

IS-NITRO-VIDEO

Users Manual

Version 11/13/2004

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

Confidential

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1 Using This Product Safely

To use IS-NITRO-VIDEO 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-VIDEO 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-VIDEO 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-VIDEO 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-VIDEO 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-VIDEO 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-VIDEO 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-VIDEO står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.
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German	Hiermit erklärt INTELLIGENT SYSTEMS Co. Ltd, dass sich <i>dieser/diese/dieses</i> IS-NITRO-VIDEO in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMW i)
	Hiermit erklärt INTELLIGENT SYSTEMS Co. Ltd die Übereinstimmung des Gerätes IS-NITRO-VIDEO mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EG. (Wien)
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Slovak	INTELLIGENT SYSTEMS Co. Ltd týmto vyhlasuje, že IS-NITRO-VIDEO spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Czech	INTELLIGENT SYSTEMS Co. Ltd tímto prohlašuje, že tento IS-NITRO-VIDEO 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-VIDEO atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Lithuanian	Šiuo INTELLIGENT SYSTEMS Co. Ltd deklaruoja, kad šis IS-NITRO-VIDEO atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Latvian	Ar šo INTELLIGENT SYSTEMS Co. Ltd deklarē, ka IS-NITRO-VIDEO atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.

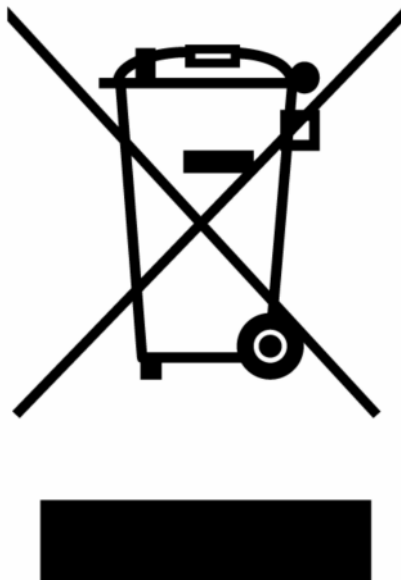
2 Special Notes

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

- After you have turned the IS-NITRO-VIDEO 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.
- While the power switch of the IS-NITRO-VIDEO device is ON, do not insert or remove a DS Card or GBA Game Pak. Doing so can cause damage to the IS-NITRO-VIDEO device, the DS Card, and the GBA Game Pak.
- While the power switch of the IS-NITRO-VIDEO 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-VIDEO 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-VIDEO unit, you must return the IS-NITRO-VIDEO unit to Nintendo of America. During the installation of the wireless option, the cover that forms the top and sides of the IS-NITRO-VIDEO device will be replaced. Do not attach asset control labels to this cover.

“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 with IS-NITRO-VIDEO. Take a moment to ensure that you have all these items before using this device

Item	Description	Quantity
1	IS-NITRO-VIDEO Device (Including the controller)	1
2	Stylus (stored in the controller)	1
3	AC Adapter	1 ^{*1}
4	IS-NITRO-VIDEO User Manual (this manual)	1
5	Ferrite Core	5

Note^{*1}: (Shipped Separately) A Nintendo GameCube™ AC adapter designed for use in the region where the IS-NITRO-VIDEO will be used is required. Contact Nintendo to acquire the correct AC Adapter.

If your IS-NITRO-VIDEO device includes the wireless option, there should be a checkmark in the “Wireless” column of the sticker on the bottom of the IS-NITRO-VIDEO unit.

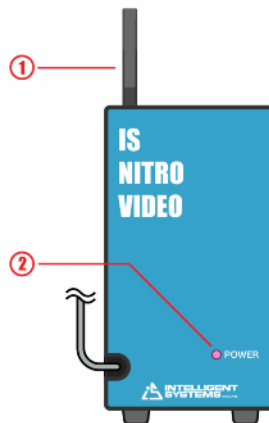
Connect a ferrite core to the following cable sections:

- IS-NITRO-VIDEO device side of the cable that connects the IS-NITRO-VIDEO device front panel and the controller.
- IS-NITRO-VIDEO device side of the AC adapter.
- IS-NITRO-VIDEO device side of the DS Wireless Communication cable.
- IS-NITRO-VIDEO device side of the Video cables.

