

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

**The contents in this document are highly
confidential and should be handled accordingly.**

Confidential

These coded instructions, statements, and computer programs contain proprietary information of Nintendo of America Inc. and/or Nintendo Company Ltd. and are protected by Federal copyright law. They may not be disclosed to third parties or copied or duplicated in any form, in whole or in part, without the prior written consent of Nintendo.

Table of Contents

1	Introduction	5
2	Using NITRO-Viewer Controller	6
2.1	Starting NITRO-Viewer Controller	6
2.1.1	Starting NITRO-Viewer Controller	6
2.1.2	Communication between the Nintendo DS and Other Windows Applications	7
2.2	Simultaneous 2D/3D Preview Mode and Single Preview Mode	7
2.2.1	Simultaneous 2D/3D Preview Mode	7
2.2.2	Single Preview Mode	7
2.2.3	Switching between Single Preview and Simultaneous 2D/3D Preview Modes	7
2.3	VRAM Bank Allocation Settings	8
3	Other Controls and Settings	9
3.1	Resetting the Nintendo DS	9
3.2	Disconnecting the Nintendo DS	9
3.3	Reading Nintendo DS ROM Files	9
3.4	Operating with ensata	9
3.5	Version Information	9

Figures

Figure 1-1 Overview	5
Figure 2-1 NITRO-Viewer Controller Startup Screen	6
Figure 2-2 Allocate VRAM banks Dialog Box	8

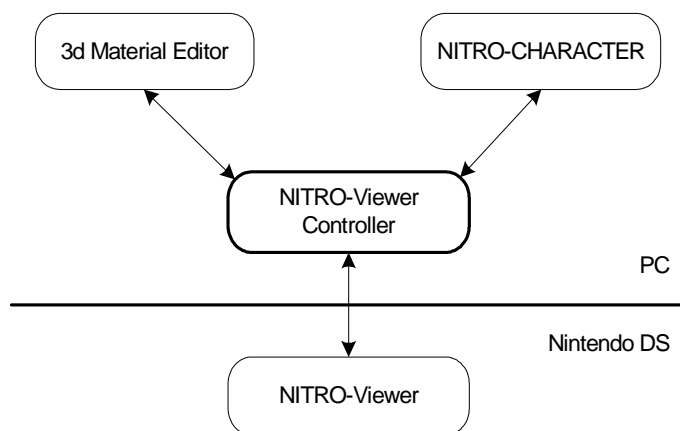
Revision History

Version	Revision Date	Details of Revision
1.0.0a	2007/04/20	Corrected typographical errors. Changed dates in Revision History to international format.
1.0.0	2005/01/18	Added, modified functionality: <ul style="list-style-type: none">Deleted support for IS-CGB/AGB-EMULATOR. Added, modified documentation: <ul style="list-style-type: none">Changed NITRO to Nintendo DS.
0.8.3	2004/12/02	Added, modified functionality: <ul style="list-style-type: none">Restored the window display location saved at time of previous startup.
0.7.3	2004/10/29	Added, modified functionality: <ul style="list-style-type: none">Changed the icon image. Added, modified documentation: <ul style="list-style-type: none">Added that it depends on <code>ISNITRO.DLL</code>.
0.7.0	2004/10/12	Added, modified functionality: <ul style="list-style-type: none">Added support for IS-NITRO-UIC.
0.6.0	2004/09/13	Added, modified functionality: <ul style="list-style-type: none">Added ensata mode.
0.5.0	2004/08/30	Added, modified functionality: <ul style="list-style-type: none">Created the English version of menu and dialog text. (Only manual changed.)Expressions "Dedicated" mode and "Dual" mode changed to "2D/3D Concurrent Preview" mode and "Single Preview" mode.
0.4.4	2004/08/17	Added, modified functionality: <ul style="list-style-type: none">Revised the spelling of the cancel button in the "Allocate VRAM" dialog box. ("Allocating VRAM" image in the manual.)Changed <code>ISNITRO.dll</code> version display from 3 to 4 digits.
0.4.1	2004/07/15	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 and 3D Material Editor or NITRO-CHARACTER running on a PC. NITRO-Viewer Controller also includes a function to allocate Nintendo DS resources used by NITRO-Viewer. The following sections provide details regarding the use of NITRO-Viewer Controller.

