



ARGON2 – User Manual

4th generation WII modchip – Updatable via Internet – Argonchannel legal software
Solderless – Control on data bus.

Quick Start Guide

Release 1.0

Document Version 1.4 – 10/02/2009

Legal Notes

ARGON2 is a kit of both ARGON2 hardware and ARGONCHANNEL software. Hardware and software are the vital parts of this kit to create ARGON2 project.

The objective of this plan is to reveal the homebrew material and to give access to free software rights produced from third parties.

The Wii console producer, for Commercial and Marketing reasons, does not allow executing relative software or so-called HOMEBREW.

Several methods exists to execute HOMEBREW software on your own console, one of them is represented by both MODCHIP and ARGONCHANNEL, the most secure ways of being sure that eventual updating posted by NINTENDO on the web can "disable" the access to the free contents from copyrights.

Moreover Argon2 is necessary to protect the software that will be free of charge when released for ARGON2 customers.

The Law condemns whichever abuse using the modchip to play illegally copied games, which means, not being the owner of the original game itself.

ARGON is studied to give an advanced access to the Wii console for legally recognized use, whatever abuse is under the consumer's responsibility.

In order to understand the Legally Recognize use of the device, we advise you to read of the following Legislations Reference:

Digital Millennium Copyright Act (DMCA) - USA UE Copyright Directive – EUROPE

Copyright

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NINTENDO WII, and WII are a registered trademark of NINTENDO CORP JAPAN.



Introduction

ARGON2 is the 4th Modchip Generation which launches the substantial differences regarding the other competitors on the Market.

- *ArgonChannel: an Included software whenever you purchase a Modchip and it allows you to be updated constantly the innovation of HOMEBREW for NINTENDO WII console*
- *Internet Updatable: The first Chip in the world so far, to be updated on the internet.*
- *WIICLIP on Board: It takes less than 10 minutes to Mount the clip on board*
- *JTAG updatable: Updatable by the Injectus Programmer for the based structure of the ACTEL to be modified; which is impossible for the competitors to do only with the software update.*
- *16Mbits Flash: High flashing capacity of the chip on board for the future implementations.*
- *FLAT 32 PIN: Total control of the Data Bus of the WII Drive. Indispensable for the ARGON2 Software Protection and for the future support of the New Generation drives (D2Nothing, etc..).*

Through ARGONCHANNEL will be proposed FREE OF CHARGE of the new HOMEBREW software and software that will be develops to you for our customers.

In fact ARGONCHANNEL promotes the use and development of free software, supports the developers for new applications by sending a small amount of money to our team.

Purchasing one ARGON2 you can participate for the promotion and development of new HOMEBREW software for WII Console.



User Manual

This guide is intended to final user, who intends to install an ARGON2 in his own console, the goal to approach world HOMEBREW and to keep your ORIGINAL game perfect condition by creating one legal copy of Backup which cannot be done practically using the console at the ORIGINAL state.

Feedback

The Technical support is guaranteed at www.argonchannel.com and the relative forum www.argonchannel.com/forum

Specifications

- INTERNET UPDATABLE BY ARGONCHANNEL.COM and DVD UPDATABLE
- ARGONCHANNEL WITH FREE APPLICATIONS INCLUDED
- On board the ORIGINAL WIICLIP socket
- FLAT CABLE to full access on WII DATABUS (new cool features coming)
- Update Blocker feature. Available in the DVD UPGRADER. This feature will block harmful other-region updates.
- Compatible with DMS, D2A, D2B, D2C, D2C-2 and D2E chipsets (old chipset need FW1.8)
- Compatible with all regions, USA, JAP, PAL and KOREA
- Compatible with D2B "cut pin" drives (does not require the cut pins to be connected)
- Fully configurable and updatable via DVD & Internet
- Micro-switches to configure the regional setting
- Region override for WII and GameCube games
- Direct Boot of WII original, import, and backup games
- Direct Boot of GameCube original, import, and backup games
- Direct boot of homebrew in GC mode
- Supports multi-disc games, DVD-R, +R, +RW (no bit setting required)
- Supports Dual Layer
- Supports factory made 'silvers', even with incorrect header data
- Supports, SMG, SSBB, Mario Kart and other 'problem' titles
- Streaming audio-fix for GameCube games
- Disk speed configurable via DVD, with separate settings for different media types
- Recovery mode makes it impossible to brick the chip with a bad flash



Chapter 1: Installation

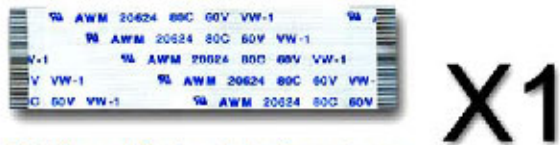
Package contents

- 1 pc. ARGON2 modchip
- 1 pc. Short 32PIN flat cable
- 1 pc. Long 32PIN flat cable

