OMRON	**UPS Setting Utility Instruction Manual**	
	For S8BA/BU-2RWL	Rev 1.02

Contents

RevisiON History:

Rev.	Date	Description	Author
1.00	Mar.9, 2016	1st Release	Y.O
1.01	Jul.29.2016	Add the information of BU-2RWL	K.T
1.02	Aug.24.2016	Updated for Ver4.0.1	K.T

1. What is UPS Setting Utility?

UPS Setting Utility is software for configuring the settings of UPS. By using this software, you can change the settings of your UPS easily.

    Example: To stop the UPS when a power outage occurs without using shutdown software
             → Configure the "Max backup Time".

You can also back up the settings of your UPS into a file or transfer them to another UPS device.

[Settable items]
1. [Basic] group
   Audible Alarm; AC Input Sensitivity; Cold start; and Max backup Time
2. [Boot] group
   Start up Self Test; Every 4 Week Self Test; Reboot Delay Time;
   Reboot Battery Level; D.C. Start; Auto Reboot; and Auto Reboot Mode (BS signal)
3. [UPS Dry Contact] group
   BS Signal Delay Time; BU Signal Delay Time; BS Signal Valid Range; Remote ON/OFF Logic; and Dry Contact Logic
4. [Load Segments] group
   ON Delay Outlet A/B/C; and OFF Delay Outlet A/B/C
5. [In/Out] group
   Output Voltage; Frequency Range; ECO Mode; Input Plug; Transfer Sensitivity; Max Momentary Loss Time, and Power SW OFF Mode
6. [Battery] group
   Battery Life Counter; UPS Life Counter; Low Battery Warning; UPS Installation; and Battery Installation
7. [LCD, Other] group
   LCD Language; LCD Auto OFF; Memorandum; Calendar; and Log

[Utility functions]
1. Function to send and receive commands
2. Function to save settings into a backup file
3. Function to restore settings from a backup file
4. Function to load UPS settings
5. Function to return UPS settings into their default values

2. UPS Setting Utility Operating Environment

Supported computers	DOS/V PC (Cannot be used on Apple Macintosh OS or on Apple Macintosh compatible machines.)
Supported OS	Windows 10 Windows 8.1/8 Windows Server 2012 R2/2012 Windows Server 2008 R2/2008 Windows 7 Windows Vista Windows Server2003 R2/2003 Windows XP
Interface	RS232C USB * RS232C communication setting: 2400bps/8bit/1bit/none
Target UPS	[S8BA series] S8BA-24D24D120LF S8BA-24D24D240LF S8BA-24D24D360LF S8BA-24D24D480LF [BU-2RWL series] BU2002RWL BU3002RWL BU5002RWL

3. Software License Agreement

Installation of the software to your computer constitutes your full acceptance of the following software license agreement ("the agreement"). If you do not agree, do not install the software on your computer.
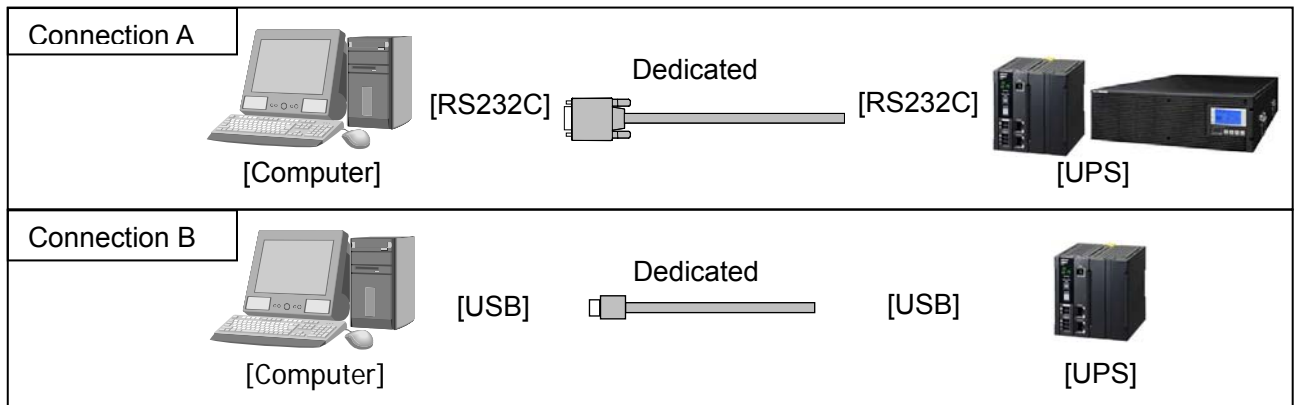
[Software License Agreement]

The agreement is what OMRON Corporation ("OMRON") determines as the terms and conditions under which the software products ("the software") are licensed to our customers. Before using this software, be sure to read carefully the following items.

1. "The software" referred to in the agreement includes all the computer programs and related technical documentation which are included in this package.
   Copyrights and other intellectual property rights related to the software belong to OMRON or third parties that have a license to OMRON, and are never transferred to you by the agreement.
   If the customer violates those rights, the customer shall bear the responsibility to OMRON and the third parties that have a license to OMRON described above.

2. OMRON accepts the non-exclusive rights to use the software in the only purpose of our customers to control the UPS.

3. The downloaded files can be redistributed only to the purchaser or the user of the product.

4. Customers are not allowed to do modifications, decompilation, disassembly, or reverse engineering of the software, or other acts similar to them.

5. OMRON is not responsible for any damages for the customers of direct, indirect or repercussive damages resulting from the downloading or the defect of the software.

6. If the customer has been claimed from a third party or any party other than the third party that has a license to OMRON for infringing.   The patent rights (which includes rights under the utility model rights, and the same applies below) or copyrights resulting from modification, decompilation, disassembly, and reverse engineering of the software or other similar acts, OMRON does not bear responsibility.

7. If the customer is in breach of the agreement, OMRON will be able to terminate the license of the software by notification. In that case the customer must return the software and all of its copies to OMRON.

8. The software is not allowed to be published on any other network, and the downloaded or created files are not allowed to be modified or attached to any magazine or commercial product.

9. The software is subject to improvement or modification without prior notice.

4. How to Connect UPS to Your Computer

   To use "UPS Setting Utility", you must connect the UPS to your computer by any of the methods below.
Note that "UPS Setting Utility" cannot be used together with OMRON's other automatic shutdown software
(such as PowerAct Pro and SimpleShutdownSoftware). If other shutdown software is installed, right click

the power supply plug symbol " " in task tray and click   "Agent Stop" on the menu screen before
configuring the UPS or prepare another computer for configuring the UPS. Otherwise, PC can not connect
with UPS.

After setting with "UPS Setting Utility", shutdown "UPS Setting Utility" and right-click the power supply plug

symbol " " in task tray and click "Agent Start" to restart shutdown software.

Connection A		
[Computer]	[RS232C] Dedicated [RS232C]	[UPS]
Connection B		
[Computer]	[USB] Dedicated [USB]	[UPS]

UPS model	Connection	Dedicated cable
S8BA-24D24D120LF S8BA-24D24D240LF	Connection A	option "S8BW-C01"
S8BA-24D24D360LF S8BA-24D24D480LF	Connection B	bundled for UPS
BU2002RWL BU3002RWL BU5002RWL	Connection A	bundled for UPS

How to Use UPS Setting Utility

5-1. Starting up the application and establishing communication with the UPS

1.   Starting up the application
     Click "UPSSettingTool.exe". UPS Setting Utility starts up.
     (Installation is not required. You can use the application just by executing UPSSettingTool.exe.)

2.   Establishing communication with the UPS
     Click [Auto Connect] and the software automatically looks for the UPS connected to your computer and enables communication. It takes several seconds to several ten seconds for the software to find the UPS.
     When communication is established, information is correctly displayed in the [Port] and [UPS model] fields. If "The connected UPS did not exist" appears, the UPS may not be recognized or the communication port may be occupied by another application.
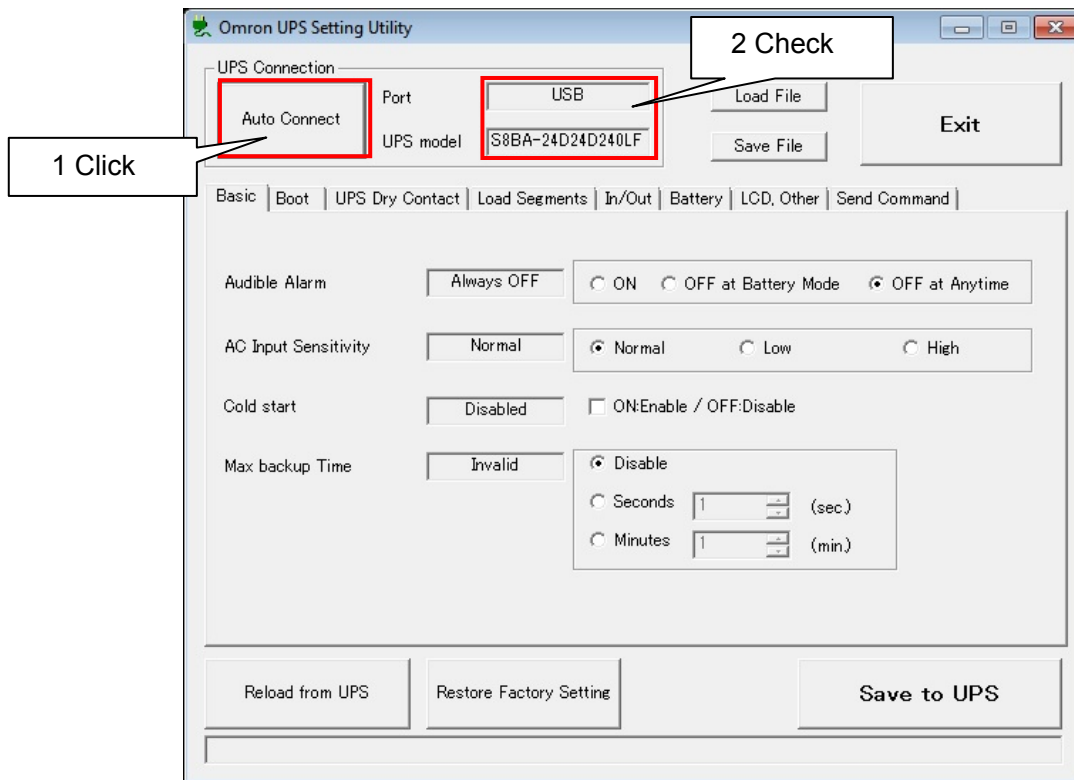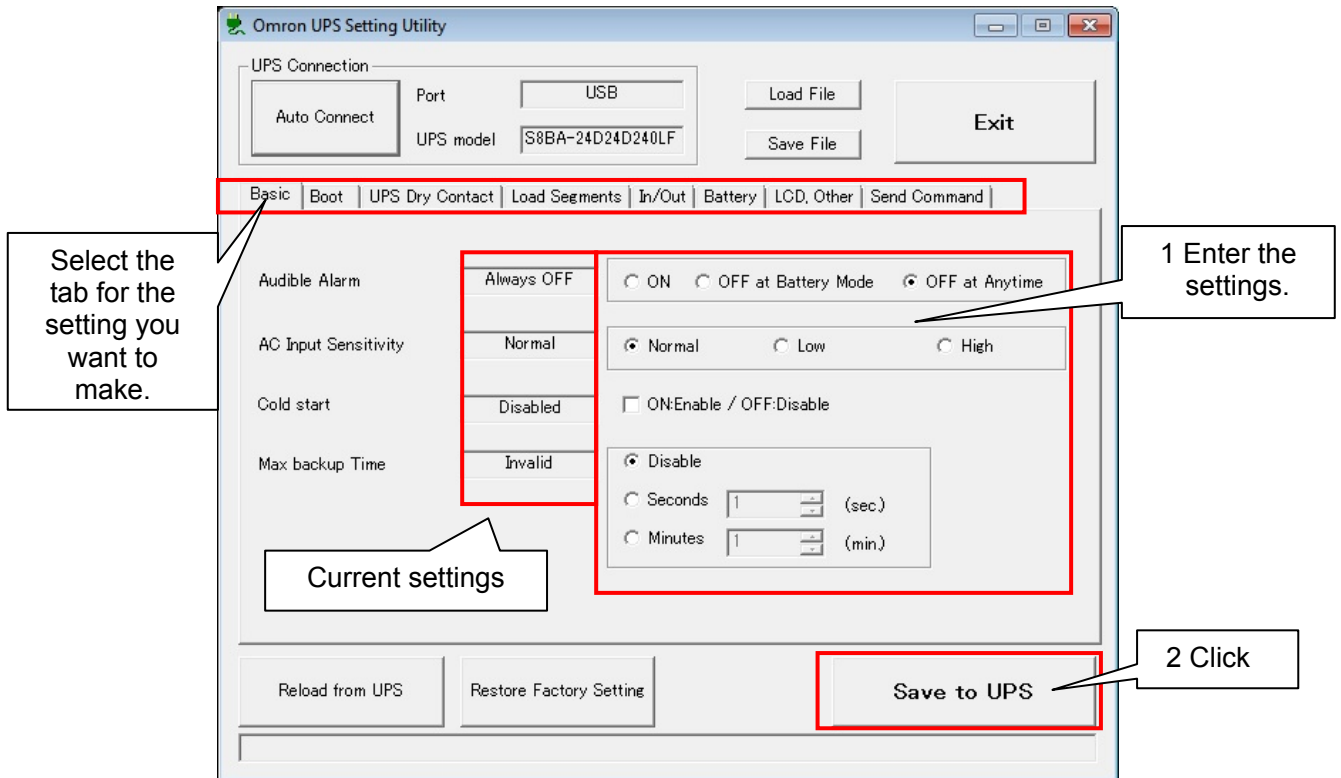
5-2. Changing the UPS settings

