

BY-S Firmware Update Tool Instruction Manual (for UPS Service Driver)

<For "BY-S Firmware Update Tool v3.exe">

<Caution>

This Instruction Manual is described for users who use "UPS Service Driver (USB version)".
And if you use OMRON's Virtual COM Driver with your own software, use this Instruction Manual.
If you use PowerAct Pro or Simple Shutdown Software, or if you are not using the UPS monitoring software, refer to the separate "BY-S Firmware Update Tool Instruction Manual (for General Users) No. K1L-D-12008".

This firmware update tool (*) (hereinafter called the "Update Tool") is a program to update the firmware of BY35S / BY50S / BY80S / BY120S (hereinafter called the "BY-S") for the correction of problems. The BY-S firmware can be categorized into two types of firmware; the "main firmware" that controls the BY-S operations and the "USB firmware" that controls USB communications. The Update Tool automatically determines which firmware should be updated.

Please follow the messages shown by the Update Tool and the instructions in this manual for updating.

* Firmware : Internal programs incorporated into the BY-S series UPS main unit.

Firmware update : Rewriting the firmware.

Update Tool : Programs to rewrite firmware

Table of Contents

[Precautions]	P.2
[System Requirements]	P.2
1. Operating procedures	P.3
2. Checking the usage and preparation before use	P.4
3. Preparing the update tool	P.6
4. Firmware update	P.8
5. Recovery to the used condition	P.13
6. If an error occurs during update	P.15
[Contact Information]	P.16

[Precautions]

- The Update Tool is dedicated to OMRON's BY-S (BY35S / BY50S / BY80S / BY120S). Do not use it for products other than BY-S.
- Follow the instructions described in this manual for updating firmware. Incorrect operations in updating may result in failure of the BY-S.
- The Update Tool can be used for only one BY-S product at one time. If you have more than one BY-S, you must update them one by one.
- This manual uses screenshots of Windows 7. Actual screens that appear on your computer may differ, depending on your OS and computer settings.

[System Requirements]

The Update Tool is dedicated to Windows OS. (Supported OS include: Windows XP/Windows Vista / Windows 7)

If your computer does not have a supported OS, such as Macintosh and Linux, please contact our Customer Support Center as shown below.

<Caution>

If you are using security software (software to protect your computer from attacks such as computer viruses), it may interfere with the update tool, resulting in operation failure of the update tool. Therefore an error may occur during updating process.

To prevent an error during update, temporarily disable the functionality of the security software before starting BY-S update processing.

For details on temporary suspension of the security software, refer to its instruction manual.

If you temporarily suspend the security software, be sure to resume the security software after BY-S update processing.

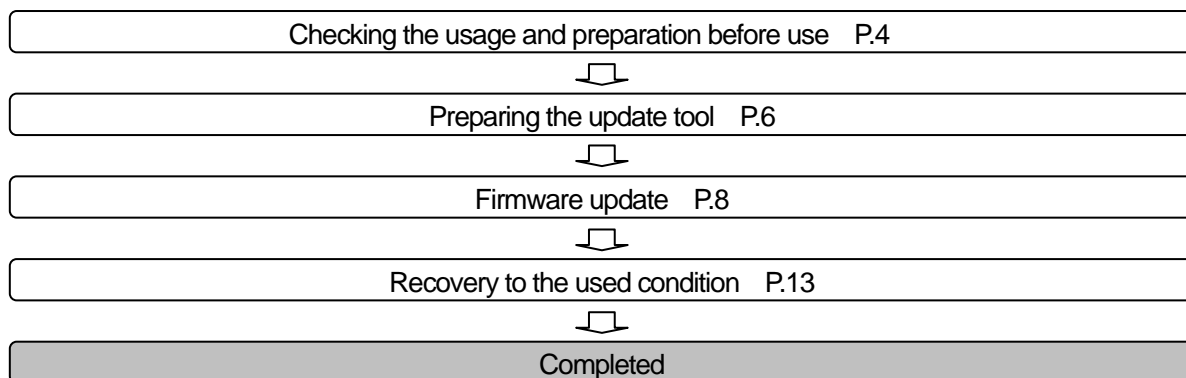
OMRON Electronic Systems & Equipment Customer Support Center

FAX: +81-3-6718-3632

Email: omron_support@omron.co.jp

1. Operating procedures

This manual describes the operating procedures as follows.



2. Checking the usage and preparation before use

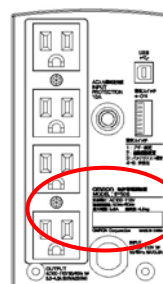
Check and perform the followings.

- (1) Check if BY-S that you use needs a firmware update.
- (2) Make a memo of computer's USB port into which BY-S is connected.
- (3) Make a memo of wiring of devices connected to BY-S.
- (4) Prepare for an update.

