

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

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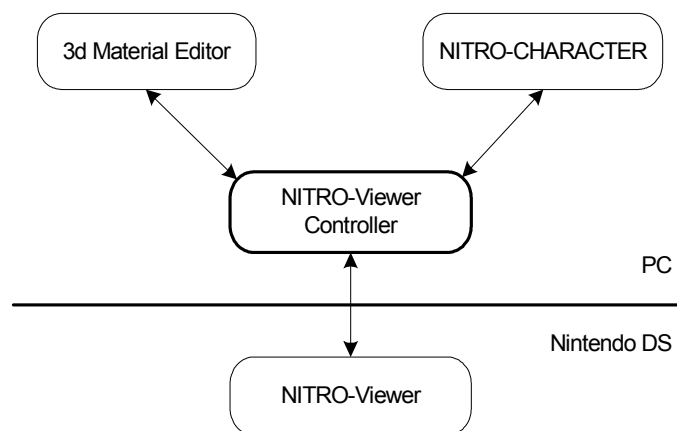
## Revision History

Version	Revision Date	Details of Revision
1.0.0	01/18/2005	Added, modified functionality: <ul style="list-style-type: none"> <li>Deleted support for IS-CGB/AGB-EMULATOR</li> </ul> Added, modified documentation: <ul style="list-style-type: none"> <li>Changed NITRO to Nintendo DS</li> </ul>
0.8.3	12/02/2004	Added, modified functionality: <ul style="list-style-type: none"> <li>Restored the window display location saved at time of 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> Added, modified documentation: <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. (Only manual changed.)</li> <li>Expressions "Dedicated" mode and "Dual" mode changed to "2D/3D Concurrent 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" dialog box. ("Allocating VRAM" 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 for data transfer between NITRO-Viewer running on Nintendo DS hardware and 3D Material Editor or NITRO-CHARACTER running on a PC. NITRO-Viewer Controller also includes a function to allocate Nintendo DS hardware resources used by NITRO-Viewer. The following sections provide details about using the NITRO-Viewer Controller.

**Figure 1-1 Overview**



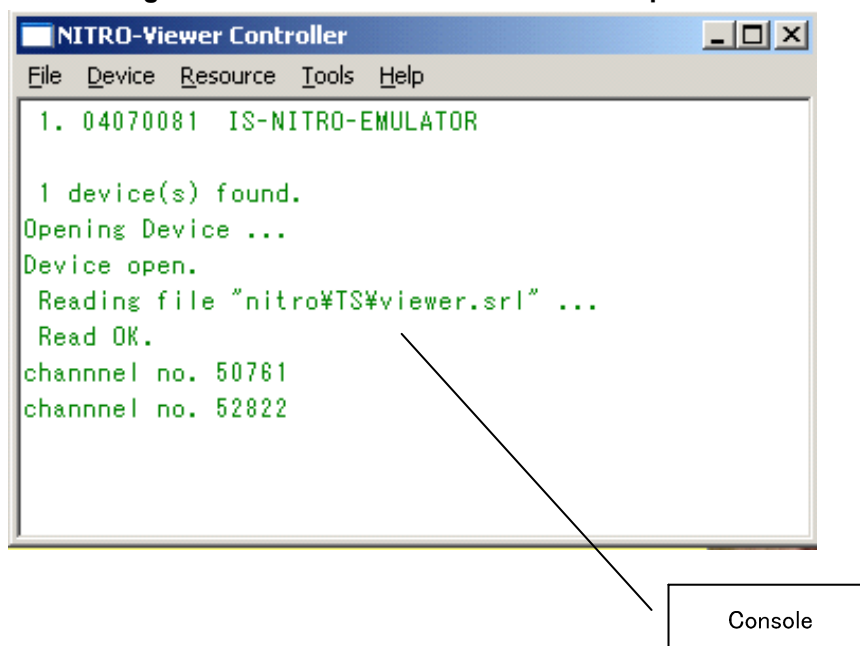
## 2 Using NITRO-Viewer Controller

### 2.1 Starting NITRO-Viewer Controller

#### 2.1.1 Starting NITRO-Viewer Controller

The procedure for starting NITRO-Viewer Controller is shown below.

Figure 2-1 NITRO-Viewer Controller Startup Screen



- (1) Double-click on the `NITRO-Viewer_Controller` shortcut file. The NITRO-Viewer Controller starts up and the window shown in **Error! Reference source not found.** is displayed.
- (2) If `IS-NITRO-EMULATOR` hardware is connected, NITRO-Viewer will start up on the Nintendo DS after a short interval.

Note: Generally speaking, you can disregard the contents displayed on the startup console.

Caution: When using either `IS-NITRO-EMULATOR` or `IS-NITRO-UIC` hardware, the `ISNITRO.dll` file must be installed in the system. To install the `ISNITRO.dll` file, install the `IS-NITRO-DEBUGGER` software.