1 pc. ARGON2 code



X1



X1

Optional flat cable for wires
installation of ARGON2



X1

ARGON2 KIT

Opening the console WII

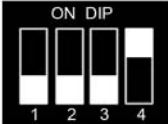
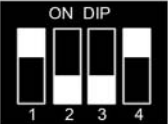
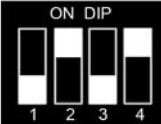
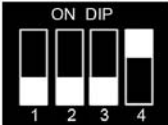
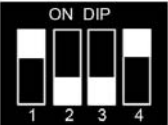
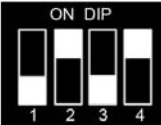
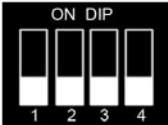
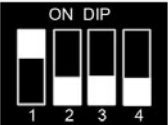
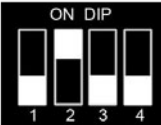
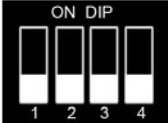
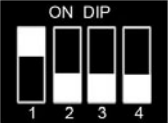
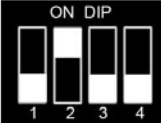
Opening a WII console is an easy operation, we advise you to watch a very interesting tutorial video at the following link:-

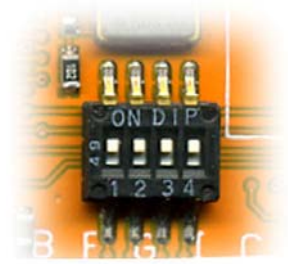
http://www.metacafe.com/watch/757800/opening_up_nintendo_wii/

ARGON2 hardware installation

Step 1

Setting the MICROSWITCH depending on your WII version

	PAL	JAP	USA
DMS			
D2B			
D2C			
D2C2 D2E			



ARGON²

Switch's configuration

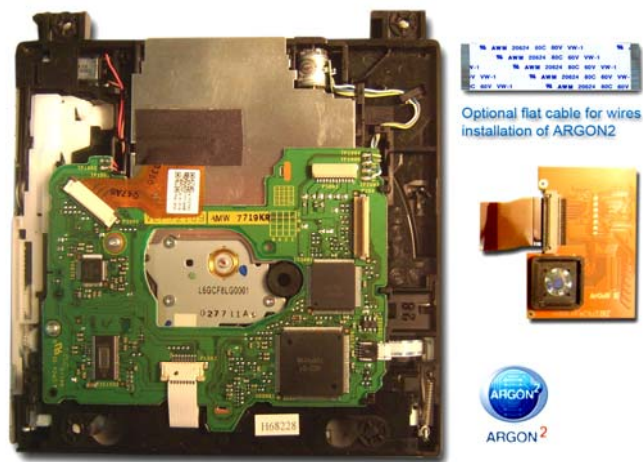
Note: For KOREAN WII we will release soon an update.

Step 2

Write down the ARGON2 code which appears on the label on the back of the Modchip. It will be important when requested for the activation of the ARGONCHANNEL of your WII console.

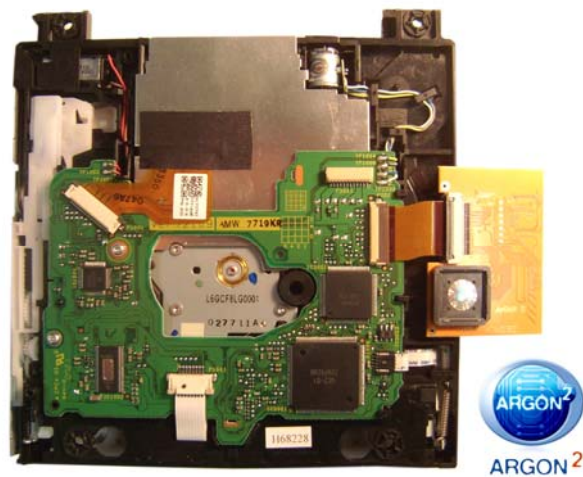
Step 3

Place the chip next to the drive as shown in the picture below



Step 4 A

Connect the ARGON2 chip to the 32Pin socket of the drive. ARGON2 has 32Pin sockets.



Step 4 B

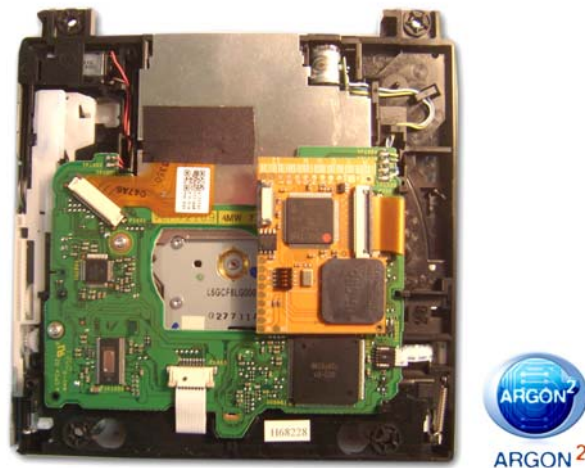
*Installation using wires – **ONLY WITHOUT CLIP MOUNTING!***

Argon2 cannot be installed with the WIICLIP on the console with the Epoxy glue around the micro controller of the drive. The short Flat cable should be disconnected and be replaced by the longer one as shown in the figure below.



