

# Canon Digital Video Camcorder Firmware Update Procedure

**VIXIA HF R10**

**VIXIA HF R11**

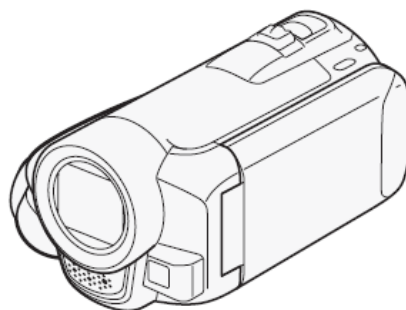
**VIXIA HF R100**

**LEGRIA HF R16**

**LEGRIA HF R17**

**LEGRIA HF R18**

**LEGRIA HF R106**



Firmware is software installed to control the equipment. Using the firmware, the camcorder can perform many operations, such as shooting or processing the image. The following is an explanation of how to download the data for the new firmware, save it to your computer's hard disk, copy it to an SD (or SDHC) memory card, and update your camcorder to the new firmware.

Please note that, to perform this update you will need the following, in addition to a computer: a commercially available SD memory card or SDHC memory card (32 MB or more), and a commercially available SD memory card reader or an SD card slot built into the computer. Please have these items ready in advance.

Make sure you have read the precautions and procedures below carefully before updating the firmware.

## **IMPORTANT: Observe the following precautions when updating the firmware**

- When updating the firmware, make sure to use a battery pack and power the camcorder using the supplied compact power adapter.
- Before updating the firmware, initialize the SD (or SDHC) memory card in the camcorder. When you initialize the SD (or SDHC) memory card, any data written on it will be erased, so please be sure to save a copy of any important data on your computer or somewhere other than the card, prior to initializing it.
- While updating the firmware, make absolutely sure not to turn the camcorder off or to operate its buttons or controls. Doing so could cause camcorder malfunctions.
- After the firmware update is completed, all of the camcorder settings are reset to their default values.
- After the firmware update is completed, it is not possible to revert back to a previous version.
- If the firmware update does not finish normally, or if the camcorder no longer starts normally, please contact our camera repair center.

The firmware update for the VIXIA HF R10/R11/R100, LEGRIA HF R16/R17/R18/R106 is performed as follows.

## Step 1. Make preparations

Explains the equipment required for the firmware update.



## Step 2: Check the firmware version on your camcorder

Explains the steps for checking the firmware version on your camcorder.



## Step 3: Download the firmware and prepare the data for the update

Explains the steps for downloading the new firmware for your camcorder.



## Step 4: Prepare an SD (or SDHC) memory card for the firmware update

Explains the steps for copying the new firmware you downloaded to an SD (or SDHC) memory card.





## Step 5: Update the camcorder to the new firmware

Explains the steps for updating the camcorder to the new firmware.

## Step 1: Make Preparations

The following items are required for this firmware update.

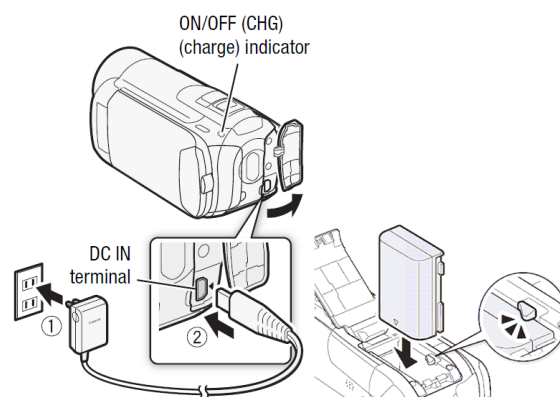
1.	Camcorder	VIXIA HF R10/R11/R100, LEGRIA R16/R17/R18/R106
2.	Computer	OS: Computer running either Windows or Mac OS X <sup>(*)</sup>
3.	SD memory card reader	SD memory card reader (commercially available) or a computer with an SD card slot
4.	SD memory card	A 32 MB or higher-capacity SD memory card or SDHC memory card (both commercially available)  * If using an SDHC memory card, the memory card reader or memory card slot on the computer (previous item) must support SDHC memory cards.
5.	Battery pack	The battery pack (BP-2L5) that comes with the digital camcorder  
6.	Compact power adapter	The compact power adapter (CA-590 or CA-590E) and AC power cable that comes with the digital camcorder.  

