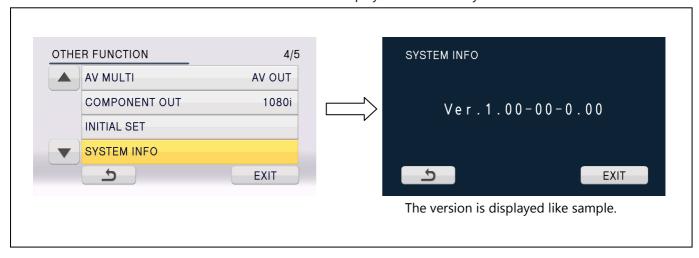
AG-AC90A Firmware update procedure

1. Version display method

1-1. The version of system in camera recorder

The version of system in this camera recorder is displayed in OTHER FUNCTIONS menu screen of setting menu.

- 1. Turn the power on.
- 2. Press **MENU** button to display the setting menu.
- 3. Touch the item "OTHER FUNCTIONS" to open the OTHER FUNCTIONS menu.
- 4. Select ▼▲ and touch the item "SYSTEM INFO" to display the version of system in this camera recorder.



1-2. Preparation

CAUTION: Before Updating Software

<u>Do not power down or pull card while upgrading.</u> If the program quits during loading, the data will be erased or part writing condition and the restart is not made. However software can not be updated, please contact Panasonic Service Engineering.

< External Power >

The AC adaptor is required for updating the camera recorder.

< Preparation for SD memory card >

- 1. Buffer memory size in SD memory card more than 64MB.
- 2. Be sure to format SD memory card on the camera recorder. **NOTE:** SD card formatted by PC standard formatter will not work.

< Copy the update file >

Accept the software usage agreement and download the update file data "TC****.zip" for the AG-AC90A firmware from the following support web site.
 http://pro-av.panasonic.net/en/ Service and Support

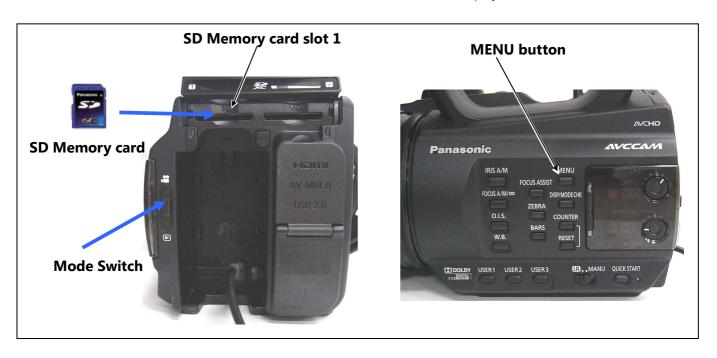
- 2. Copy the file "TC****.zip" to hard disk of your PC and extract the file.
- 3. Insert the formatted SD memory card into the PC's card slot.

 Then copy the extracted update file "UPDATE.HDC" to the root directory (*1) of the card.

For example, if the SD Card folder is on D drive, the file's location will be described as "D: UPDATE.HDC". (*1): Root directory = top-level directory (i.e., it is not a folder) of the file structure

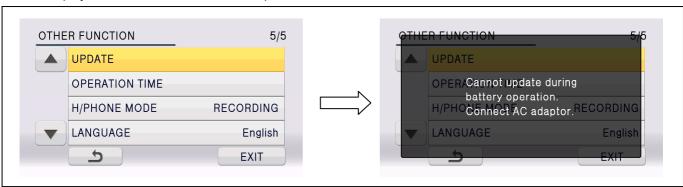
2. Update procedure

- 1. Turn the power on. Set the **MODE SW** to **mark** side.
- 2. Insert the SD memory card into the SD memory card **slot 1**.
- 3. Press the **MENU** button and touch the item "**OTHER FUNCTIONS**" to display the OTHER FUNCTIONS menu.

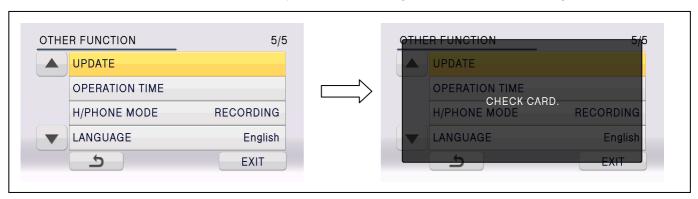


4. Select ▼▲ and touch the item "UPDATE" on the OTHER FUNCTION menu.

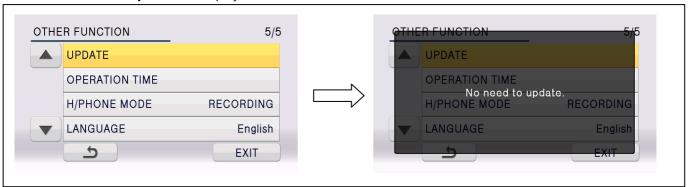
NOTE: The update can not be executed when the camera is operating on battery power. The following message is displayed. Please connect the AC adapter.