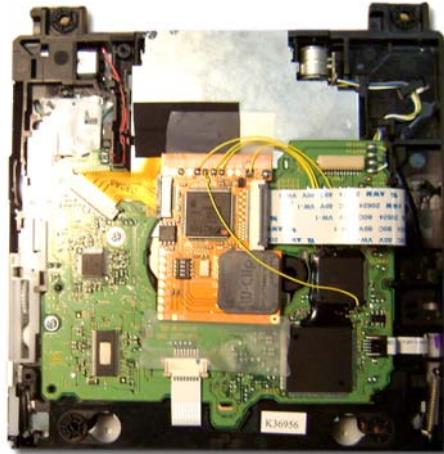
Step 5 Connect the clip to the controller

As shown in the below picture rotate the chip and position gently the WIICLIP on the micro controller and carefully press it on the microprocessor and verify that it is firmly clipped.



*Step 5B Installation using wires – **ONLY WITHOUT CLIP MOUNTING!**
The 32 Pin Flat Cable which is longer is positioned easily in the centre of the drive
where it's possible to connect 6 wires to the main board. This modification is necessary
only for consoles having the epoxy glue around the Micro controller of the drive.*

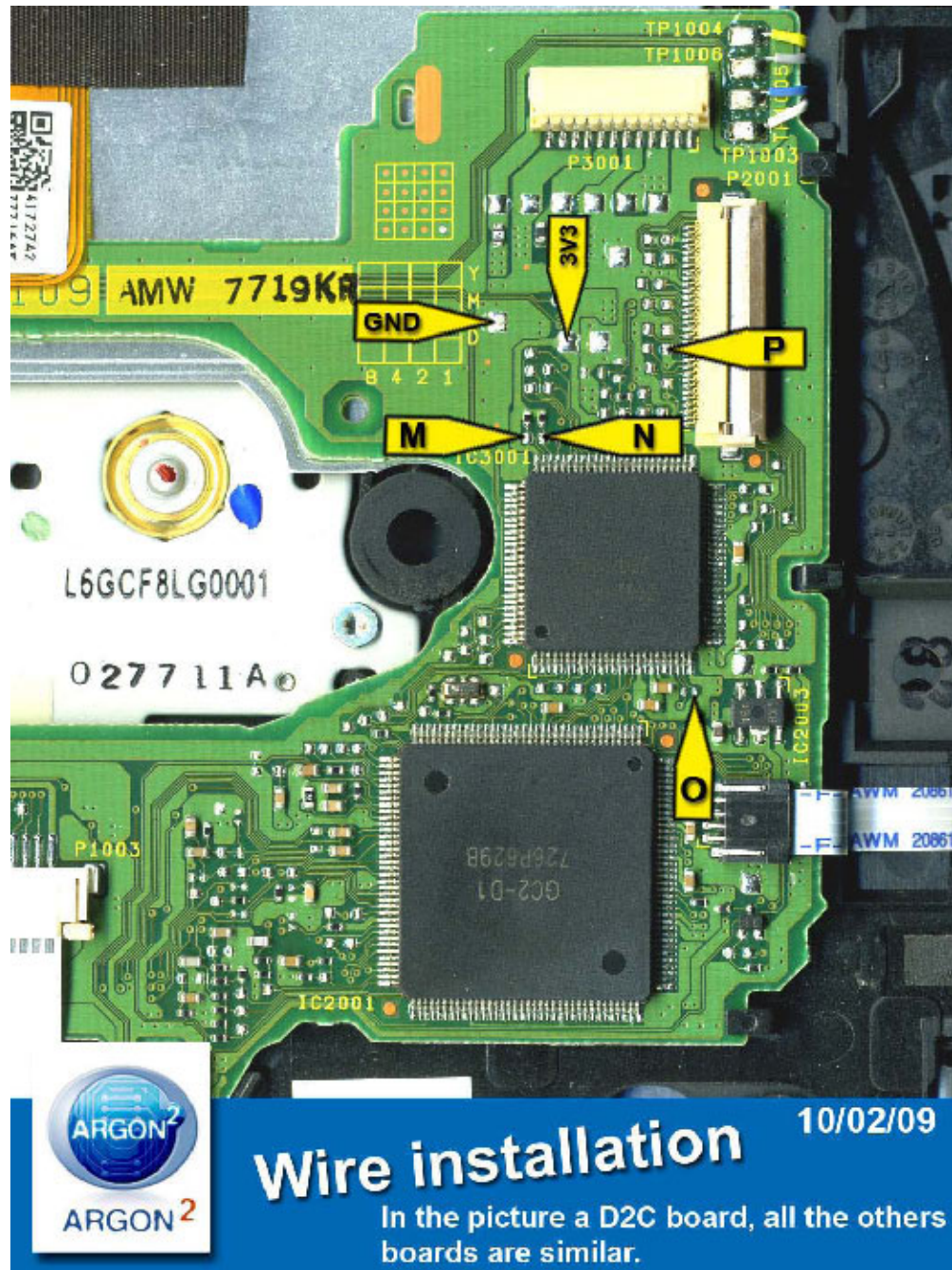
Circuit panel below of the manual



Circuit panel for manual mounting using wires

ONLY WITHOUT CLIP MOUNTING!