<sup>(\*)</sup>OS Requirements: Windows 7, Windows Vista (Service Pack 1 or 2), Windows XP (Service Pack 3), or Mac OS X (10.4-10.6)

Customers who do not have items 2, 3, or 4 above are advised to contact our customer support center.

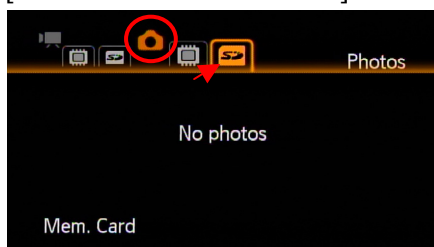
## Step 2: Check the firmware version on your camcorder

1. Insert the battery pack and connect the compact power adapter to the camcorder. Connect the compact power adapter to the power outlet and turn the camcorder ON.

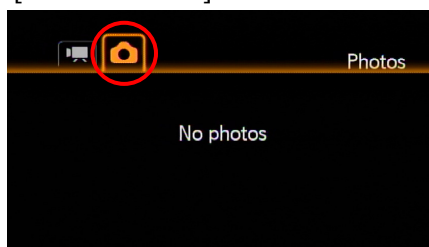


2. Press the (Camera/Play) button and set the camcorder to playback mode to play back photos (). (For HF R10/R11/R16/R17/R18, select the SD card tab.)

[HF R10/R11/R16/R17/R18]



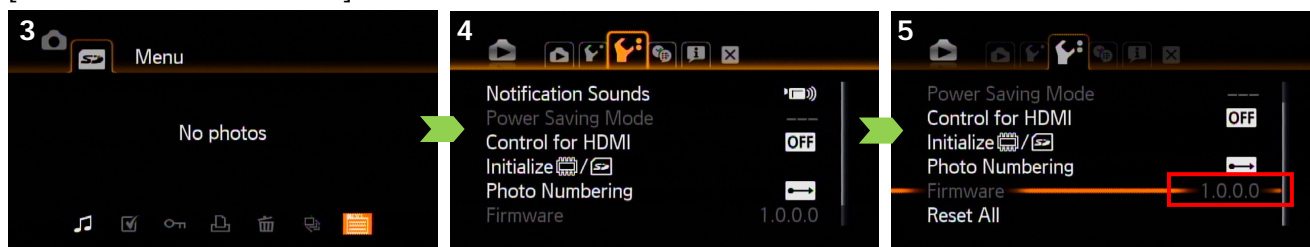
[HF R100/R106]



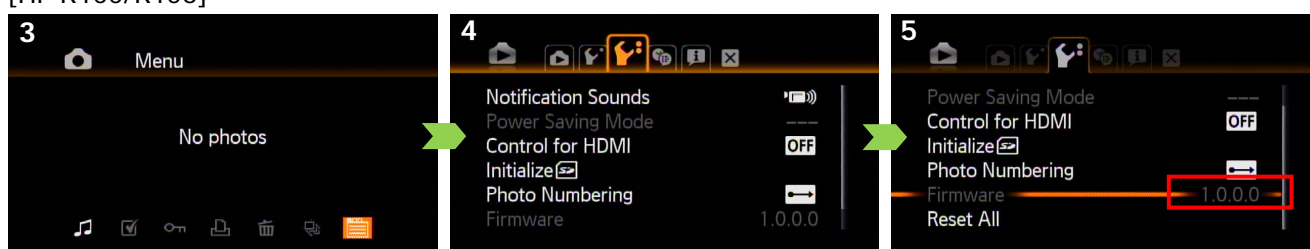
3. Press the **FUNC.** button, select (Menu), and then press the **SET** button.
4. Select the (System Setup 2) tab.
5. Check the version shown in [**Firmware**]. If the firmware version is [**1.0.0.0**], you need to update the firmware of your camcorder. If the firmware version is higher than **1.0.0.0**, you do not need to update the firmware.
6. Turn the camcorder OFF.

