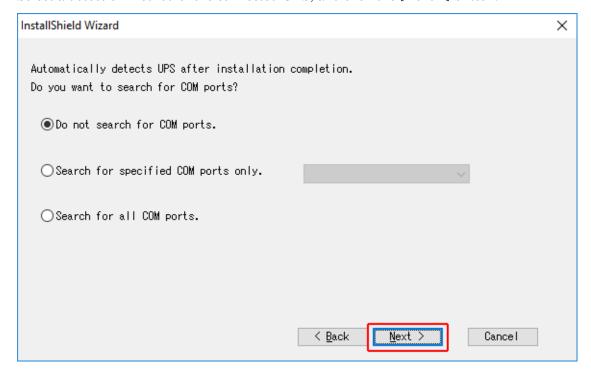
2-2 Installation Procedures 2-2-2 Installation

3 Click the [Next >] button.

To change the installation folder, click the [Browse...] button, specify the folder.



4 Select a detection method of the connected UPS, and click the [Next >] button.

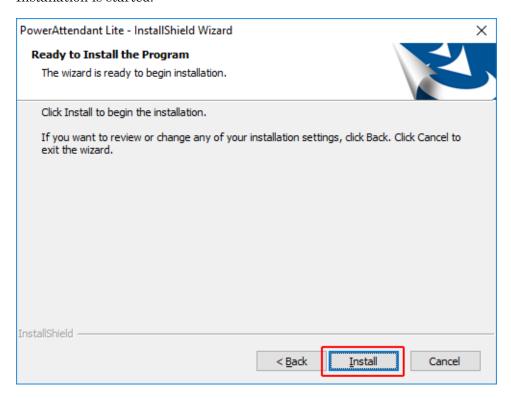


# Hint

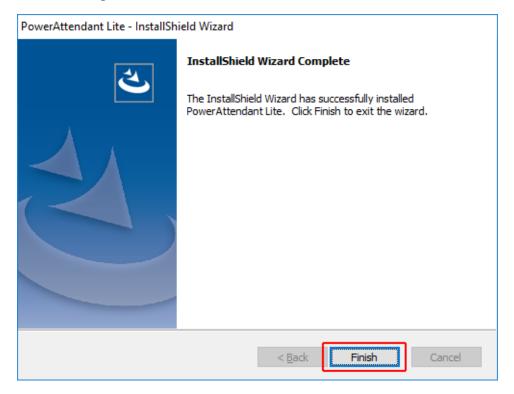
You can change a detection method of the connected UPS in "Communication Setting" of Other Menus".

2-2 Installation Procedures 2-2-2 Installation

Select the [Install] button.Installation is started.



6 After finishing installation, click the [Finish] button.



Installation of the software is finished. And then, test if the shutdown operation is run normally while referring "Chapter 3 The simple usage and operation test".

When you set the detail of the software, see the "Chapter 4 Setting Procedure of PAL".

# Chapter 3

# The Simple Usage and Operation Test

After finishing connecting and installing, start the software and test if the shutdown operation is run normally.

# 3-1 Status Indication of Task Tray Icon

# 3-1-1 Task Tray Icon

By installing the software, an agent resides to the computer and monitors the UPS and power status. You can see the status in the task tray icon of Windows.



# 3-1-2 Display Contents of Task Tray Icon

Icon Display	Display Contents	Description
<b>.</b>	Commercial	The agent is starting and the UPS is operating normally.
<b>4</b> 1	Operation and	
	Normal	
×	Agent Stop	The agent is stopping.
**	Backing Up	The UPS is operating in a backup state.
at N	Communication Error	Communication error is occurring.
8112		Check the following status.
		• The status of the serial port or USB port of the computer
		Connection of the communication cable
		• Do NOT the software and other software use the same
		serial post?

Icon Display	Display Contents	Description
ě۱	Hardware	A hardware abnormality occurred in the UPS.
	Abnormality	There may be the following situations.
		Input Error
		Battery Low
		Bypass Detection
		Battery Weak Detection
		Battery Disconnected
		Overload
		Boosting Operation (Input Voltage Lowering)
		Dropping Operation (Input Voltage Increasing)
		Output Over Voltage
		DC BUS Voltage Abnormal
		Overload Timeout/Output Short
		Battery Over Charge
		Battery Over Discharge
		High Temperature Abnormality
		FAN Fail
		TX Fail
		Output Low Voltage
		Battery Life Detection (Life Counter Over Flow)

# Start Monitor Window and Login to Agent

Setting of the software is conducted on the monitor window. Start the monitor window by the following procedures to login the agent.

#### Procedures to Start and Login 3-2-1

Select the "Start button"  $\rightarrow$  "All Program"  $\rightarrow$  "OMRON"  $\rightarrow$  "Power Attendant Lite"  $\rightarrow$  "Power 1 Attendant Lite".



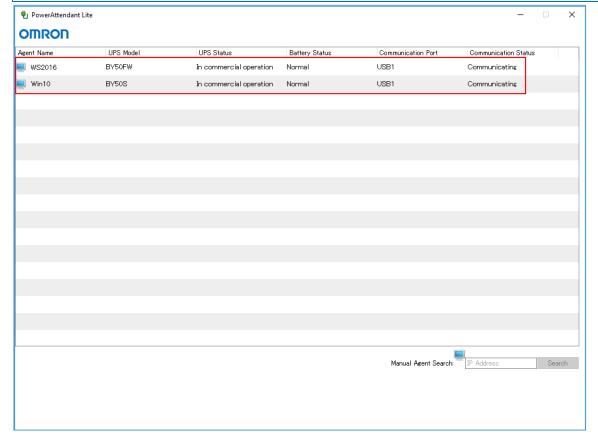
By installing the software, the shortcut of [ Power Attendant Lite ] is created on the desktop. You can start using this icon.



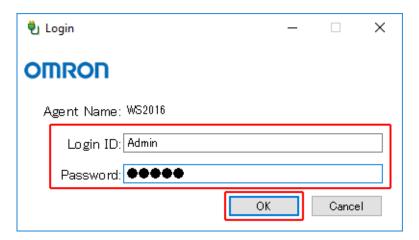
(2) Click the agent name in the agent list window.



Agents detected by the software are displayed in the agent list window. In this version, only agents installed to own computer are displayed.