Update 10/02/09 : We fixed point "O" that was wrong in previous diagram

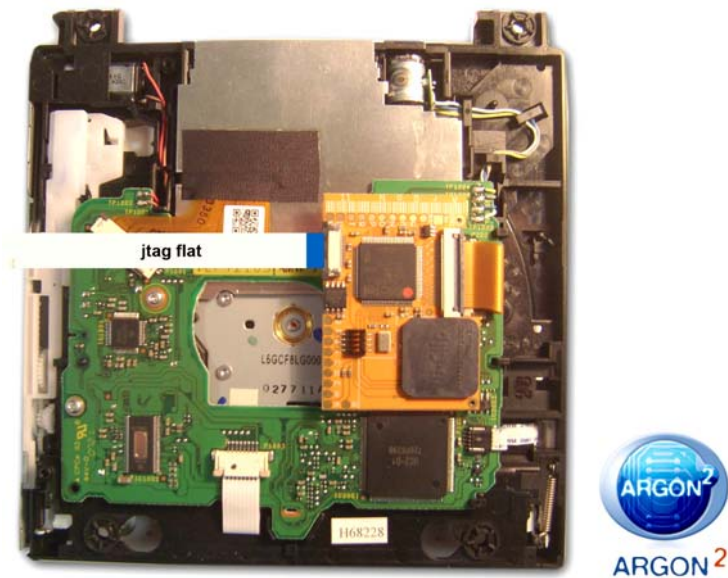


Step 6 – JTAG FLAT - Optional

The flat JTAG cable included is optional and is principally applicable for installers and distributors for updating future consoles which will be on the market.

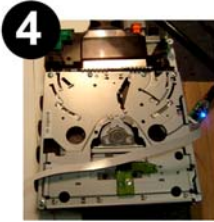
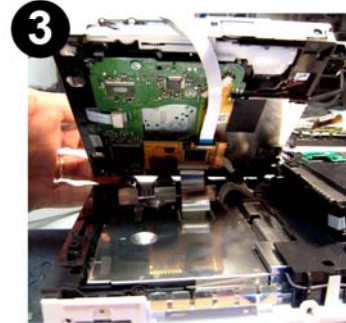
Whoever install an ARGON2 on a supported console can easily have the updates on the internet or a DVA without any programmer.!

The positive sides of the Flat cable should face the PCB.



Step7 – CLOSING THE CONSOLE

Here below 4 illustrations which shows how to close the console and the position of the FLAT.



Updating of the ARGON2 CHIP

The argon chip can be updated in 3 ways:

Technical Note:

the software DVDUPDATER is in GAME CUBE format. To move around you will need a GAME CUBE pad or an alternative which can has the RESET button.

LONG PUSH "RESET" = Menu selection

SHORT PUSH "RESET" = Selecting menu

1- UPDATING VIA "ARGON DVD UPDATER":

The DVD generated already contains an updated firmware. To always obtain the latest available version you need to download the file from the website www.argonchannel.com if necessary.

- a. Download the "Argon2_Updater_PAL_v1.7.ZIP (or latest version)" from <http://www.argonchannel.com/argontools.html> according to the console version i.e. PAL, US or JAP.
- b. Inside the ISO File which is GAME CUBE format and compatible with NINTENDO WII. Burn the file on a DVD.
- c. Insert the DVD inside the WII with ARGON2 installed and run the software
- d. Select UPDATE from menu
- e. As shown below it is possible to check the firmware version installed on the chip and the included version available on the DVD UPDATER prepare previously. Selecting CONTINUE you will be able to proceed with the updating.

In case of BAD FLASHING the chip will automatically recover back from the previous version of the firmware.