3. Entering the UPS settings
   Enter the UPS settings. The current settings are displayed in the text boxes.
   After entering all settings, click [Save to UPS], and the changed content will be written into UPS. (For details on the meaning of each setting, how to make each setting, and so on, refer to item 7.)

Select the tab for the setting you want to make.

Current settings

1 Enter the settings.

2 Click

4. Checking before writing the set content
   Check before writing the set content. The setting for an item with "*" can be changed only when the UPS's power supply switch is turned OFF. To change the setting for such an item, check that the UPS's power supply switch is turned OFF, and click [Yes]. (The setting for an item without "*" can be changed even when UPS's power supply switch is turned ON.) Note that it takes five to ten seconds to write the set content completely. When the content displayed for [Current settings] is updated to the content after change, the writing process is successful.
   * Regardless of the tab selected, all the changed settings will be rewritten. Be careful.

Click
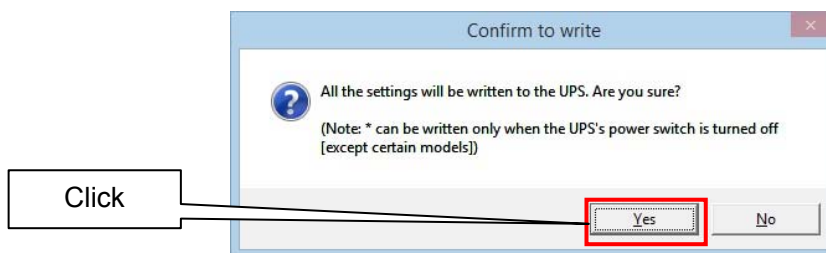
5. Saving the set content into the nonvolatile memory (EEPROM) inside UPS
   Turn OFF the UPS's power supply switch, and then turn OFF the UPS's input power supply. (Check that the indicators on the UPS's operation display section have all been turned OFF.)   The set content will be saved into the nonvolatile memory (EEPROM) inside the UPS.

5-3. Backing up the settings

6.   Backing up the settings
    You can back up the settings of the UPS into a file.
    To perform a backup, click [Save File]. The set content is saved as text data. (The file extension is "dat".)
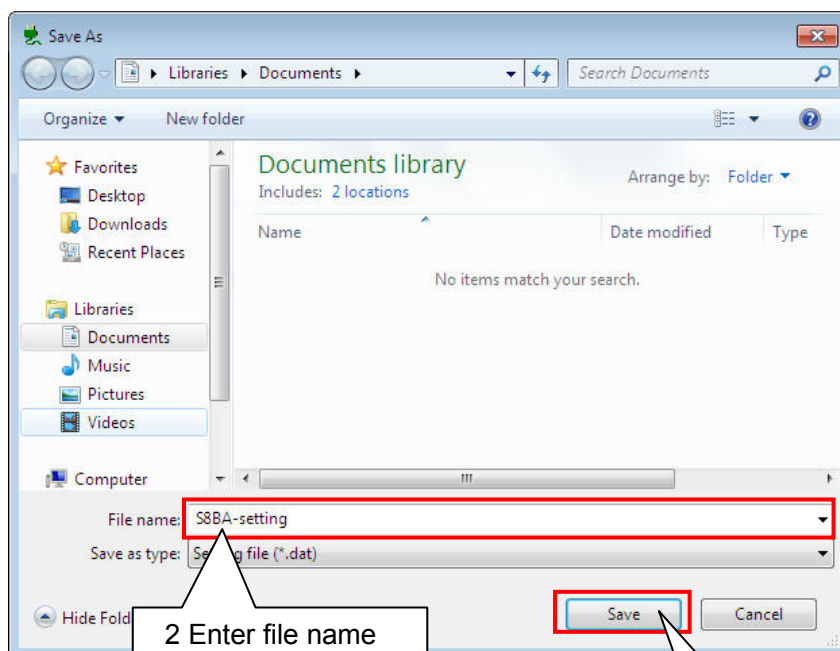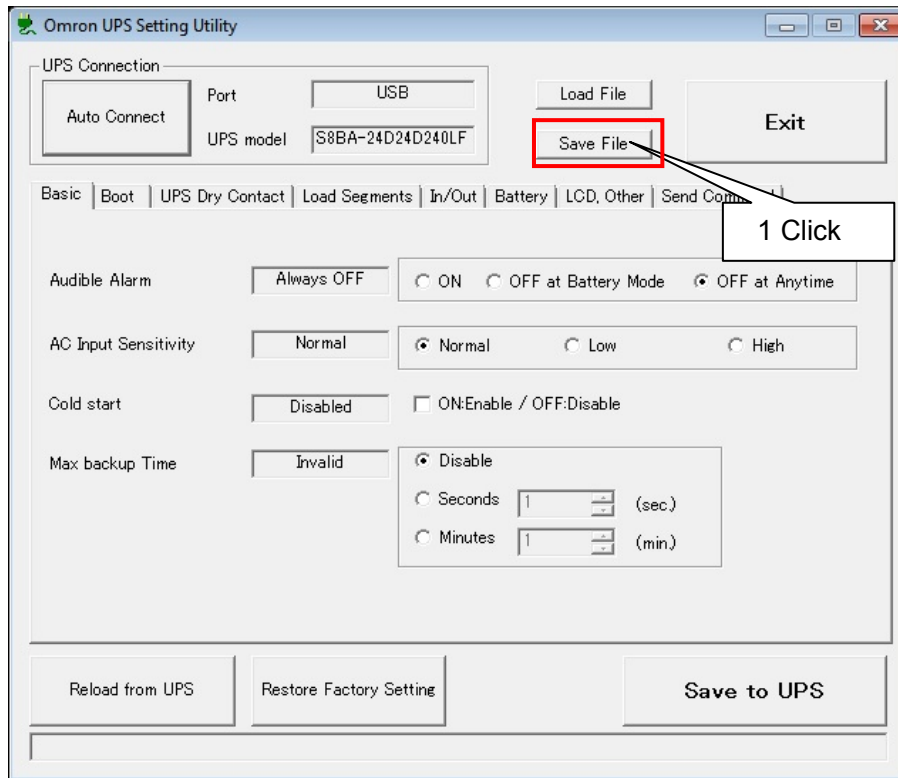
5-4. Restoring UPS settings from a UPS settings backup file