4 Description of Parts

4.1 Front Panel

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



1. Antenna

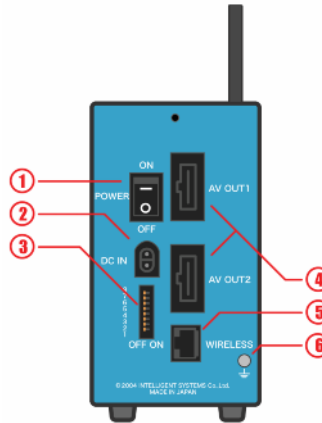
This antenna is used to perform DS Wireless Communications. It is only installed if you have purchased the wireless option.

2. Power LED (POWER)

The power LED indicates the power state of IS-NITRO-VIDEO. 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-VIDEO, shown below.



1. Power Switch (POWER)

This is the power switch for IS-NITRO-VIDEO. 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 connects here.

3. DIP Switches

These switches are used to configure IS-NITRO-VIDEO. When a switch is positioned to the right it is ON. When positioned to the left it is OFF.

DIP Switch	Description
Switches 1-4	Not used. Set 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.
Switch 6	Used to set the color of the outside of the LCD screen, on images output by the AV Cable. Set to OFF for black and ON for gray.
Switches 7-8	Not used. Set to OFF.

4. Audio/Video Output Connectors (AV OUT1, AV OUT2)

These connectors are used for outputting audio and video from the LCD screen to a TV or video device. AV OUT1 outputs audio and video from the upper screen. AV OUT2 outputs audio and video from the lower screen.

5. Wireless Connector (WIRELESS)

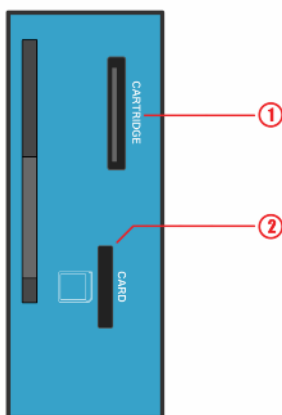
This is a connector that is used to perform wired DS Wireless Communications with the Nintendo DS development tools.

6. Ground Connector

This connector is used to electrically ground the device.

4.3 Top Panel

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



1. GBA Game Pak Slot (CARTRIDGE)

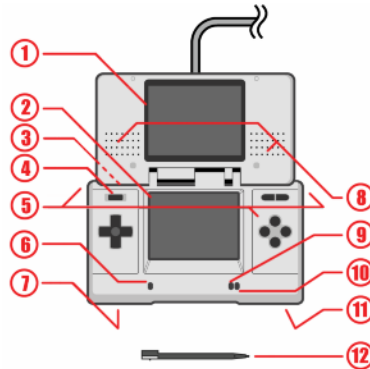
The GBA Game Pak plugs into this slot. **Make sure that the power switch of the IS-NITRO-VIDEO is in the OFF position before inserting the GBA Game Pak.** With the Game Pak in a vertical position, insert it into the slot with the label facing to the right.

2. DS Game Card Slot (CARD)

The DS Card plugs into this slot. **Make sure that the power switch of IS-NITRO-VIDEO is in the OFF position before inserting the DS Card into the slot.** 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 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 TFT color LCD.

2. Lower Screen (Touch Screen)

This screen is a backlit, 3-inch TFT color 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-VIDEO 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-VIDEO it is used as a reset button. To reset, hold this button down for approximately one second.

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-VIDEO.