Step 1)

Check that a red round label is **not attached** to the back of BY-S, close to its serial number.

If the label is attached, it already has new firmware applied and an update is not required.



Example: BY35S/BY50S



Identification label

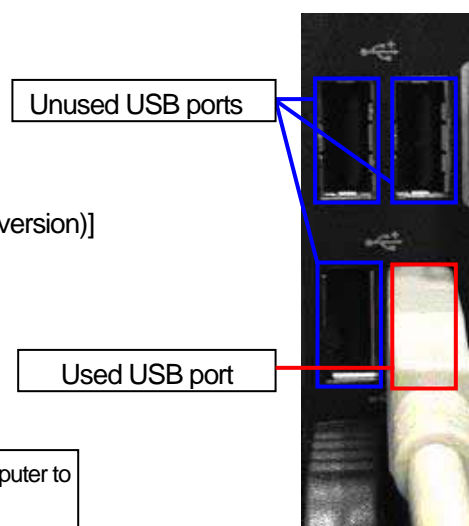
Step 2) <Updating the firmware using a computer>

If you are using [UPS Service Driver (USB version)], make a memo of the location of the USB ports (USB ports of your computer) that you use.

(You need to put the connection back to the original condition after update).

This is not necessary if you are not using [UPS Service Driver (USB version)] or if you update the firmware using other computer.

<Example of UPS ports of a computer>



Step 3) <Updating the firmware using a computer>

Reconnect the USB cable that connects BY-S and a computer to **other unused USB port**.

If you are not using [UPS Service Driver (USB version)], or if you use other computer to update the firmware, this process will be done on Step 6).

Step 4)

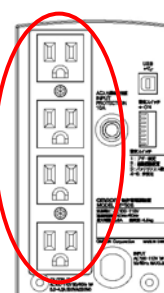
Make a memo of all the wiring of the power cables of the devices connected to the power supply output receptacles of the BY-S.

(After updating, it will be needed to put the connections back to the original condition.)

Shut down **all the connected devices** (shutting down the computer, etc.), and then remove the power cables of the devices from BY-S.

Example: BY35S/BY50S

Power supply outlet



Step 5)

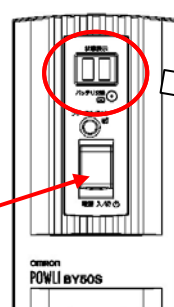
Check that the BY-S power cable is plugged in to a commercial power supply (wall socket).

Turn OFF the power switch of the BY-S.

If done correctly, the display on the BY-S should be as shown in the photo on the right.

Example: BY35S/BY50S

Power switch

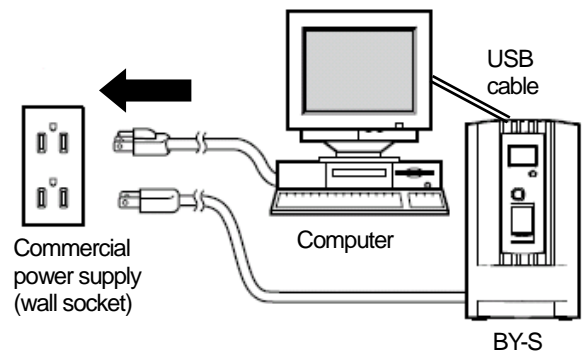


Step 6) <Not using [UPS Service Driver (USB version)], or using other computer to update the firmware>

Connect the BY-S to a computer used for the update
with a USB cable.

Step 7)

Plug in the power cable of the computer used for the update to a commercial power supply (wall socket),
and start up the computer.



3. Preparing the update tool

Make preparations to update the BY-S firmware.

If you downloaded the update tool from the site, go to 1), if you obtained the CD-ROM version, go to 2).

1) If you downloaded it from the site

Windows XP:

Decompress the downloaded compressed file (BY-S Firmware Update Tool_E_E.zip) on your desktop.

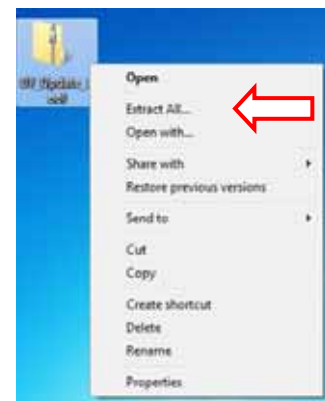
Windows Vista / 7:

(1) Move the downloaded compressed file (BY-S Firmware Update Tool_E_E.zip) to your desktop.