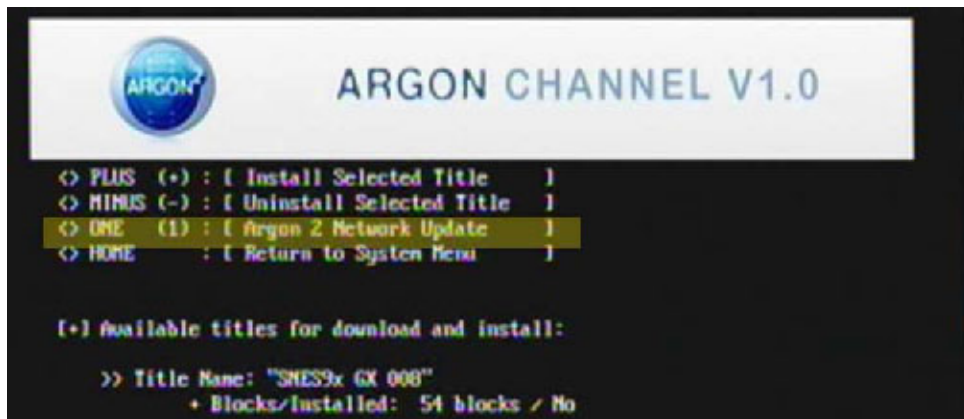


2- UPDATING VIA “ARGONCHANNEL” + “ARGON DVDUPDATER”

ARGON2 is the first chip to be updated via INTERNET using the ARGONCHANNEL software.

To proceed you should have the ARGONCHANNEL installed and have a DVD “ARGON DVDUPDATER with whatever existing version in the console.

- a. Start ARGONCHANNEL
- b. As shown below, between the presented options on the channel, there is option ONE (1) select it using the wii REMOTE CONTROLLER.



- c. The software will ask to insert the DVD “ARGON DVD UPDATER” in the WII.
- d. The DVD will autorun and you should see the following screenshot. “New firmware Update Detected”.



- e. Continue with the standard procedure selecting from the menu UPDATE and CONTINUE.
- f. The update will proceed using the downloaded software from ARGONCHANNEL instead of the existing one on the DVD "ARGON UPDATER"

If you see this message on your screen, the firmware has not be downloaded properly and it's important that you start the procedure al lover again.



3- DIRECT INTERNET UPDATE WITHOUT ARGONCHANNEL

If you haven't argonchannel installed, you could update ARGON2 by internet with a simple procedure with ZELDA + TWILIGHT HACK.

- a. Install in your SD CARD the TWILIGHT HACK "private" folder
- b. Move the "boot.dol" file from the "ARGONCHANNEL-INSTALLATION-DVD-1_0.zip" to the root of your SD CARD. Root need to have these files:
 - BOOT.DOL >> loader of INTERNET ARGON2 update
 - PRIVATE >> folder with twilight hack (<http://hbc.hackmii.com/download/>)
 - Download the correct version, right now FW3.3 or FW3.4.**
- c. Turn on the WII and move the TWILIGHT HACK ZELDA SAVING to the console memory (Start for the first time the game ZELDA and save it for the first time. This procedure is important to ally you to copy onto the SD CARD for the first time the saved game TWILIGHT HACK)
- d. Load Zelda , load the TWILIGHT HACK ZELDA SAVING and go to talk with the man.
- e. ARGON UPDATER LOADER will check network (internet need to be configured on the console)
- f. INSERT ARGON UPDATER DVD. The procedure than is the same of ARGONCHANNEL PROCEDURE from step D.

ARGONCHANNEL Installation

Installation and configuration Procedure of the ARGONCHANNEL on your Nintendo Wii console.

The actual software allows the following functions:

- Downloading and updating ARGON2
- Automatically downloading the list of applications at www.argonchannel.com
- Installing and uninstalling automatic applications
- Installation CIOS automatically (custom operating system)

IMPORTANTE!

If your console has the 3.2 firmware or earlier you can install the DVD of the ARGONCHANNEL directly in your console and you can update the console with the latest firmware version available without any problem.

if your console has the 3.3 firmware or later, it is important to follow a procedure before installing the DVD of the ARGONCHANNEL.

To check the version installed on your Wii simply in the property OPTIONS of the Wii and verify at the top right the software version.

An internet connection is necessary to use the software!

What is necessary before starting:

- ARGONCHANNEL INSTALLATION DISK. Download the ISO for the TOOLS section at <http://www.argonchannel.com/argontools.html>
- ARGONCHANNEL3.3.ZIP file (**only for console with firmware 3.3 version**). Download the ZIP FILE from the TOOLS section at <http://www.argonchannel.com/argontools.html>
In necessary also the TWILIGHT HACK that for a COPYRIGHT issue we cannot host on our servers. This hack is available for free on this link:
<http://hbc.hackmii.com/download/>
<http://hbc.hackmii.com/dist/twilight-hack-v0.1-beta1.zip> << direct link
- Only for console with FW3.4 you need to install a "special version" of IOS Nintendo called "IOS16" with a Custom Firmware. The IOS16 is a copyright protected Nintendo content. You should have right to use it.
An EDONKEY / EMULE link is available on the <http://www.argonchannel.com/argontools.html>
- WII GAME "ZELDA TWIN LIGHT PRINCESS" whether original or BackUp copy can work both. (**Only for console with firmware 3.3 version or later**).
- SD CARD 2GB maximum capacity (**only for console with firmware 3.3 version or later**).
- READ and WRITE drive for SDCARD for PC