3 Enter "login ID" and "Password" and click the "OK" button.

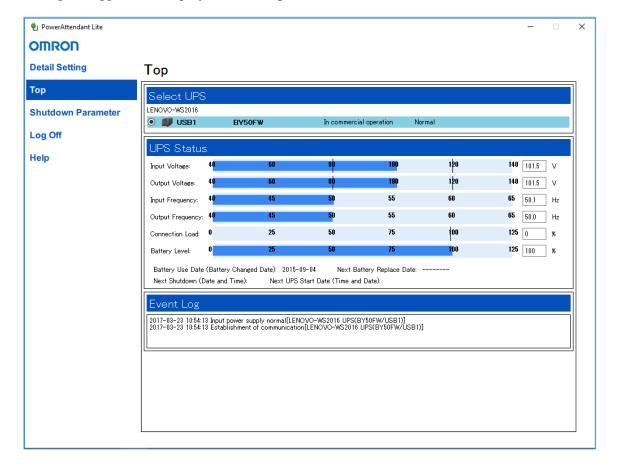


\*\*Factory default settings: Login ID=Admin/Password=omron



A new user can register in the "User Access Right Setting" of the "Other" menu.

4 The agent logged in is displayed on the top window.



# 3-3 Operation Test

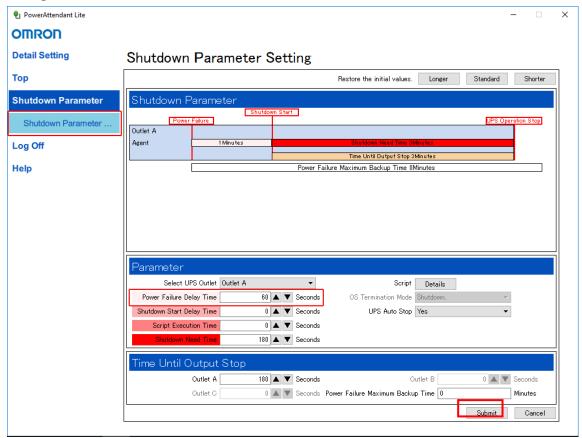
Make a UPS into a power outage state spuriously (stopping the supply from the commercial power) and test if the software shuts down a computer normally.

### 3-3-1 Setting for Operation Test

① Click [Shutdown Parameter] menu.

Check "AC Fail Delay Time" of "Parameter". By default, shutdown is started in "60 seconds" from stopping power supply of the UPS.

Change the time as needed and click the [Submit] button.



### 3-3-2 Conducting Operation Test

Stop the power supply of UPS and test if the software shuts down a computer normally.



As a precaution, save a data being generated.



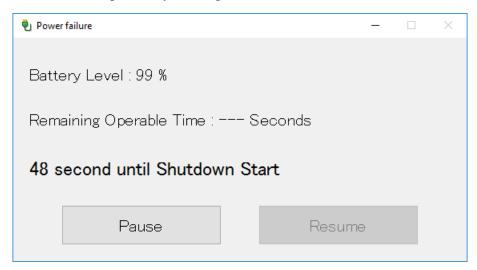
Check that the UPS and the computer are connected by a communication cable and the task tray icon

indicates "In commercial operation".

- ① Pull out the AC input plug of the UPS from an outlet.
- ② The task tray icon changes to the indication for occurring AC line failure.



3 A countdown of the shutdown AC Fail Delay Time is started. The countdown pauses by clicking the [Pause] button.



- After finishing the countdown, the computer is shut down.XIn the initial setting, a UPS stops automatically.
- (5) After checking that the computer is shut down normally, insert the AC input plug of the UPS into an outlet to start the UPS.
- 6 Start the computer.
- 9 In the task tray icon, check that the agent operates normally.



Then, test is completed.

# Chapter 4

# Setting

You can set the all functions of the software in the setting window.

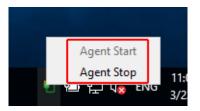
4-1 Agent Operation 4-1-1 Start/Stop of Agent

# 4-1 Agent Operation

# 4-1-1 Start/Stop of Agent

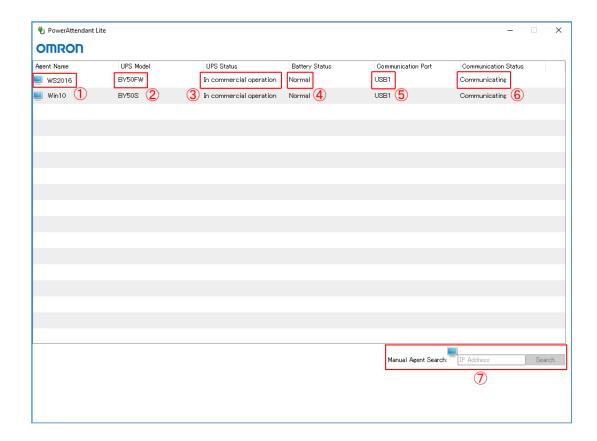
By installing the software, an agent that monitors a UPS status resides.

The agent is stated or stopped by right-clicking the task tray icon.



### 4-1-2 How to See Agent List Window

By starting the setting window, the agent list is displayed.



	Item	Display Contents			
1	Agent Name	Agent names are displayed in the agent list window.			
1)		Double-click the agent name to login the setting window.			
2	UPS Model	Connected UPS Model name			
	UPS Status	S Status The following UPS statuses are displayed.			
3		Communication error/Standby/Awaiting Shutdown/Awaiting			
		Rebooting/Shutdown/Backing up/Testing/In commercial operation			
	Battery Status	Displays the following battery status.			
4		Battery Disconnected/Battery Low/Battery			
		Weak/Testing/Charging/Discharging/Battery Life/Battery Fault/Normal			
(5)	Communication	Connected Communication port names are displayed.			
(5)	Port	USBx or COMx (x=Port number)			
6	Communication	Communication statuses of the UPS and the computer are displayed.			
	Status	Communicating/No display			

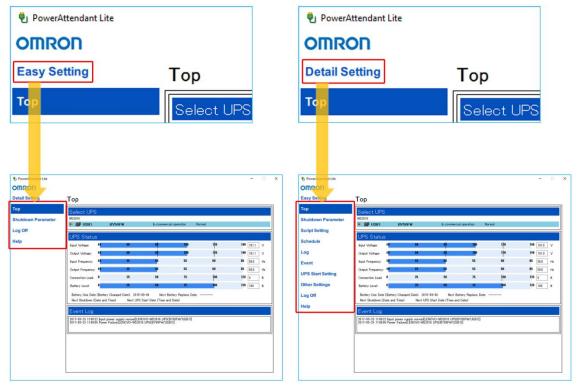
### Manual Agent Search

If the objective agent is NOT displayed, enter the IP address to the "Manual Agent Search" and click the [Search] button.

