



Wasabi 360 Ultra User Guide

For firmware **v1.0**, document revision 0

Introduction

Wasabi 360 Ultra – the ultimate ODDE (Optical Disc Drive Emulator), allows you to emulate your Xbox 360's optical disc drive and run Xbox 360 or Xbox 1 ISO's from HDD. No more hunting for game discs, simply execute your favourite ISO's from any ESATA or USB (adaptor required) external HDD. Easy, fast, safe and convenient.

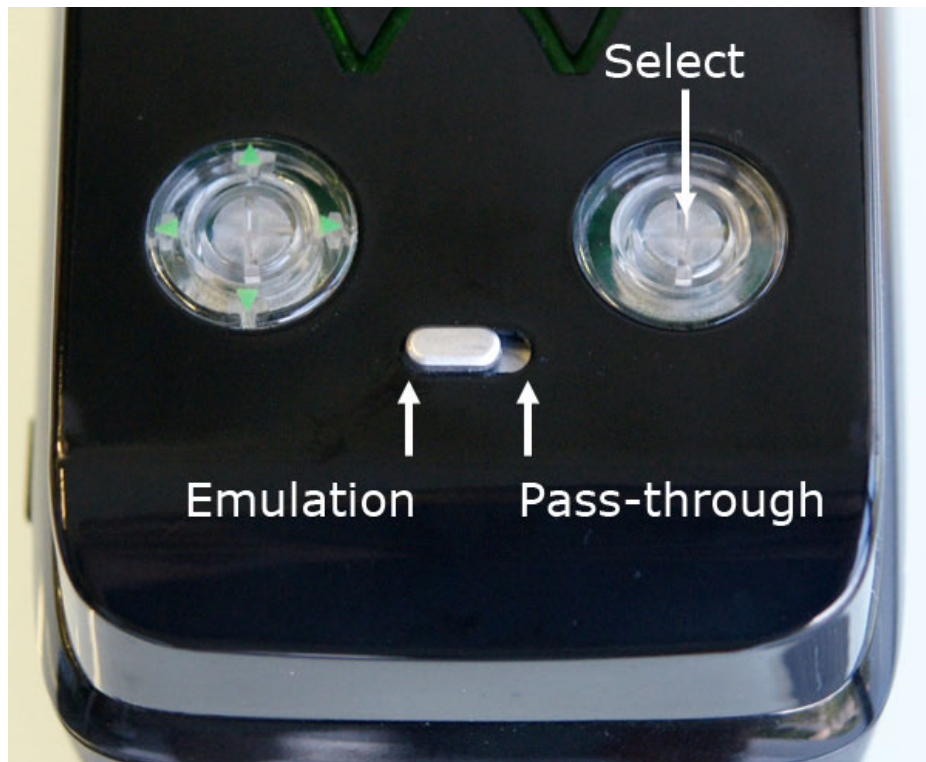
Features include:

- Unique, intuitive on-screen user interface - navigate the ISO list directly from the Xbox 360 dashboard using your controller. No need to interact with a small remote/LCD for feedback or navigation. No need to ever leave the sofa
- Solder-less installation
- Support for XGD3 games
- Support for AP25 protected games, without needing to patch ISO's
- ESATA interface is used in place of USB providing superior performance, since data is transferred directly between the ESATA HDD and Xbox 360 resulting in impressively high bandwidth, many times faster than reading from a real DVD disc
- Elegant and streamlined console inspired case design
- Versions available for both fat and slim consoles
- NTFS file system natively supported
- Powerful embedded CPU running performance tuned Real Time Operating System
- Regular firmware updates available free for download
- Fully updatable hardware (MCU and FPGA's) from ESATA HDD including a failsafe recovery mode
- No need to flash or in any way modify your original ODD
- Hardware selectable pass through mode – allowing games to be played from the original disc drive in a 100% Xbox Live safe manner
- Latest supported Xbox 360 dashboard version: **2.0.13599.0**

NOTE: PLEASE READ AND ENSURE THAT YOU FULLY UNDERSTAND THIS ENTIRE DOCUMENT BEFORE YOU ATTEMPT TO OPERATE WASABI 360 ULTRA

Usage Overview

Wasabi 360 Ultra sits between your Xbox 360 motherboard and ODD (Optical Disc Drive). Two fundamental modes of operation are supported, **pass-through** and **emulation** mode. The current mode is selected by the mode switch. The mode of operation should only be changed while the Xbox 360 is powered off, do not toggle the switch while the Xbox 360 is powered on.



Pass-through Mode

In pass-through mode, your original ODD is connected directly to the Xbox 360, with Wasabi 360 Ultra effectively disabled. In this mode you can play original game discs, DVD movies etc and safely sign in to Xbox Live to play games online.