10. Power Indicator LED

This LED displays the power state of IS-NITRO-VIDEO. It is lit when the power switch at the rear of IS-NITRO-VIDEO 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 Setup

5.1 Connecting the Device

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

1. First make sure that the power switch for IS-NITRO-VIDEO is in the OFF position.
2. Connect the DC plug of a Nintendo GameCube AC Adapter to the DC connector (DC In) on the back panel of IS-NITRO-VIDEO.
3. Plug the AC plug of the AC Adapter into an AC power outlet.

5.2 Video and Audio Output

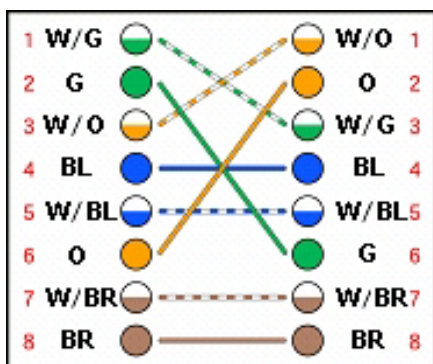
When outputting video and audio from the LCD screen to a TV or video device, use the audio/video connectors on the rear panel of IS-NITRO-VIDEO. Use any of the following optional Video cables sold by Nintendo for these connections.

- 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.)

5.3 Performing DS Wireless Communication Using Wires

The IS-NITRO-VIDEO 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-VIDEO units (including IS-NITRO-EMULATOR and IS-NITRO-CAPTURE units).

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

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

1. Make sure the power switches on the IS-NITRO-VIDEO units and IS-NITRO-HUB unit are set to OFF.
2. Set DIP switch #5 on the IS-NITRO-VIDEO units to OFF.
3. Connect the IS-NITRO- VIDEO 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-VIDEO 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.

5.4 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-VIDEO unit is set to OFF.
2. Set DIP switch #5 on the IS-NITRO-VIDEO unit to ON.
3. Set the power switch on the IS-NITRO-VIDEO unit to ON.

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

6 Operating Procedure

6.1 Starting a Game

Follow the procedure below to start a game.

1. First, make sure that the power switch of the IS-NITRO-VIDEO is in the OFF position.
2. Insert a DS Card or a GBA Game Pak. Insert a DS Card with the label facing to the right. You will feel a slight click when it has been properly inserted. Insert a GBA Game Pak with the label facing to the right.
3. Change the power switch of the IS-NITRO-VIDEO to the ON position.

6.2 Ending a Game

When ending a game, follow the procedure below.

1. Change the power switch of the IS-NITRO-VIDEO to the OFF position.
2. Remove the DS Card or the GBA Game Pak from its slot. The DS Card can be removed from the slot by pushing down lightly on the DS Card. The card should spring up slightly. Grab the card by the edge and remove it. Remove the GBA Game Pak by pulling it directly out of the slot.

6.3 Resetting a Game

To reset in the middle of a game, hold down the reset button (POWER) on the controller for at least one second. The game can be started from the same state as when turning on the power.

7 Specifications

The specifications for IS-NITRO-VIDEO are as follows:

Item	Specification
Name	IS-NITRO-VIDEO Device
Main Memory	4MB
Video Output	NTSC Non-interlaced
Connectors	AV Output Connectors (2) Wireless Connector DC Connector Ground Connector
Slots	DS Game Card Slot GBA Game Pak Slot
Power Source	DC12V 3.25A (Nintendo GameCube AC Adapter)
Operating Environment	10° – 40°C (No condensation)
External 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 4.5 lbs (2.0 kg) (Including the controller)

The controller specifications are as follows:

Item	Specification
Name	Controller
Operating Environment	10° – 40°C (No condensation)
External Dimensions	Width 6" (148.7 mm) x Height 1" (28.9 mm) x Depth 3" (84.7) mm (When folded)
Cable Length	Approximately 20" (50 cm)

8 Support

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

- **Website**

Information and documents regarding IS-NITRO-VIDEO 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-VIDEO, please contact the Software Development Support Group at support@noa.com.

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