# 4-2 Usage of Menu

# 4-2-1 Easy Setting Menu and Detail Setting Menu

It is possible to change 2 menu displays in the setting window. There are "Easy Setting" that displays frequently used items and "Detail Setting" that displays all items.



Easy Setting Menu Detail Setting Menu

4-2 Usage of Menu 4-2-2 Setting Menu List

# 4-2-2 Setting Menu List

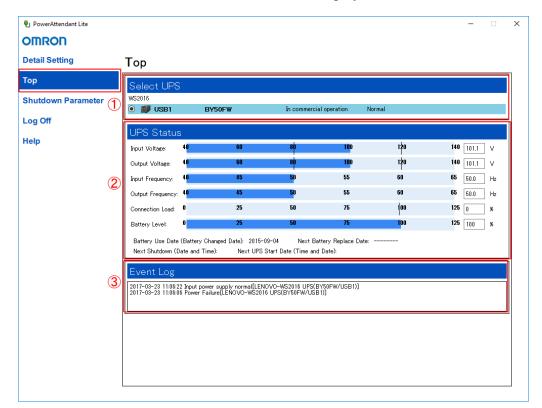
Menu	Setting Option		Menu Display	
Items			Easy	Details
Тор	<ul><li>Selecting UPS</li><li>UPS Status</li><li>Event Log</li></ul>		0	0
Shutdown	Shutdown	· Shutdown Parameter	0	0
Parameter	Parameter	· Parameter		
	Setting	· Time Until Output Stop		
	Shutdown	· Emergency Shutdown		0
	Option Setting	· AC Fail Delay Time Cancel Shutdown		
		· Communication Error Shutdown		
		· Shutdown at the time of abnormality		
		occurrence		
		· Warning Occurrence Shutdown		
Script Setting	· Script Setting			0
Schedule	Schedule	· Registered Schedule		0
	Registration	· Schedule Registration		
	Schedule Setting	· Schedule Shutdown Warning Start Setting		0
Log	Event Log	· Period Setting		0
		· Event Log Option		
		· Event Occurrence Situation		
	Data Log	· Selecting UPS		
		· Period Setting		
		· Data Log Option		
Event	• Action Informa	· Action Information		0
UPS Start	• UPS Reboot Se	· UPS Reboot Setting		0
Setting	• Output Start D	elay Time of UPS Boot Up		
	• UPS Cold Start			
Other	UPS Setting	· Select UPS		0
Settings		· Battery Auto Test		
		· Input/Output Setting		
		· Battery Use Date (Battery Replace Date)		
	Communication	• UPS Communication Port		0
	Setting	· Network Setting		
		· Data Update Time		

4-2 Usage of Menu 4-2-2 Setting Menu List

Menu	Setting Option	Setting Option		Menu Display	
Items				Details	
		· Logoff Time			
	Manual	· Selecting UPS		0	
	Operation	• Buzzer			
		· Shutdown Immediately			
		· Self Test			
		· Outlet B			
		· Outlet C			
		· Setting Information			
	Command	· Selecting UPS		0	
	Transmission	· Command			
	User Access	· Registered User		0	
	Right Setting	· Log			
		· User Access Right Setting			
	Synchronization	· Synchronization Setting		0	
	Setting				

# 4-3 How to See Top Window

By displaying the setting window, the top window is displayed at first. The status of the connected UPS and the information of occurred events are displayed on the window.



	Item	Description
1	Agent Name	Overviews of the UPS status are displayed.
	UPS Status	"Input Voltage", "Output Voltage", "Input Frequency", "Output
	and Schedule	Frequency", "Connection Load" and "Battery Level" of the UPS are
		displayed with charts and numeric values.
2		The time of "Battery Use Date (Battery Changed Date)" and "Next
		Battery Replace Date" are displayed.
		The scheduled dates and times of next shutdown and starting the UPS
		are displayed.
3	Event Log	Occurred events are displayed.

# 4-4 Setting Shutdown Parameters

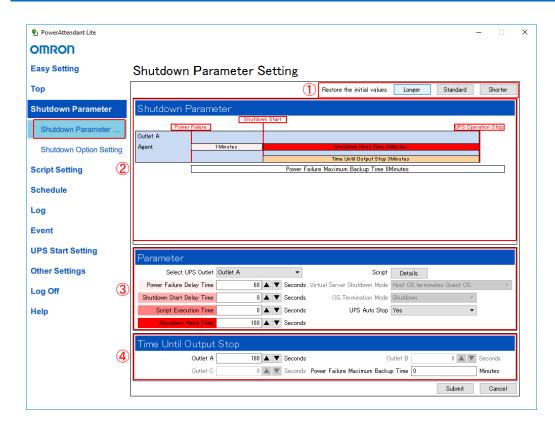
Set the shutdown Operation.

There are 2 setting menus of "Shutdown Parameter Setting" and "Shutdown Option Setting".

# Hint

After changing the setting, click the [Submit] button.

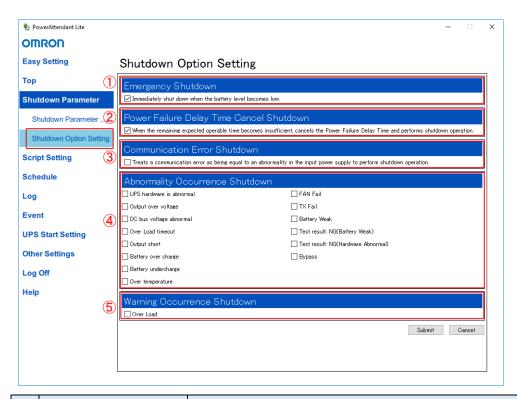
## 4-4-1 Shutdown Parameter Setting



	Item	Description
	Pattern Setting of Parameter	Set the preset parameter patterns of shutdown. 3 patterns
		(Longer/Standard/Shorter) are prepared depending on the
1		length of shutdown operations.
		By select the [Restore the initial values.], set to the default
		parameter (Standard).
2	Shutdown Parameter	The shutdown parameter set in "Parameter", "Time Until
		Output Stop"is displayed with charts.
	Selecting UPS Outlet	Select the outlet of the UPS that the computer is connected.
	AC Fail Delay Time	Set the time until shutdown operation starts after detecting AC
3		line failure of UPS. (0-36,000 seconds)
		※During AC Fail Delay Time, the following "AC line failure"
		window is displayed in the window.