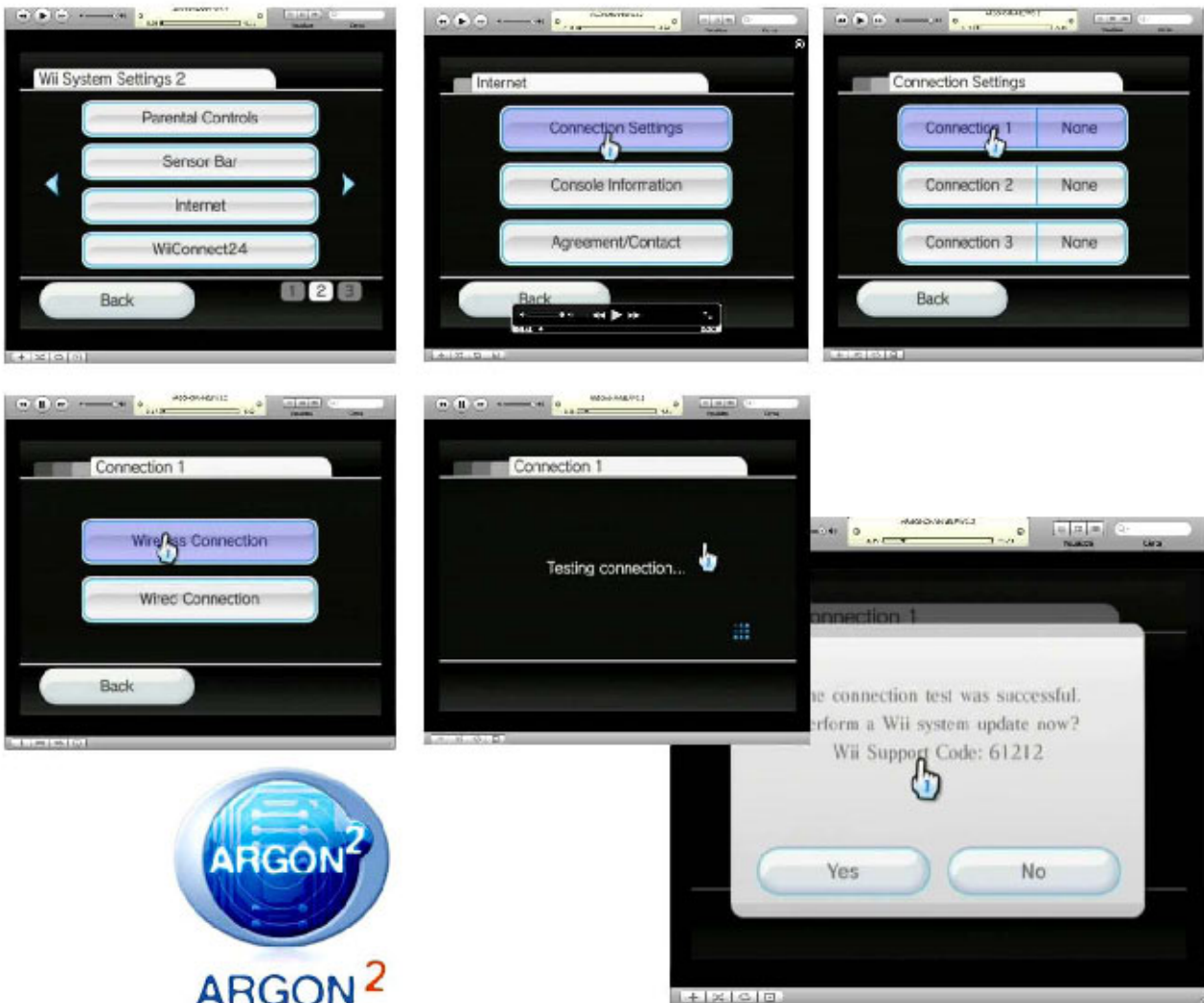
Installation Procedure on console FW 3.2 or earlier.

Step1

verify that there is an internet connection configured on the wii.
Click on the WII menu on the bottom right.

Select: INTERNET >> CONNECTION SETTING >> CONNECTION 1 and follow the instructions on the screen. Please find below some screenshots.

The procedure SHOULD end with "The connection test was successful"



Step2

insert the "ARGONCHANNEL INSTALLATION" DVD and wait for the initialization. (if the internet connection is not present, or network problem to connect to www.argonchannel.com there will be an error message and the installation will be terminated. We suggest to reset the internet connection and to try again later.)

