IS-NITRO-DEBUGGER

Setup Manual

Version 1/27/2005

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

NTR-06-0121-001-A3
Released: October 13, 2005

Confidential

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1 Using This Product Safely

To use IS-NITRO-EMULATOR 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."

English	Hereby, INTELLIGENT SYSTEMS Co. Ltd, declares that this IS-NITRO-EMULATOR is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Finnish	INTELLIGENT SYSTEMS Co. Ltd vakuuttaa täten että IS-NITRO-EMULATOR tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Dutch	Hierbij verklaart INTELLIGENT SYSTEMS Co. Ltd dat het toestel IS-NITRO-EMULATOR in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG
	Bij deze verklaart INTELLIGENT SYSTEMS Co. Ltd dat deze IS-NITRO-EMULATOR voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.
French	Par la présente INTELLIGENT SYSTEMS Co. Ltd déclare que l'appareil IS-NITRO-EMULATOR est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE
	Par la présente, INTELLIGENT SYSTEMS Co. Ltd déclare que IS-NITRO-EMULATOR est conforme aux exigences essentielles et aux autres dispositions de la directive 1999/5/CE qui lui sont applicables
Swedish	Härmed intygar INTELLIGENT SYSTEMS Co. Ltd att denna IS-NITRO-EMULATOR står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.
Danish	Undertegnede INTELLIGENT SYSTEMS Co. Ltd erklærer herved, at følgende udstyr IS-NITRO-EMULATOR overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF
German	Hiermit erklärt INTELLIGENT SYSTEMS Co. Ltd, dass sich *dieser/diese/dieses* IS-NITRO-EMULATOR in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMWi)
	Hiermit erklärt INTELLIGENT SYSTEMS Co. Ltd die Übereinstimmung des Gerätes IS-NITRO-EMULATOR mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EG. (Wien)
Greek	*ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ* INTELLIGENT SYSTEMS Co. Ltd *ΔΗΛΩΝΕΙ ΟΤΙ* IS-NITRO-EMULATOR *ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ*

Italian	Con la presente INTELLIGENT SYSTEMS Co. Ltd dichiara che questo IS-NITRO-EMULATOR è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Spanish	Por medio de la presente INTELLIGENT SYSTEMS Co. Ltd declara que el IS-NITRO-EMULATOR cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE
Portuguese	INTELLIGENT SYSTEMS Co. Ltd declara que este IS-NITRO-EMULATOR está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Malti	Hawnhekk, INTELLIGENT SYSTEMS Co. Ltd, jiddikjara li dan IS-NITRO-EMULATOR mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC
Estonian	Käesolevaga kinnitab INTELLIGENT SYSTEMS Co. Ltd seadme IS-NITRO-EMULATOR vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
Hungarian	Alulírott, INTELLIGENT SYSTEMS Co. Ltd nyilatkozom, hogy a IS-NITRO-EMULATOR megfelel a vonatkozó alapvetõ követelményeknek és az 1999/5/EC irányelv egyéb elõírásainak.
Slovak	INTELLIGENT SYSTEMS Co. Ltd týmto vyhlasuje, že IS-NITRO-EMULATOR spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Czech	INTELLIGENT SYSTEMS Co. Ltd tímto prohlašuje, že tento IS-NITRO-EMULATOR je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Slovene	Šiuo INTELLIGENT SYSTEMS Co. Ltd deklaruoja, kad šis IS-NITRO-EMULATOR atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Lithuanian	Šiuo INTELLIGENT SYSTEMS Co. Ltd deklaruoja, kad šis IS-NITRO-EMULATOR atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Latvian	Ar šo INTELLIGENT SYSTEMS Co. Ltd deklarē, ka IS-NITRO-EMULATOR atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.