The actual screen displays for Steps 3 to 5 are as follows:

[HF R10/R11/R16/R17/R18]



[HF R100/R106]



### Step 3: Download the firmware and prepare the data for the update

This section explains the operations to be made on your computer.

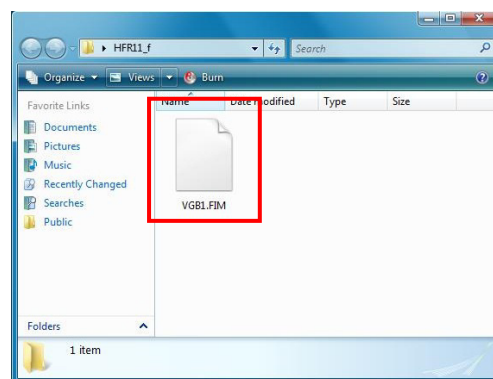
Please perform the procedure that corresponds to your computer's operating system.

#### For Windows (These explanations use the screens from Windows Vista.)

1. Click on **I agree** on the download page, and then download the file for the update, **hfr11-1010.exe**, specifying the Desktop as the destination. (Depending on the preferences set in your computer, the **.exe** part of the file name might not be displayed.)
2. Extract the contents of the **hfr11-1010.exe** file by double-clicking it.
3. When the contents are extracted, a folder named **HFR11\_f** will be created.

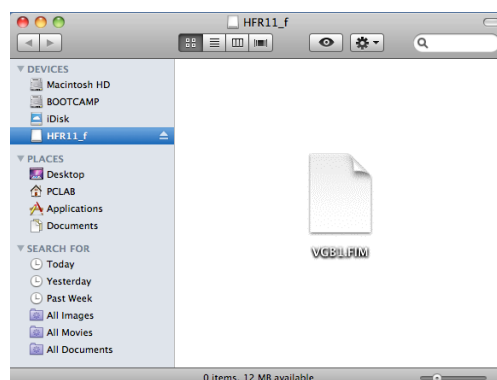
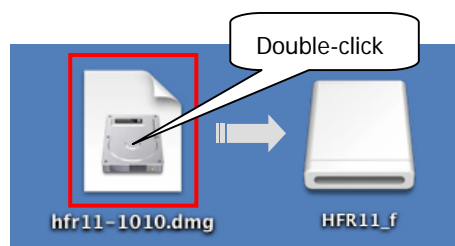


4. Open the **HFR11\_f** folder created in the previous step, and confirm that it contains the firmware update data, which is a file named **VGB1.FIM**.



#### For Mac OS

1. Click on **I agree** on the download page, and then download the file for the update, **hfr11-1010.dmg**. (The downloaded file will be saved to the folder specified in **Preferences**.)
2. After the download is completed, an icon named **HFR11\_f** will be automatically created on the Desktop. (Depending on the **Preferences** setting, the icon may not be automatically generated. In this case, double-click **hfr11-1010.dmg** saved to the folder specified in **Preferences**.)
3. Double-click the **HFR11\_f** icon and confirm that it contains the firmware update data, which is a file named **VGB1.FIM**.



## Step 4: Prepare an SD (or SDHC) memory card for the firmware update

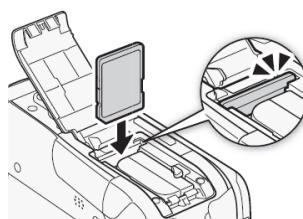
First, insert an SD (or SDHC) memory card into the camcorder and initialize it. This section will explain how to use your computer and an SD memory card writer (or an SD card slot built into your computer) to copy the new firmware to the initialized SD (or SDHC) memory card.

