

N I N T E N D O  
**NITRO**-System  
NITRO-Viewer Controller  
User's Manual  
Version 1.0.0

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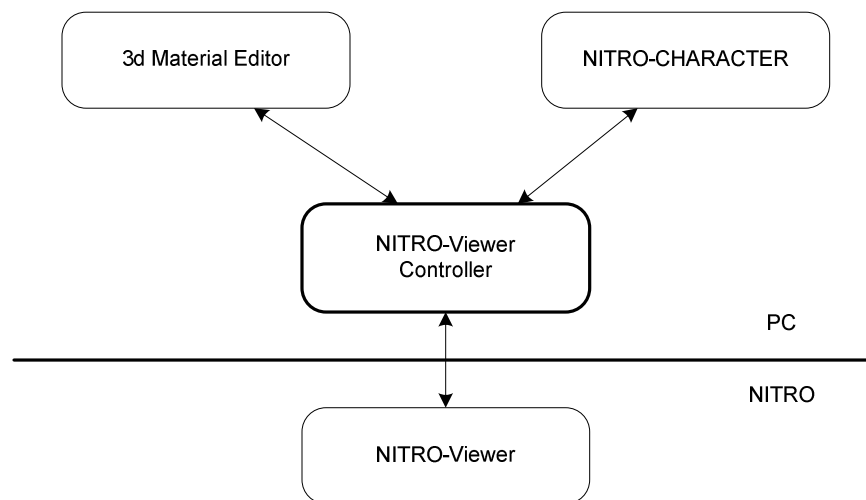
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## Revision History

Version	Revision Date	Details of Revision
1.0.0	1/18/2005	Added, modified functionality: <ul style="list-style-type: none"> <li>Deleted support for IS-CGB/AGB-EMULATOR</li> </ul> Changed only in the manual: <ul style="list-style-type: none"> <li>Changed all instances of "NITRO" to "Nintendo DS" in the manual</li> </ul>
0.8.3	12/02/2004	Added, modified functionality: <ul style="list-style-type: none"> <li>Restored the window display location of the previous startup.</li> </ul>
0.7.3	10/29/2004	Added, modified functionality: <ul style="list-style-type: none"> <li>Changed the icon image</li> </ul> Changed only in the manual: <ul style="list-style-type: none"> <li>Added that it depends on <code>ISNITRO.DLL</code>.</li> </ul>
0.7.0	10/12/2004	Added, modified functionality: <ul style="list-style-type: none"> <li>Added support for IS-NITRO-UIC</li> </ul>
0.6.0	9/13/2004	Added, modified functionality: <ul style="list-style-type: none"> <li>Added ensata mode.</li> </ul>
0.5.0	8/30/2004	Added, modified functionality: <ul style="list-style-type: none"> <li>Created the English version of menu and dialog text.</li> </ul> Changed only in the manual: <ul style="list-style-type: none"> <li>Expressions "share mode" and "exclusive mode" changed to "2D/3D Simultaneous Preview" mode and "Single Preview" mode.</li> </ul>
0.4.4	8/17/2004	Added, modified functionality: <ul style="list-style-type: none"> <li>Revised the spelling of the cancel button in the "Allocate VRAM Banks" dialog box. ("Allocate VRAM Banks" image in the manual.)</li> <li>Changed <code>ISNITRO.dll</code> version display from 3 to 4 digits.</li> </ul>
0.4.1	7/15/2004	Initial release.

# 1 Introduction

The NITRO-Viewer Controller is a Windows application that acts as an intermediary between the NITRO-Viewer running on the Nintendo DS hardware, and the Windows application 3D Material Editor and NITRO-CHARACTER data on the PC side. NITRO-Viewer also includes a feature to allocate resources in the Nintendo DS hardware. The following chapters explain how to use the NITRO-Viewer Controller.