2 Special Notes

When using IS-NITRO-DEBUGGER, please observe the following:

- After you have turned the IS-NITRO-EMULATOR device OFF, be sure to wait at least five seconds before setting the power switch to ON again. If you turn it on again immediately, the device may not function properly.
- When a System LED of the IS-NITRO-EMULATOR device is ON, do not insert or remove a DS Card or GBA Game Pak. Doing so can cause damage to the IS-NITRO-EMULATOR, the DS Card or the GBA Game Pak.
- Do not turn OFF the power to the IS-NITRO-EMULATOR while updating or restoring the firmware. This could cause the IS-NITRO-EMULATOR hardware to function abnormally.
- While the power switch of the IS-NITRO-EMULATOR device is ON, do not manipulate the DIP switches. The DIP switches should only be manipulated when the power switch is OFF.
- The IS-NITRO-EMULATOR device generates heat when in use. Therefore, do not block its vents, do not put it in an enclosed space, do not put any objects on top of it, and do not do anything else that would impede cooling.
- If you purchase the wireless option after you have purchased the IS-NITRO-DEBUGGER, you must return the IS-NITRO-EMULATOR unit to Nintendo of America. During the installation of the Wireless Option the cover that forms the top and sides of the IS-NITRO-EMULATOR device will be replaced. Do not attach asset control labels to this cover.

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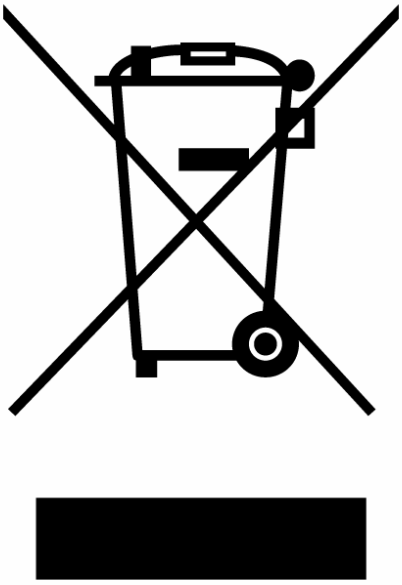
“Disposal of this equipment at the end of its life”

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)*. 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 in IS-NITRO-DEBUGGER. Take a moment to ensure that you have all these items before using this device.

Item	Description	Quantity
1	IS-NITRO-EMULATOR device (including controller)	1
2	Stylus (stored in controller)	1
3	AC Adapter	1[*1]
4	High-Speed USB Cable (approximately 5’ (1.5 m) in length)	1
5	IS-NITRO-DEBUGGER Setup Guide (this book)	1
6	Ferrite Core	4[*2]

Note[*1]: (Shipped Seperately) A Nintendo GameCube™ AC adapter designed for use in the region where the IS-NITRO-DEBUGGER will be used is required. Contact Nintendo to aquire the correct AC Adapter.

Note[*2]**:** If you have the video option, you will have 6 ferrite cores in your kit.

If your IS-NITRO-DEBUGGER includes the wireless or video option, there should be a checkmark in the “Wireless” or “Video” column of the sticker on the bottom of the IS-NITRO-EMULATOR device.

Connect a ferrite core to the following cable sections:

- To the IS-NITRO-EMULATOR side of the cable that connects from the front panel of the IS-NITRO-EMULATOR to the controller.
- To the IS-NITRO-EMULATOR side of the AC adapter.
- To the IS-NITRO-EMULATOR side of the DS Wireless Communications cable.
- To the IS-NITRO-EMULATOR side of the USB cable.
- To the IS-NITRO-EMULATOR side of the Video cables (when using the video option).

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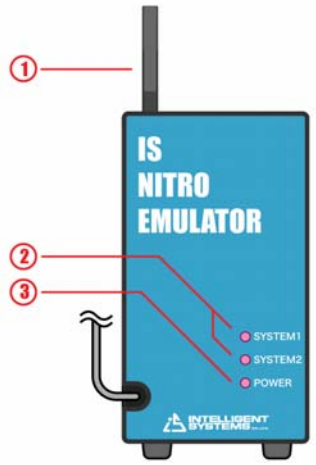
4 Description of Parts

4.1 Front Panel

The following is a description of the front panel of the IS-NITRO-EMULATOR device (henceforth called only IS-NITRO-EMULATOR).



1. **Antenna**
   This antenna is used to perform DS Wireless Communications. It is only installed if you have purchased the wireless option.

2. **System LEDs (SYSTEM1, SYSTEM2)**
   The various states of the IS-NITRO-EMULATOR are shown below.