### Caution

**When you initialize the SD (or SDHC) memory card, all of the data saved on it will be erased, so please save any important data on your computer or somewhere else before initializing the card. If you perform the firmware update with data remaining on the SD (or SDHC) memory card, it could cause the camcorder to malfunction.**

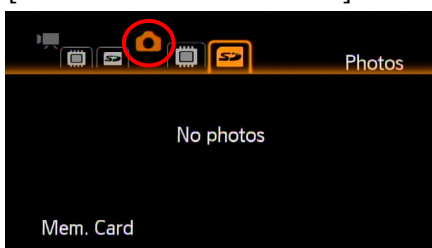
### Insert an SD (or SDHC) memory card into the camcorder and initialize it.

5. Insert the SD (or SDHC) memory card into the camcorder.

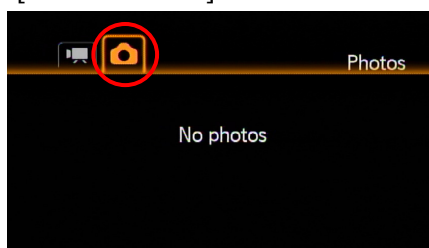


6. Press the (Camera/Play) button and set the camcorder to playback mode to play back photos (). (For HF R10/R11/R16/R17/R18, select the SD card button.)

[HF R10/R11/R16/R17/R18]

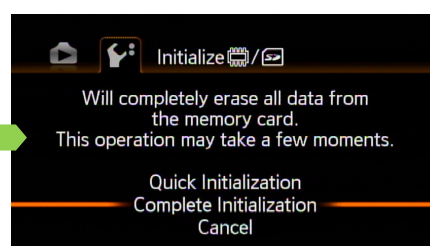
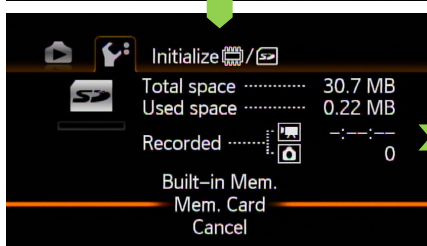
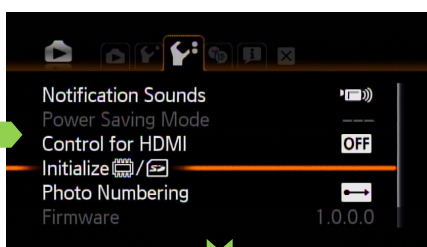
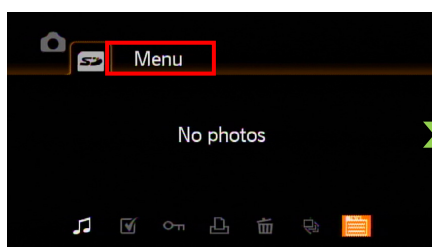


[HF R100/R106]

