

# IS-NITRO-UIC IS-NITRO-UIC (MIDI)

## Users Manual

Version 7/22/2005

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# 1 Using This Product Safely

To use IS-NITRO-UIC safely, please read the following items carefully to insure the unit does not malfunction and possibly cause a safety hazard.

- Do not modify or take apart the device.
- If you notice a problem, immediately stop using the unit.
- Do not allow liquids or foreign objects to enter the unit.
- Do not store the unit in a humid or dusty location.
- Never cover the unit or block ventilation.
- Do not bend, pull, or twist the cables.
- Do not subject the unit to strong impact.
- Do not use the unit in locations where the temperature is below 0° C or above 40° C.
- Do not use the unit during an electrical storm.

## Regulatory Statement

- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
- This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.
- Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.
- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.
- This equipment should be installed and operated with minimum distance 20 cm between the radiator and body. This transmitter must not be co-located or operating in conjunction with any antenna or transmitter.
- This Class A digital apparatus complies with Canadian ICES-003. The term "IC" before the equipment certification number only signifies that the Industry Canada technical specifications were met.  
Cet appareil numerique de la classe A est conforme a la norme NMB-003 du Canada.  
Le terme "IC" avant le numero d'homologation ne signifie seulement que les normes d'Industrie Canada ont ete respectees."

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	Bij deze verklaart INTELLIGENT SYSTEMS Co. Ltd dat deze IS-NITRO-UIC voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.
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## 2 Special Notes

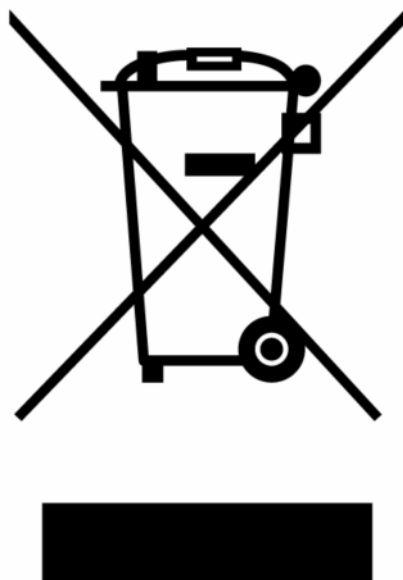
When using the IS-NITRO-UIC, please keep the following in mind:

- To use IS-NITRO-UIC, a NITRO flash card is needed for startup. You can purchase a NITRO flash card from Nintendo.



**“Disposal of this equipment at the end of its life”**

The crossed-out wheeled bin symbol (see below) is affixed to all electrical and electronic equipment that has been put onto the market in Europe by Nintendo on or after 13 August 2005.



This symbol means that at the end of its life the equipment must be treated in an environmentally sound manner at a licensed recycling plant and its components must be recovered, recycled or reused, in compliance with the requirements of the European Directive on Waste Electrical and Electronic Equipment (2002/96/EC) of 27 January 2003.

Accordingly you must use the available separate collection systems for waste electrical and electronic equipment when you dispose of this equipment at the end of its life or alternatively you can choose to return this equipment to Nintendo, at your own cost, and Nintendo will then take care of its appropriate disposal. If you wish to do this, please contact NOA Development Parts Department for instructions (425-861-2038 or [developmentparts@noa.nintendo.com](mailto:developmentparts@noa.nintendo.com)). You will be given a Return Authorization and will be instructed to return the equipment to an appropriate Nintendo location in your region.

## 3 Package Contents

The following items are included with IS-NITRO-UIC. Take a moment to ensure that you have all these items before using this device.

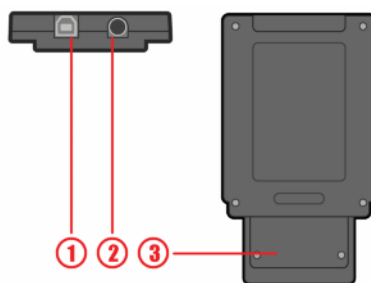
Item	Description	Quantity
1	IS-NITRO-UIC Hardware (including the controller)	1
2	High-Speed USB cable (approximately 1.5 m in length)	1
3	MIDI conversion connector (for IS-NITRO-UIC (MIDI) only)	1
4	IS-NITRO-UIC Users Manual (this manual, downloaded from <a href="http://www.warioworld.com">www.warioworld.com</a> )	1
5	Ferrite Core (with IS-NITRO-UIC)	1
	(with IS-NITRO-UIC (MIDI))	2

Connect a ferrite core to the following cable sections:

- IS-NITRO-UIC device side of the USB cable.
- IS-NITRO-UIC (MIDI) device side of the MIDI cable (only with IS-NITRO-UIC (MIDI)).