7. You can restore UPS settings from a backup file. Click [Load File] and select a backup file. Click [Save to UPS] and the settings of the backup file will be written into the UPS.
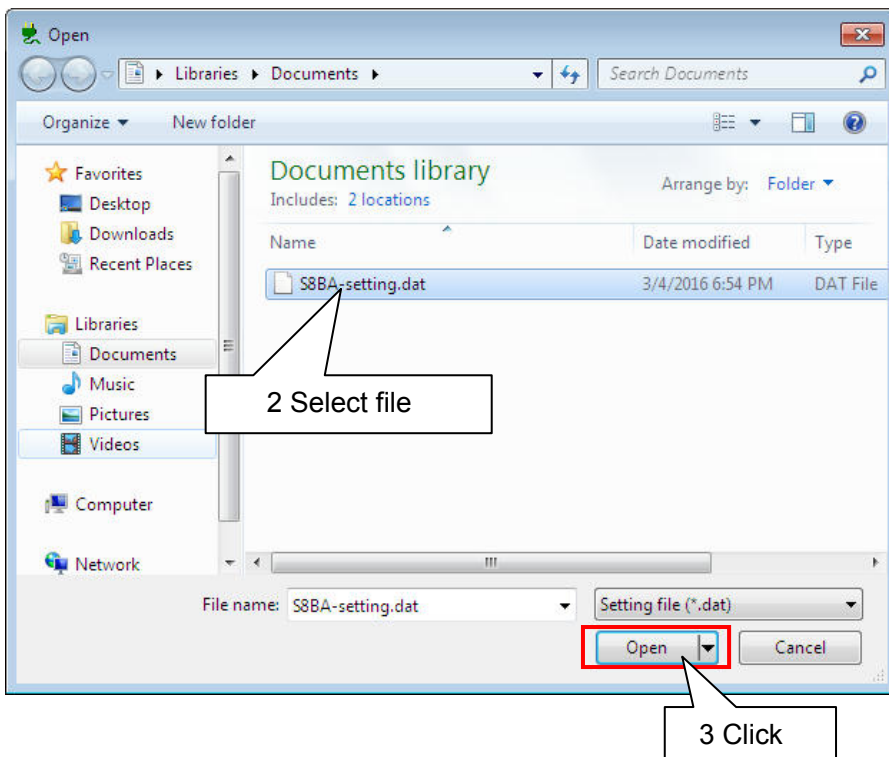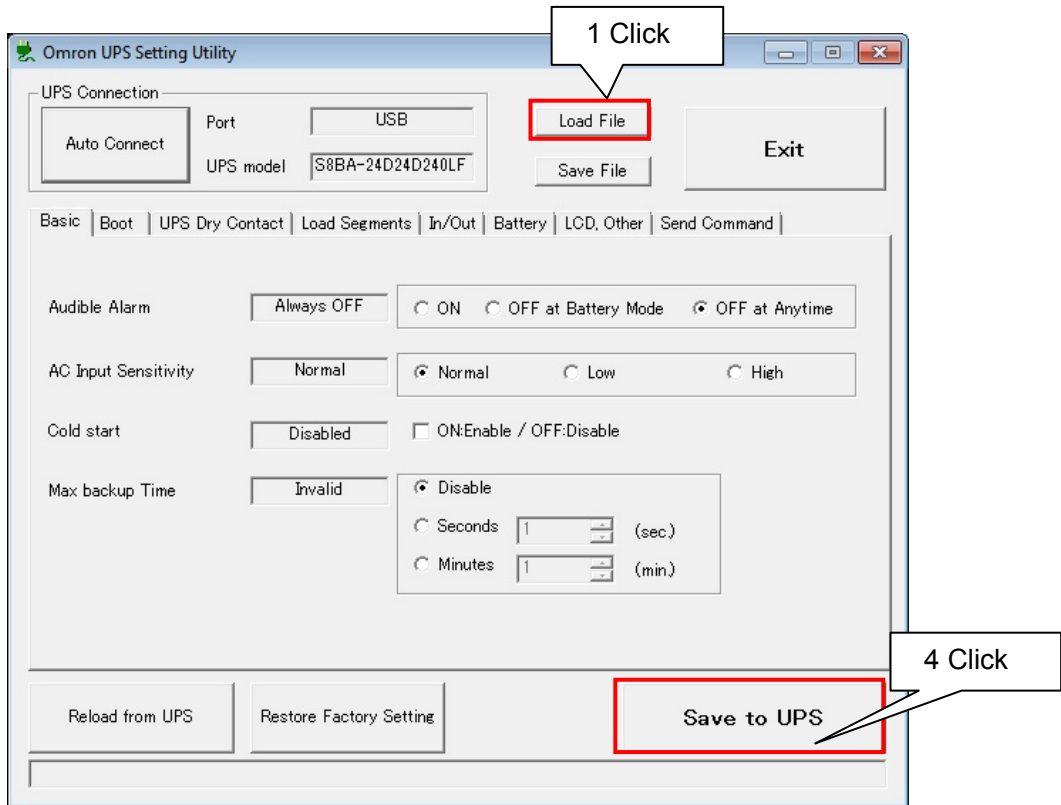
5-5. Returning the UPS settings into their default (factory default) state

8. You can return the UPS settings into their default (factory default) state. Click [Restore Factory Setting].
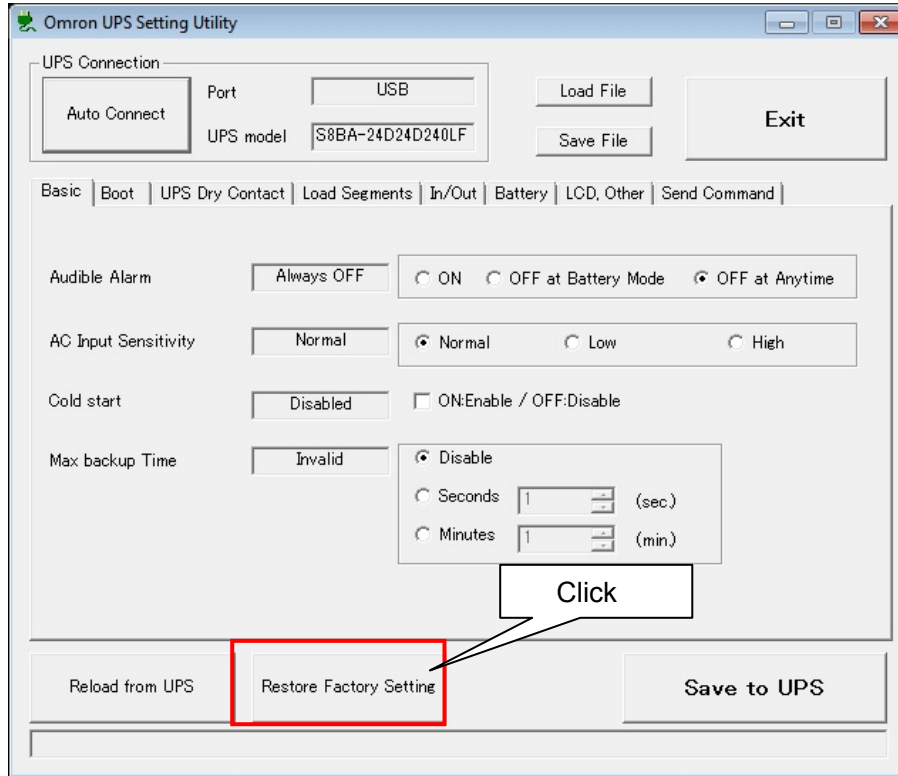
9. Checking before returning the UPS settings to their default state
    You must turn OFF the UPS's power supply switch before returning the settings to their default state. Check that the UPS's power supply switch is turned OFF, and then click [Yes]. Note that it takes five to ten seconds to write the content completely.
    * **Regardless of the tab selected, all the changed settings will be replaced with their default values. Be careful.**
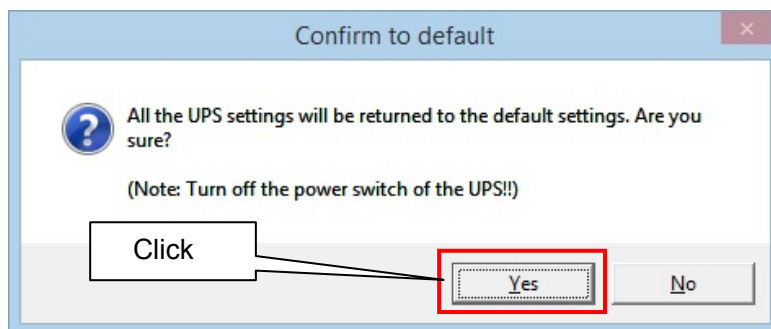
5-6. Terminating the application

10. To terminate the application, click [Exit].
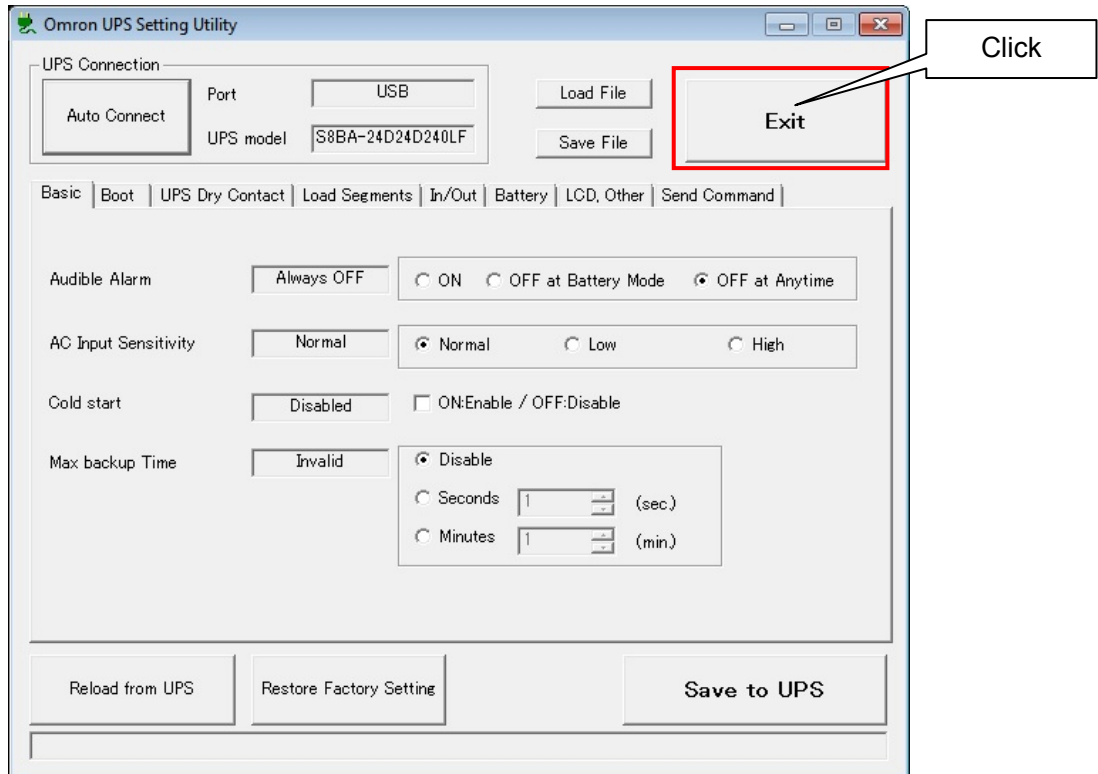
5. Detailed Explanations on Settings

6-1. [Basic] group

(1) Audible Alarm
  ● Settings
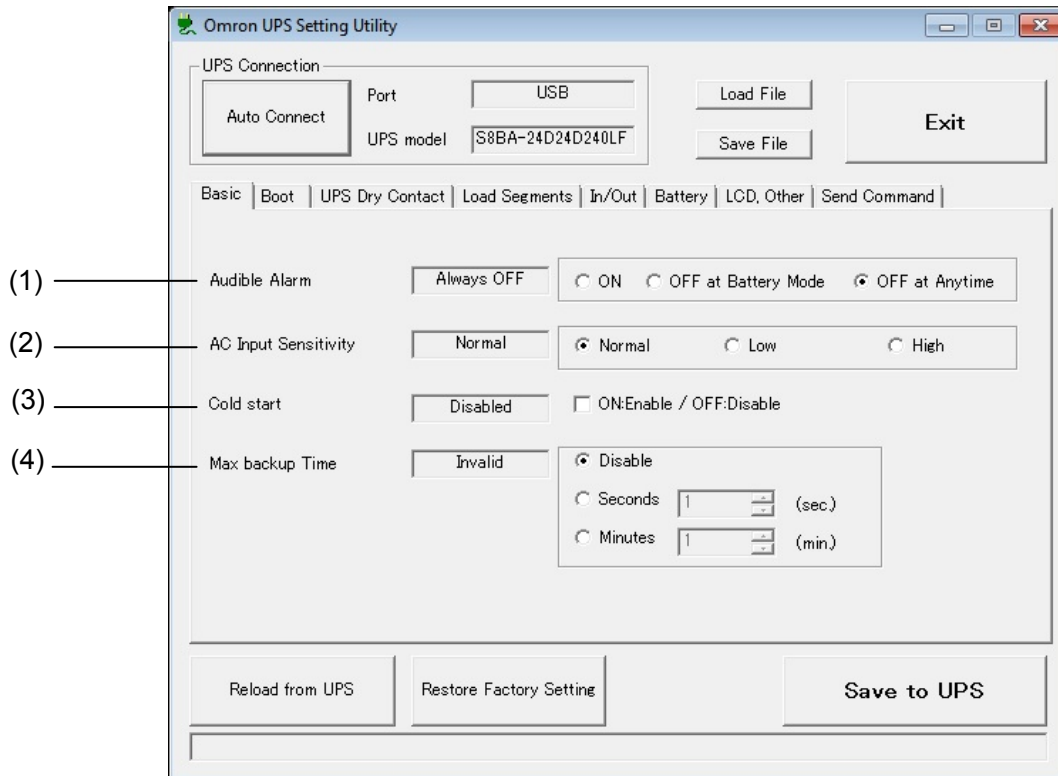   Set whether the UPS's alarm "sounds/does not sound" if an error occurs, and so on when in Battery mode.
    - ON: Enables the alarm. Sounds the alarm.
    -OFF at Battery Mode: Does not sound the alarm when in Battery mode or when the battery is deteriorated.
    - OFF at Anytime: Disables the alarm. Does not sound the alarm.
    * When [OFF at Battery Mode] or [OFF at Anytime] is selected, the alarm to alert you for battery replacement also ceases to sound. Be careful about battery management in such a case.