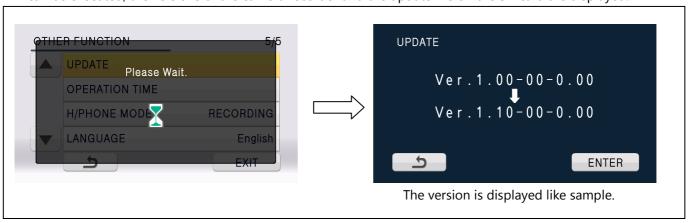
NOTE: When the update file is not recognized on SD memory card etc., the message "**CHECK CARD**." is displayed as follows. Please confirm whether the update file is correctly written on the SD memory card.



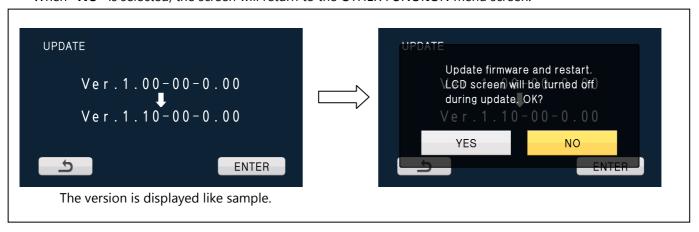
NOTE: When the version is the same or when the version of the update file on the SD card is lower, the message "**No need to update.**" is displayed.



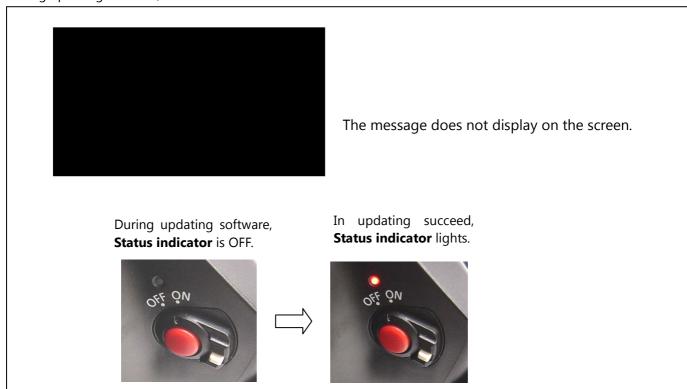
5. It takes a few seconds to check the file. While checking it, the message "**Please wait.**" is displayed. If the update can be executed, the versions of the camera recorder and the update file on the SD card are displayed.



- 6. Touch the "ENTER" button.
- 7. The update confirmation screen is displayed. Touch the "YES" button, the update process will start. When "NO" is selected, the screen will return to the OTHER FUNCTION menu screen.



The LCD screen darkens when shifting to the update processing, and the **Status indicator** goes OFF. During updating software, **Status indicator** is OFF.



- ◆ Software update takes approx. 1 to 2min. Do not power down while updating.
- 8. When the update is completed, the power automatically turns OFF / ON and the message "Update is completed." is displayed. After the power is ON again, Status indicator is ON.

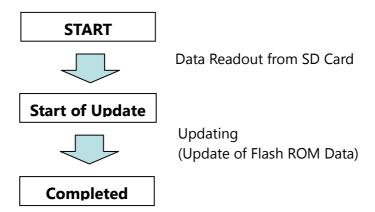


9. Touch the "OK" button. The normal "Recording" mode screen is displayed.

< How to recover from irregular situations while updating >

Solutions are introduced against both Card Plug-Out troubles to execute the update again.

Process	Card Plug-Out	Power Interruption
Data Readout from SD Card	Error Message (CHECK CARD)	The camera recorder starts up normally.
	Restart from selection of "UPDATE"	Restart from selection of "UPDATE"
Updating (Update of Flash ROM Data)	Plug-Out is ignored. Update is continued. (because the update file data is already transferred to the camera recorder)	At the power-on, the camera recorder starts up in UPDATE mode. Update is continued.



3. Confirm the version number is renewed

Follow the procedure of "Step1", confirm the version number is renewed.

If it succeeded to update, the update file in the SD memory card is not need anymore.