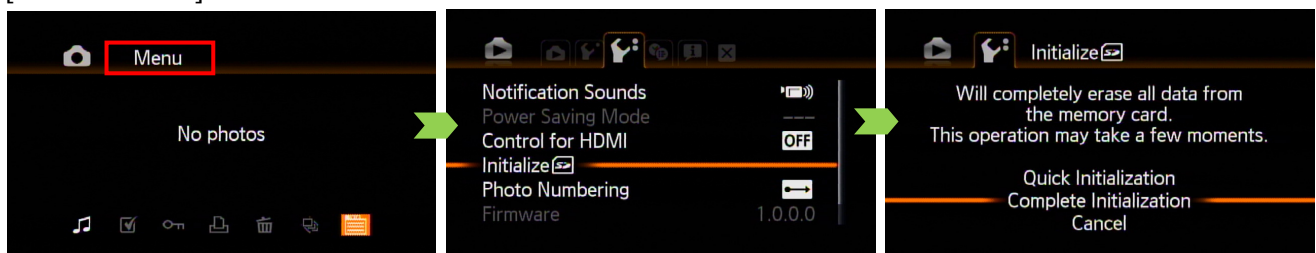


7. Press the **FUNC.** button, select (Menu), and then press the **SET** button.
8. Select the (System Setup 2) tab, select [**Initialize**], and then press the **SET** button.
9. Select [**Complete Initialization**], and then press the **SET** button. (For HF R10/R11/R16/R17/R18, you need to first select [**Mem. Card**] to proceed.) \*The sample screens below use an SD memory card with a capacity of 32 MB.

[HF R10/R11/R16/R17/R18]

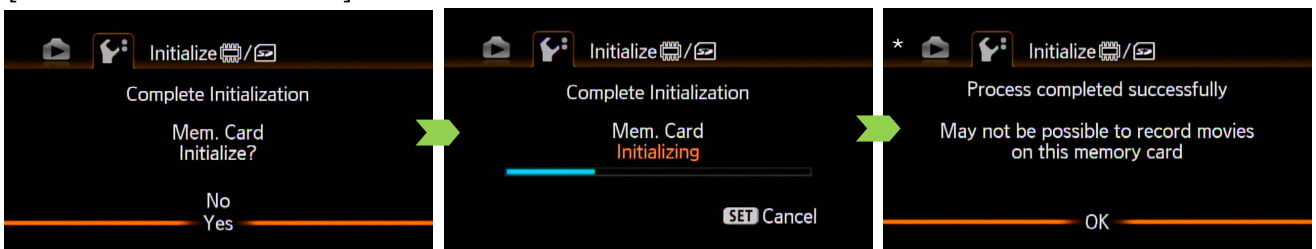


[HF R100/R106]

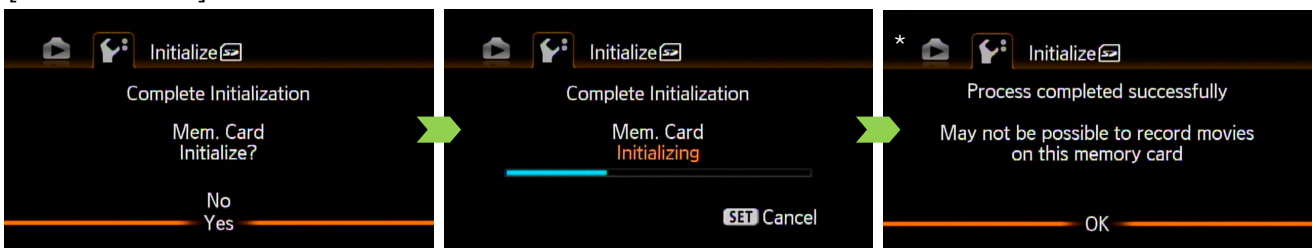


10. Select [**Yes**], and then press the **SET** button to initialize the memory card. After a short while, the screen will show that the initialization has been completed, so select [**OK**], and then press the **SET** button.  
 \*The sample screens below use an SD memory card with a capacity of 32 MB.

[HF R10/R11/R16/R17/R18]



[HF R100/R106]



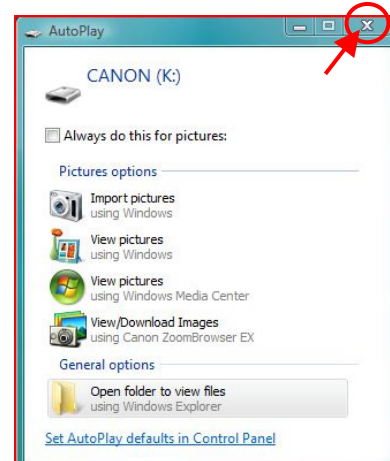
11. Press the **FUNC.** button to close the Menu.  
 12. Turn the camcorder OFF, and then remove the SD (or SDHC) memory card from the camcorder.

