

IS-NITRO-HUB

Users Manual

Version 3/30/2005

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1 Using This Product Safely

To use IS-NITRO-HUB 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-HUB 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-HUB 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-HUB 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-HUB 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-HUB est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE
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Swedish	Härmed intygar INTELLIGENT SYSTEMS Co. Ltd att denna IS-NITRO-HUB 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-HUB overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF
German	Hiermit erklärt INTELLIGENT SYSTEMS Co. Ltd, dass sich <i>dieser/diese/dieses</i> IS-NITRO-HUB 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-HUB mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EG. (Wien)
Greek	<i>ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ</i> INTELLIGENT SYSTEMS Co. Ltd <i>ΔΗΛΩΝΕΙ ΟΤΙ</i> IS-NITRO-HUB <i>ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ</i>
Italian	Con la presente INTELLIGENT SYSTEMS Co. Ltd dichiara che questo IS-NITRO-HUB 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-HUB 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-HUB 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-HUB mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn rilevanti li hemm fid-Dirrettiva 1999/5/EC
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Hungarian	Alulírott, INTELLIGENT SYSTEMS Co. Ltd nyilatkozom, hogy a IS-NITRO-HUB megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Slovak	INTELLIGENT SYSTEMS Co. Ltd týmto vyhlasuje, že IS-NITRO-HUB spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Czech	INTELLIGENT SYSTEMS Co. Ltd tímto prohlašuje, že tento IS-NITRO-HUB 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-HUB atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Lithuanian	Šiuo INTELLIGENT SYSTEMS Co. Ltd deklaruoja, kad šis IS-NITRO-HUB atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Latvian	Ar šo INTELLIGENT SYSTEMS Co. Ltd deklarē, ka IS-NITRO-HUB atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.

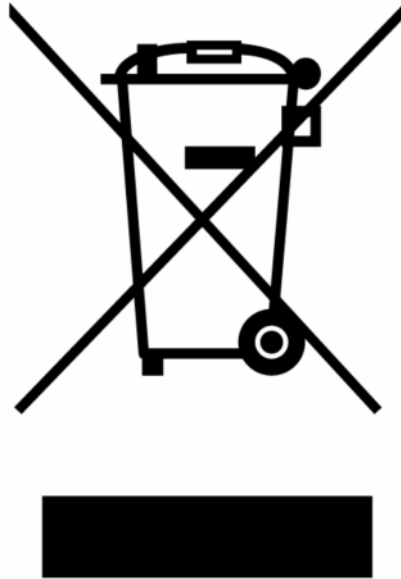
2 Special Notes

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

- Follow the proper procedures when powering up or powering down the IS-NITRO-HUB and the Nintendo DS development tools (IS-NITRO-DEBUGGER, IS-NITRO-CAPTURE, and IS-NITRO-VIDEO) that are connected to it. If you perform these procedures incorrectly, you may damage the IS-NITRO-HUB and the Nintendo DS development tools. These procedures are explained under the heading “Setup.”
- Make sure that the power switches of the Nintendo DS development tools, connected to the IS-NITRO-HUB, are in the ON position. Even those DS development tools that are not using DS network communications should be turned ON when connected to the IS-NITRO-HUB .
- The IS-NITRO-HUB 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.

“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-HUB. Take a moment to ensure that you have all these items before using this device.

Item	Description	Quantity
1	IS-NITRO-HUB Device	1
2	AC Adapter	1 ^{*1}
3	IS-NITRO-HUB Users Manual (this manual)	1
4	Ferrite Core	18

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

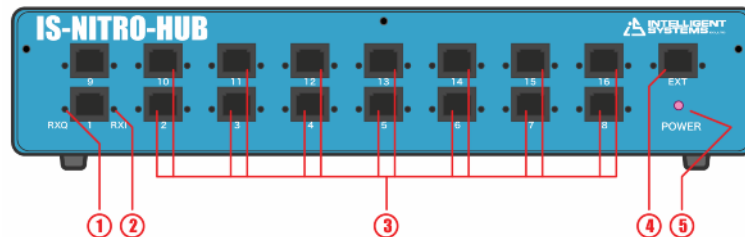
Connect a ferrite core to the following cable sections:

- IS-NITRO-HUB device side of the AC adapter.
- IS-NITRO-HUB device side of the DS Wireless Communications cable.