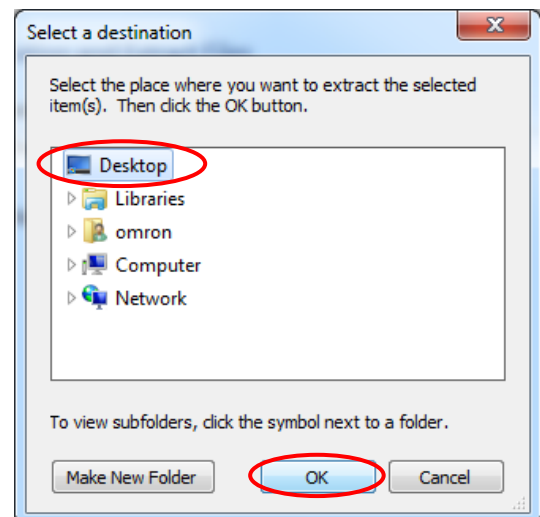
(2)-1 The icon of the downloaded compressed file is  :

1) Right-click the compressed file, and select [Extract All].

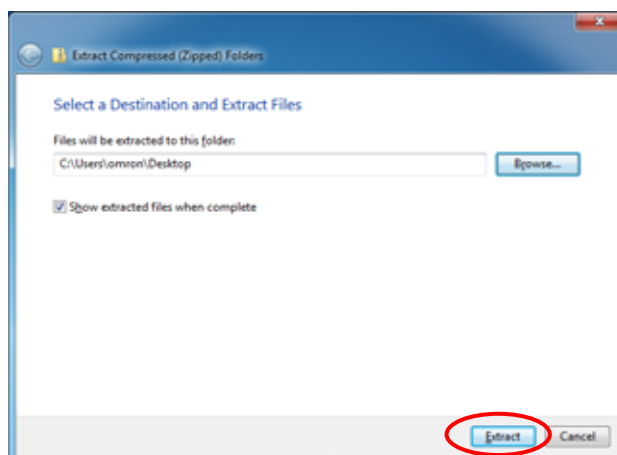
2) Click [Browse].



3) Select Desktop and then click [OK].



4) Click [Extract].



(2)-2 The icon of the downloaded compressed file is not :

- 1) Double-click the icon of the compressed file to decompress the file.
- 2) Follow the instructions on the screen.

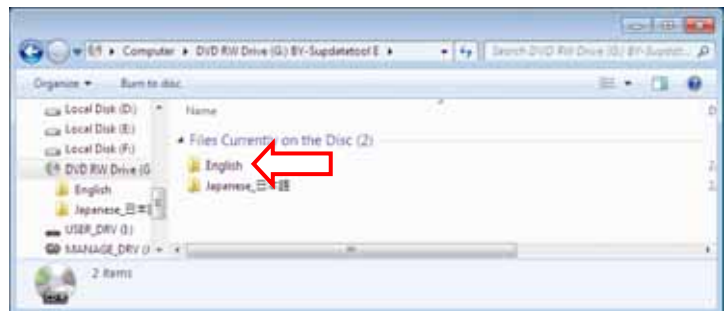
An image of the desktop after extraction



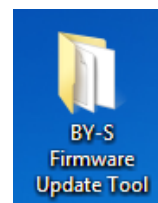
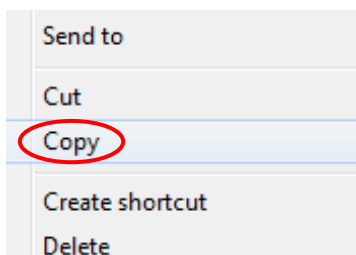
After the decompression of the downloaded file is complete on the desktop, go to [4. Firmware update] on the next page.

2) Using a CD-ROM

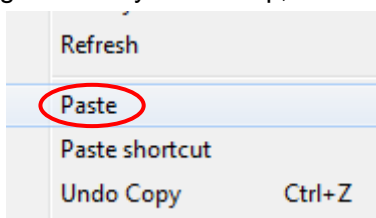
Double-click "English" folder on the CD-ROM.



Then, Right-click the "BY-S Firmware Update Tool" folder on the CD-ROM, and select [Copy].



Right-click on your desktop, and select [Paste].



After pasting the "BY-S Firmware Update Tool" folder on your desktop, go to [4. Firmware update] on the next page.

*** You cannot directly use the update tool on the CD-ROM.
Be sure to move the tool to a location where read and write can be performed.**


4. Firmware update

Update the BY-S firmware.

There are two BY-S firmware; "Main Firmware" and "USB Firmware".

The update tool will automatically judge which firmware should be downloaded.

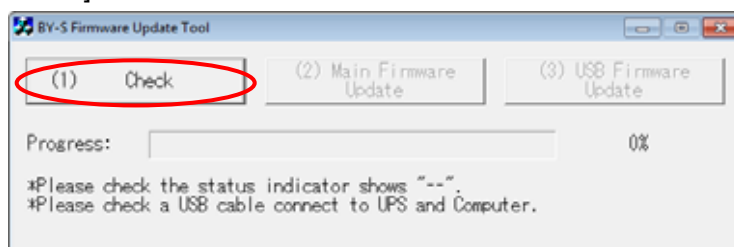
Step 1)

Double-click the [BY-S Update Tool v3.exe] icon  under the "BY-S Firmware Update Tool" folder on your desktop.