**Figure 1-1. NITRO-Viewer Controller**

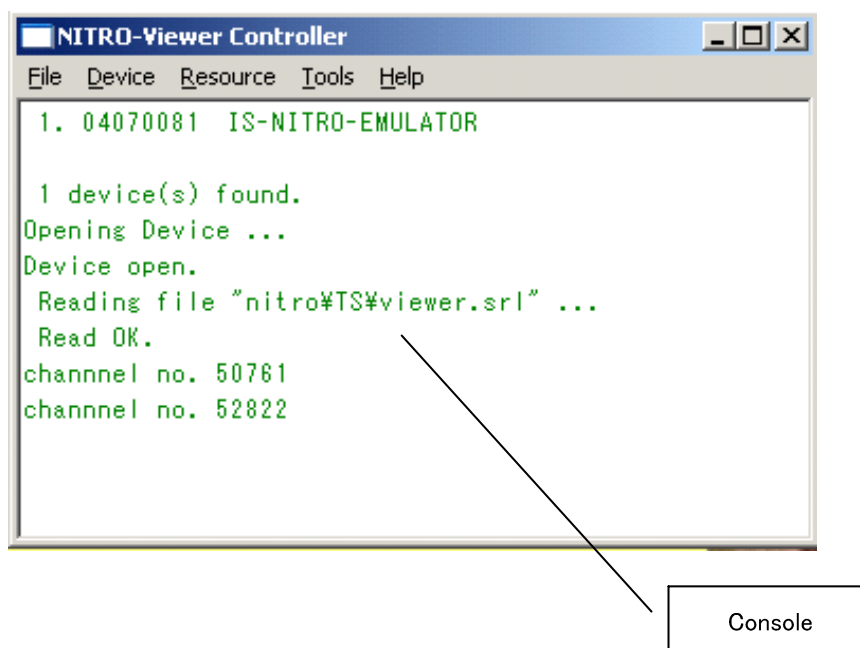
## 2 Using the NITRO-Viewer Controller

### 2.1 Starting the NITRO-Viewer Controller

#### 2.1.1 Starting the NITRO-Viewer Controller

The procedure for starting the NITRO-Viewer Controller is as follows:

- (1) Double-click on the `NITRO-Viewer_Controller` shortcut. The NITRO-Viewer Controller starts up and a window appears as shown in **Error! Reference source not found.**



**Figure 2-1. The NITRO-Viewer Controller Startup Screen**

- (2) When the connected device is the IS-NITRO-EMULATOR, NITRO-Viewer will also start up on the Nintendo DS hardware after a short interval.

**Note:** Generally speaking, you can disregard the contents that are displayed on the console.

**Note:** To use IS-NITRO-EMULATOR or IS-NITRO-UIC hardware, `ISNITRO.dll` must be installed in the system. `ISNITRO.dll` is installed in the system when the IS-NITRO-DEBUGGER software is installed.

### 2.1.2 Communication between the Nintendo DS Hardware and Other Windows Applications

While the NITRO-Viewer Controller is running, communication is not possible between the Nintendo DS hardware and Windows applications other than the 3D Material Editor and NITRO-Viewer. To use other Windows applications to communicate with the Nintendo DS hardware, you must first close the NITRO-Viewer Controller.

## 2.2 2D/3D Simultaneous Preview Mode and Single Preview Mode

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When 3D Material Editor and NITRO-CHARACTER connect to NITRO-Viewer, there are two possible connection modes, the 2D/3D Simultaneous Preview Mode and the Single Preview Mode.

The state in which both 3D Material Editor and NITRO-CHARACTER can connect to NITRO-Viewer at the same time, or the state in which only one of them can connect. The state in which two can connect at the same time is called "2D/3D Simultaneous Preview Mode," and the state in which only either of them can connect is called "Single Preview Mode."

### 2.2.1 2D/3D Simultaneous Preview Mode

In the 2D/3D Simultaneous Preview Mode, the preview screens of both the NITRO-CHARACTER and the NITRO-Viewer can be displayed at once. However, to display properly, it is necessary to decide how you want to allocate the Nintendo DS hardware resources. This is described in Section 2.3.

### 2.2.2 Single Preview Mode

In the Single Preview mode, only one of the applications can be connected to NITRO-Viewer. For example, if the 3D Material Editor is already connected, NITRO-CHARACTER cannot communicate with NITRO-Viewer. To connect to NITRO-CHARACTER, 3D Material Editor and NITRO-Viewer must be disconnected first.

### 2.2.3 Switching between Single Preview and 2D/3D Simultaneous Preview Modes

Switching between the 2D/3D Simultaneous Preview and the Single Preview modes is done by checking or unchecking the **Share Mode** menu item in the **Resource** menu in the NITRO-Viewer Controller. NITRO-Viewer is reset whenever the mode is switched.

