

N I N T E N D O  
**NITRO**-System  
**Library Release Notes**

05/29/2006 Release Version

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

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## Revision History

Version	Date	Content
	08/02/2004	Release.
	06/22/2004	Release.
	05/24/2004	<ul style="list-style-type: none"><li>• Revised "Overview"</li><li>• Change "NITRO-System Information" to "NITRO-System Library Information."</li></ul>
	4/12/2004	Released.

# 1 Overview

This package is the 05/29/2006 version of the Nintendo NITRO-System Library.

Nintendo NITRO-System is a collective term for the basic tools and libraries that are used to develop game software for the Nintendo DS system. This document contains the release notes for the NITRO-System Library that is included with Nintendo NITRO-System.

## 2 Package Contents

The Nintendo NITRO-System Library package contains the following:

- Foundation library (Fnd library)
- Graphics Foundation Library (Gfd library)
- 2D Graphics Library (G2D library)
- 3D Graphics Library (G3D library)
- NITRO-Composer (Sound library)
- Multiple Channel Stream library (mcs library)
- Tools for various converters
- Manuals and Function Reference

### 2.1 Extracting the NITRO-System Library Package

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Extract the Nintendo NITRO-System Library package to any location on the local drive. The Nintendo NITRO-System Library package is a compressed `.zip` file. You must use an appropriate extraction tool to extract the `.zip` file. When the package is extracted, a directory named `NitroSystem` is created.

### 2.2 NITRO-SDK Version

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The Nintendo NITRO-System Library that is supplied with this release requires NITRO-SDK 3.1. If you are using an older version of the NITRO-SDK, update the NITRO-SDK.

## 3 Changes from the 09/01/2005 Version

Here are the major changes in this version. For details on the changes, see the release notes for each library.

### 3.1 Revisions to the G2D Library and Tools

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#### 3.1.1 Revisions to the Converter

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- Fixed the problem of the cell's region information calculation being output incorrectly when it included OBJ for which double-size angle mode was set.
- Fixed the problem with the process for calculating VRAM transfer information that resulted in incorrect calculation.
- Fixed the problem of incorrect calculation of the cell border radius.
- Added the `-afs` option, which aligns the size of the output file to be a multiple of 4 bytes.

#### 3.1.2 Revisions to the library

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- Fixed the problem of the G2d Library not operating correctly when `GX_SetDefaultDMA()` was set with `GX_DMA_NOT_USE`.
- Added the `NNS_G2dRestartCellAnimation()` function, which restarts animation playback from the start of the animation.
- Added the `NNS_G2dRestartMCAnimation()` function, which restarts playback of the multicell animation from the start of the animation.
- Added the `NNS_G2dStartMCCellAnimationAll()` function, which sets the cell animations that comprise the multicell to the 'start animation play' state.

### 3.2 Revisions to the G3D Library and Tools

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#### 3.2.1 Features added to g3dcvtr

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- You can now load command line arguments from a file.
- Added the `-tex-nomerge` option to allocate texture and palette data to separate regions if they have different names, even when the data is the same.

#### 3.2.2 Bug fixes

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- Fixed the comments in the `NNS_G3dGeUseFastDma` function.

- Fixed the bug that prevented the conversion of intermediate files containing billboards.

### 3.3 NITRO-Composer Revisions

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#### 3.3.1 Changes related to the Sound data

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- Added the `mute` command to configure the mute setting from the sequence data.
- Made it possible to backward-reference labels in the Sound Archive definitions file.
- Made it possible to expand the track number only and not the filename by specifying `$$` instead of `$` for the feature that expands label names embedded in SMF text commands.

#### 3.3.2 Changes related to the program

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- Added the `NNS_SndPlayerSetTrackMuteE` function, which can mute a playing sound without stopping it.
- Added the `NNS_SndCaptureDestroyThread` function, which ends the capture thread.

#### 3.3.3 Bug fixes

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- When performing an SMF format 1 conversion, the `wait` command was not inserted in the final portion of the track. This is fixed.
- When running a conversion using a path that included blank characters, the conversion did not process correctly. This is fixed.
- The layout of the SoundMap file would break when created using a missing group number. This is fixed.
- When the group definitions for the Sound Archive definitions file (`*.sarc`) was created with a missing group number, the layout of the SoundMap file (`*.smap`) output during the conversion process would break. This is fixed.

### 3.4 mcs Server Revisions

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- When a file was read using the Nintendo DS function `NNS_McsReadFile`, the function would not return the correct file size. This is fixed.

## 4 NITRO-System Library Information

Information regarding the Nintendo NITRO-System is located in the `docs` directory of the NITRO-System source tree. Read the following documents first.

(1) Build System

Storage location: `NitroSystem\docs\Readme\BuildSystem.pdf`

This document explains the procedures for building the Nintendo NITRO-System Library and demo programs, and the structure of the source tree.

(2) Foundation Library Release Notes

Storage location: `NitroSystem\docs\Foundation\Foundation_ReleaseNotes.pdf`

This document contains the release notes for the Nintendo NITRO-System Foundation Library.

(3) Graphics Foundation Library Release Notes

Location: `NitroSystem\docs\GraphicsFoundation\GraphicsFoundation_ReleaseNotes.pdf`

This document contains the release notes for the Nintendo NITRO-System Graphics Foundation library.

(4) G2D Library Release Notes

Storage Location: `NitroSystem\docs\G2D\G2D_ReleaseNotes.pdf`

This document contains the release notes for the NINTENDO NITRO-System G2D Library.

(5) G3D Library Release Notes

Location: `NitroSystem\docs\G3D\G3D_ReleaseNotes.pdf`

This document contains the release notes for the Nintendo NITRO-System G3D library.

(6) NITRO-Composer Release Notes

Storage location: `NitroSystem\docs\NitroComposer\NITRO_Composer_ReleaseNotes.pdf`

This document contains the release notes for the Nintendo NITRO-System NITRO-Composer.

(7) `mcs` (Multiple Channel Stream) Library Release Notes

Location: `NitroSystem\docs\mcs\mcs_ReleaseNotes.pdf`

This document is the release notes for the Nintendo NITRO-System `mcs` library.

(8) NITRO-Player Release Notes

Location: `NitroSystem\docs\NitroPlayer\NITRO_Player_ReleaseNotes.pdf`

This document contains the release notes for the Nintendo NITRO-System NITRO-Player.

## 5 Cautions

### 5.1 Operations in Multi-Thread

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NITRO-System library is not designed to be thread-safe (supporting multi-thread). Therefore, when calling API of NITRO-System's library from the interrupt handler or a different thread, it might not work properly.

### 5.2 Regarding Image Data and Music Data in Samples

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Copyrights for the image data and music data used in the demo and sample programs included in this package are the property of Nintendo. This data may only be used in the demo and sample programs in this package, and may not be used in any other programs.

### 5.3 Font licenses

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Versions released on and after 06/06/2005 of the Nintendo NITRO-System library includes a font converter (fontcvtr). By using this fontcvtr, you can convert any font installed on a PC to a form usable by Nintendo DS. However, in order to sell software that uses these fonts, you must obtain licenses for them. Please obtain the required licenses for each game program. fontcvtr and NITRO-System do not include licenses for any fonts, including LC fonts.



This package contains the software developed by Apache Software Foundation (<http://www.apache.org/>).

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