360 XTRACTOR TOOL

User Manual

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Part 1 - Knowing your 360 Xtractor

Thanks for choosing 360 Xtractor tool, we are proud to offer this high quality product wich is a real inovation over past similar tools.
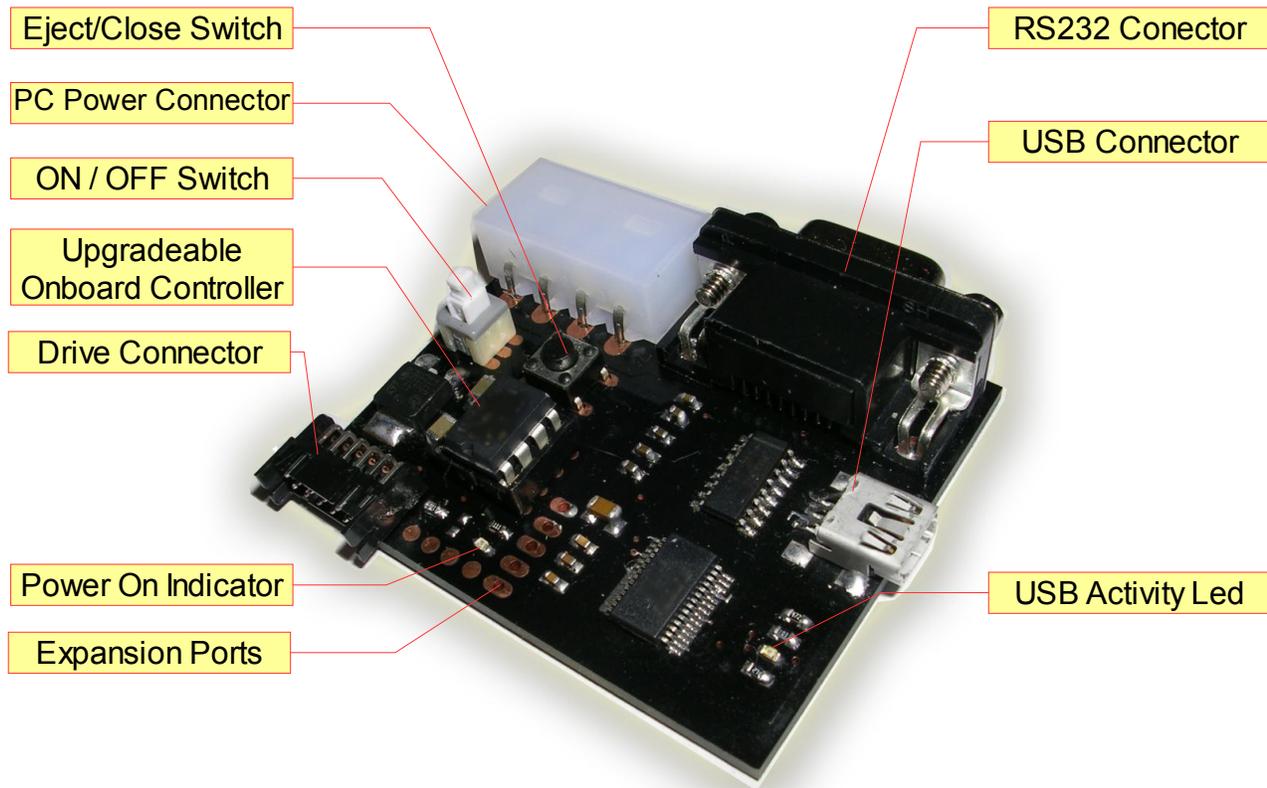
Description	
Eject/Close Switch	Provides Eject / Close tray function for attached drive
PC Power Connector	Plugs to your PC Power Supply with a Molex connector
ON/OFF	Allows full turn on / off the device and drive attached
Upgradeable Controller	Small Task controller, this feature will provide compatibility with future projects
Drive Connector	Plugs to the Power and Data cable going to the Xbox 360 Drive
Power On Indicator	Blue Visible indicator of the ON/OFF status of the device
Expansion Ports	Reserved for Expansion / Compatibility with future projects
RS232 Connector	Provides RS232 interface connection to PC
USB Connector	Provides USB interface connection to PC
USB Activity Led	Green Blinks when data pass thru the USB controller