	ON	OFF at Battery Mode	OFF at Anytime
During backup operation	Sounds the alarm.	Does not sound the alarm.	Does not sound the alarm.
When the battery level is low			
When the battery is deteriorated			
When overload is occurring		Sounds the alarm.	
When interruption occurs due to overload			
When an internal error occurs			

  ● Usage
    If you want to sound the alarm.

(2) AC Input Sensitivity
  ● Settings
    Set the input voltage sensitivity for the UPS to switch to Battery mode.
    -Normal: Sets the mode to standard voltage sensitivity.
    - Low: Sets the mode to low voltage sensitivity.
    - High: Sets the mode to high voltage sensitivity.
  ● Usage
    If you want to change the voltage at which the UPS switches to Battery mode.

(3) Cold start
  ● Settings
    Set the Cold start mode for the UPS.
    - ON (selected): Enables cold start.
        You can start the UPS without input power supply.
    - OFF (cleared): Disables cold start.
        You can start the UPS only when an input power supply is available.
  ● Usage
    If you want to use the UPS as a battery power supply in an environment where no input power supply is available.
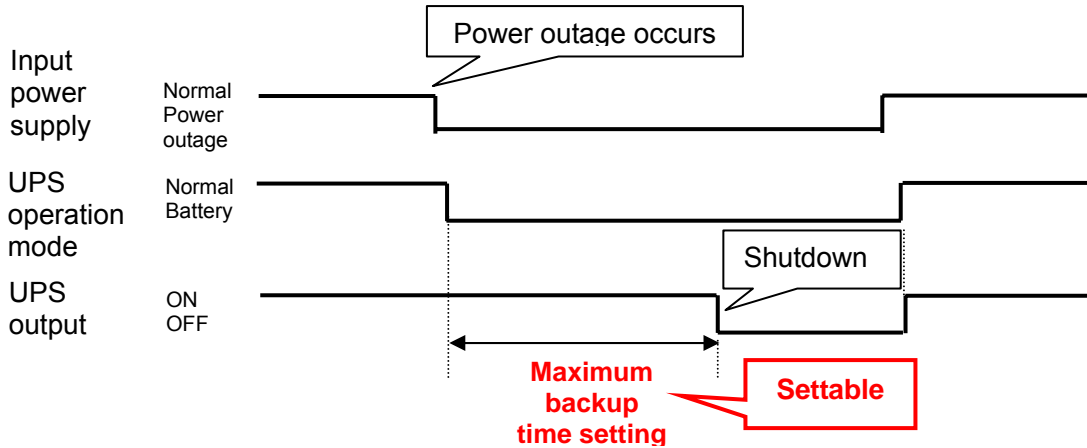
(4) Max backup Time
● Settings
Set the maximum backup time for the UPS.
When a power outage occurs, after the battery mode continues for the specified period of time, the UPS stops outputting power.
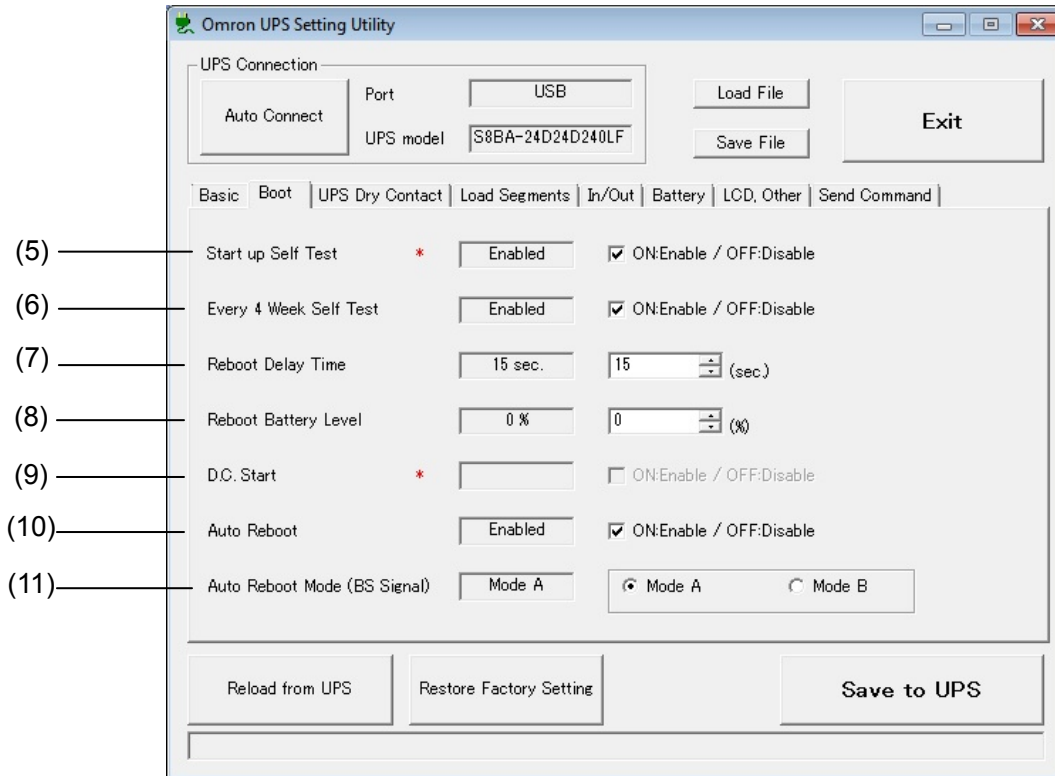Shutdown software is not required for stopping the UPS.

● Usage
If you want to shutdown the UPS after a specific period of time elapses without using a computer or controller.

6-2. [Boot] group

(5) Start up Self Test
  ● Settings
    Set whether a self diagnosis test is automatically executed when the UPS is powered ON.
    - ON (selected): A self diagnosis test is executed when the UPS starts up.
    - OFF (cleared): A self diagnosis test is not executed when the UPS starts up.
  ● Usage
    If you do not want to execute a self diagnosis when the UPS starts up.

(6) Every 4 week Self Test
  ● Settings
    Set whether a self diagnosis test is automatically executed every four weeks.
    - ON (selected): A self diagnosis test is executed every four weeks.
    - OFF (cleared): A self diagnosis test is not executed every four weeks.
  ● Usage
    If you do not want to execute a self diagnosis every four weeks.

(7) Reboot Delay Time
  ● Settings
  Set the reboot delay time for the case in which the UPS is automatically started when power is restored after UPS shutdown.
  The UPS starts outputting power in the timing delayed for the period of time set at the time of restart.
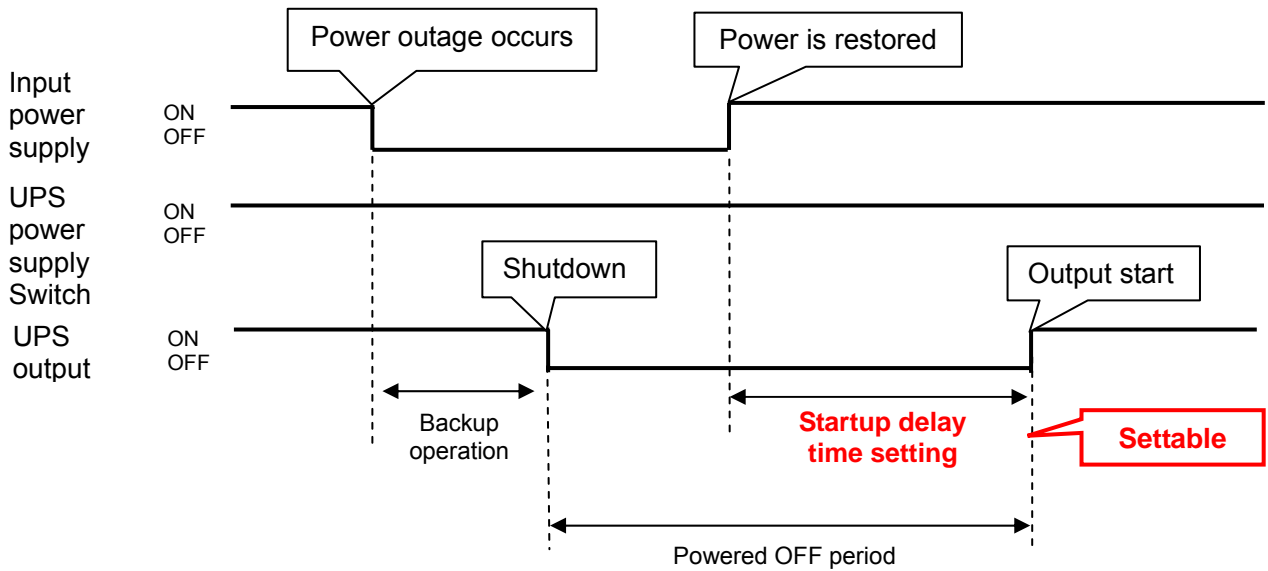
  ● Usage
  If you need to secure a sufficient powered-OFF period for restarting connected equipment when power is restored.
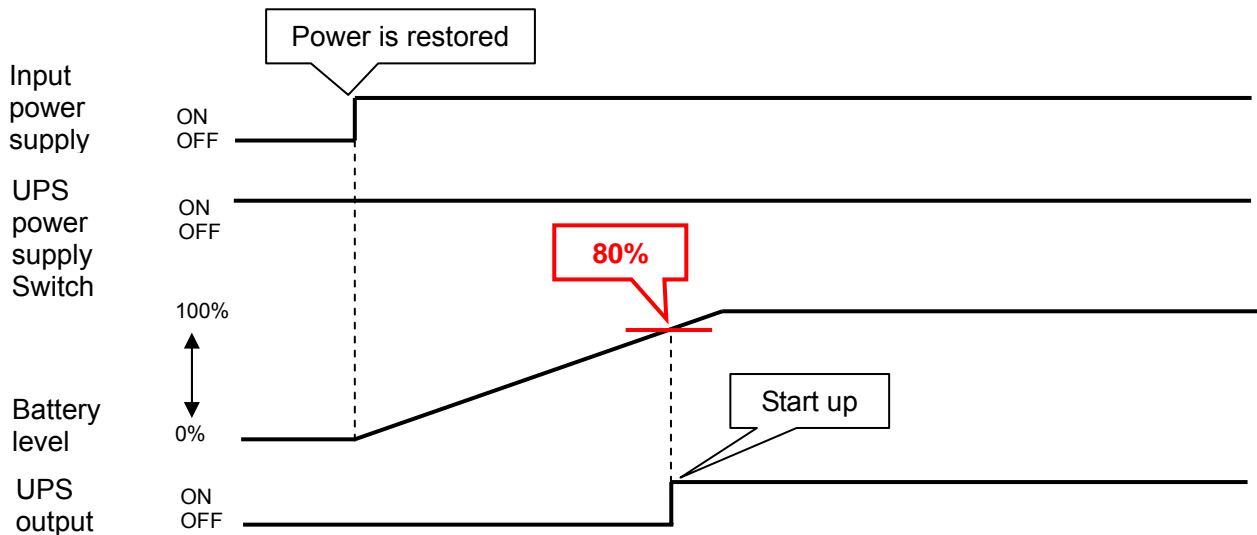
(8) Reboot Battery Level
 ● Settings
 Set the battery level at which the UPS can start up.
 Even at the time power is restored, the UPS starts only when the battery level becomes equal to or higher than the specified value.