The Update Tool will start.

Step 2)

Click the [(1) Check] button.



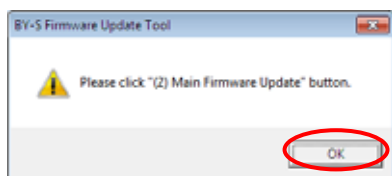
Step 3)

A message appears that notifies you if a main firmware update is required or not.

(1) If the message says that an update is required:

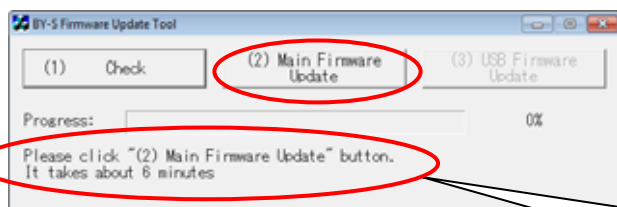
The message shown below appears.

Click the [OK] button on the message window.



* This message window may not be displayed depending on the firmware type used.

Click the [(2) Main Firmware Update] button.



Click the [(2) Main Firmware Update] button.

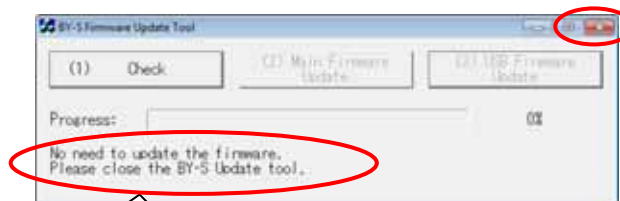
Main Firmware update will start.

The update will take about 6 minutes.

(2) If the message says that an update is NOT required:

The message shown below appears.

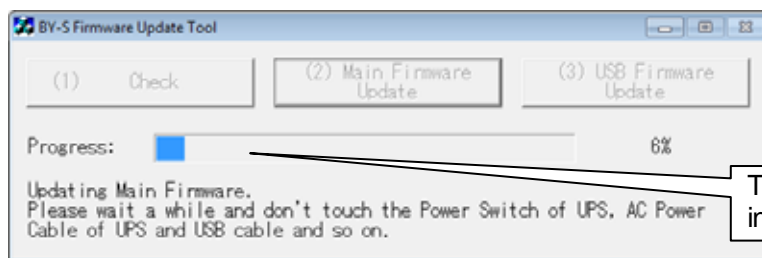
Click the [x] button at the top right of the Update Tool to close.



No need to update the firmware.

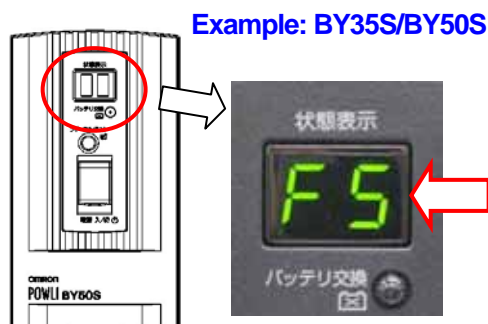
Click the [x] button, and then go to
[5.Recovery to the used condition]
on page 13.

<Progress of update>



The progress of the update is indicated by a blue progress bar.

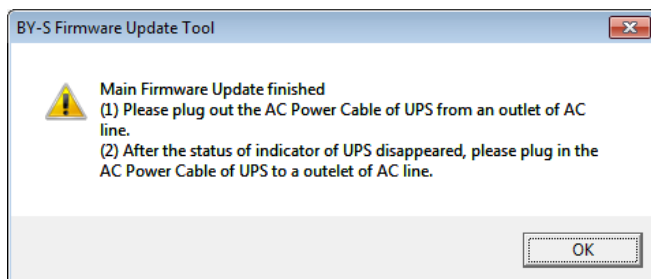
* During main firmware update, the BY-S shall display "F5".



If an error occurs during update,
refer to [6. If an error occurs during update] on page 15.

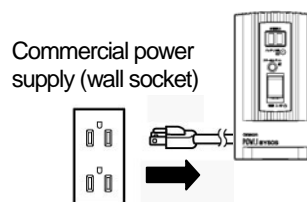
Step 4)

The message shown below appears when main firmware update has finished. Perform the following steps.



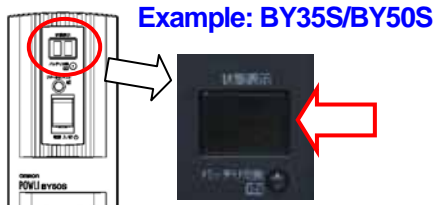
(1) Unplug the BY-S power cable from the wall socket.