Figure 1-1 Overview



2 Using NITRO-Viewer Controller

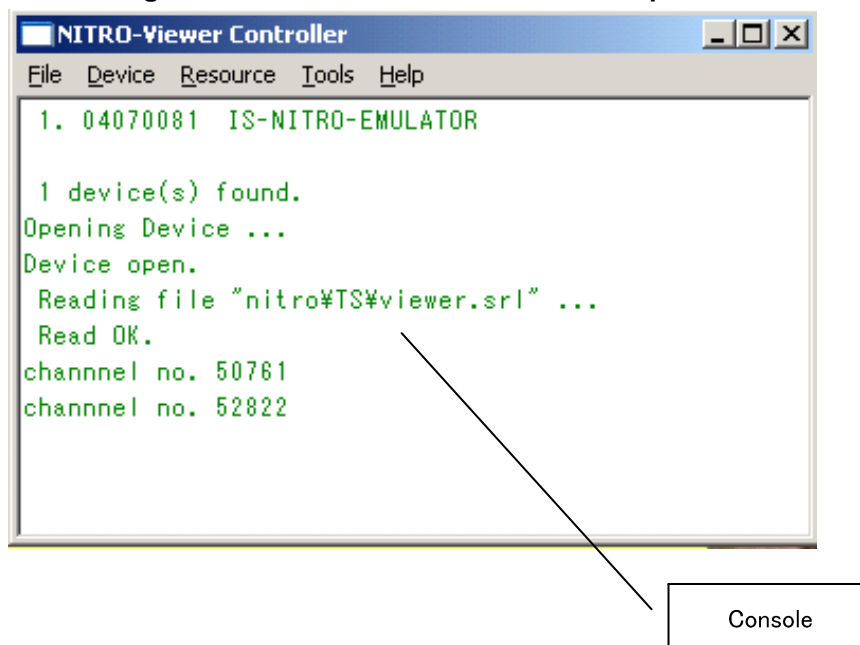
2.1 Starting NITRO-Viewer Controller

2.1.1 Starting NITRO-Viewer Controller

The procedure for starting NITRO-Viewer Controller is as follows.

- (1) Double-click on the NITRO-Viewer_Controller shortcut file. The NITRO-Viewer Controller starts up and a window appears as shown in Figure 2-1.

Figure 2-1 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 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 and Other Windows Applications

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

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

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 resources. Nintendo DS resource 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 Nintendo DS 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.

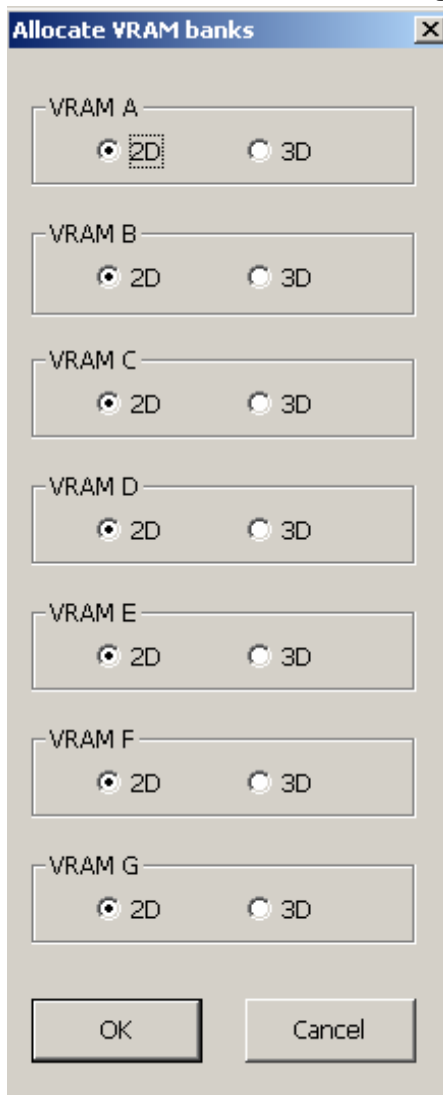
- If the **Share Mode** item is checked, the mode is Simultaneous 2D/3D Preview.
- If the **Share Mode** item is not checked, the mode is Single Preview.

2.3 VRAM Bank Allocation Settings

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

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

Figure 2-2 Allocate VRAM banks Dialog Box



- (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

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

3.2 Disconnecting the Nintendo DS

After NITRO-Viewer Controller starts and communication begins with Nintendo DS, Windows applications other than 3D Material Editor and NITRO-CHARACTER cannot communicate with Nintendo DS. One way to allow other applications to communicate with Nintendo DS is to exit NITRO-Viewer Controller. Another way is to disconnect and reestablish communications between NITRO-Viewer Controller and 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 Nintendo DS and releases all connections.
- To resume communication between NITRO-Viewer Controller and Nintendo DS, select the **Device > Connect** menu option. NITRO-Viewer Controller reconnects to Nintendo DS using the current mode and VRAM (if in Share mode) configuration settings.

3.3 Reading Nintendo DS ROM Files

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

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 Nintendo DS is not connected.

3.5 Version Information

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.

Windows is a registered trademark or a trademark of Microsoft Corporation in the United States and other countries.

Other company names, product names, etc., are registered trademarks or trademarks of their respective companies.

© 2004-2007 Nintendo

The contents of this document cannot be duplicated, copied, reprinted, transferred, distributed or loaned in whole or in part without the prior approval of Nintendo.