	Item	Description
		Battery Level: 99 % Remaining Operable Time: Seconds  48 second until Shutdown Start  Pause Resume  It is possible to [Pause] [Resume] a countdown.
	Shutdown Start Delay Time	Set the delay time, if you want to further delay the start of shutdown operation after shutdown operation starts.(0-7,200 seconds)  For example, if you want to start shutdown 1 minute after Shutdown Start Time, set to 60 seconds.
	Script Execution Time	Scripts are executed only in set time. (0-14,000 seconds)  The next operation (closing applications or OS shutdown operation) is NOT executed until a set time elapses.
	Shutdown Need Time	Set the time necessary for shutting down the computer.(0-1,800 seconds)  *If the time is short, power supply is cut from the UPS before normal shutdown is executed.
	Using Script	When scripts are executed, select the execution script.  Click the [Details] button and select in the [Script Execution List] window.
	OS Shutdown Mode	Select a shutdown status of OS.  For the OS, select between Terminates by Shutdown. and Terminates by Hibernate.
	UPS Auto Stop	Set whether to automatically stop the UPS after the computer shuts down.
4	Time Until Output Stop	Set the time until power supply is stopped to the computer.  (0-153,000 seconds)  ** The minimum time changes by setting in "Parameter". The sum of "Shutdown Start Delay Time", "Script Execution Time" and "Shutdown Need Time" is the minimum times.
	When input power supply abnormality,  Maximum Backup Time	The explanation of Maximum Backup Time when input error Set the time when the UPS supplies power. (0-9,999 seconds) In case of shorter than the shutdown time, it is an error.

# 4-4-2 Shutdown Option Setting



	Item	Description
1	Emergency	Shut down the computer and stop the UPS when the battery level
	Shutdown	becomes low.
2	AC Fail Delay Time	If the expected time from when a power supply abnormality occurs in the
	Cancel	UPS until the battery level become zero is shorter than AC Fail Delay
	Shutdown	Time + Shutdown Time, shutdown operation is started without
		countdown of AC Fail Delay Time.
3	At the time of	If a communication error occurs, shutdown operation is started same as
	Communication	a power supply abnormality.
	Error Shutdown	However, an error recovery detection term of 10 seconds is set, so when
		recovering from the error during the time, shutdown is NOT executed.
4	At the time of	Shutdown operation is started when a failure has occurred.
	Abnormality	Select a failure from the followings.
	Occurrence	UPS hardware is abnormal/Output over voltage/DC bus voltage
	Shutdown	abnormal/Over Load timeout/Output short/Battery over charge/Battery
		short charge/Over temperature/FAN Fail/TX Fail/Battery Weak/Test
		Results · Abnormal (Battery Weak)/Test Results · Abnormal (Hardware
		abnormality)/Bypass
5	At the time of	Shutdown operation is started at the time of over load of the UPS.
	Warning Occurrence	
	Shutdown	

4-5 Setting Scripts 4-5-1 Setting Scripts

# 4-5 Setting Scripts

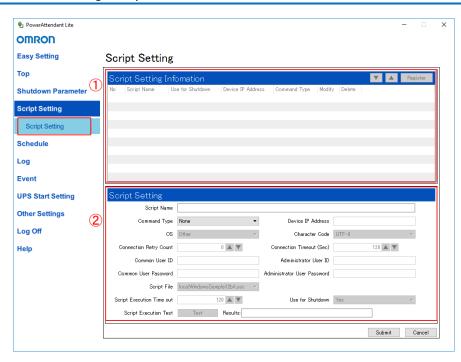
You can execute by sending scripts to other computers.

Scripts are command sets for executing tasks of OS. The software can be used for executing shutdown operation by sending scripts to computers (not connected to the UPS) on network at the time of abnormality occurrence



After changing the setting, click the [Submit] button.

## 4-5-1 Setting Scripts



	Item	Description
	Information of	The saved scripts information is displayed.
	Script Setting	• By clicking the [Register] button, the "Script Setting" field is displayed,
1		and you can create the new scripts.
		• If there are registered scripts, [Modify] [Delete] buttons are displayed
		and you can modify and delete them.
	Script Name	Enter a script name
2	Command Type	Set the communication method for sending scripts.
		None/Command Line/Telnet/SSH V1/SSH V2
		※ In case of "None", scripts are invalided temporally.
	OS	Set OS of a computer that executes scripts.
		Other/Windows/Linux/Mac
	Connection Retry	Select the number (0-9) of retries when you fail to log in.
	Count	

4-5 Setting Scripts 4-5-1 Setting Scripts

Item	Description
Login Common	Specify login user ID (common) of the computer that executes scripts.
User ID	
Login Common	Specify login password (common) of the computer that executes scripts.
User Password	
Login Administrator	Specify login user ID (administrator) of the computer that executes
User ID	scripts.
	For Linux/Mac/Unix, enter data if necessary. For Windows, entry is no
	necessary.
Login Administrator	Specify login password (administrator) of the computer that executes
User Password	scripts.
	For Linux/Mac/Unix, enter data if necessary. For Windows, entry is no
	necessary.
Script File	Select an execution script from a script files list.
	Script files are saved at
	$C:\ \ \ \ C:\ \ \ \ \ \ \ \ \ \ \ \ \ \ $
Script	Set the timeout time of script execution. (0-7,200 seconds)
Execution Timeout	If you set "0", it does NOT time out.
(Sec)	
Script	By click the [Test] button, the script execution is simulated based on the
Execution Test	set contents.
	Executing results are displayed in the "Results" field.
	*If the "Script Setting" window is closed during execution of the scrip
	test, the active script test is suspended.
Device IP Address	Enter an IP address of a computer that executes scripts.
Character Code	Set character codes of scripts.
Connection Timeout	Set the timeout time for login. (0-120 seconds)
(Sec)	If you set "0", it does NOT time out.
At the time of	Scripts are executed when the computer is shut down.
Shutdown,	
Use	

4-5 Setting Scripts 4-5-2 Creating of Scripts

### 4-5-2 Creating of Scripts

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, when receiving the character strings including "\$" from the connection destination, if command su is sent, describe like the followings.

```
rcv=$
snd=su -
```

Save the created scripts at the following folder with the extension "usc".