(1)



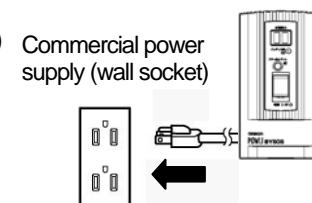
(2) After several seconds, check that the BY-S display has turned OFF.

(2)

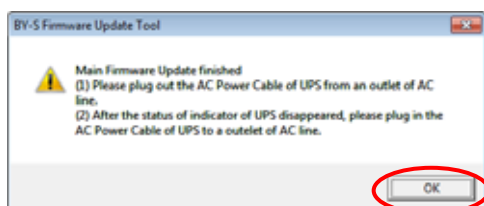


(3) Plug the BY-S power cable into the wall socket.

(3)

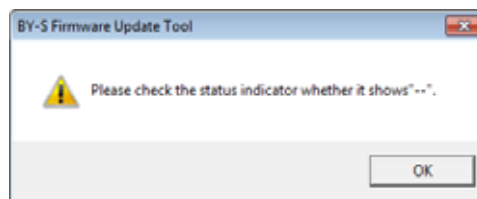


(4) Click the [OK] button.



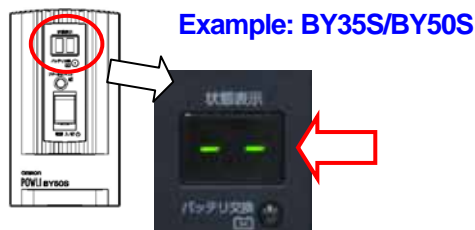
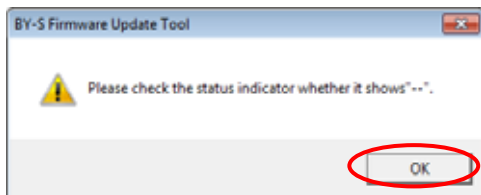
Step 5)

The message on the right appears.

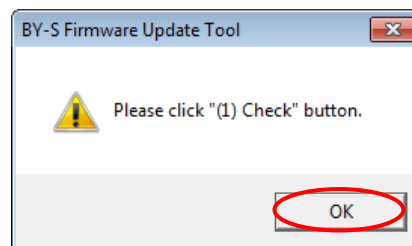
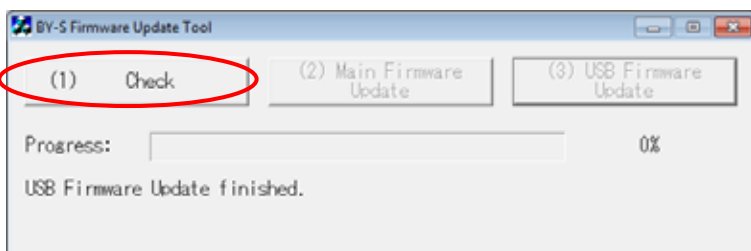


Check that the BY-S display now shows "--".

Click the [OK] button.

**Step 6)**

When the message on the right appears, click the [OK] button then the [(1) Check] button on the Update Tool.

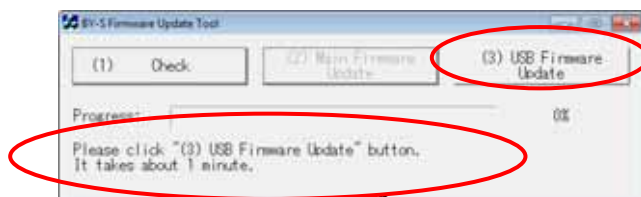
**Step 7)**

A message appears that notifies you if a USB firmware update is required or not.

(1) If the message says that an update is required:

The message shown below appears.

Click the [(3) USB Firmware Update] button.



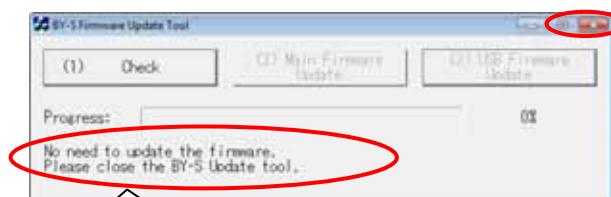
Click "(3) USB Firmware Update" button.

The USB firmware update will start. It will take about 1 minute.

(2) If the message says that an update is NOT required:

The message shown below appears.