**Next, you will use a computer to copy the firmware to the SD (or SDHC) memory card that was completely initialized in the camcorder. Please perform the procedure that corresponds to your computer's operating system (Windows or Mac OS).**

**For Windows (These explanations use the screens from Windows Vista.)**

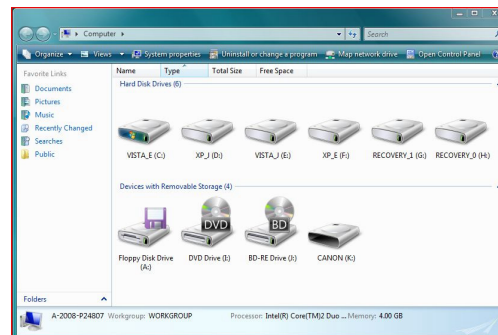
1. Insert the initialized SD (or SDHC) memory card into the SD card reader/writer (or the SD card slot on the computer).

Depending on the settings of your OS, a dialog box for either **Auto Play** or a **Removable Disk** may appear. If that happens, click the Close button [x] in the upper right-hand corner of the dialog box.

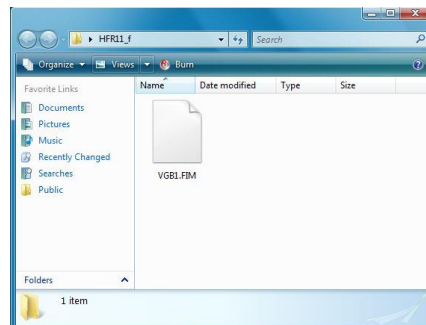




2. If you click on the **Computer** icon (or **My Computer** in Windows XP), a removable disk icon labeled **CANON** appears.



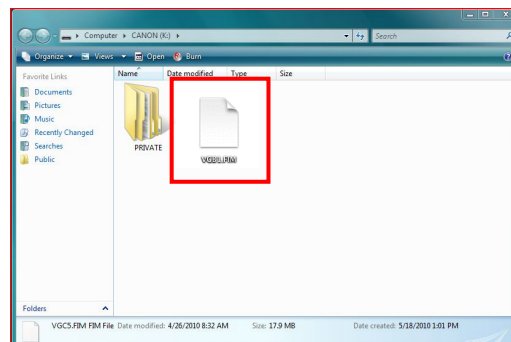
3. Drag the firmware update data **VGB1.FIM** from the **HFR11\_f** folder created in Step 3-4 to the **CANON** icon.




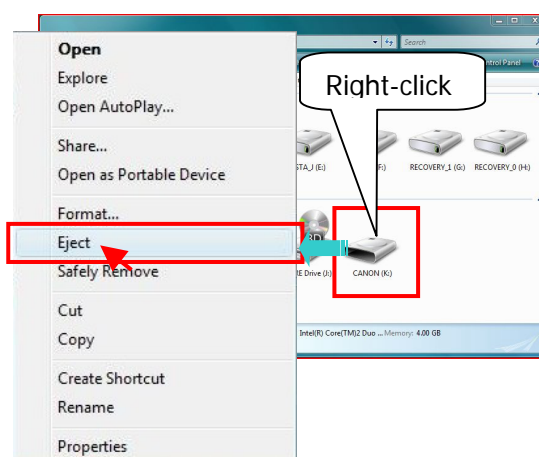
### Caution

Please be sure to copy the firmware to the root directory of the SD (or SDHC) memory card.

4. After copying the data, double-click the **CANON** icon, and if the firmware update data **VGB1.FIM** is there, the copying process is completed.



5. Click the Back button [  ] in the currently open window, right-click on the **CANON** icon, select **Eject** from the context menu, and then remove the SD (or SDHC) memory card from the card reader/writer (or from the SD card slot on the computer).