Part 2 – Basic Functionality

Powering Up Drives

This tool provides a safe regulated voltage supply to your drive, it can power up any brand of XBOX 360 Drive currently out, basically you only need to plug the cable to the Xbox 360 Drive and the other end to the Xtractor Tool and press the ON/OFF switch on the Xtractor. Take your time an extra care on observing the proper polarization tabs on the drive
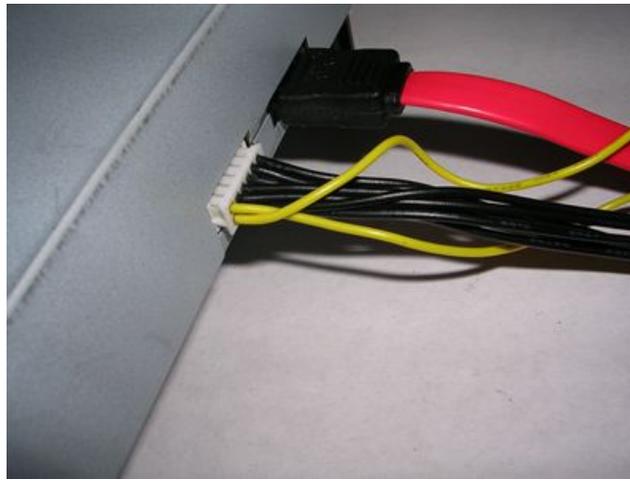
Eject / Close Tray

With the Eject/Close button you can open / close the drive tray, this is usefull if you need to load a disc on the XBOX 360 Drive or having to get the tray half opened, for testing ModeB, etc. Remember that if you are pluging a Hitachi Drive on ModeB this will require 2 button presses to eject and 2 button presses to load, this is normal Hitachi behaviour

Hitachi AutoModeB

This is an automatic feature for Hitachi Drives, it will take care of putting the drive automatically in ModeB, you dont need to worry about having the switches on one or other state, they will just go into ModeB automatically when you power on the Xtractor. This feature works for Hitachi Drives 46/47/59 (or any other lower than 59), for the Hitachi 78/79 if they are already with custom (aka hacked) firmware, then will work too, if the 78/79 drive is not hacked then the tool cannot put it into Mode B but dont get sad just yet, we are releasing a Free Software tool to put Mode B on those drive Versions, keep reading this manual to the Tutorials section

Disabling AutoModeB

The ModeB feature is safe and tested, will not cause any disturb if the drive attached is not a Hitachi drive, however if you by any reason want to disable this function at startup you can do it too.

To ***Temporally Disable*** the AutoModeB feature, you only need Turn ON the Xtractor while having the Eject Button Pressed, once you see Blue Led indicator on you can release eject button and the Xtractor has been booted with AutoModeB disabled, you can test this behaviour with a regular Hitachi Drive, if you boot on this way then you can see it will be on ModeA (no windows detection and 1 eject button press for eject instead of 2).

To ***Permanent Disable*** AutoModeB feature (not recommended) you can remove or break R1, this will cause permanent AutoModeB disable. (you still can do ModeB on the drive with the Xtractor Reader, Toolbox or Slax).

Part 3 – Flashing your Drives

Since Flashing Drives is not a new topic and is widely covered on forums around the internet we feel its not needing to put a tutorial here, basically think of the tool as a power supply on this process so you dont have to worry of having a open Xbox 360 console next to your PC for supplying power, basically do the Flashing following your favorite method and your favorite tool, for hitachi we recomend Fw Toolbox 4.8 or later, for benq drives use dosflash and for old samsungs use mtkflash as usual.

If you went to this part looking for how to read keys on Lite-on Drives with USB/RS232 then you need to check to the next section (Appendix) where we will give you hints and briefs on how to use this tool together with Xtractor Reader to generate firmwares for replacement drives.   Lite-on Fw Hacking is possible and will be done (eventually) but at this moment the only way is to have a replacement drive (benq recomended but it also works with hitachi/samsung drives)

Part 4 – Setting up Xtractor USB Port on Windows

Before you plug the Xtractor to the Computer PC is better to have downloaded and installed the USB drivers on your PC, we have placed them on the following link

http://rapidshare.de/files/40558528/CDM_2.04.06.rar.html

Just download, unzip it and execute it after that the drivers have been installed, so next time you plug the Xtractor with USB cable Windows will detect it and will create a COM port for it. The driver is compatible with Windows 2000, Windows XP and Windows Vista

Part 5 – Upgrading Onboard Controller on Xtractor

The onboard Controller can be upgraded on the future, since we put it on a socket it simply will require remove of the controller and reprogram it with a cheap JDM programmer

We will be releasing the necesary .hex files on the product page when they will be required, we cannot release more details on what other extra features this controller will give because of all the copy-cats around.