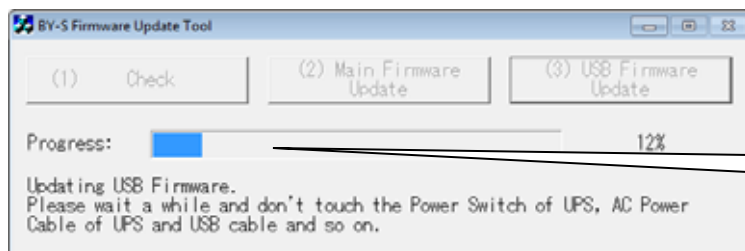
Click the [x] button at the top right of the Update Tool to exit.



No need to update the firmware.

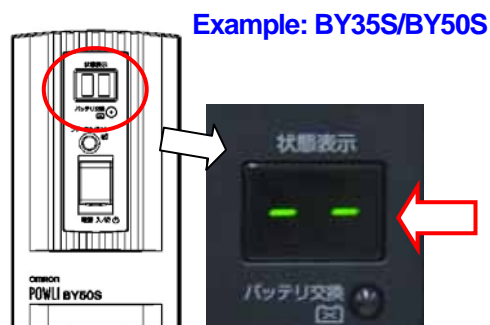
Click the [x] button, and then go to
[5.Recovery to the used condition]
on page 13.

<Progress of update>



The progress of the update is indicated by a blue progress bar.

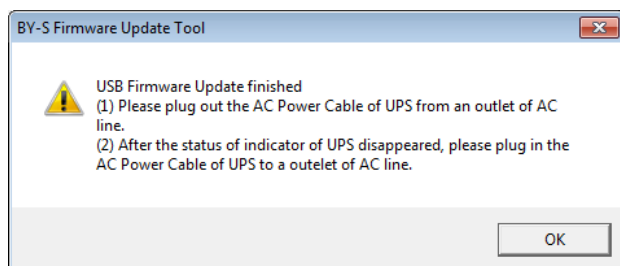
During USB firmware update, the BY-S display remains "- -".



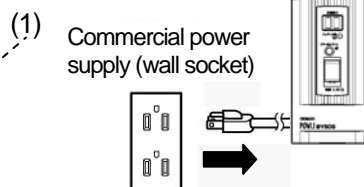
If an error occurs during the update,
see [6. If an error occurs during update] on page 15.

Step 8)

The message shown below appears when USB firmware update has finished. Perform the following steps.

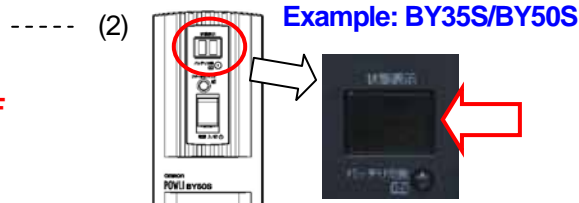


(1) Unplug the BY-S power cable from the wall socket.

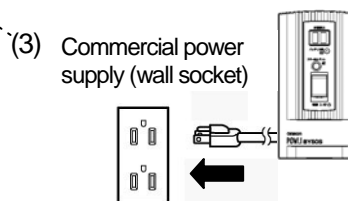


(2) After several seconds, check that the BY-S display has turned OFF.

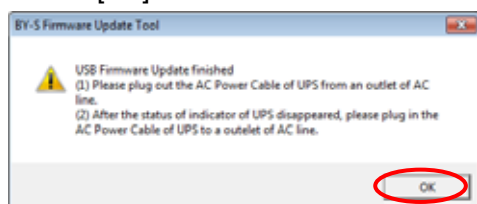
(Be sure to check that the display has turned OFF before going to (3).)



(3) Plug the BY-S power cable into the wall socket.

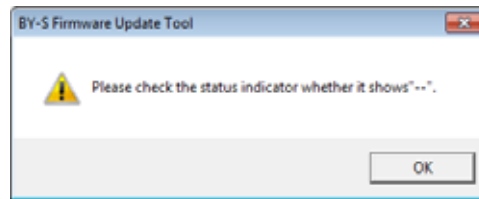


(4) Click the [OK] button.



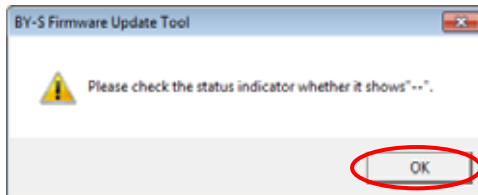
Step 9)

The message as shown on the right appears.

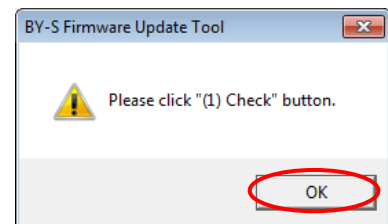
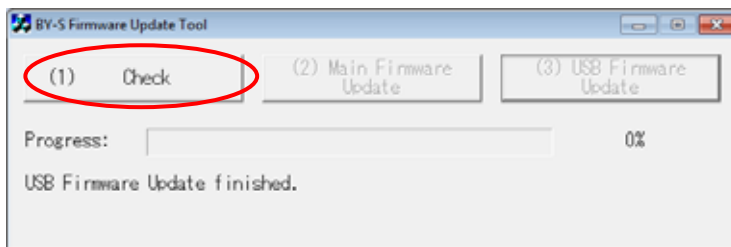


Check that the BY-S display shows "- -".