 Example: When '80%' is set for the startup battery level.

 ● Usage
 If you want to secure sufficient backup time even when a power outage occurs immediately after the UPS starts up.

(9) D.C. Start
 ● Settings
 Set DC startup (startup in Battery mode).
 - ON (selected): Enables DC startup.
  When the power supply switch turns ON, the UPS runs in Battery mode once, and then returns to normal operation.
 - OFF (cleared): Disables DC startup.
  When the power supply switch turns ON, the UPS runs in normal operation.
 ● Usage
 When the power supply switch turns ON, to start up the UPS in Battery mode once, and then cause it to return to normal operation.

(10) Auto Reboot
 ● Settings
 Set whether to perform auto restart when power is restored after UPS shutdown.
 - ON (selected): Performs auto restart when power is restored.
 - OFF (cleared): Does not perform auto restart when power is restored.
 ● Usage
 If you do not want to automatically restart the UPS when power is restored.

(11) Auto Reboot Mode(BS Signal)
● Settings
Set Auto restart mode after the UPS is shut down by a BS signal.
- Mode A: Sets Auto restart mode to "Mode A".
After shutdown by a BS signal, the UPS restarts immediately when detecting that the input power supply turns ON.
- Mode B: Sets Auto restart mode to "Mode B".
After shutdown by a BS signal, the UPS restarts when detecting that the input power supply turns OFF, then ON.
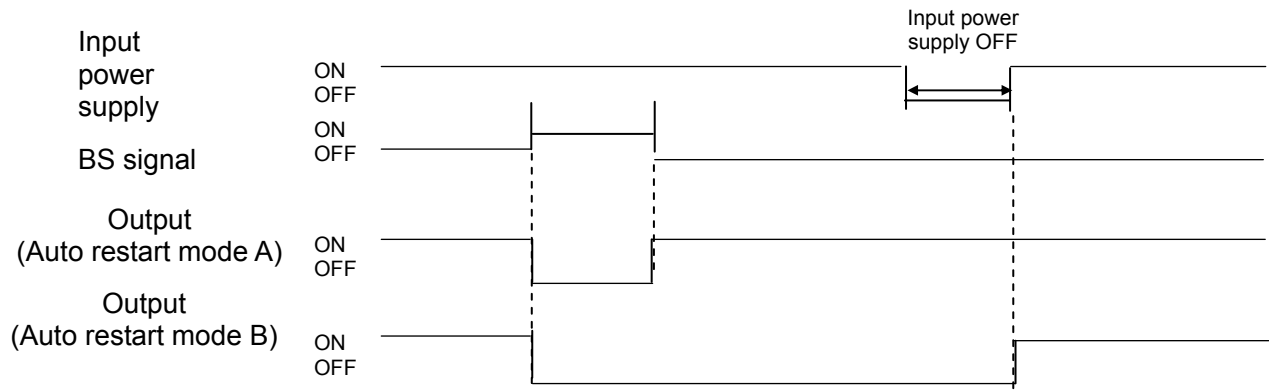
● Usage
When finishing the day's work, to terminate the system by stopping the UPS using a BS signal, and turn the input power supply last.
If you want the UPS to automatically restart when the input power supply turns ON in the next morning, set the mode to "Mode B".

6-3. [UPS Dry Contact] group

(12) — BS Signal Delay Time

(13) — BU Signal Delay Time

(14) — BS Signal Valid Range

(15) — Remote ON/OFF Logic

(16) — Dry Contact Logic
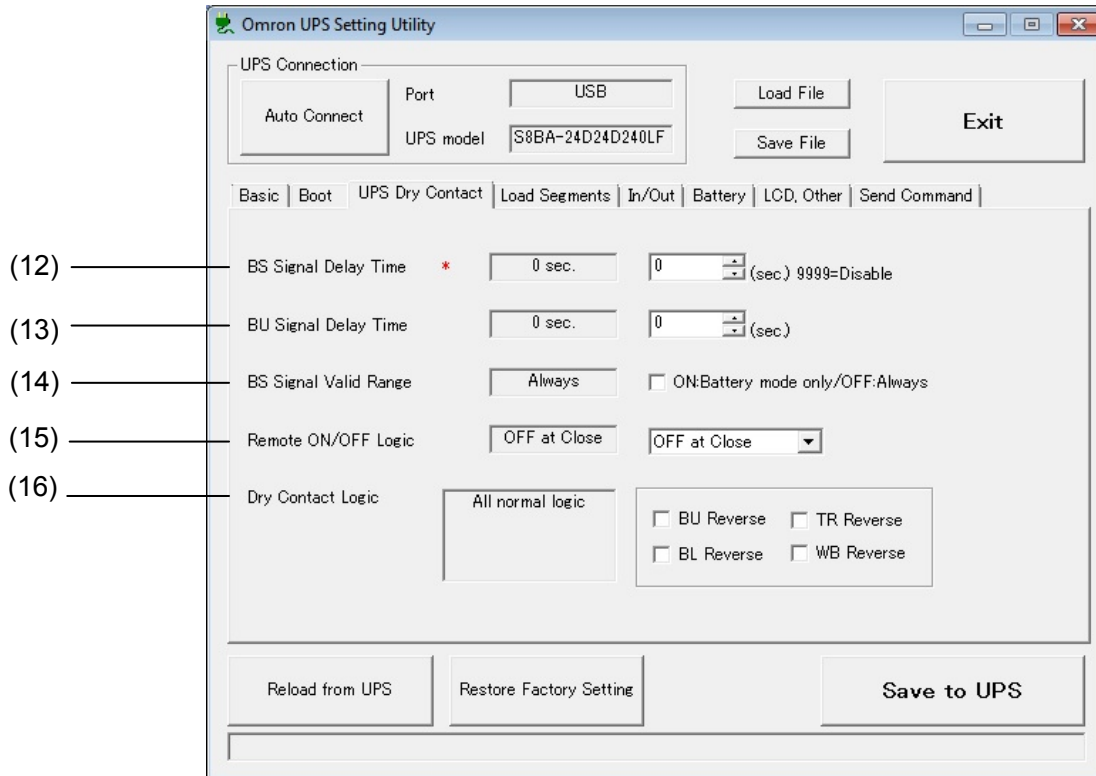
(12) BS Signal Delay Time
  ● Settings
    Set the delay time from when a BS signal (power output stop signal) input is received until the UPS power output is stopped. After receiving a BS signal input, the UPS waits for the specified period of time and then stops outputting power.
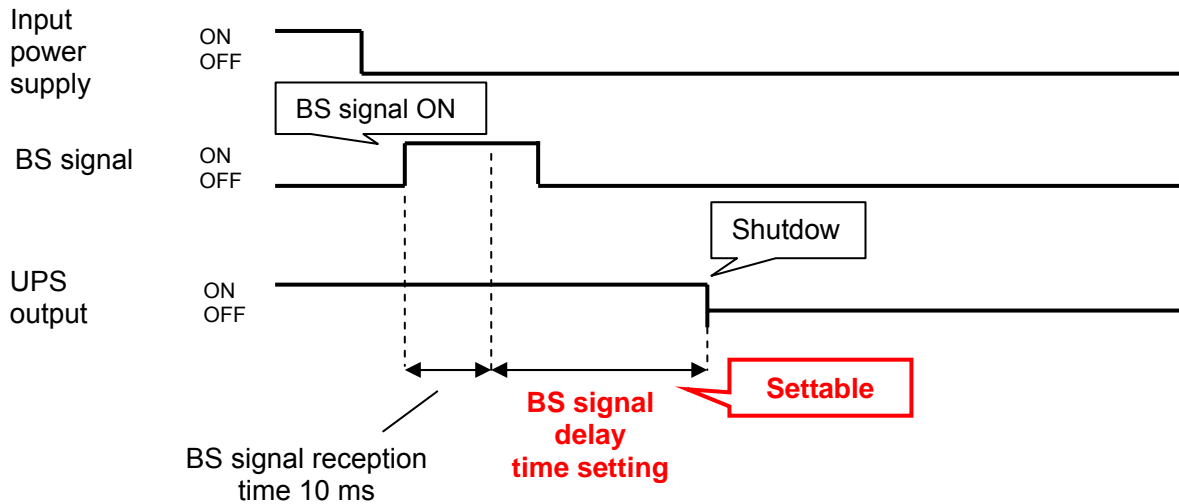
  ● Usage
    To shut down the UPS using a BS signal from a device whose power is supplied from the UPS such as a computer and PLC.
    (After a BS signal input, if you want to shut down the device itself, then the UPS.)