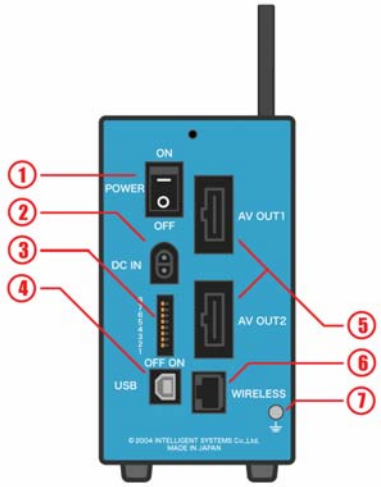
SYSTEM 1	SYSTEM2	Description
LED OFF	LED OFF	Indicates that the IS-NITRO-EMULATOR unit is operating normally
LED ON	LED ON	Indicates that one of the following processes is taking place: • IS-NITRO-EMULATOR initialization • IS-NITRO-EMULATOR firmware is being updated • IS-NITRO-EMULATOR firmware is being restored
LED Blinking	LED Blinking	Indicates that an error has occurred in the IS-NITRO-EMULATOR device
LED ON	-	Indicates that a DS Game Card inserted into the DS Game Card slot is in use
-	LED ON	Indicates that an GBA Game Pak inserted into the GBA Game Pak slot is in use

   Here “-“ indicates that either condition is OK.

3. **Power LED (POWER)**
   The power LED indicates the power state of the IS-NITRO-EMULATOR. This LED is lit if the power switch at the rear of the device is switched ON. If the LED is not lit, the device is switched OFF.

4.2 Rear Panel

The following is a description of the Rear Panel of IS-NITRO-EMULATOR, shown below.



1. **Power Switch (POWER)**
   This is the power switch for IS-NITRO-EMULATOR. When the switch is changed to its [ON] position, it will turn the device ON. When changed to its [OFF] position the device is turned OFF.

2. **DC Connector (DC IN)**
   The DC Plug of a Nintendo GameCube AC Adapter that connects here.

3. **DIP Switches**
   These switches are used to configure IS-NITRO-EMULATOR. When a switch is positioned to the right, it is ON. When positioned to the left, it is OFF.

Dip Switch	Description
Switches 1-3	Not used. Set to OFF.
Switch 4	When restoring the IS-NITRO-EMULATOR firmware, set this to ON. If you are not restoring the firmware, set this to off.
Switch 5	Toggles between wired and wireless DS Wireless Communication. It is set to OFF for wired communication and ON for wireless communication. This switch can be used when you have purchased the wireless option.
Switches 6-8	Not used. Set to OFF.

4. **USB Connector (USB)**
   This is a USB connector used to connect the IS-NITRO–EMULATOR to the USB port on a computer.

5. **Audio/Video Output Connectors (AVOUT1, AVOUT2)**
   These connectors are used for outputting audio and video from the LCD screen to a TV monitor or video device. AVOUT1 outputs audio and video from the upper screen. AVOUT2 outputs audio and video from the lower screen. These connectors can only be used if you have purchased the video option.

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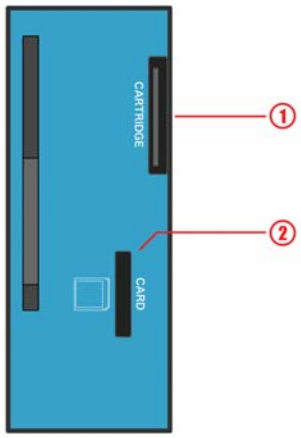
6. **Wireless Connector (WIRELESS)**
   This is a connector that is used to perform wired DS Wireless Communications with the Nintendo DS development tools.

7. **Ground Connector**
   This connector is used to electrically ground the device.

4.3 Top Panel

The following is a description of the slots on top of IS-NITRO-EMULATOR.

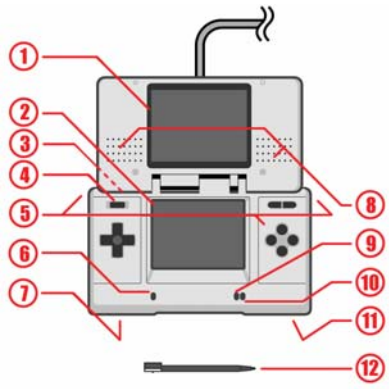


1. **GBA Game Pak Slot (Cartridge)**
   The GBA Game Pak plugs into this slot. When inserting or removing the GBA Game Pak, first verify that System LED 2 (SYSTEM2) is not lit. With the Game Pak in a vertical position, insert it into the slot with the label facing to the right.