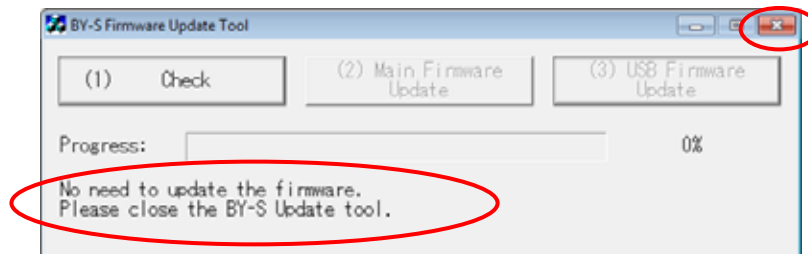
Click the [OK] button.

**Step 10)**

When the message as shown on the right appears, click the [OK] button then the [(1) Check] button on the Update Tool.

**Step 11)**

Check that the message "No need to update the firmware. Please close the BY-S Update Tool." appears, and click the [x] button at the top right of the tool to close.



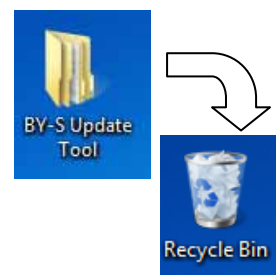
5. Recovery to the used condition

This section describes how to return to the original connecting condition after completing the update.

Step 1)

The firmware update tool that you have used cannot be used for a purpose other than updating the firmware.

When you finish updating the firmware for BY-S, delete the downloaded [BY-S Update Tool.zip] and the [BY-S Firmware Update Tool] folder and all the files in its folder.

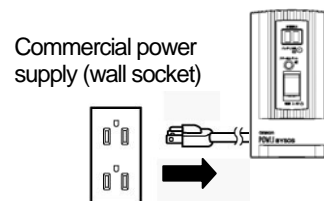


Step 2)

Shut down the computer used for the update.

Step 3)

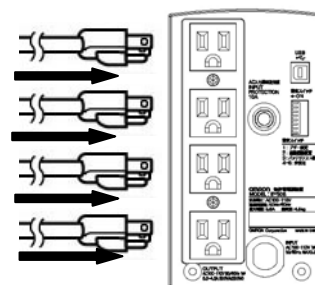
Unplug the BY-S power cable from the wall socket.



Step 4)

See the memo made on Step 4) on page 4 to put the devices that have been connected to a computer or other BY-S back to the original condition.

Example: BY35S/BY50S



<Example of UPS ports of a PC>

Step 5) <Only for users who use USP Service Driver (USB version)>

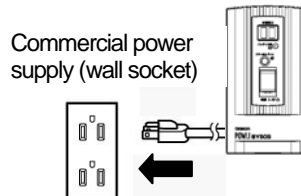
Refer to the memo made on step 2) on page 4 to connect the USB cable to **the originally connected UPS port** of the computer.

A USB port that has been used



Step 6)

Plug the BY-S power cable into the wall socket.

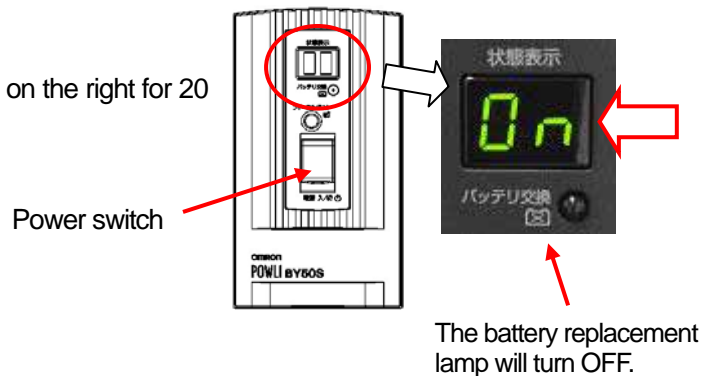


Example: BY35S/BY50S

Step 7)


Turn ON the power of the BY-S.

If the BY-S shows the display shown in the photo on the right for 20 seconds or less, it is operating normally.