### 2.1.2 Communicating with the Nintendo DS Hardware using Other Windows Applications

While NITRO-Viewer Controller is running, communication is not possible between the Nintendo DS hardware and Windows applications other than the 3D Material Editor or NITRO-CHARACTER. You can exit NITRO-Viewer Controller to send data from other Windows applications to your Nintendo DS.

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

The primary difference between the two connection modes is that the Simultaneous 2D/3D Preview mode allows both 3D Material Editor and NITRO-CHARACTER to connect to NITRO-Viewer, while the Single Preview Mode allows only one application to connect at a time.

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

In the Simultaneous 2D/3D Preview Mode, you can combine and simultaneously display preview screens for both NITRO-CHARACTER and 3D Material Editor. To display the preview screens of both applications properly, you need to decide how you want to allocate Nintendo DS hardware resources. Nintendo DS hardware resources allocation is described in Section 2.3.

### 2.2.2 Single Preview Mode

In the Single Preview mode, only one of the applications can connect to NITRO-Viewer at a time. Therefore, if 3D Material Editor is already connected, NITRO-CHARACTER cannot communicate with your NITRO hardware until you disconnect 3D Material Editor. The same restriction applies if NITRO-CHARACTER is already connected.

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

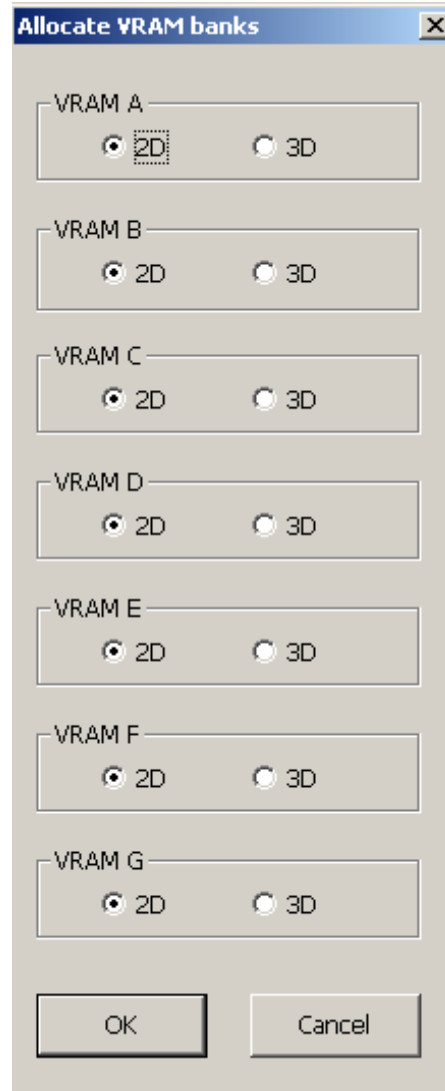
Switching between the Simultaneous 2D/3D Preview and the Single Preview modes is done using the NITRO-Viewer Controller. From the **Resource** menu, select or deselect **Share Mode**. NITRO-Viewer resets whenever you change modes.

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

## 2.3 VRAM Bank Allocation Settings

The VRAM banks used by NITRO-Viewer can be allocated.

Figure 2-2 Allocate VRAM banks Dialog Box



- (1) Select the **Resource > VRAM bank allocation** menu option.  
The **Allocate VRAM banks** dialog box opens.
- (2) Select either **2D** or **3D** for 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

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If the the Nintendo DS is connected to the PC through the IS-NITRO-EMULATOR hardware, 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 NITRO-Viewer Controller starts and communication begins with the Nintendo DS, Windows applications other than 3D Material Editor and NITRO-CHARACTER cannot communicate with the Nintendo DS. One way to allow other applications to communicate with the Nintendo DS is to exit NITRO-Viewer Controller. Another way is to disconnect and reestablish communications between NITRO-Viewer Controller and the Nintendo DS by using the following procedure.

- To disconnect without exiting NITRO-Viewer Controller, simply select the **Device > Disconnect** menu option. NITRO-Viewer Controller suspends all communications with the Nintendo DS and releases all connections.
- To resume communication between NITRO-Viewer Controller and the hardware, select the **Device > Connect** menu option. NITRO-Viewer Controller reconnects to the hardware using the current mode and VRAM (if in Share mode) configuration settings.

### 3.3 Reading Nintendo DS ROM Files

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If the connection between the Nintendo DS and the PC is through the IS-NITRO- EMULATOR hardware, you can read Nintendo DS ROM files by using the following procedure.

- (1) Select the **File > Open** menu option. The standard Open File dialog appears.
- (2) Highlight the ROM file that you want to read and click the **Open** button.
- (3) Once the ROM file is read, the Nintendo DS resets and launches the program.

### 3.4 Operating with ensata

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It is possible to operate Nintendo DS programs in ensata, the Nintendo DS software emulator, instead of operating them in the Nintendo DS. To operate Nintendo DS programs on ensata, check the "ensata" menu item on the "Device" menu when the Nintendo DS 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** menu option. The **About NITRO-Viewer Controller** dialog box opens and displays the version numbers and release dates.

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