Emulation Mode

In emulation mode, Wasabi 360 Ultra is connected to your Xbox 360 and replaces your ODD. From this mode you can enjoy playing ISO's directly from the attached HDD. When the Xbox 360 is initially powered on, Wasabi 360 Ultra will scan the attached HDD and generate a listing of available ISO files. This will subsequently be used to display the on-screen menu system. To access the Wasabi 360 Ultra menu system and select an ISO file to play, navigate to **Video Library** in the Xbox 360 dashboard and then select **Current Disc**. You will be presented with the list of ISO files on your HDD, represented as a series of folders. Using your controller, navigate this list and when you have decided which item you would like to play, press the **A** button to enter that "folder". You will then be presented with a message saying "ISO selected. Please eject disc". At this stage you must "eject" Wasabi either by pressing the eject button on the front of the console, an Xbox 360 remote control, or using the controller to navigate back to the main dash screen where you can select **Mixed Media Disc** and then press **X** to eject. At this point Wasabi 360 Ultra will mount the selected ISO and after a few seconds the Xbox 360 will show that game as inserted in the same way it would with any regular game disc. You may then start playing at your leisure (if the game has not already automatically started due to the dashboard auto-start feature).

When you wish to switch to a different game, the procedure is just as simple. Return to the Xbox 360 dashboard and then eject the disc again using any of the methods described above. Wasabi 360 Ultra will then re-mount the "mixed media disc" which makes up the menu system, and you may browse the menu system and select a new ISO just as previously.

Initial Preparation

DVD Key

Before you can use Wasabi 360 Ultra, you must first obtain the DVD key that corresponds to your Xbox 360. Every single Xbox 360 has a unique DVD key and you must obtain the one that specifically matches your Xbox.

While we are planning to update Wasabi 360 Ultra to support automatically extracting the DVD key directly from your ODD, unfortunately this feature is not yet available and for now you will need to obtain your DVD key through other means. We recommend the use of a piece of software called **Jungle Flasher** which can extract drive keys from almost any Xbox 360 drive. You will need a way to connect the drive to your PC in order to use Jungle Flasher; often this will involve additional hardware. Please see the documentation accompanying Jungle Flasher for further information.

There are other means of extracting drive keys; any method is suitable providing you end up with the correct drive key. Wasabi 360 Ultra currently supports ANY Xbox 360 drive regardless of the firmware version, **providing** you can obtain the correct drive key. There is currently only one known drive where the key cannot be extracted from the drive itself – that is the Xbox 360 Slim Hitachi DL10N. However in this instance, the drive key may still be obtained from the Xbox 360 itself via the “reset glitch”.

Once you have obtained the DVD key for your Xbox 360, you should have a file called “**Key.bin**” which contains the 16-byte key in binary format. If you have used Jungle Flasher to obtain your DVD key, you can generate a Key.bin file by selecting the “FirmwareTool 32” tab and then pressing the “Save Drive Key” button. The “Key.bin” file must be placed at a specific location on the HDD you will connect to Wasabi 360 Ultra. In the root directory of your HDD there should be a folder called “**wasabi**”; if this does not exist then create it. Place the “Key.bin” file inside the “wasabi” folder, so you end up with the file path “**X:\wasabi\Key.bin**” where X: is the drive letter for your external HDD.

Hard Disk Drive

Wasabi 360 Ultra connects to external HDD's via an ESATA port. Any ESATA enclosure is supported, along with USB HDD's if you are making use of the Wasabi ESATA -> USB adaptor. The HDD must be formatted with the **NTFS** file system. Wasabi 360 Ultra will only scan the root directory for ISO files, so place all your game ISO's in the root directory of your HDD. The files must be named with a **.ISO** extension.

AP25 Setup

AP25 is a new Xbox 360 copy protection scheme affecting some of the more recent games, where a challenge/response table is required in order for such games to boot with Wasabi 360 Ultra. The specific list of games where AP25 is activated can be found here: <http://bit.ly/ap25list>. The challenge response table required for AP25 is dependent on your Xbox 360 dashboard version; in order to use an AP25 protected game, you must first obtain the correct AP25 table corresponding to the dashboard version you have installed. Team Wasabi provide AP25 tables for various dashboard versions for download from the Wasabi 360 Ultra website. Inside the download archive is a file named **ap25.bin** – place this file on your HDD in the **wasabi** directory, along with your key.bin etc. Unlike with other solutions, you do not need to patch ISO files with “AP25 replay data”. This is handled for you automatically by Wasabi 360 Ultra; all you need to do is ensure that ap25.bin has been copied to your Wasabi 360 Ultra's HDD.

Even if you have no plans to play an AP25 protected game at the current time, we recommend that you install ap25.bin regardless. This will lead to less trouble if you decide to play AP25 protected games in the future.