## 4 Description of Parts

The following is a description of the IS-NITRO-UIC hardware.



### 1. The USB Connector

The USB connector is used to connect the IS-NITRO-UIC to the USB port on a computer.

### 2. The MIDI Connector

The MIDI connector is used with the MIDI conversion connector to connect IS-NITRO-UIC to a MIDI device. This connector is only available with the IS-NITRO-UIC (MIDI).

### 3. The GBA Game Pak Connector

The GBA Game Pak Connector is used to connect IS-NITRO-UIC to the GBA Game Pak slot on the Nintendo DS. When connecting the IS-NITRO-UIC device to the Nintendo DS, be sure the Power Button on the Nintendo DS is set to OFF.

## 5 The Operating Environment

### 5.1 Operating Environment

The following operating environment is required to use the IS-NITRO-UIC hardware.

Component	Description
Computer	IBM PC/AT Compatible
Operating System	The software must be installed under one of the following operating systems: <ul style="list-style-type: none"><li>▪ Microsoft Windows XP Professional (Service Pack 1 or later)</li><li>▪ Microsoft Windows 2000 Professional (Service Pack 4 or later)</li></ul>
Memory	The amount of memory recommended for the operating system or greater must be available.
Disk Space	There must be 20 megabytes or more of free disk space available.
Browser	Microsoft Internet Explorer version 5.0 or higher must be installed.
USB Interface	We recommend USB 2.0 (Hi-Speed). For details when using USB 2.0, please refer to "About USB 2.0", below.

### 5.2 About USB 2.0

The IS-NITRO-UIC device supports USB 2.0 high-speed (480 Mbps) data transmission. To fully utilize all the features of IS-NITRO-UIC, it is recommended that the following cautions be observed in order to provide an environment under which IS-NITRO-UIC can perform high-speed operations.

- Confirm that the computer is compatible with high-speed USB. If the computer does not support high-speed, please use a high-speed compatible USB interface card.
- Be sure to use a USB cable that is compatible with high-speed to connect the computer with the IS-NITRO-UIC. A high-speed compatible USB cable is included with the IS-NITRO-UIC.
- When using a USB hub to connect the computer to the IS-NITRO-UIC, make sure that it is a high-speed compatible hub.
- If the number of USB devices connected to the computer increases, the data transfer speed will go down. In order to maximize the data transfer speed, it is recommended that no USB devices other than the IS-NITRO-UIC, be connected to the computer.

### 5.3 The USB 2.0 Driver

As of July, 2004 USB 2.0 drivers for Windows 2000 and Windows XP are provided by Microsoft, Inc. Users of Windows 2000 must have Service Pack 4 or later installed. Users of Windows XP must have Service Pack 1 or later installed. However, please be forewarned that we cannot guarantee operation on these systems for the drivers provided by the USB 2.0 interface card developers.

## 6 Setup

### 6.1 Installing the Communications Library

The IS-NITRO-UIC communications library is included with IS-NITRO-DEBUGGER software. Install IS-NITRO-DEBUGGER software on the computer using the following procedure.

1. Log on to Windows with an account that has administrator privileges.
2. Quit all programs that are currently running, other than Windows Explorer.
3. If you haven't yet downloaded the installation file from [www.WarioWorld.com](http://www.WarioWorld.com), do so at this time.  
Using Windows Explorer, navigate to the folder in which you've downloaded the installation file.
4. Open the IS-NITRO-DEBUGGER folder, and double-click the file IS-NITRO-DEBUGGER- XXX.EXE (where XXX indicates the version number) to execute the installation program.
5. Proceed according to the onscreen instructions.
6. If the install program finishes successfully, installation is complete. Once the installation program has finished, you may need to restart the computer when prompted.

### 6.2 Uninstalling the Communications Library

The following is an explanation of the procedure to uninstall IS-NITRO-DEBUGGER software, which includes the IS-NITRO-UIC communication library, from the computer. Note that this will uninstall not only the communications library, but also the IS-NITRO-DEBUGGER software.

1. Log on to Windows with an account that has administrative privileges.
2. In the Control Panel, click "Add and Remove Programs" to open the "Add and Remove Programs" dialog. (Under Windows 2000, click "Add and Remove Applications" to open the "Add and Remove Applications" dialog).
3. Select "IS-NITRO-DEBUGGER" from the list of installed programs.
4. Click the "Remove" button to delete the IS-NITRO-DEBUGGER. If the deletion completes successfully, then the IS-NITRO-DEBUGGER software has been uninstalled.