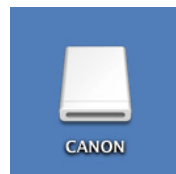


Please proceed to "Step 5: Update the camcorder to the new firmware".

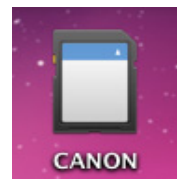
## For Mac OS

1. Insert the initialized SD (or SDHC) memory card into the SD card reader/writer (or the SD card slot on the computer).
2. An icon labeled **CANON** will appear on the computer's desktop.

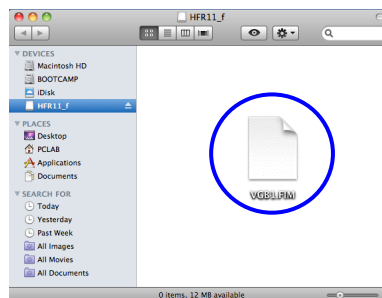
Using a card reader



Using a built-in card slot



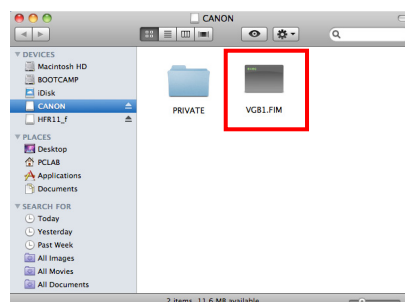
3. Drag the firmware update data **VGB1.FIM** from the **HFR11\_f** icon created in Step 3-3 to the **CANON** icon on the desktop.




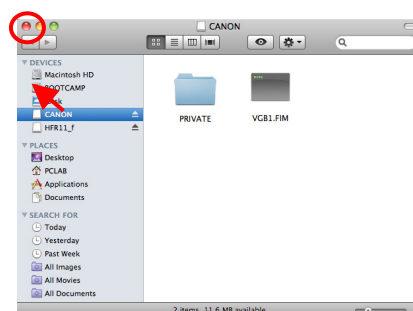
### Caution

Please be sure to copy the firmware to the root directory of the SD (or SDHC) memory card.

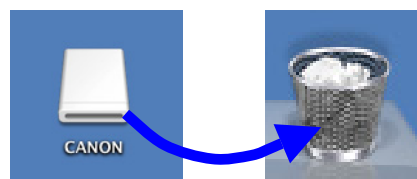
4. After copying the data, double-click the **CANON** icon on the desktop. If the firmware update data **VGB1.FIM** is there, the copying process is completed.



5. Click the close button [  ] in the upper left-hand side of the screen to close the folder.



6. Drag the **CANON** icon to the **Trash** icon, and then remove the SD (or SDHC) memory card from the card reader/writer (or the SD card slot on the computer).



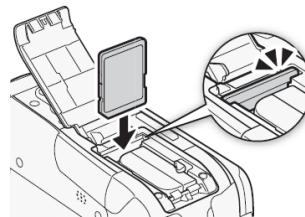
Please proceed to Step 5: Update the camcorder to the new firmware.








## Step 5: Update the camcorder to the new firmware

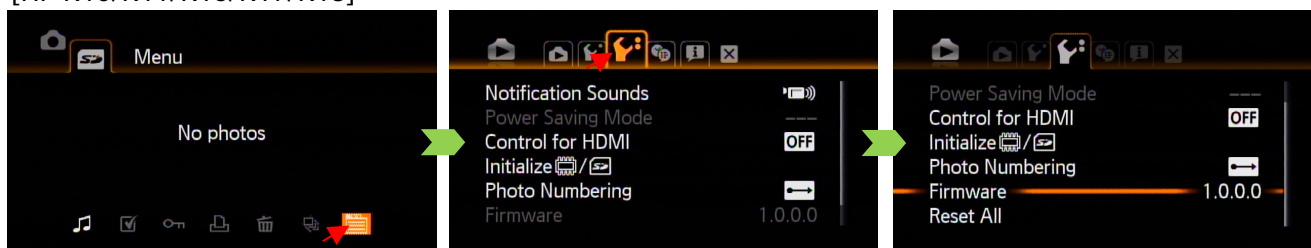
This section explains how to operate the camcorder.