C:\Users\Public\Documents\OMRON\PAL\

The script files saved at this folder are displayed at the "Script File" of the "Script Setting" field (1).

#### Script Examples

The following examples are scripts for executing shutdown.

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

#### 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	It is replaced to a common user ID of "Script
		Setting".
\$p1	Login Common User Password	It is replaced to a common user password of "Script
		Setting",
\$u2	Login Administrator User ID	It is replaced to an administrator user ID of "Script
		Setting".
\$p2	Login Administrator User	It is replaced to an administrator password of
	Password	"Script Setting".

#### Precautions for Creating Scripts

4-5 Setting Scripts 4-5-2 Creating of 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. Only ASCII code characters are available.
- 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.
- · You can NOT send character strings including "\$u1", "\$u2", "\$p1", "\$p2" and "<CR>".
- · 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.



Prohibition of double execution of scripts

While a script is executed, it is impossible to execute other scripts.

If plural executed scripts when shutting down are registered, they are executed one by one in the order of registration.

Even if scripts are invoked during executing scripts because events occur, it is ignored.

4-6 Setting Schedule 4-6-1 Schedule Registration

# 4-6 Setting Schedule

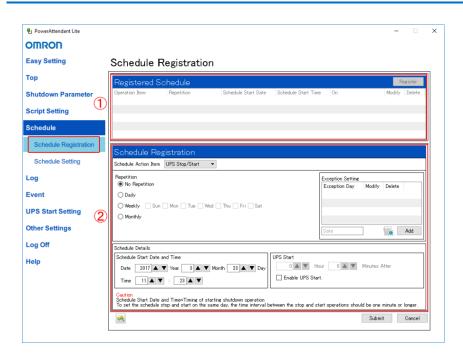
Create a schedule and register it. It is possible to execute schedule executions of "UPS Stop/Start" and "Self Test".

There are 2 menus of "Schedule Registration" and "Schedule Setting".



After changing the setting, click the [Submit] button.

## 4-6-1 Schedule Registration



	Item	Description
	Registered Schedule	The registered schedule information is displayed.
		• By clicking the [Register] button, the "Schedule Registration" field
		(2) is displayed, and you can create the new schedule.
1		• If there are registered schedules, [Modify] [Delete] buttons are
		displayed and you can modify and delete them.
		XYou can register 50 schedules at most.
	Schedule Action Item	Select the object of schedule execution from "UPS Stop/Start" or "Self
		Test".
	Repetition	In case of executing schedules repeatedly, specify it.
2		No Repetition/Daily/Weekly(specify the day)/Monthly
	Exception Setting	Specify the date on which schedules are NOT executed from the date
		on which repetition is specified.
		Enter the date of exceptions and click the [Submit] button to register.
		You can edit registered exception days with the [Modify] [Delete]

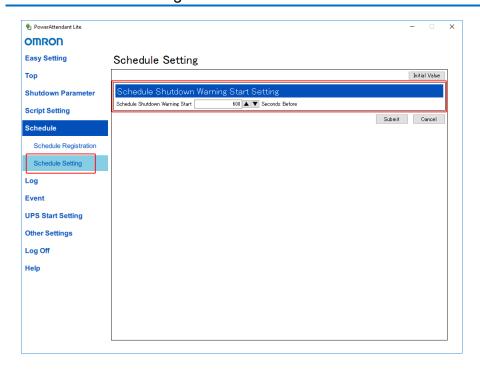
4-6 Setting Schedule 4-6-2 Schedule Setting

Item	Description
	buttons.
	Exception Days are available to the schedule start day (the day of
	stopping the UPS). Exception Days are NOT available to the start
	day.
Schedule Start Date	Set the date and time of starting to stop the UPS.
and Time	
UPS Start	Set the time until rebooting after the UPS stops.
	In case of rebooting automatically, check off "Enable UPS Start.".
	leph Space out the time intervals (1 minute or more) from the stop time
	of Schedule Start Date and Time".

#### Schedule Operation

- Even during operating the setting window, schedules are executed.
- Executed schedules also remain undeleted unless Delete is executed.
- Schedules are executed to the all UPS connected to an agent.
- If schedules that start at the same time is set, they are executed in the oder of priorities at "Exception Setting"→"Stop/Start (including only Stop)"→"Self Diagnosis".
- If schedules that are same priority are registered at the same time, the schedule registered after overrides.

### 4-6-2 Schedule Setting



Item		Description
Schedule	Shutdown	Before schedules start, the following warning window is displayed.

4-6 Setting Schedule 4-6-2 Schedule Setting

Warning Start

Specify to display on what seconds before schedule starting time. (0-600 seconds)

Seconds

Seconds

Specify to display on what seconds before schedule starting time. (0-600 seconds)

Seconds

By clicking the [Initial Value] button, it is set to the default setting (600 seconds).



- If the start time of the next schedule reach in Schedule Start Warning Time, the schedule that reaches after are NOT executed.
- If the value of Schedule Start Warning Time is changed while Schedule Start Warning is displayed, the schedule under executing is NOT affected.

# 4-7 Setting and Operating Log

The UPS status and occurring events are recorded, and it is possible to display and output them.

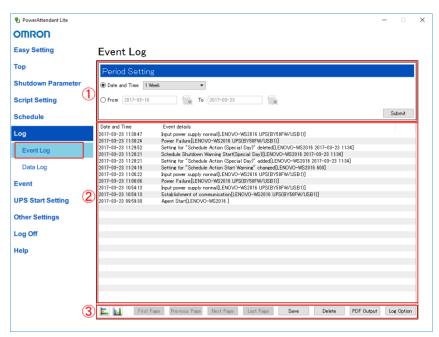
There are 2 menus of "Event Log" and "Data Log".



After changing the setting, click the [Submit] button.

## 4-7-1 Event Log

Events occurred in the software and the UPS is displayed and output.