4 Description of Parts

4.1 Front Panel

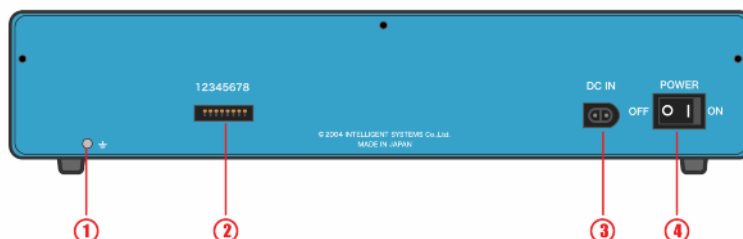
The following is a description of the front panel of the IS-NITRO-HUB device (henceforth called only IS-NITRO-HUB).



1. **RXQ LED (RXQ)**
This LED displays the status of the Q channel as data is going into the IS-NITRO-HUB. It is lit for "1" and not lit for "0".
2. **RXI LED (RXI)**
This LED displays the status of the I channel as data is going into the IS-NITRO-HUB. It is lit for "1" and not lit for "0".
3. **Wireless Connectors 1 through 16**
These connectors are for connecting the IS-NITRO-HUB to the wireless connectors on Nintendo DS development tools.
4. **EXT Wireless Connector (EXT)**
This connector is for noise input. There is currently no device that connects to this connector.
5. **Power LED (POWER)**
The power LED indicates the power state of IS-NITRO-HUB. 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-HUB, shown below.

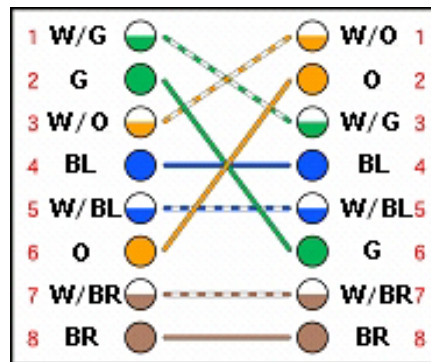


1. **Ground Connector**
This connector is used to electrically ground the device.
2. **DIP Switches**
These switches are used to configure IS-NITRO-HUB. When the switches are down they are ON, and when up they are OFF. **Do not use these switches. Make sure they are set to OFF.**
3. **DC Connector (DC IN)**
The DC Plug of a Nintendo GameCube AC adapter connects here.
4. **Power Switch (POWER)**
This is the power switch for IS-NITRO-HUB. 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.

5 Setup

5.1 The Communications Cables

Use communications cables to connect the IS-NITRO-HUB device with the Nintendo DS development tools. Use category 5 cross LAN cables that are no longer than 16 feet (5 meters). (They should meet 10BASE-T and 100BASE-T standards (TIA/EIA-568A, IEEE802.3i).)



5.2 Turning On the Power

Follow the procedure below to set up the IS-NITRO-HUB and turn on the power.

1. Make sure that the IS-NITRO-HUB and the Nintendo DS development tools that are connected to it (such as IS-NITRO-EMULATOR) are turned OFF.
2. Connect the DC plug of the Nintendo GameCube AC adapter to the DC connector (DC IN) at the rear of the IS-NITRO-HUB.
3. Insert the AC Plug from the AC Adapter into an AC wall outlet.. **Do not turn on the IS-NITRO-HUB yet.**
4. Use the communication cables to connect the IS-NITRO-HUB to the Nintendo DS development tools.
5. Turn ON the IS-NITRO-HUB using the power switch.
6. Turn ON the Nintendo DS development tools that are connected to the IS-NITRO-HUB, using their power switches.

There is no need to modify the user program to use the IS-NITRO-HUB. A user program that uses DS Wireless Communications can be run without modification.

5.3 Turning Off the Power

Follow the procedure below when powering down the IS-NITRO-HUB.

1. First, using their power switches, turn OFF the Nintendo DS development tools (such as IS-NITRO-EMULATOR) that are connected to the IS-NITRO-HUB.
2. Then, turn OFF the IS-NITRO-HUB, using its power switch.
3. Make sure the power switches of the IS-NITRO-HUB and the Nintendo DS development tools that are connected to it are in the OFF position. Then, disconnect the communication cables.

6 Specifications

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

Item	Description
Product Name	IS-NITRO-HUB Device
Connectors	Wireless Connectors (17) DC Connector Ground Connector
Power Source	DC12V 3.25A (Nintendo GameCube AC Adapter)
Usage Environment	10 C – 40 C (No condensation)
Dimensions	Width: inches 11.9 (302 mm) x Height: 2.8 inches (70 mm) x Depth: 4.3 inches (109 mm) (Excluding the largest protrusions other than the feet)
Weight	Approx. 2.9 lbs (1.3 kg)

7 Support

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

- Website
Information and documents about IS-NITRO-HUB and the latest versions are available on the Nintendo Software Development Support Group website (<http://www.warioworld.com>). Only users that have 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 regarding IS-NITRO-HUB, please contact the Software Development Support Group at support@noa.com.

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