Please ensure that you familiarise yourself with which games are AP25 enabled for your dashboard version, and if you will be using any of these games, ensure that you have correctly setup Wasabi 360 Ultra to deal with AP25 as per the directions above. If you attempt to play an AP25 protected game without first setting up ap25.bin then Wasabi

360 Ultra will abort and you will be returned to the Xbox dashboard with a disc read error message. This protection is designed to prevent you from being banned from Xbox Live.

Wasabi 360 Ultra Firmware

Wasabi 360 Ultra ships from the factory without any firmware installed. Before you may use the device for the first time, you must perform the initial firmware installation. Download the latest firmware build from the official Wasabi 360 Ultra website. Inside the archive will be a file called “**wasabi-update.bin**” – this file contains the firmware update data. Place this file into the “wasabi” folder on your Wasabi 360 Ultra’s HDD (which will have been created in the steps above) and then install according to the following procedure:

1. Power **off** your Xbox 360, and power **on** your HDD
2. Ensure that pass-through mode is selected, by placing the mode switch in the correct position – **THIS IS IMPORTANT**
3. Hold down the **SELECT** button on the Wasabi 360 Ultra control panel (the button by itself, away from the remaining buttons)
4. While holding down the SELECT button, turn on your Xbox 360. A **blue** LED should start blinking on your Wasabi 360 Ultra. This indicates that the update process is underway.
DO NOT TURN OFF YOUR XBOX 360 OR OTHERWISE DISCONNECT POWER FROM WASABI 360 ULTRA UNTIL THE UPDATE IS COMPLETE!
5. After a few moments, a **green** LED should turn on to indicate that the update was successful. If for any reason the update failed, a red LED will turn on instead.
6. Once the update has completed, as indicated by either a solid green or red LED, switch off your Xbox 360.
7. Select emulation mode by placing the mode switch in the correct position. Providing you have correctly setup your DVD Key.bin file according to the directions above, your Wasabi 360 Ultra is now ready to use. Enjoy!

These same steps should be followed whenever you need to install a new firmware release in future.

Precautions

There are some precautions to keep in mind both before using your Wasabi 360 Ultra for the first time, and continuing its use into the future:

- Do not update your Xbox 360 system software (dashboard) past the most recent version explicitly supported by Wasabi 360 Ultra. The latest system software version currently supported by Wasabi 360 Ultra is: **2.0.13599.0**
- Do not connect to Xbox Live while you are using Wasabi 360 Ultra in emulation mode. Xbox Live is **currently** not supported unless you have booted your Xbox 360 with Wasabi 360 Ultra in pass-through mode (whereby you would play games from your ODD rather than Wasabi)

Be warned, failure to adhere to the above precautions could result in your console getting banned from Xbox Live.

FAQ

Is there a way to check the software/hardware version of my Wasabi 360 Ultra?

Turn on the Xbox 360 while holding the **UP** button on the Wasabi 360 Ultra control interface, and then navigate to the menu system. Instead of displaying the list of ISO’s, the version information for your Wasabi 360 Ultra will be displayed. To leave this mode and revert back to normal operation, simply cycle power on your Xbox 360 and do not hold down any buttons upon the next power up.

Do I need a working original ODD in order to use Wasabi 360 Ultra?

At the current time, a functioning original ODD is required in order to use Wasabi 360 Ultra. We plan to release a firmware update capable of functioning without any ODD attached in the future.

Troubleshooting

There are several situations which will result in Wasabi 360 Ultra displaying an error message instead of the ISO list when you navigate to Video Library in order to display the menu system. These error messages are explained below:

- **ERROR: NTFS cluster size is not 4kb** – non-standard cluster sizes are not supported, your HDD must be formatted with NTFS using the standard 4kb cluster size
- **ERROR: HDD not NTFS formatted** – the HDD connected to your Wasabi 360 Ultra MUST be formatted with NTFS. Other file system formats such as FAT32 are not supported (due to the fact that FAT32 cannot accommodate files larger than 4GB)
- **ERROR: HDD not connected** – a HDD could not be detected. Check that the HDD is properly connected to Wasabi 360 Ultra and reset the Xbox 360
- **ERROR: ODD not connected** – the ODD connection could not be detected. The original disc drive for your Xbox 360 must be connected as per the instructions in the installation manual. Check the connection and try again
- **ERROR: \wasabi\key.bin not found** – the Key.bin file was not found on your HDD. Ensure that your Key.bin file is placed on the HDD according to the preceding instructions

Further Information and Contact

Wasabi 360 Ultra official website: <http://www.wasabi360.com>

Technical Support e-mail: support@wasabi360.com

Wholesale enquiry e-mail: sales@wasabi360.com

Please see our official website for news, downloads, tutorials, videos and our official Facebook and Twitter pages.