2. **DS Game Card Slot (CARD)**
   The DS Card plugs into this slot. When inserting or removing the DS Card, first verify that System LED 1 (SYSTEM1) is not lit. With the DS Card in a vertical position, insert it into the slot with the label facing to the right. You will hear a slight click when it has been properly inserted. The DS Card can be removed from the slot by pushing down lightly on it. The DS Card should spring up slightly. Grab the DS Card by the edge and remove it.

4.4 The Controller

The following is a description of each part of the Controller.



1. **Upper Screen**
   This screen is a backlit, 3-inch color TFT LCD.

2. **Lower Screen (Touch Screen)**
   This screen is a backlit, 3-inch color TFT LCD. This LCD also has touch screen functionality.

3. **External Extension Connector**
   By connecting the Game Boy Advance Headphone adapter (NOA Part #51067), you can attach a set of stereo headphones. If the headphones are connected, no sound will come out of the speakers. The connector is powered by the IS-NITRO-EMULATOR device, so there is no need to connect the AC Adapter for Game Boy Advance SP or Nintendo DS to this peripheral connector.

4. **Power Button (POWER)**
   Although this is labeled as the Power Button, on IS-NITRO-DEBUGGER it is used as a debug button. This button functions only when debugging.

5. **Control Buttons**
   These buttons are used to control the game.

6. **Microphone (MIC.)**
   The microphone can be used to input sounds.

7. **Volume Control (VOL.)**
   This controls the sound volume of the speakers or the stereo headphones.

8. **Speakers (L, R)**
   These play stereo sound when headphones are not connected.

9. **Recharge Indicator LED**
   This LED is not used on IS-NITRO-DEBUGGER.

10. **Power Indicator LED**
    This LED displays the power state of IS-NITRO-EMULATOR. It is lit when the power switch at the rear of the IS-NITRO-EMULATOR is set to ON, and not lit when the switch is set to OFF.

11. **Audio Jack**
    This connector allows for the connection of stereo headphones, microphone, or stereo headset. If headphones are connected, there will be no sound from the speakers.

12. **Stylus**
    The stylus is for use with the Touch Screen .

5 Operating Environment

5.1 Operating Environment

The following operating environment is required in order to use IS-NITRO-DEBUGGER.

Component	Description
Computer	IBM PC/AT compatible
Operating System	Either of the following operating systems must be installed: • Microsoft Windows XP Professional (Service Pack 1or later) • Microsoft Windows 2000 Professional (Service Pack 4 or later)
Memory capacity	Memory capacity recommended for the operating system
Disk capacity	20 megabytes or more of blank space is required.
Display	An XGA (1024 pixels x 768 pixels) or greater resolution display must be available.
Browser	Version 5.0 or later of Microsoft Internet Explorer must be installed.
USB Interface	USB 2.0 (high-speed) is recommended. For details on using USB 2.0, see the following section.

5.2 About USB 2.0

The IS-NITRO-EMULATOR device supports USB 2.0 high-speed (480 Mbps) data transmission. To fully utilize all the features of IS-NITRO-DEBUGGER, it is recommended that the following cautions be observed in order to provide an environment under which IS-NITRO-EMULATOR 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.
- Make sure to use a USB cable that is compatible with high-speed to connect the computer with the IS-NITRO-EMULATOR. A high-speed compatible USB cable is included with the IS-NITRO-DEBUGGER.
- When using a USB hub to connect the computer to the IS-NITRO-EMULATOR, 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-EMULATOR, 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 1or 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 Setting up the IS-NITRO-EMULATOR

The following is a description of how to connect IS-NITRO-EMULATOR.

(1) First make sure that the power switch for IS-NITRO-EMULATOR is in the OFF position.

(2) Connect the computer and the IS-NITRO-EMULATOR device with a USB cable.

(3) Connect the DC plug of the Nintendo GameCube AC Adapter to the DC connector (DC IN) on the rear panel of IS-NITRO-EMULATOR.