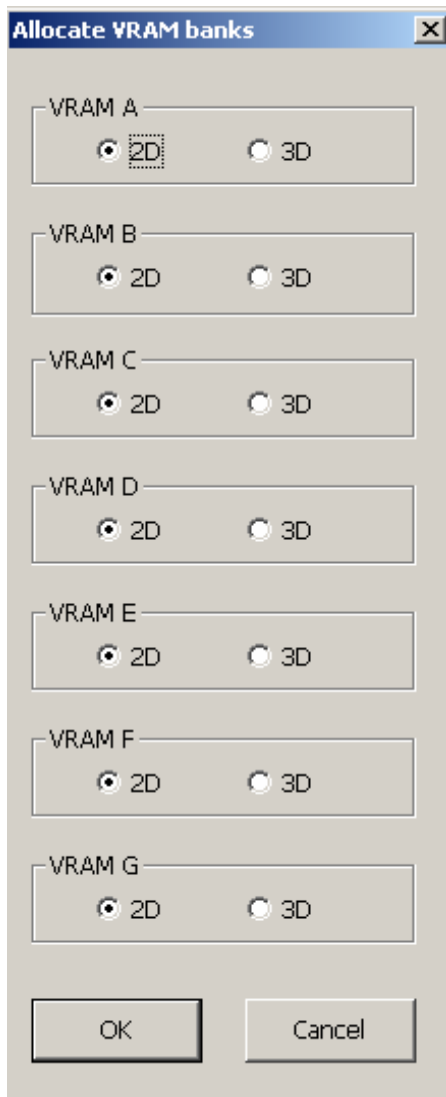
- If the Share mode menu item is checked, the mode is 2D/3D Simultaneous Preview.
- If the Share mode menu item is not checked, the mode is Single Preview.

## 2.3 VRAM Bank Allocation Settings

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NITRO-Viewer can be used to allocate VRAM banks.

- (1) Select the **Resource > Allocate VRAM banks** menu item.  
The Allocate VRAM Banks dialog box opens.



**Figure 2-2. Allocate VRAM Banks Dialog Box**

- (2) Select either **2D** or **3D** for VRAM banks **A** through **G**.
- (3) Click the **OK** button to save your settings and close the dialog box.



## 3 Other Controls and Settings

### 3.1 Resetting the Nintendo DS Hardware

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If connected with the IS-NITRO-EMULATOR, you can reset the Nintendo DS hardware by selecting the **Device > Reset** menu option.

### 3.2 Disconnecting the Nintendo DS Hardware

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After the NITRO-Viewer Controller starts and communication begins with the Nintendo DS hardware, Windows applications other than 3D Material Editor and NITRO-CHARACTER cannot communicate with the Nintendo DS hardware. After exiting the NITRO-Viewer Controller, other Windows applications can communicate with Nintendo DS hardware. Also, by disconnecting the communication between the NITRO-Viewer controller and Nintendo DS hardware, other Windows applications can communicate with Nintendo DS hardware.

To disconnect without exiting the NITRO-Viewer Controller, select the **Device > Disconnect** menu item. To resume communication with the Nintendo DS hardware, select the **Device > Connect** menu item.

### 3.3 Loading Nintendo DS ROM Files

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If connected with the IS-NITRO-EMULATOR, you can load Nintendo DS ROM files by using the following procedure.

- (1) Select the **File > Open** menu item. The **Open File** dialog box appears.
- (2) Select the ROM file that you want to load and click the **Open** button.
- (3) Once the ROM file is loaded and the Nintendo DS hardware is reset, the program starts execution after a moment.

### 3.4 Operating with ensata

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It is possible to operate NITRO programs in ensata, the NITRO software emulator, instead of operating them in the Nintendo DS hardware. To operate NITRO programs on ensata, check the **ensata** menu item on the **Device** menu while the Nintendo DS hardware is not connected.

### 3.5 Version Information

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To view the version information for your NITRO-Viewer Controller and library module, select the **Help > About NITRO-Viewer Controller** menu option. The **About NITRO-Viewer Controller** dialog box opens and displays the version numbers and release dates.

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