	Item	Description
	Period Setting	Set the time period to display event log.
		Set the period by selecting the following specifying methods with a
		radio button.
		· Date and Time: Select by a drop-down list on a weekly basis.
1		· Period: Enter start day (From) and finish day (To) in the
		"YYYY-MM-DD" format or click 🌘 icon and enter it by selecting
		from a calendar.
		By clicking the [Submit] button, the log is displayed in the event log
		list at the bottom.
2	Event Log List	Event logs in specified period are displayed.
	Chart 1(#Icon)	The number of occurrence is displayed by events (Communication
		error, Over Load, AC line failure, Battery Weak, Over temperature,
3		Battery Low) by a horizontal bar chart.
		For operating charts, see the next page "Chart Display".
	Chart 2(#Icon)	The number of occurrence of events (Communication error, Over

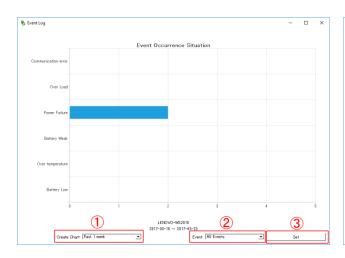
Item	Description
	Load, AC line failure, Battery Weak, Over temperature, Battery
	Low) occurred is displayed by periods by a column chart.
Navigation Button	If the displays extend over a plurality of pages, you can change the
	pages by the [First Page], [Previous Page], [Next Page] and [Last
	Page] buttons.
[Save] Button	Logs are saved at CSV files. It is saved with the following file name.
	$C: \label{local-csv_YYY} C: \label{local-csv_YYYY} C: \label{local-csv_YYYYY} C: \label{local-csv_YYYY} C: \label{local-csv_YYYY} C: \label{local-csv_YYYY} C: \label{local-csv_YYYYY} C: \label{local-csv_YYYY} C: \label{local-csv_YYYYY} C: local-csv_YYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY$
	YMMDD.zip
	*Files are zipcompressed and saved with file names of YYMMDDD
	on a daily basis. If the same name file exists, it will be
	overwritten.
[Delete] Button	All saved event logs are deleted.
[PDF Output] Button	Logs are output to PDF files.
	$C:\label{localize} C:\label{localize} C:\label{localize} OMRON\PAL\EventLog\_pdf\_YYY$
	YMMDD.zip
	*Files are zipcompressed and saved with file names of YYMMDDD
	on a daily basis. If the same name file exists, it will be
	overwritten.
[Log Option] Button	Set Maximum Event Log Record Time. Select whether logs are
	recorded for how many weeks by a drop-down list.

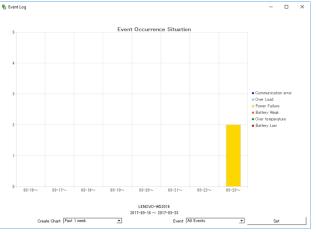
# ■ Chart Display

By clicking the [Chart] button, the following chart is displayed.

Chart for the total every event

Weekly total



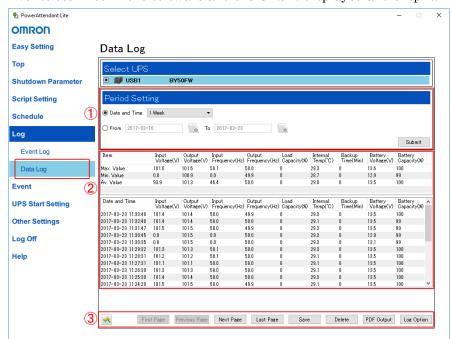


	Item	Description	
	Create Chart	Select whether logs are charted for how many past weeks by	
1)		drop-down list.	
2	Event	Select logs charted by drop-down list.	
3	[Setting] Button	After selecting the period and event, charts are displayed.	

## 4-7-2 Data Log

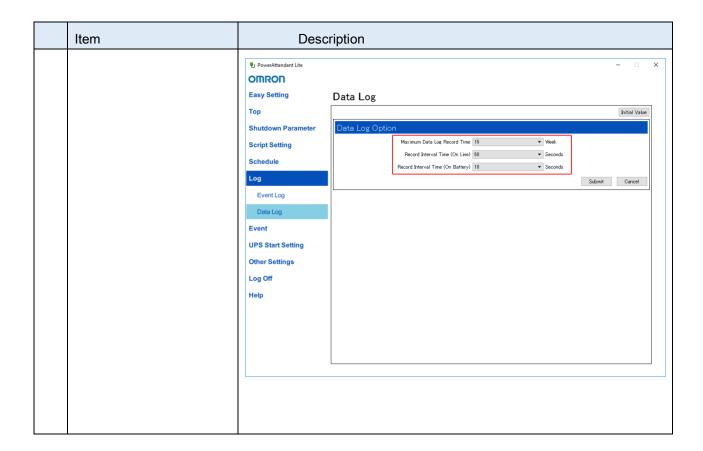
The UPS statuses are displayed and output.

Events occurred in the software and the UPS is displayed and output.



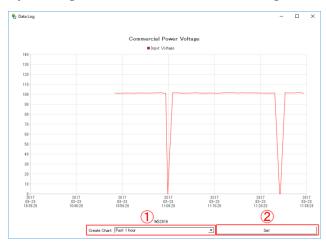
		Item	Description
(ī	Period Setting Set the period for displaying data logs.		Set the period for displaying data logs.
	<u>(I)</u>		Set the period by selecting the following specifying methods with a

	Item	Description	
		radio button.	
		• Date and Time: Select by drop-down list on a weekly basis.	
		· Period: Enter start day (From) and finish day (To) in the	
		"YYYY-MM-DD" format or click icon and enter it by selecting	
		from a calendar.	
		By clicking the [Submit] button, the log is displayed in the event log	
		list at the bottom.	
	Data Log List	Data logs in specified period are displayed.	
2		Max. Value/Min. Value/Av. Value of each data and lists for each date	
		are displayed.	
	Chart Button(#Icon)	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, it is possible to	
		change the pages by the [First Page], [Previous Page], [Next Page]	
		and [Last Page] buttons.	
	[Save] Button	Logs are saved at CSV files. It is saved with the following file name.	
		C:\Users\Public\Documents\OMRON\PAL\DataLog_csv_YYY	
		YMMDD.zip	
		*Files are zipcompressed and saved with file names of YYMMDDD	
		on a daily basis. If the same name file exists, it will be	
		overwritten.	
3	[Delete] Button	All saved logs are deleted.	
	[PDF Output] Button	Logs are output to PDF files.	
		C:\Users\Public\Documents\OMRON\PAL\DataLog_pdf_YYY	
		YMMDD.zip	
		*Files are zipcompressed and saved with file names of YYMMDDD	
		on a daily basis. If the same name file exists, it will be	
		overwritten.	
	[Log Option] Button	Set the followings and click the [Submit] button.	
		• The maximum time for recording logs: The period for recording	
		logs	
		• Record Interval Time (On Line): Interval time for receiving data	
		on commercial operation	
		• Record Interval Time (On Backing up): Interval time for receiving	
		data on backing up operation	



#### ■ Chart Display

By clicking the [Chart] button, the following chart is displayed.