(13) BU Signal Delay Time
  ● Settings
    Set the delay time in the event of a power outage from when the UPS shifts to Battery mode until a BU signal output is turned ON. After shifting to Battery mode, the UPS waits for the specified period of time, then turns a BU signal ON.
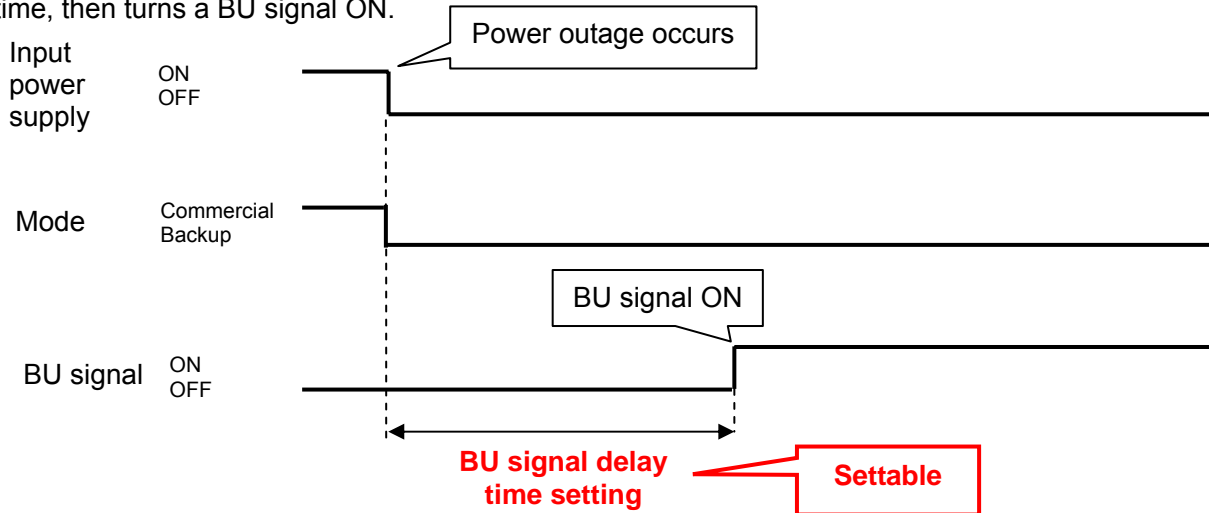

  ● Usage
    After the UPS shifts to Battery mode, if you want the UPS to execute shutdown when a certain period of time elapses.

(14) BS Signal Valid Range
  ● Settings
    Set the mode(s) in which a BS signal input is permitted.
    - ON (selected): Receives a BS signal input only when in Battery mode.
    - OFF (cleared): Receives a BS signal input when in any mode.
  ● Usage
    If you want to restrict the operation to stop the UPS via a BS signal to only when in Battery mode.

(15) Remote ON/OFF Logic
● Settings
Set the input logic of remote ON/OFF signal.
- OFF at Close: Turns OFF the output operation when the remote ON and OFF terminals have a
short-circuit.
- OFF at Open: Turns OFF the output operation when the remote ON and OFF terminals have
an open circuit.
- Disabled: Disables the remote ON/OFF function.
● Usage
If you want to reverse the input logic of remote ON/OFF signal.

(16) Dry Contact Logic
● Settings
Set the output logic of contact port output signal.
- ON (selected): Outputs in reverse.
- OFF (cleared): Outputs normally.
● Usage
If you want to reverse the output logic of output signal.

6-4. [Load Segments] group
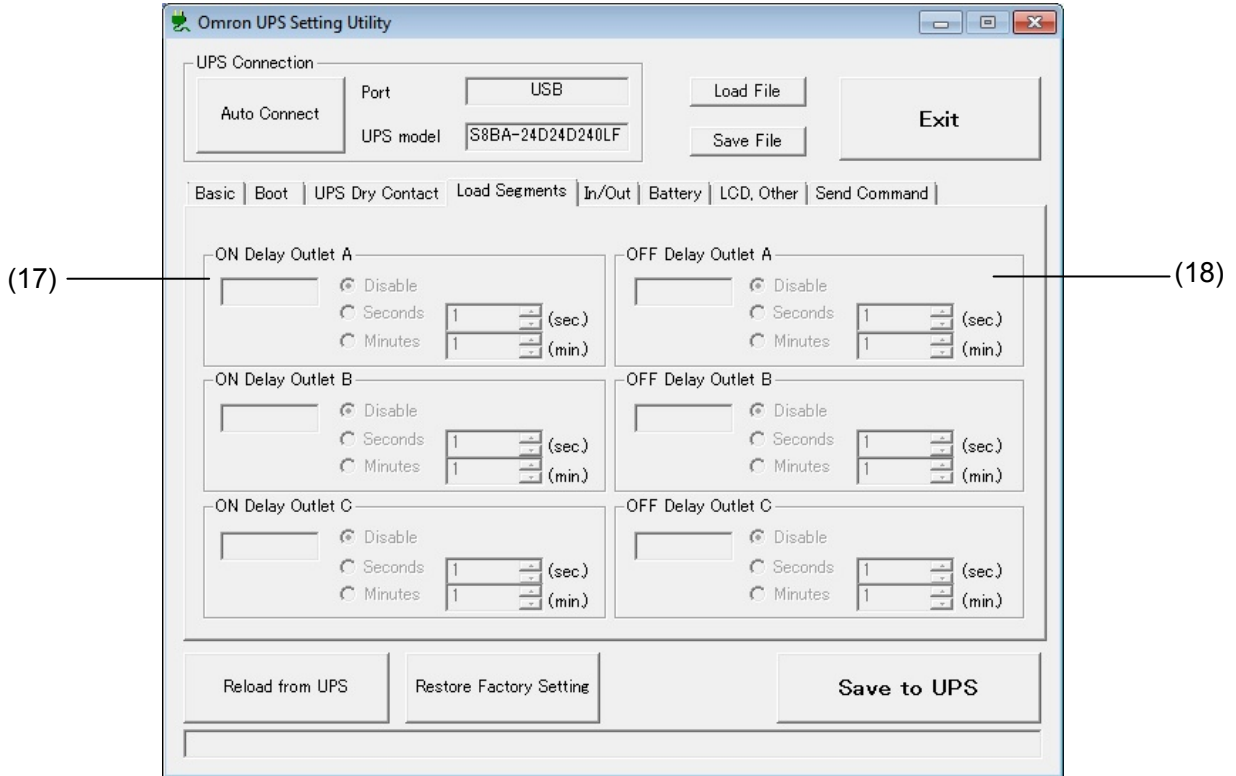
(17) ON Delay Outlet A/B/C
- Settings
  Set the output start delay time for each outlet when the UPS starts. The UPS waits for the specified period of time to start outputting power from each output outlet. You can set the time on a per-outlet basis.
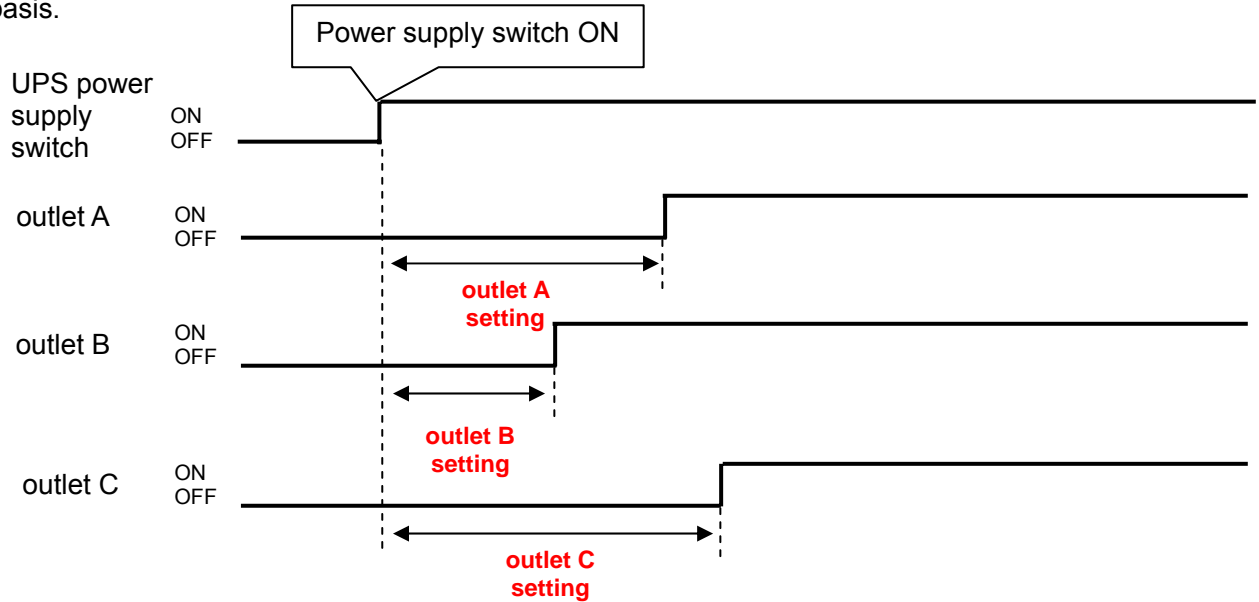
- Usage
  If you want to start the connected devices one after another with delay when the UPS starts up.
  Example 1: To prevent a mount error by starting the server two minutes after starting the storage device.
  Example 2: To prevent an inrush current from occurring by starting the connected devices with delay.

(18) OFF Delay Outlet A/B/C
  ● Settings
    Set the output stop delay time for each outlet when the UPS shuts down. The UPS waits for the specified period of time to stop outputting power from each output outlet. You can set the time on a per-outlet basis.
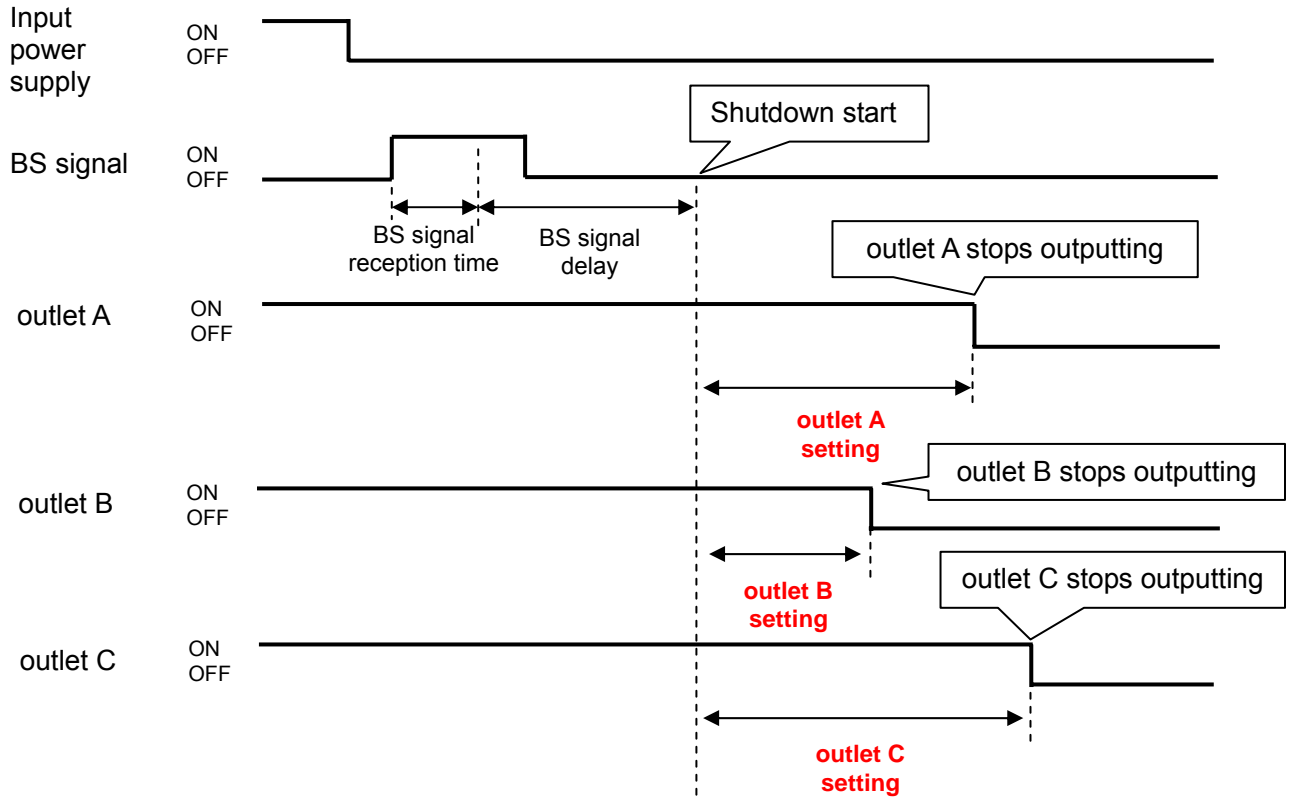
  ● Usage
    If you want to stop the connected devices one after another with delay when the UPS shuts down.
    Example: When the order of stopping devices is restricted due to some reason on the system side.