### 6.3 Writing to the NITRO flash memory card

Write the following boot program to a NITRO flash memory card, which is not included in this package.

```
C:\Program Files\INTELLIGENT SYSTEMS\IS-NITRO-DEBUGGER\Samples\stream\TEG\bin\ARM9-TS\Release\stream.srl
```

To write to the NITRO flash memory card, use IS-NITRO-DEBUGGER or IS-NITRO-WRITER. See the respective help files for information on how to do this.

## 6.4 Connecting

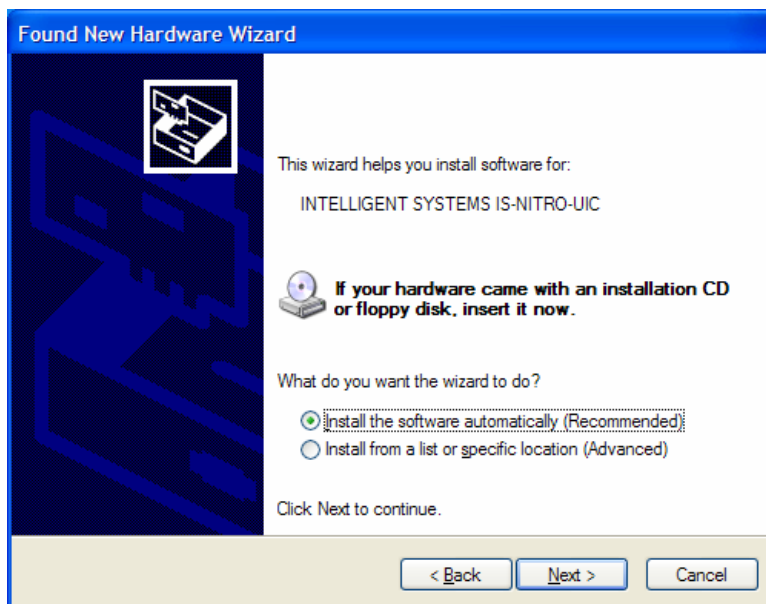
To connect the IS-NITRO-UIC, follow the procedure below.

1. Be sure the power is OFF on the Nintendo DS that you are connecting to the IS-NITRO-UIC.
2. Insert the IS-NITRO-UIC into the GBA Game Pak slot on the Nintendo DS.
3. Insert the NITRO flash memory card on which you have written the boot program into the Game Card slot on the Nintendo DS.
4. Connect the computer and the IS-NITRO-UIC using the USB cable.
5. To connect IS-NITRO-UIC to the MIDI device when using the IS-NITRO-UIC (MIDI), connect the MIDI cable to the IS-NITRO-UIC (MIDI) using the MIDI conversion connector.

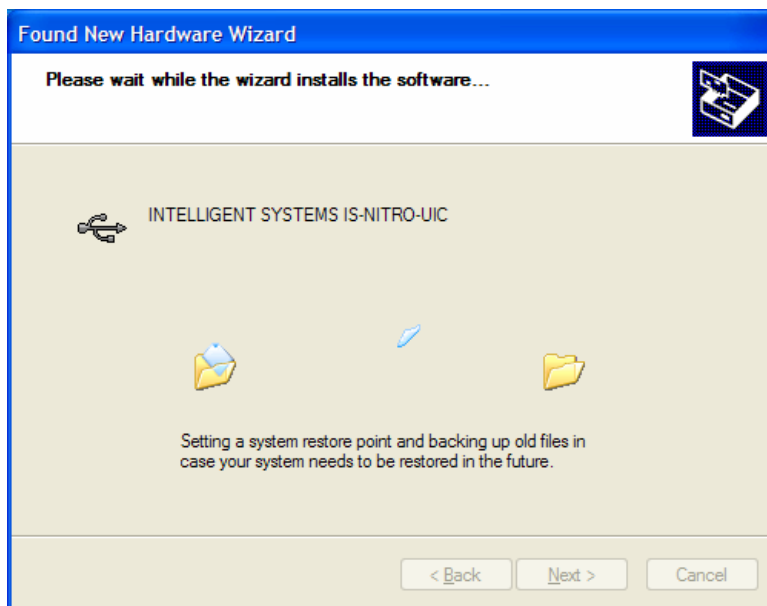
## 6.5 Installing the Device Driver

When connecting the IS-NITRO-UIC to the computer for the first time or when connecting to a different USB port, the device driver must be installed.