1. Insert the SD (or SDHC) memory card that has the firmware update data on it into the camcorder.

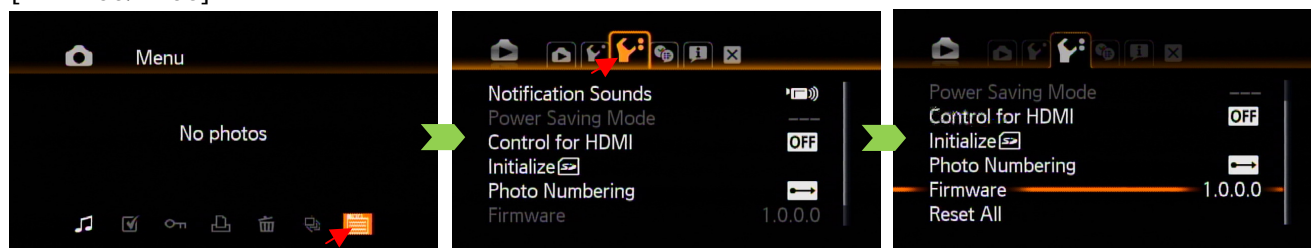


2. Turn the camcorder ON.
3. Press the  (Camera/Play) button and set the camcorder to playback mode to play back photos (). (For HF R10/R11/R16/R17/R18, select the  SD card.)
4. Press the **FUNC.** button, select  (Menu) , and then press the **SET** button.
5. Select the  (System Setup 2) tab, and then select [**Firmware**].

[HF R10/R11/R16/R17/R18]

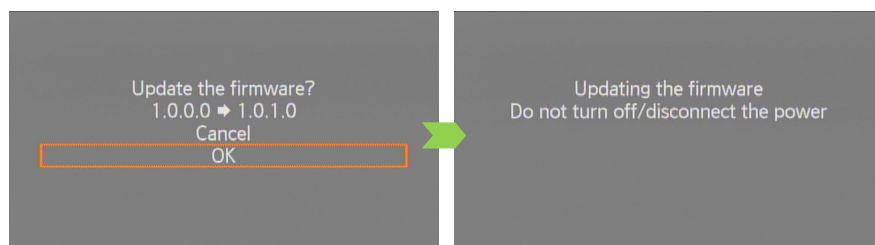


[HF R100/R106]



6. Press the **SET** button to display the update confirmation screen. Select [**OK**], and then press the **SET** button to start the firmware update.

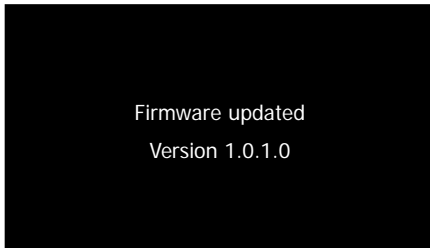
After a short while, the firmware will be overwritten with the new version.



### Caution

The firmware update takes approximately three minutes to complete. During this time, please do not turn off the camcorder or operate any of its controls. Doing so could cause camcorder malfunctions.

7. After the update ends, the camcorder will automatically restart, and a screen that shows the new firmware version will appear for about four seconds.



8. All of the settings will be reset, and the time and date screen will appear. Please set the date and time.
9. Please operate the camcorder as described in Step 2, "**Check the firmware version on your camcorder**", to confirm that the firmware version has changed.
10. Turn off the camcorder, and then remove the SD (or SDHC) memory card.
11. This completes the firmware update.

#### **Caution**

**After the firmware update is completed, make sure to follow Step 4-1 to 4-7 to completely initialize the SD (or SDHC) memory card that was used to copy the firmware before using the memory card. Also, please delete the firmware you downloaded from your computer.**