6-5. [In/Out] group
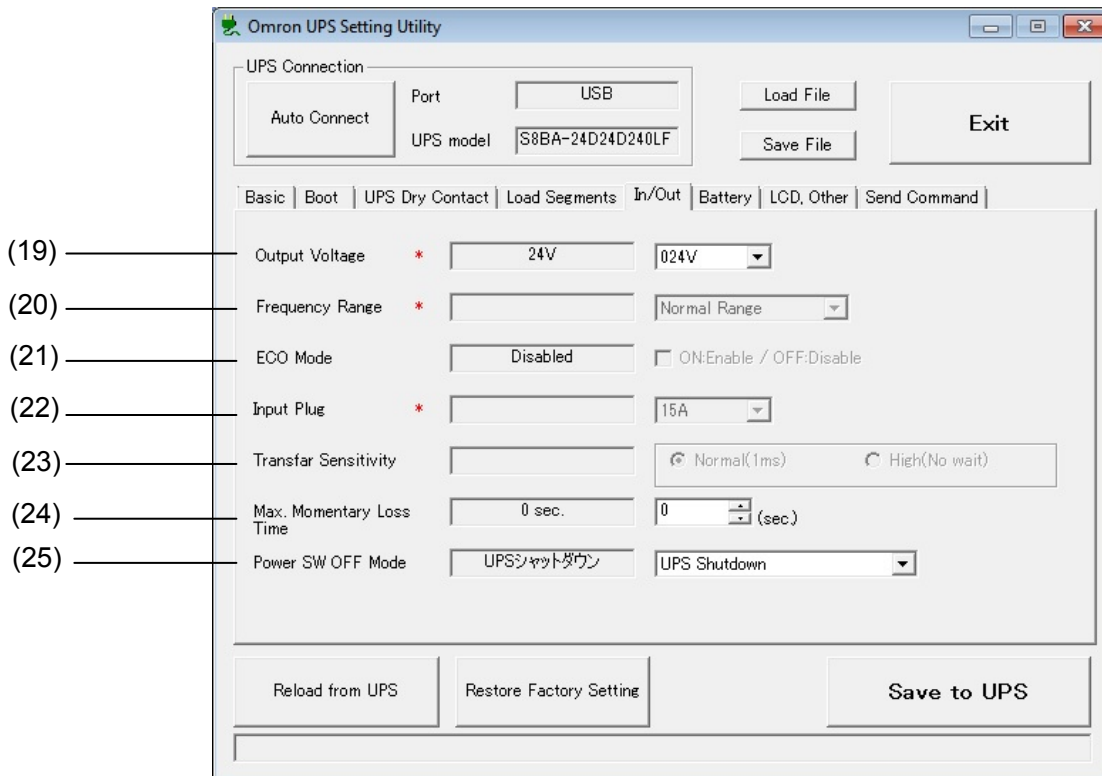
(19) Output Voltage
  ● Settings
    Set the output voltage for the UPS.
    * This setting can be changed only when the UPS's power supply switch is turned OFF.
  ● Usage
    If you want to change the value for the output voltage.

(20) Frequency Range
- ● Settings
  Set the Frequency synchronization mode for the UPS.
- ● Usage
  If you change the value for the Frequency synchronization mode.

(21) ECO Mode
- ● Settings
  Set whether to enable or disable the ECO mode.
  - ON (selected): Sets the ECO mode as enabled.
  - OFF (cleared): Sets the ECO mode as disabled.
- ● Usage
  If you want to set the UPS to ECO mode.

(22) Input Plug
- ● Settings
  Set the electric current capacity for the input plug of the UPS.
- ● Usage
  If the input plug has been changed.

(23) Transfer Sensitivity
- ● Settings
  Set the voltage drop detection sensitivity for the UPS to identify a voltage drop.
  - Normal (switching by identifying a voltage drop for 1ms): Sets the sensitivity to standard switching sensitivity (a 1ms long voltage drop is detected).
  - High (switching at highest speed): Sets the sensitivity to high switching sensitivity (a 1ms or shorter voltage drop is detected).
- ● Usage
  If you want to change the value for the voltage drop switching sensitivity.
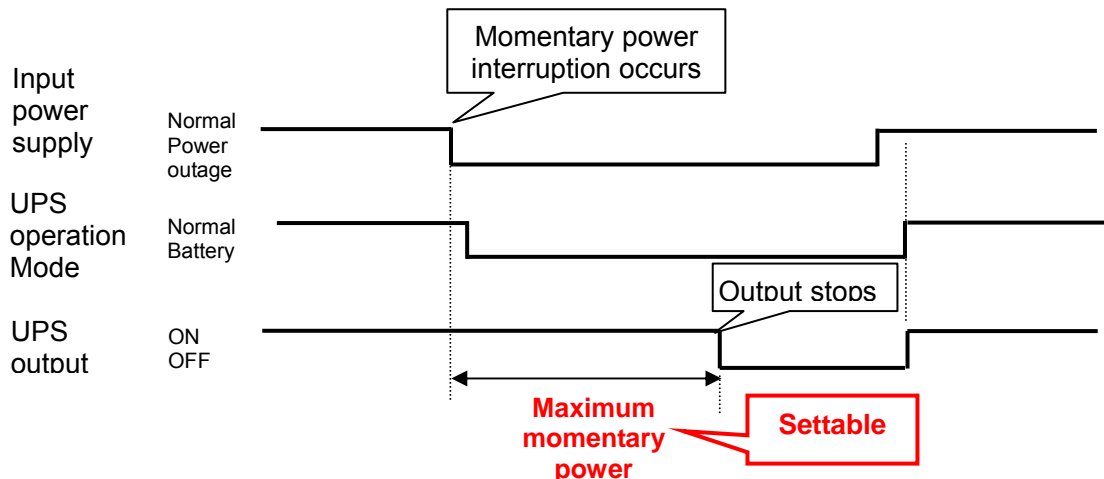
(24) Max. Momentary Loss Time
● Settings
Set the maximum momentary power interruption time for the UPS.
When a momentary power interruption occurs, if detecting that the specified momentary power interruption time elapses, the UPS stops outputting power immediately.
Shutdown software is not required for stopping the UPS.

● Usage
To use the UPS as a protection device against momentary power interruption.

(25) Power SW OFF Mode
● Settings
Set the operation mode to be activated when the UPS's power supply switch is turned OFF.
- UPS shutdown: Performs UPS shutdown.
- UPS+PC shutdown: Performs UPS+PC shutdown.

Operation when [UPS shutdown] is set
    1. Turn OFF the power supply switch (hold it down for three seconds).
    2. The UPS stops outputting power.

Operation when [UPS+PC shutdown] is set
    1. Turn OFF the power supply switch (hold it down for three seconds).
    2. A "shutdown instruction" is issued from each communication port to the system.
        - USB port/RS232C port: Make "power outage notification" to SimpleShutdownSoftware (*1).
        - CONTACT port: A BU signal turns ON.
    3. Receiving "shutdown instruction", the system performs shutdown (*2).
    4. The UPS stops outputting power according to a shutdown instruction from the system.
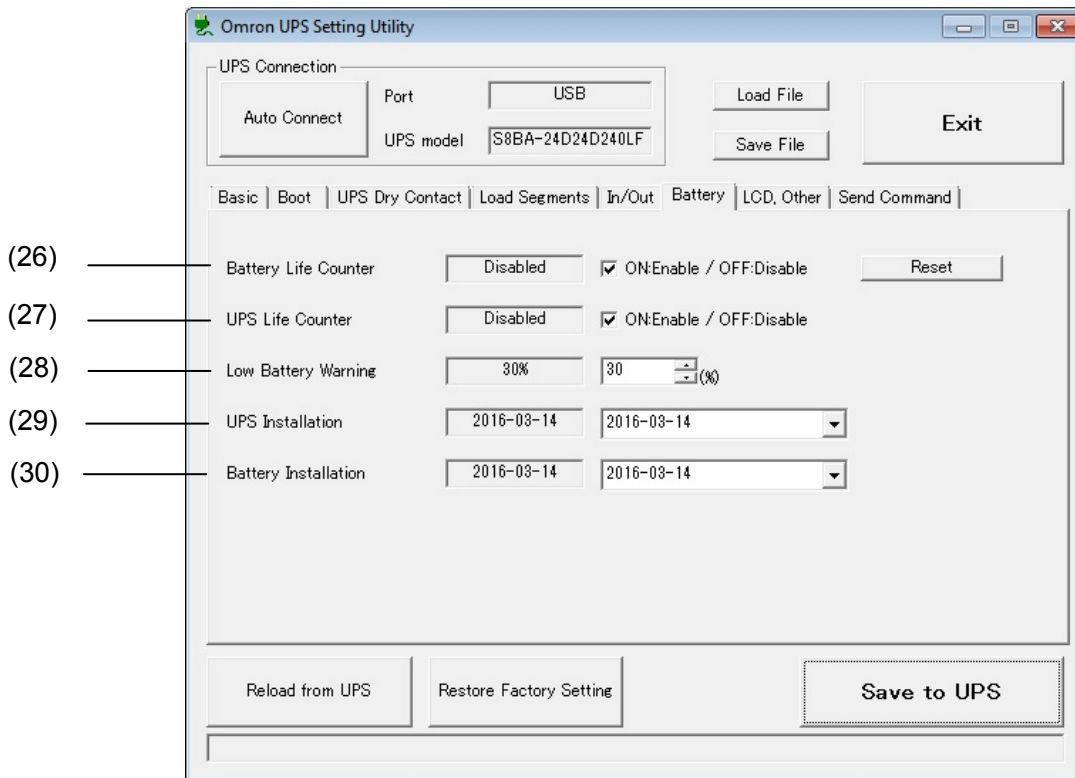   *1 OMRON's automatic shutdown software.
        *2 This setting is enabled only in the system that shuts downs when a power outage occurs.
        *3 If you hold down the power supply switch for six seconds or longer, the UPS is forced to stop outputting.

● Usage
If you want to shut down the whole system by turning OFF the power supply switch.