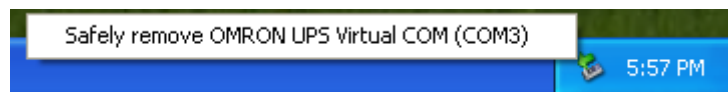


If you encounter a battery weak indication blinking when starting up the BY-S, contact our Customer Support Center. (Refer to page 16 for contact information)

Step 8) <Only for users who use USP Service Driver (USB version)>

Click the "Safely remove" icon () on the task tray at the bottom right of the desktop screen of your computer. The message [Safely remove OMRON UPS Virtual COM (COM3)] appears.

Do not remove it yet.

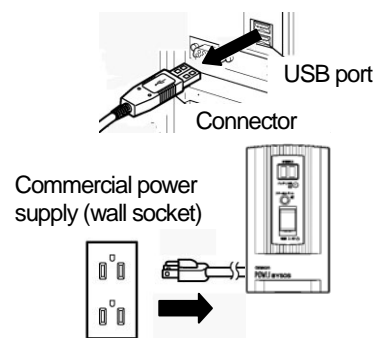
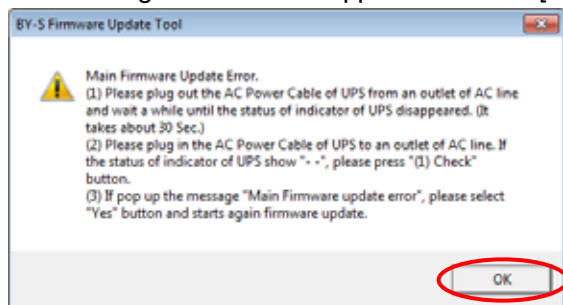


**This is the end of the operating procedures.
Thank you for updating the BY-S firmware.**

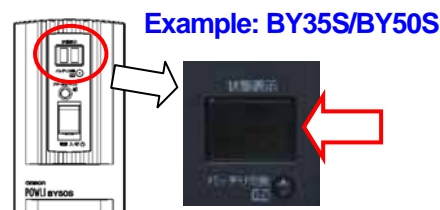
6. If an error occurs during update

1. If an error occurs during main firmware update

The message shown below appears. Click the [OK] button to proceed.

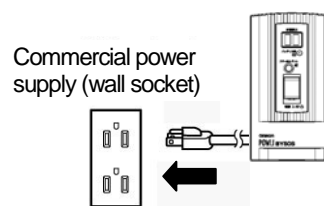
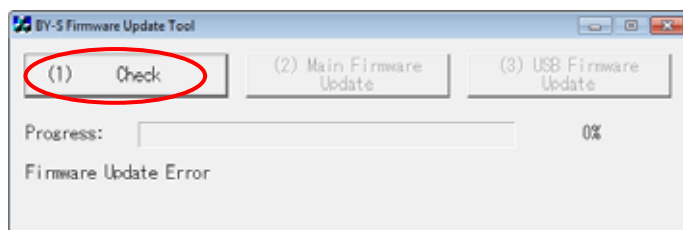
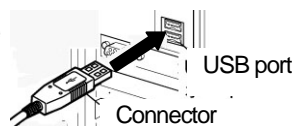


- (1) Remove the USB cable, unplug the BY-S power cable from the wall socket and wait until the BY-S display disappears. (It will take about 30 seconds to disappear)



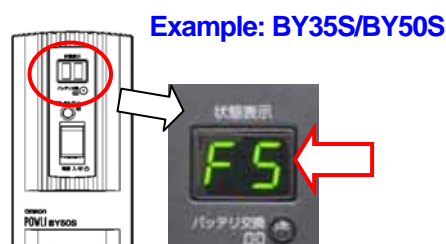
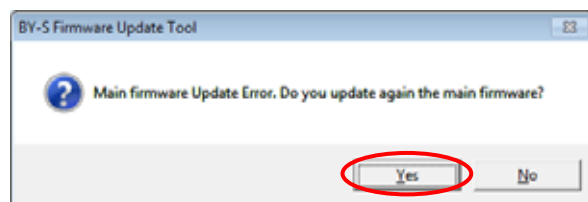
Example: BY35S/BY50S

- (2) Insert the USB cable to the same USB port, and plug the BY-S power cable to the wall socket, and click the [(1) Check] button.



- (3) When the message "Main firmware update error . . ." appears, click [Yes] to resume update.

This operation must be done while the BY-S displays "F5" (for about 30 seconds).

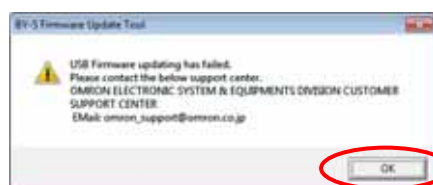


Example: BY35S/BY50S

- (4) Go back to step 3) on Page 8 to proceed.

2. If an error occurs during USB firmware update

Contact our Customer Support Center.



[Contact Information]

If you have any questions or concerns, contact our Customer Support Center.

OMRON Electronic Systems & Equipment Customer Support Center

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