	Item	Description	
	Create Chart	Select whether logs are charted for how many past hours by	
I)		drop-down list.	
2	[Setting] Button	After selecting the period and event, charts are displayed.	

4-8 Setting Event Action 4-7-2 Data Log

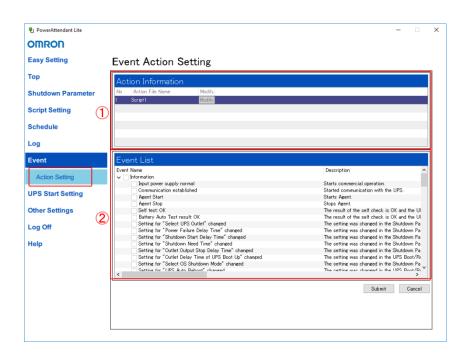
# 4-8 Setting Event Action

When events have occurred in the software and the UPS, the specified action is executed .

Describe executing actions to script files and save them in advance.



After changing the setting, click the [Submit] button.



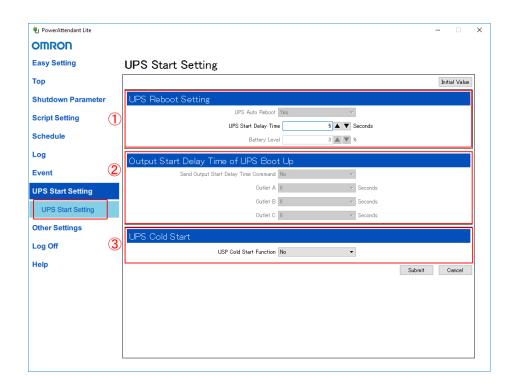
	Item	Description	
	Action File Name	Script files name (the extension "usc") saved at specifie	
		folder (C:\Users\Public\Documents\OMRON\PAL\) are	
1		displayed.	
	[Modify] Button	By clicking it, the following events list is displayed.	
	Events List	Specify events that become an action execution trigger in the	
		check box.	
2		Events are categorized to 3 of "Information", "Warning" and	
4		"Error". You can select all categories or individual events in	
		each category.	
		You can select several events to one action.	

# 4-9 Setting UPS Reboot Method

It is possible to automatically reboot the UPS that power supply is shutdown. You can set the condition and operation when rebooting.

## Hint

- After changing the setting, click the [Submit] button.
- By clicking the [Initial Value] button, it is set to the factory default settings.



	Item	Description	
	UPS Auto Reboot	When a power supply abnormality of UPS is recovered, a	
		UPS is rebooted automatically.	
(I)	UPS Start Delay Time	Set the delay time until the UPS is rebooted after recovering	
1		from a power supply failure.	
	Battery Level	If a battery becomes more than specified level, it is possible	
		to start the UPS.	
	Output Start Delay Time of	When the UPS starts, it is possible to set the output delay	
	UPS Boot Up	time each outlet.	
2		Select "Yes" in "Output Delay Command Transmission" and	
		select the delay time each outlet.	
		If you want to set a time difference for supplying power to	
		connection equipment.	
3	USP Cold Start Function	Set whether to enable the UPS cold start function.	
<b>(3)</b>		##Please add some more explanation.	

4-10 Setting Others 4-10-1 UPS Setting

# 4-10 Setting Others

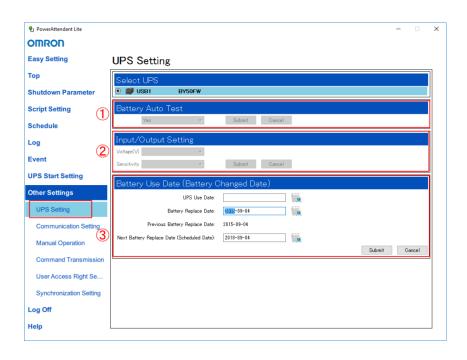
Describes setting for other menus.



After changing the setting, click the [Submit] button.

## 4-10-1 UPS Setting

You can set whether to automatically diagnose the battery deterioration state, output voltage/ input sensitivity of the UPS, and set and input the replace date of the UPS.

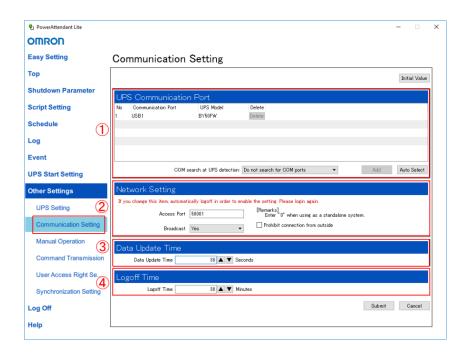


	Item	Description	
(1)	Battery Auto Test	The test for checking a battery weakness is executed automatically.	
(1)		By selecting Auto Test, the test is executed every 4 weeks.	
	Voltage (V)	Set output voltage of the UPS. (24-240V)	
2	Sensitivity	Select the UPS input sensitivity.	
		High Sensitivity/Standard Sensitivity/Low Sensitivity	
	UPS Use Date	Period: Enter the UPS use date in the "YYYY-MM-DD" format of	
		click 🌘 icon and enter it by selecting from a calendar.	
	Battery Replace	Period: Enter the date of the battery replace in the "YYYY-MM-DD"	
3		format or click 🤵 icon and enter it by selecting from a calendar.	
	Next Battery Replace	Period: Enter the scheduled date of the next battery replace in the	
	Date	"YYYY-MM-DD" format or click 🤵 icon and enter it by selecting	
	(Scheduled dates)	from a calendar.	

4-10 Setting Others 4-10-2 Communication Setting

# 4-10-2 Communication Setting

Settings about communication of UPS and the software are conducted.



# Hint

By clicking the [Initial Value] button, it is set to the factory default settings.