(4) Plug the AC plug of the AC Adapter into an AC power outlet.

6.2 Installing the Device Driver

When connecting the IS-NITRO-EMULATOR to the computer for the first time or when connecting to a different USB port, you must install the device driver.

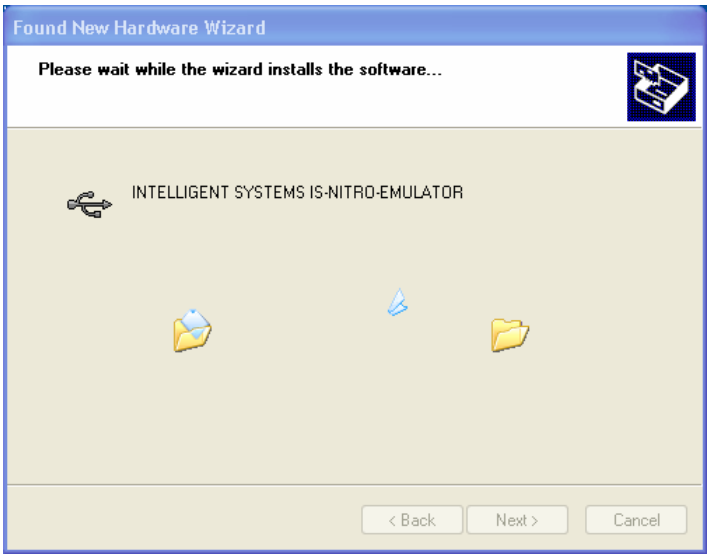
(1) Set the power switch of the IS-NITRO-EMULATOR to ON.

(2) [The new hardware detection wizard] Dialog opens to lead you through the installation process.

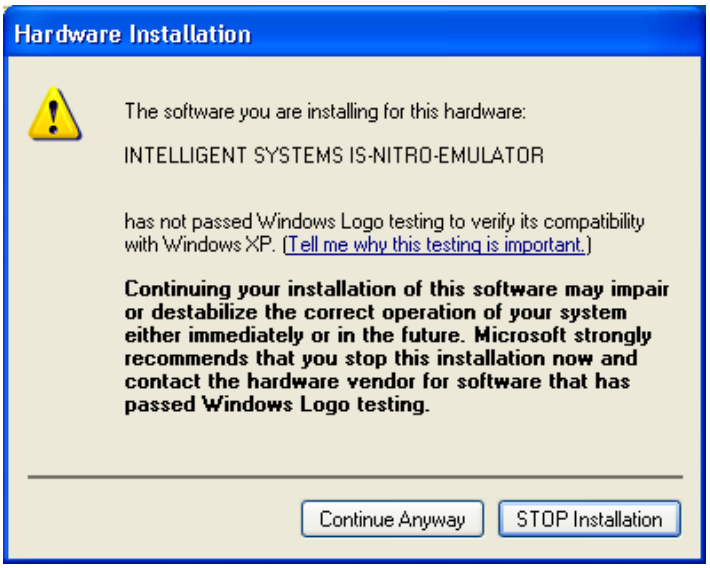
(3) If you haven't yet downloaded the device driver from www.warioworld.com, do so at this time.

(4) Select [Install the software automatically (Recommended)] and click [Next].

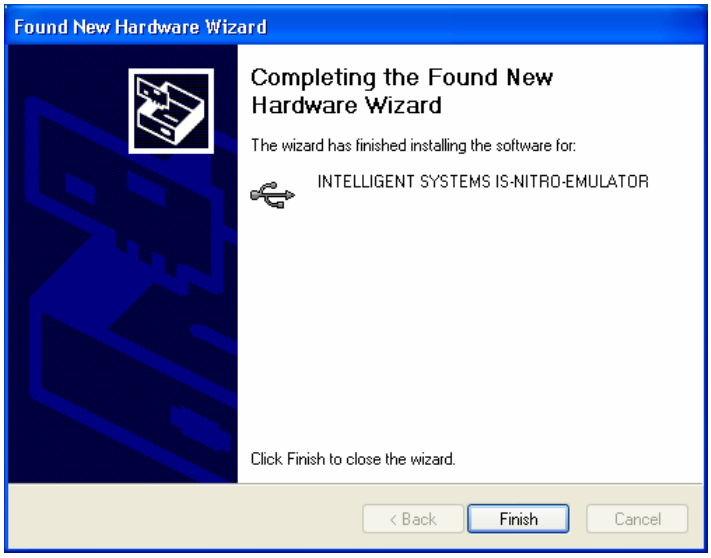
(5) A dialog box similar to the following opens when installation begins.
Note: Do not proceed any further until the dialog box appears.