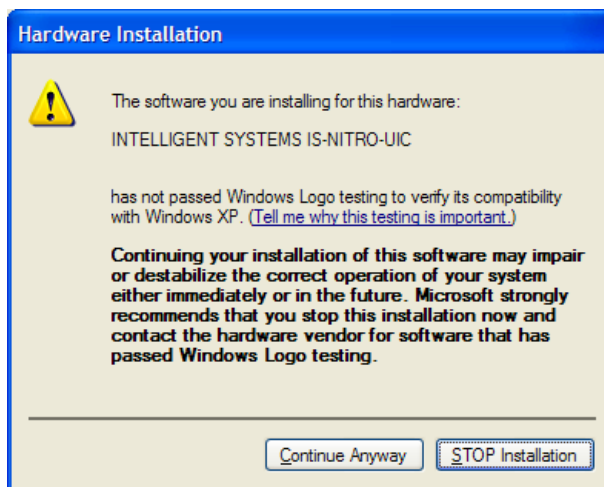
1. Turn ON power to the Nintendo DS.
2. Use the Nintendo DS startup menu to run the program on the DS Card.
3. The "Find New Hardware Wizard" dialog will be displayed, prompting the installation of the device drivers.
4. If the device driver is not automatically detected, use the [Browse] button to locate the device driver downloaded from [www.WarioWorld.com](http://www.WarioWorld.com), select the driver file and click the [Open] button.
5. Select "Automatically Install Software (Recommended)", and click the "Next" button.



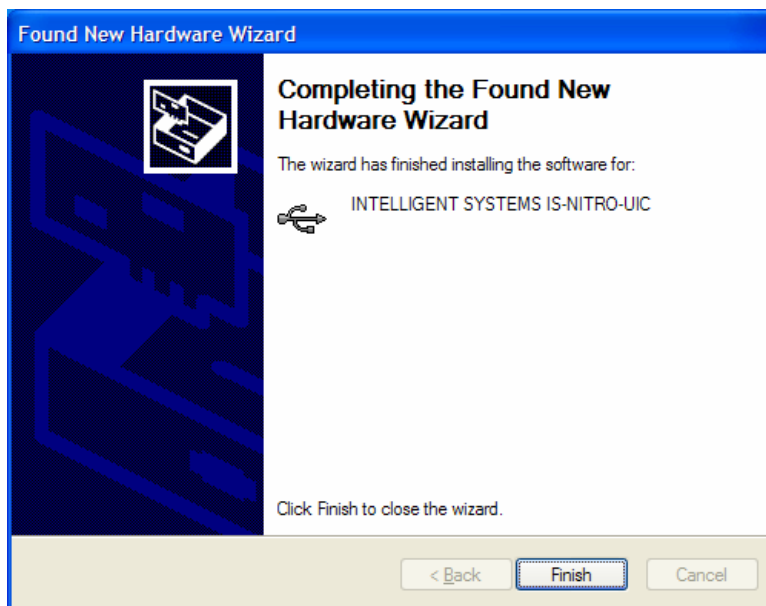
6. When the installation of the software begins, the following display will appear. Please be patient.



7. The following dialog will be displayed during installation. Click the "Continue" button to proceed.



8. If the hardware update wizard finishes as expected, the following dialog will be displayed. Click the “Finish” button to close the wizard.



## 6.6 Using IS-NITRO-UIC

When you have completed the setup for IS-NITRO-UIC, you can check the connection on the USB port by running the following program:

```
C:\Program Files\INTELLIGENT SYSTEMS\IS-NITRO-DEBUGGER\Samples\stream\X86\Release\stream.exe
```

## 6.7 Using MIDI

The IS-NITRO-UIC (MIDI) can accept MIDI signal input from a MIDI device. If you write the following program to the NITRO flash card, you can display a dump of the MIDI signal.

```
C:\Program Files\INTELLIGENT SYSTEMS\IS-NITRO-DEBUGGER\Samples\MIDI\TEG\bin\ARM9-TS\Release\midi.srl
```

To play the incoming MIDI signal on the Nintendo DS, use NITRO-Composer, which is provided by Nintendo.



## 7 Specifications

The specifications of the IS-NITRO-UIC are as follows:

Item	Description
Product Name	IS-NITRO-UIC Hardware
Connectors	USB Connector (series B) MIDI DIN Connector (Only available with IS-NITRO-UIC (MIDI))
Usage Environment	10°C – 40°C (No condensation)
Dimensions	Width: 3.1 inches (77.2 mm) x Height: 0.8 inches (20.4 mm) x Depth: 4.1 inches (101.6 mm)
Weight	Approximately 2.5 ounces (72 g)

## 8 Support

To provide support to users of IS-NITRO-UIC, Nintendo has a website and e-mail support.

- Website  
Information and documents regarding IS-NITRO-UIC and the latest software versions is available on the Nintendo Software Development Support Group website (<http://www.warioworld.com>). Only those registered in the NINTENDO DS group of the website can gain access to download the latest versions. Register online at (<http://www.warioworld.com>).
- E-mail Support  
For questions and comments about IS-NITRO-UIC, please contact the Software Development Support Group at [support@noa.com](mailto:support@noa.com)

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