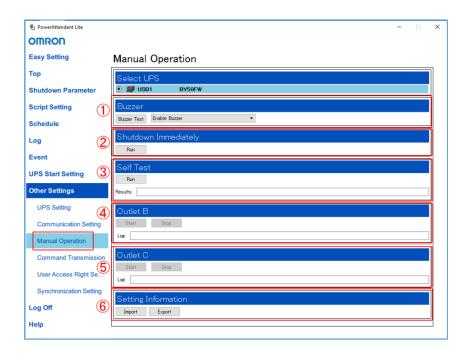
	Item	Description			
	UPS Communication	Communication port that a UPS	is connected and UPS model are		
	Port	displayed.			
	[Delete] Button	Communication port that a UPS is connected is deleted.			
		※If you delete it, communication v			
		You can NOT delete a UPS port.			
	COM search at UPS	Set COM ports searching method	at UPS detection. Search in the		
	Detection	following ports and in order.			
(1)					
		Do not search for COM ports	Only USB ports		
		Search for specified COM ports	Registered ports→USB ports		
		only			
		Search for all COM ports	USB ports→COM ports		
	[Add] Button	Add COM ports in the following "Communication Port Setting".			
		Select a communication port and click the [Submit] button.			

4-10 Setting Others 4-10-3 Manual Operation

	Item	Description	
	[Auto Search] Button	All communication ports are searched and the detected UPS are	
		listed.	
	Access Port	Enter the access port number set to the UPS.	
		The initial setting is 50001 port.	
2		※Set "0" when using as a standalone system.	
4	Broadcast	Set whether a UPS broadcasts.	
	Prohibit connection from	Operation from remote computers is prohibited.	
	outside		
3	Data Update Time	Set the interval that the software updates data to a UPS.	
4	Logoff Time	Set the time for log off from a UPS.	

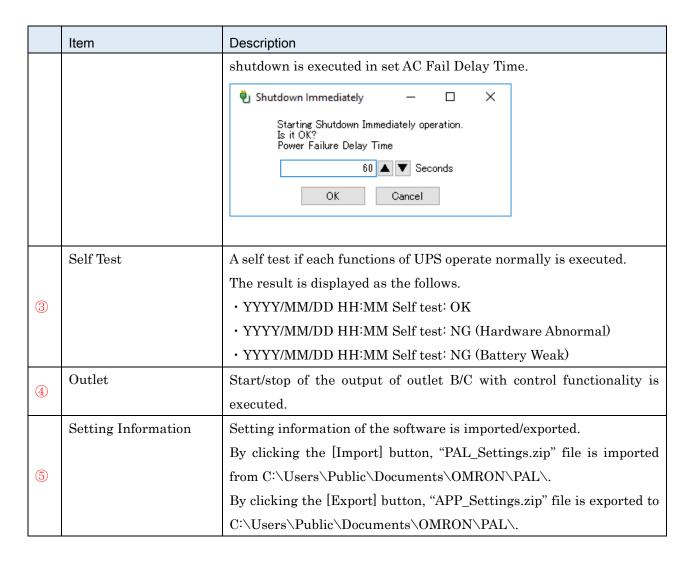
# 4-10-3 Manual Operation

Describes various manual setting.



		Item	Description	
		[Buzzer Test] Button	Buzzers of UPS are sounded.	
1	)	Setting Buzzers	Set buzzers sounding status.	
			Disable Buzzer/Disable Buzzer(only in backing up)/Enable Buzzer	
2		Shutdown Immediately	UPS shutdown is started.	
4	,		The following window is displayed and by clicking the [OK] button,	

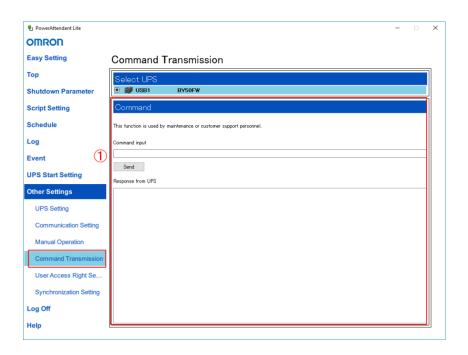
4-10 Setting Others 4-10-4 Command Transmission



#### 4-10-4 Command Transmission

This function is used by maintenance or customer service.

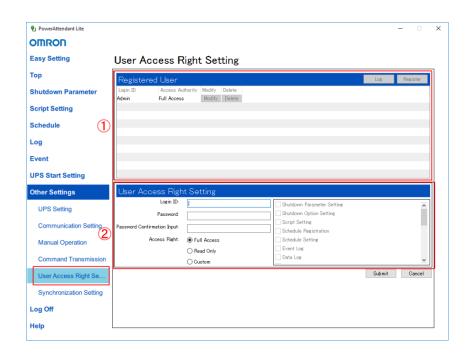
By transmitting commands, response from UPS is displayed.



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

## 4-10-5 User Access Right Setting

You can register and delete users and set password and access right.

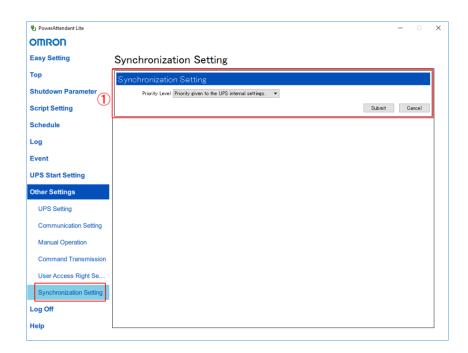


	Item	Description				
	Registered User List	The list of the software users registered is displayed. You can r				
		10 IDs at most.				
	[Log] Button	d click the button. Log informatio	n of the user is			
1		displayed.				
	[Register] Button	"User Access Right Setting" window (②) is displayed and register a new				
		user.				
ID/Password Set the login ID/pa			assword of the new user.			
	Access Right	Select an access rig	ght of the user with a radio button.			
2		Full Access	It is possible to set • register all.			
		Read Only	It is possible to only display.			
		Custom				

	Item	Description		
			Check rights that you permit in	
			the right list of right.	

## 4-10-6 Synchronization Setting

Set whether the setting values in UPS or the software are prioritized. If there is a difference between each setting values, overwrite with a priority setting. (In case of overwriting, it is recorded to the log.)



	Item	Description
	Priority Level	Select whether the setting values in the UPS or the software are
1)		prioritized.

-10	Setting Others	4-10-6	Synchronization Setting
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