(6) The following dialog appears during the install process.
Click the [Continue Anyway] button to continue installation.



(7) If the Hardware Update Wizard finishes without a problem, the following dialog appears. Click the [Finish] button to close the wizard.



6.3 Installing the IS-NITRO-DEBUGGER Software

The IS-NITRO-DEBUGGER software must be installed on your computer. To install the software, complete these steps.

(1) Log on to Windows with a user account having administrative 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, 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 (*XXX* designates the version) to run the installation program .

(5) Complete the process by following the messages that appear.

(6) The process ends if the installation program finishes normally. Restart the computer when prompted.

6.4 Uninstalling the IS-NITRO-DEBUGGER Software

Complete the following steps to uninstall the IS-NITRO-DEBUGGER software.

(1) Log on to Windows using a user account with administrator privileges.

(2) If the IS-NITRO-DEBUGGER software is running, exit the IS-NITRO-DEBUGGER software.

(3) Click Start > Settings > Control Panel > Adding and Removing Programs. (In Windows 2000, click Adding and Removing Applications.)

(4) Select IS-NITRO-DEBUGGER from the list of installed programs.

(5) Click the Remove button.

Option settings and window location information are not deleted by uninstalling or upgrading the IS-NITRO-DEBUGGER software. To erase this information, you must edit the Windows Registry. To remove the Option settings and window location information, confirm that the IS-NITRO-DEBUGGER software is not running and then erase everything *below* the following key using the registry editor.

```
HKEY_CURRENT_USER\Software\INTELLIGENT SYSTEMS\IS-NITRO-DEBUGGER
```

If you make a mistake editing the registry, Windows may not start. Editing the registry is an unsupported task, therefore we recommend backing up the registry and creating a restoration pointer (Windows XP) so you can restore the Registry. For more information about backing up and editing the registry, see Microsoft Windows Help: Registry, Overview.

6.5 Video and Audio Output

You can output audio and video from the LCD screens to a television or video monitor only if you have purchased the video option.

When outputting video and audio from the LCD screen to a TV or video device, use the audio/video connectors on the rear panel of IS-NITRO-EMULATOR. Use any of the following optional Video cables sold by Nintendo for these connections.

- Mono AV Cable
- Stereo AV Cable
- S-Video Cable

Audiovisual output connector AVOUT1 outputs the audio and video from the upper screen. Audiovisual output connector AVOUT2 outputs the audio and video from the lower screen. The output images use the NTSC non-interlaced format. The PAL format is not supported.

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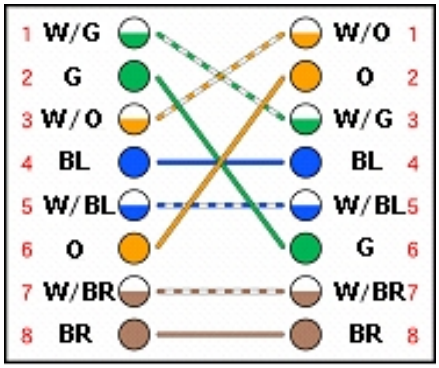
6.6 Performing DS Wireless Communication Using Wires

The IS-NITRO-EMULATOR device comes standard with the ability to perform DS wireless communication using wired networking. Use a category 5 cross LAN cable that is no longer than 16 feet (5 meters). (It should meet 10BASE-T and 100BASE-T standards (TIA/EIA-568A、IEEE802.3i).)

Use the following procedure to connect two IS-NITRO-EMULATOR units (including IS-NITRO-CAPTURE and IS-NITRO-VIDEO units).



1. Make sure the power switches on the IS-NITRO-EMULATOR units are set to OFF.
2. Set DIP switch #5 on the IS-NITRO-EMULATOR units to OFF.
3. Connect the two IS-NITRO-EMULATOR units with the communication cable.
4. Simultaneously, set the power switches of the IS-NITRO-EMULATOR units to ON.