6-6. [Battery] group

(26) Battery Life Counter
  ● Settings
    Set whether to enable or disable the battery life counter.
    - ON (selected): Sets the battery life counter as enabled.
        When battery replacement becomes necessary, an alarm is generated.
    - OFF (cleared): Sets the battery life counter as disabled.
  ● Usage
    If you want to turn OFF the battery life counter function.

(27) UPS Life Counter
  ● Settings
    Set whether to enable or disable the UPS life counter.
    - ON (selected): Sets the UPS life counter as enabled.
        When the UPS comes to the end of its useful life, an alarm is generated.
    - OFF (cleared): Sets the UPS life counter as disabled.
  ● Usage
    If you want to turn OFF the UPS life counter function.

(28) Low Battery Warning
- Settings
  Set the low battery alarm detection level.
  When in Battery mode, if the battery voltage becomes equal to or lower than the set value, a low battery alarm is generated.
- Usage
  If you want to change the low battery alarm detection timing.

(29) UPS Installation
- Settings
  Set the UPS installation date.
  The set value is used as a record. It does not affect the UPS operation.
- Usage
  If you want to record the date the UPS was installed.

(30) Battery Installation
- Settings
  Set the battery replacement date.
  The set value is used as a record. It does not affect the UPS operation.
- Usage
  If you want to record the date the battery was replaced.

6-7. [LCD, Other] group
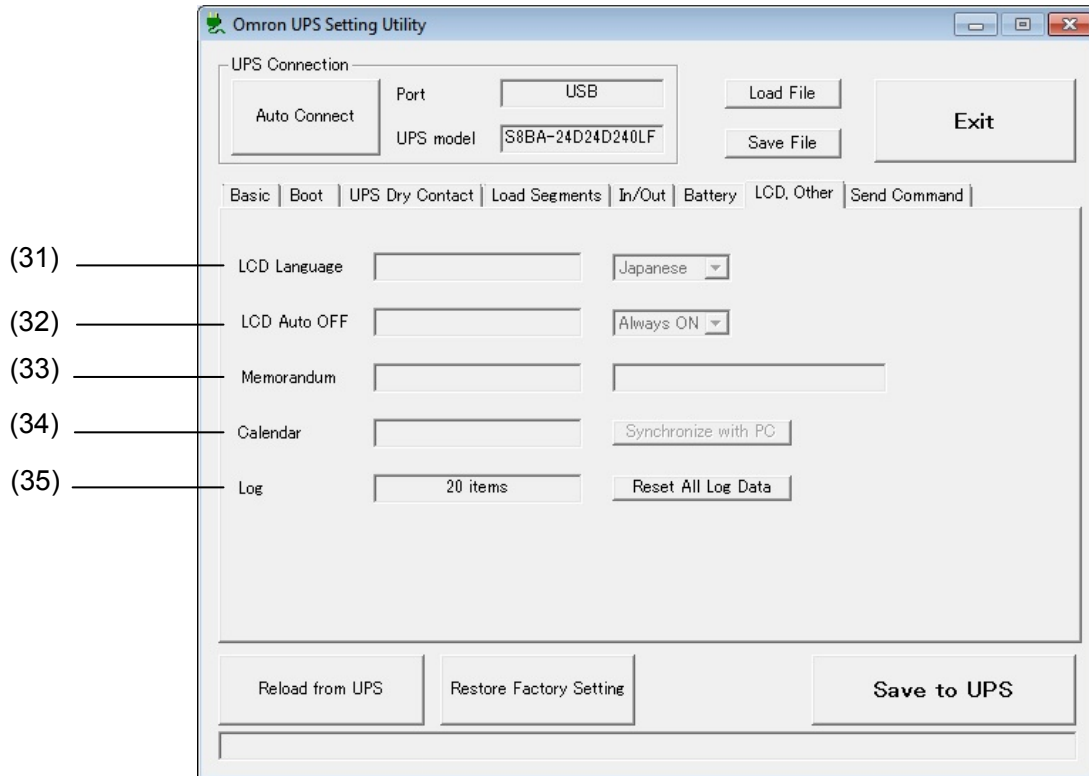
(31) LCD Language
- ● Settings
  Set the display language for the LCD panel.
  - Japanese: Sets Japanese for the display language.
  - English: Sets English for the display language.
- ● Usage
  If you want to change the display language for the LCD panel.

(32) LCD Auto OFF
- ● Settings
  Set the auto screen OFF operation for the LCD panel.
- ● Usage
  If you want to change the auto screen OFF operation for the LCD panel.

(33) Memorandum
- ● Settings
  Set the content to be displayed for the memo.
- ● Usage
  If you want to set the content to be displayed for the memo.

(34) Calendar
- Settings
  Set the time for the UPS's built-in clock.
- Usage
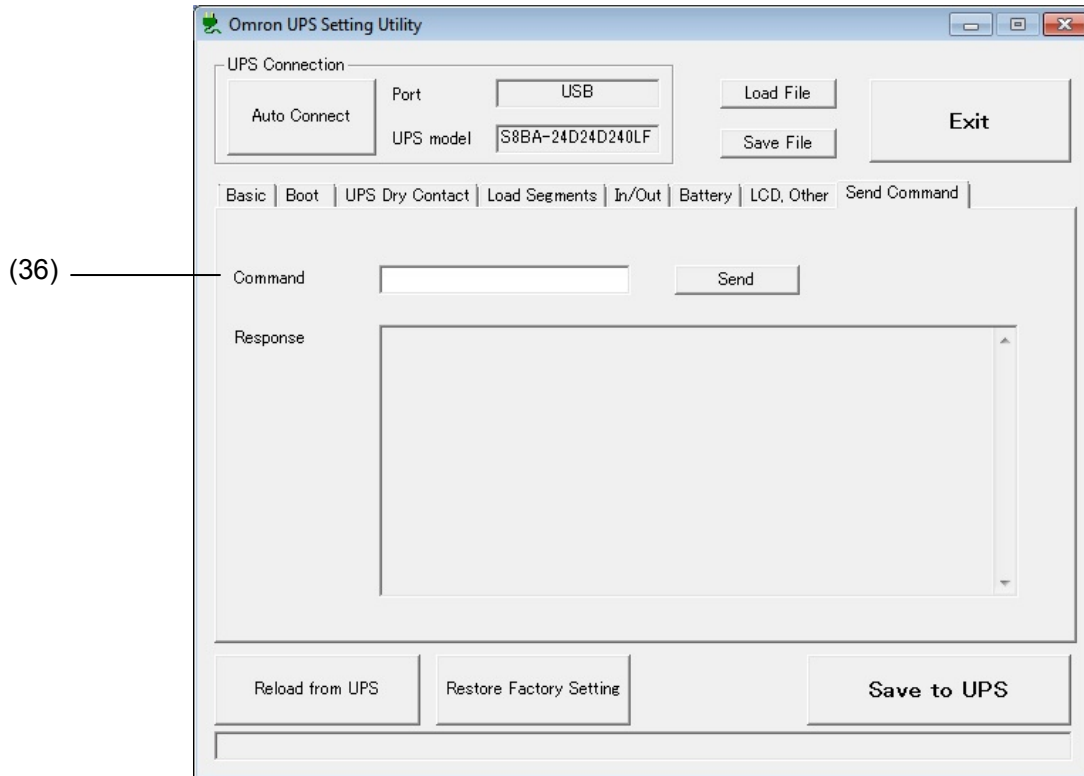 If you want to set the time for the UPS's built-in clock.

(35) Log
- Settings
  Delete internal log data.
- Usage
  If you want to delete internal log data.

6-8. Send Command

(36)

(36) Command
   ● Function
      You can send/receive an arbitrary command to the UPS.
         - Command: Used to enter the command you want to send to the UPS.
         - Send: Click this button to send the command.
         - Response: Displays the response data from the UPS.

   ● Command example
   1 If you want to check the battery level
      - Command name: Bl_? ("_" is a space.)
      - Response data: PPP<cr>/Unit:%, Range: 000 to 100%

   2 If you want to check the serial number of the product.
      - Command name: PSNR
      - Response data: ################<cr>

   3 If you want to forcibly execute a self diagnosis test
      - Command name: T
      - Response data: OK<cr>

6. Configuration items list

7-1．S8BA-24D24D□□□LF

1	Audible Alarm	◎
2	AC Input Sensitivity	◎
3	Cold start	◎
4	Max backup Time	◎
5	Start up Self Test	◎
6	Every 4 week Self Test	◎
7	Reboot Delay Time	〇
8	Reboot Battery Level	◎
9	DC Start	×
10	Auto Reboot	◎
11	Auto Reboot Mode(BS Signal)	◎
12	BS Signal Delay Time	◎
13	BU Signal Delay Time	◎
14	BS Signal Valid Range	〇
15	Remote ON/OFF Logic	◎
16	Dry Contact Logic	〇
17	ON Delay Outlet A/B/C	×
18	OFF Delay Outlet A/B/C	×
19	Output Voltage	×
20	Frequency Range	×
21	ECO Mode	×
22	Input Plug	×
23	Transfer Sensitivity	×
24	Maximum Momentary Loss Time	〇
25	Power SW OFF Mode	◎
26	Battery Life Counter	◎
27	UPS Life Counter	〇
28	Low Battery Warning	〇
29	UPS Installation	〇
30	Battery Installation	〇
31	LCD language	×
32	LCD Auto OFF	×
33	Memorandum	×
34	Calendar	×
35	Log	×
36	Command	〇

◎: Settable (Settable in the main unit)   〇: Settable (Not settable in the main unit)   ×: Not settable

7-2．BU-2RWL

1	Audible Alarm	◎
2	AC Input Sensitivity	×
3	Cold start	×
4	Max backup Time	◎
5	Start up Self Test	○
6	Every 4 week Self Test	○
7	Reboot Delay Time	◎
8	Reboot Battery Level	◎
9	DC Start	×
10	Auto Reboot	◎
11	Auto Reboot Mode(BS Signal)	◎
12	BS Signal Delay Time	◎
13	BU Signal Delay Time	◎
14	BS Signal Valid Range	◎
15	Remote ON/OFF Logic	◎
16	Dry Contact Logic	◎
17	ON Delay Outlet A/B/C	×
18	OFF Delay Outlet A/B/C	×
19	Output Voltage	◎
20	Frequency Range	◎
21	ECO Mode	×
22	Input Plug	×
23	Transfer Sensitivity	×
24	Maximum Momentary Loss Time	○
25	Power Supply Switch OFF Mode	◎
26	Battery Life Counter	◎
27	UPS Life Counter	◎
28	Low Battery Warning	◎
29	UPS Installation	◎
30	Battery Installation	◎
31	LCD language	◎
32	LCD Auto OFF	◎
33	Memorandum	◎
34	Calendar	◎
35	Log	◎
36	Command	○

◎: Settable (Settable in the main unit)　○: Settable (Not settable in the main unit)　×: Not settable

7. Uninstallation and Operation Check

To uninstall this product, take the following procedure.

[Uninstallation procedure]
1 Terminate the " UPSSettingTool.exe ".
2 Move "UPSSettingTool.exe" into the [Trash] to delete it.

End of document