Step3

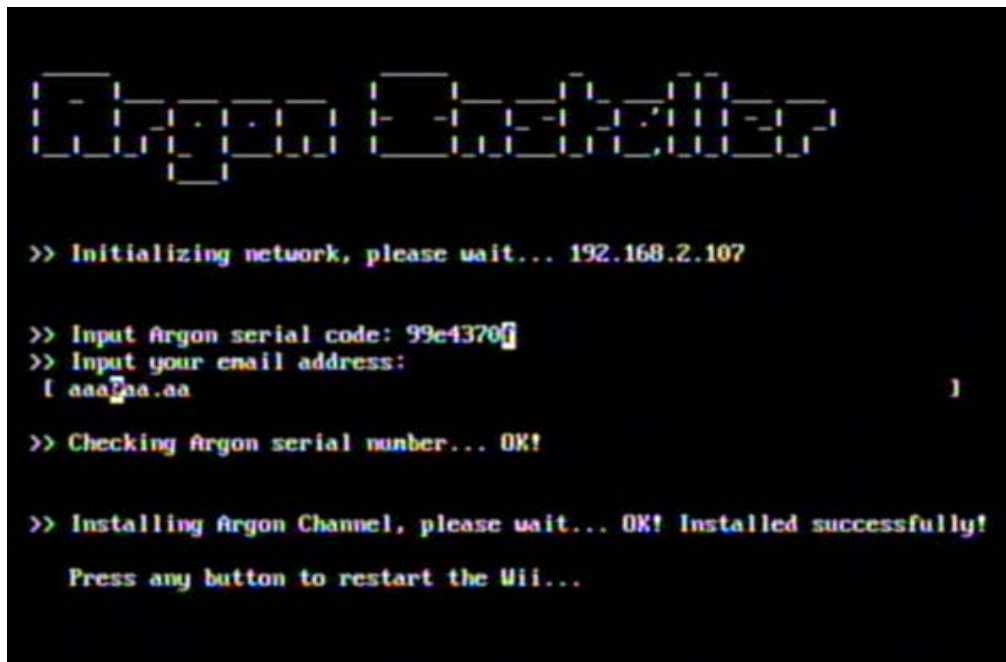
*Insert the alphanumeric code (8 characters) which appears on the label at the back of every!
Use the controller to move up and down to select the letters and the correct characters.*

Step4

Insert your email address the same way you inserted the code. If the email address is not valid the process will abort

Step5

Wait till the end of the activation of the ARGONCHANNEL like below



Possible answer from the server:

OK

“serial code is ok”

SYNTAX ERROR IN URL STRING

“contact us in the support forum www.argonchannel.com/forum “

“ARGON2 CODE DOESN'T EXIST”

your argon2 probably is not original, contact us

“YOUR SERIAL NO. IS USED ON ANOTHER WII”

your argon2 code is activated on another Wii. Every code allow to activate the channel only on one console.

“REACTIVATION OK!”

Your code is ok and was previously installed on the wii.

ARGONCHANNEL Installation on console FW 3.3

Step1

Check if the console is correctly configured for and internet connection (see previous installation instructions)

Step2

Go to <http://www.argonchannel.com/argontools.html> and download the ZIP file named "ARGONCHANNEL3.3.ZIP".

Download also the TWILIGHT HACK from the LINK:

<http://hbc.hackmii.com/dist/twilight-hack-v0.1-beta1.zip>

<http://hbc.hackmii.com/download/>

Step3

Unzip the contents of ARGONCHANNEL3.3.ZIP directly on the SD, the same for TWILIGHT HACK that has only one folder PRIVATE that need to be placed in the ROOT of SD. Please note that SD CARD should be formatted FAT and should not exceed 2GB in capacity.

ROOT SD: >PRIVATE (folder of twilight hack)
 >BOOT.DOL (loader of ARGONCHANNEL DVD)

Step4

Insert the SD CARD in the slot SD of the Wii. Insert the game ZELDA TWIN PRINCESS and switch on the Console.

Step5

Start for the first time the game ZELDA and save it for the first time. This procedure is important to allow you to copy onto the SD CARD for the first time the saved game TWILIGHT HACK.

Step6

Exit the game ZELDA TWILIGHT HACK, reboot the console. Go into game save manager, you will see the save session and DELETE it

Step7

Go in the SD Memory card option and choose TWILIGHT HACK for the version of your console (PAL, USA, JAP) and the game ZELDA inserted.

if the saved game are not visible in the save game manager check that the PRIVATE folders exists on the SD CARD and it has been formatted FAT.

Step8

Copy the Saved TWILIGHT HACK on the internal memory of the WII as the screenshot below:



Step9

Start the Game, resume the saved game TWILIGHT, move towards the man and click A to make a conversation.