You can connect several IS-NITRO-EMULATOR units (including IS-NITRO-CAPTURE and IS-NITRO-VIDEO units) using an IS-NITRO-HUB.

1. Make sure the power switches on the IS-NITRO-EMULATOR units and IS-NITRO-HUB unit are set to OFF.
2. Set DIP switch #5 on the IS-NITRO-EMULATOR units to OFF.
3. Connect the IS-NITRO-EMULATOR units to the IS-NITRO-HUB unit with the communication cables.
4. Set the power switch for the IS-NITRO-HUB unit to ON.
5. Set the power switches on the IS-NITRO-EMULATOR units to ON.

Please note the following constraints when using DS wireless communication over a wire.

- Communication is possible even when different channels are used.
- Signal strength data will not be correct.

6.7 Performing DS Wireless Communication Without Wires

If you purchase the wireless option, you can perform DS wireless communication without wires.

1. Make sure the power switch on the IS-NITRO-EMULATOR unit is set to OFF.
2. Set DIP switch #5 on the IS-NITRO-EMULATOR unit to ON.
3. Set the power switch on the IS-NITRO-EMULATOR unit to ON.

Note that because the structure of the IS-NITRO-EMULATOR unit is different from that of the Nintendo DS, they can have slightly different wireless characteristics (orientation, range etc.).

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7 Startup and Shutdown

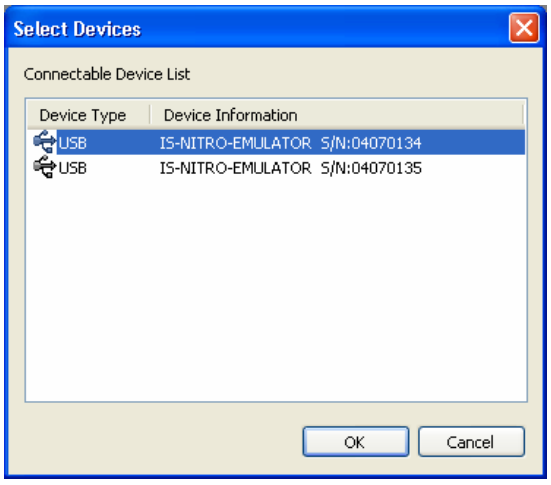
7.1 Starting up IS-NITRO-DEBUGGER

Start the IS-NITRO-DEBUGGER software by clicking the following: Start button > All Programs ("Programs" in Windows 2000) > IS-NITRO-DEBUGGER > IS-NITRO-DEBUGGER.

Select the IS-NITRO-EMULATOR device to use (if multiple IS-NITRO-EMULATOR devices are recognized), and the IS-NITRO-DEBUGGER and IS-NITRO-EMULATOR firmware version are verified. See the following section for more details.

7.2 Selecting an IS-NITRO-EMULATOR

When only one IS-NITRO-EMULATOR device is found during the IS-NITRO-DEBUGGER startup, IS-NITRO-DEBUGGER starts that IS-NITRO-EMULATOR device. However, if multiple devices are found, the Select Devices dialog box appears.



The serial numbers of the IS-NITRO-EMULATOR devices are listed in this dialog box. (The serial number is printed on a sticker on the bottom of each device.) Select an IS-NITRO-EMULATOR device and click the OK button to start IS-NITRO-DEBUGGER.

7.3 Updating the Firmware

At startup, the IS-NITRO-DEBUGGER software checks the versions of the IS-NITRO-DEBUGGER software and IS-NITRO-EMULATOR firmware. If these versions differ, a message appears prompting you to reconcile the versions.

IS-NITRO-EMULATOR firmware must be updated to operate with this software version.
Please read the following cautions.
*** Exit all applications other than IS-NITRO-DEBUGGER.**
*** Do not operate IS-NITRO-EMULATOR while updating its firmware. This requires about 20 seconds.**
*** If you encounter a problem, such as the device is not recognized as a USB device after failing the update process, please read the setup manual.**
After you understand the above conditions, please click the Update button.

This message appears when the firmware version of the IS-NITRO-EMULATOR device is older than the IS-NITRO-DEBUGGER software version.
The message may appear when updating the IS-NITRO-DEBUGGER software. If so, click the Update button to update the firmware of the IS-NITRO-EMULATOR device.

While updating the firmware, do not turn the IS-NITRO-EMULATOR device OFF, reset the computer, or operate the IS-NITRO-EMULATOR device or the computer.

If this dialog closes and IS-NITRO-DEBUGGER starts normally, the update has succeeded, and you can use the IS-NITRO-DEBUGGER software. If IS-NITRO-DEBUGGER does not start normally, the firmware update of the IS-NITRO-EMULATOR device may have failed. If so, see Restoring the Firmware (below) and follow the recovery procedure.

Note that if you click the Do Not Update button, the software runs without being updated. However, the software is not usable.

You are using software that is not supported by the IS-NITRO-EMULATOR firmware.
- A previous version of the firmware cannot be installed.
- Please download the latest version of IS-NITRO-DEBUGGER software from http://www.warioworld.com/.

This message appears when the firmware version of the IS-NITRO-EMULATOR device is newer than the IS-NITRO-DEBUGGER software.

When this message appears, you cannot use the IS-NITRO-DEBUGGER software. Download a new version of the IS-NITRO-DEBUGGER software, or try Restoring the Firmware.

When the IS-NITRO-DEBUGGER version and IS-NITRO-EMULATOR device firmware version are the same, this message does not appear and the software starts immediately.

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7.4 Restoring the Firmware

When a firmware update fails, the IS-NITRO-EMULATOR device may not operate normally; the firmware may be damaged, or the IS-NITRO-EMULATOR may not be recognized as a USB device and will not start up normally. In such cases, use this procedure to restore the damaged IS-NITRO-EMULATOR firmware.

(1) Turn the IS-NITRO-EMULATOR device OFF.

(2) Change DIP switch number 4 (found on the rear panel of IS-NITRO-EMULATOR to the ON position.

(3) Turn the IS-NITRO-EMULATOR device ON.

(4) Only **after** confirming that the System LEDs (SYSTEM1, SYSTEM2), located on the front panel of IS-NITRO-EMULATOR are NOT LIT, turn the IS-NITRO-EMULATOR device OFF.

(5) Change DIP switch number 4 to the OFF position.

If the IS-NITRO-EMULATOR device does not operate normally even after performing this procedure, the IS-NITRO-EMULATOR device must be repaired. If your device needs repair, contact support@noa.com .

7.5 Exiting IS-NITRO-DEBUGGER

Perform one of the following procedures to exit IS-NITRO-DEBUGGER:

- Select Exit from the File menu.
- Select Close from the menu displayed by clicking on the title bar icon.
- Double-click the title bar icon.
- Click the close button on the title bar.
- Press Alt+F4 on the keyboard.

Even if IS-NITRO-DEBUGGER is shut down, currently running user programs will continue to execute.

8 Specifications

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

Item	Description
Product Name	IS-NITRO-EMULATOR
Emulation Memory	256MB
Main Memory	8MB
Image Output (optional)	NTSC non-interlaced format
Connectors	USB connector (series B) Audio and video output connectors (2) Wireless connector DC connector
Slots	DS Card Slot GBA Game Pak Slot
Power Source	DC12V 3.25A (Nintendo GameCube AC Adapter)
Operating Environment	10℃ – 40℃ (No condensation)
Dimensions	Width: 3” (80 mm) x Height: 6” (152 mm) x Depth: 8.5” (212 mm) (Excluding the largest protrusions other than the feet)
Weight	Approximately 4.9 lbs (2.2 kg) (including the controller)
Video Output (Optional)	NTSC Format

The controller specifications are as follows:

Specification	Description
Name	Controller
Operating Environment	10℃ – 40℃ (No condensation)
Dimensions	Width: 6” (148.7mm) x Height: 1” (28.9mm) x Depth: 3” (84.7mm) (When folded)
Cable Length	Approximately 20” (50 cm)

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9 Support

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

- **Website**

  Information and documents regarding IS-NITRO-DEBUGGER and the latest software versions are 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-DEBUGGER, please contact the Software Development Support Group at support@noa.com .