This time the screen will be black and the installation will remain in stand by until the DVD "ARGONCHANNEL INSTALLER" is inserted in the console. Remove the game for the WII and insert the ARGONCHANNEL INSTALLER disk

Step10

as soon as the disk is in you will see the installation process on the screen. ((if the internet connection is not present, or network problem to connect to www.argonchannel.com there will be an error message and the installation will be terminated. We suggest to reset the internet connection and to try again later. If the problem persists please post your problem on our forum at www.argonchannel.com/forum)

Step11

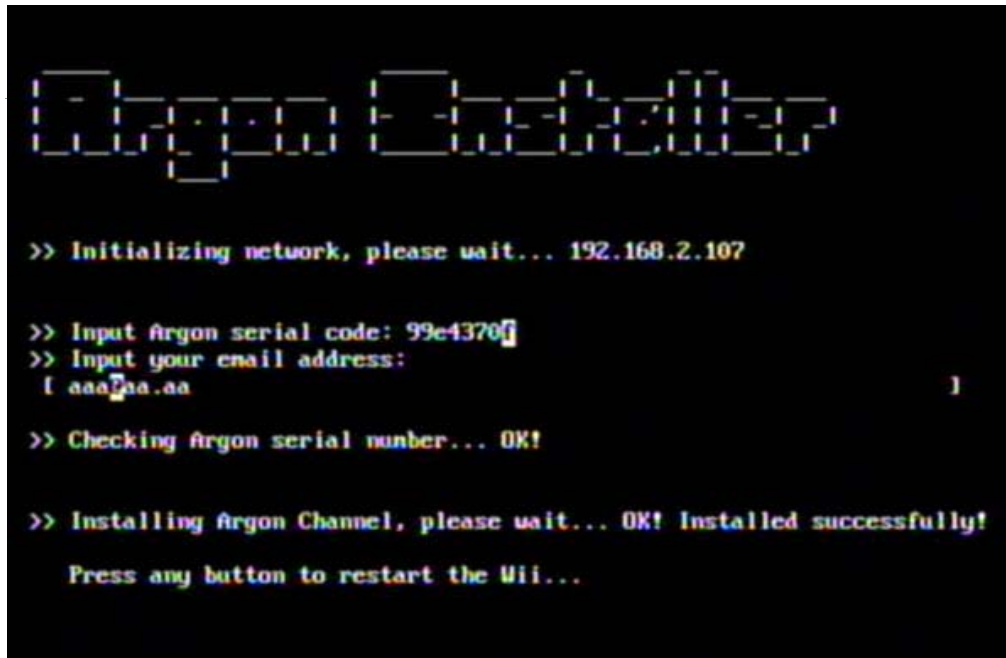
Insert the alphanumeric code (8 characters) which appears on the red label at the back of every! Use the controller to move up and down to select the letters and the correct characters.

Step12

Insert your email address the same way you inserted the code. If the email address is not valid the process will abort

Step13

wait for the Activation of the ARGONCHANNEL as shown below



Possible answer from the server server:

OK

"serial code is ok"

SYNTAX ERROR IN URL STRING

"contact us in the support forum www.argonchannel.com/forum "

"ARGON2 CODE DOESN'T EXIST"

your argon2 probably is not original, contact us

"YOUR SERIAL NO. IS USED ON ANOTHER WII"

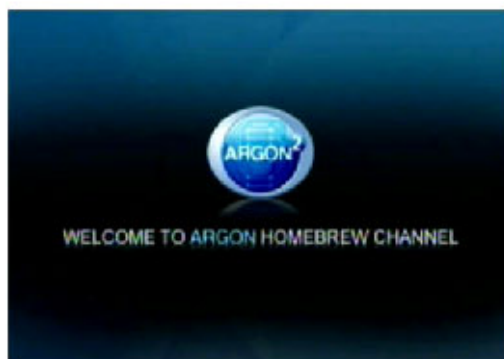
your argon2 code is activated on another WII. Every code allow to activate the channel only on one console.

"REACTIVATION OK!"

Your code is ok and was previously installed on the WII.

Step16

Reboot the console, you should now see the ARGONCHANNEL installed correctly in the Wii as you can see below:



ARGONCHANNEL Installation on console FW 3.4

IOS16 and CUSTOM FIRMWARE need to be installed in the Wii to allow installation of ARGONCHANNEL on FW3.4 or above.

The IOS16 is a copyright OS of NINTENDO you should have the right to use it!
The installer of IOS16 + CIOS is a simple DOL file that is necessary to load with TWILIGHT HACK.
You could find an EDONKEY / EMULE link on our page <http://www.argonchannel.com/argontools.html>

Simple copy the BOOT.DOL file in the root of your SD CARD, do the Twilight Hack with ZELDA game and after finish installation do the procedure of FW3.3 ARGONCHANNEL installer.

Another difference regarding the installation of the firmware FW3.4 is the folder "Private" with the related files saved TWILIGHHACK for the console FW 3.4).

To load ".DOL" files on Wii FW 3.4 or above you should use the correct TWILIGHT HACK.

The TWILIGHT HACK for FW3.4 is available here <http://hbc.hackmii.com/>

Please follow exactly step by step the the procedure for the FW3.3 but using the file, and specially the private folder of the zip ARGONCHANNEL3.4.ZIP.

You can download the file at <http://www.argonchannel.com/argontools.html>

IMPORTANT! For a proper installation of the ARGONCHANNEL as well as it's use, you should have an active INTERNET CONNECTION

All the features of ARGONCHANNEL are availables if you install the HOMEBREWCHANNEL on this URL <http://hbc.hackmii.com/> without buying ARGON2