Appendix

APPENDIX A :Setting Up SATA Ports for Legacy Mode on your PC

Since there is a lot of Motherboards out there we cant cover all possibilities, so basically we will explain what is Legacy Mode.

Legacy mode is a feature supported on Mainboard bios wich allows the Computer sees the Sata Ports as if they were regular IDE ports, it makes a sort of internal mapping, this allow to applications send commands to the drives directly as if they were IDE devices. On Standard IDE ports you can have a maximum of 4 on your PC, wich are:

- Primary Master
- Primary Slave
- Secondary Master
- Secondary Slave

So basically Legacy Mode will cause one of the sata ports gets mapped to one of the above 4 ports.

The typical choices you have on your Mainboard bios (pressing "DEL" key at PC boot) for Sata port are:

- Native or Enhanced (usually default)
- Legacy or Combined (see sata ports as IDE Ports)
- Disabled (this will disable sata ports)
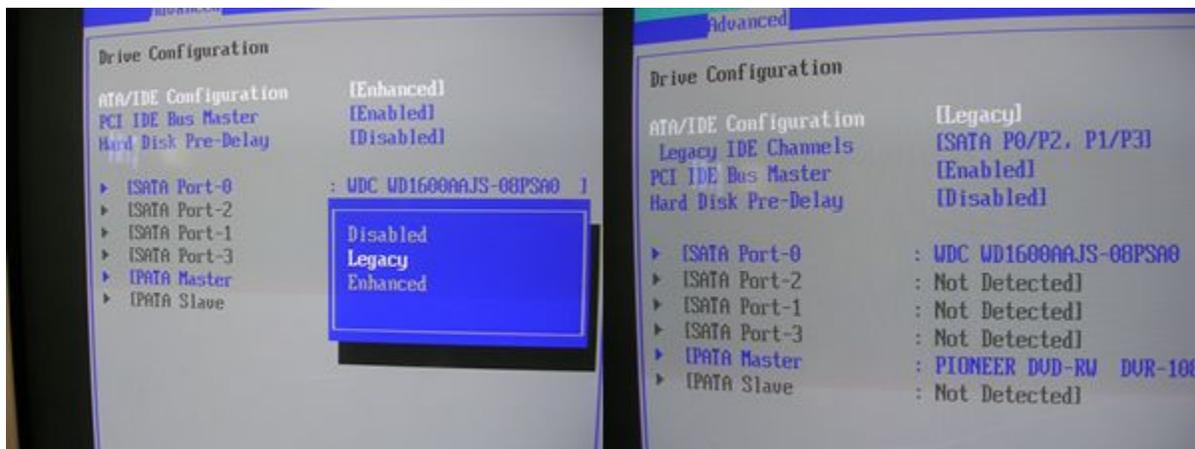
Our best advice is to use google to look for help on your specific mainboard/bios in case you cannot find it easier. Another option if your Bios does not support Legacy Mode at all, then

you can go ahead with a cheap IDE to SATA adapter, this will attach directly on one of your IDE Ports and will give you Sata conection on the other end.

Internet References:
http://support.packardbell.com/es/item/index.php?i=instr_hdd_patasata&pi=platform_honeymoon_imedia

http://forums.ebay.com/db1/thread.jspa?threadID=2000594756

or use our friend google.

## APPENDIX B :Putting Hitachi Drives (78/79) on ModeB

If you Hitachi drive is a 78/79 drive there are several ways to achieve this, the classic method is just attach the XBOX 360 drive to any available sata port on your PC and boot SLAX 2.1, this will send the proper command to put your drive into ModeB, you can test it with the eject button, should take 2 button presses to eject/close, if just take 1 to eject and 1 to close its not on ModeB.

If you have succeded on set up the LEGACY Mode (see previous Appendix) then there is an easier way to achieve this, basically you need Xtractor Reader Application wich you can get from product page (www.maximusgames.net/360xtractor.php), you only need to indicate wich IDE port (Primary Master, Primary Slave, Secondary Master o Secondary Slave) is the one that it has the Hitachi Drive attached and click on "MODEB" button.

If you are unsure on wich IDE port you can choose then its better to use the "SEND IDENTIFY ATAPI" button and wait for answer, if you get an error then its not the right port try other. (The xbox 360 drive should be powered on with Xtractor and also the Sata Cable plugged between the PC and the drive.

When command is sucessful you will see a Message window asking for making a test with the Eject Button (The application Eject Button just below ModeB button). After 2 presses it should eject the tray, that will confirm the sucess.
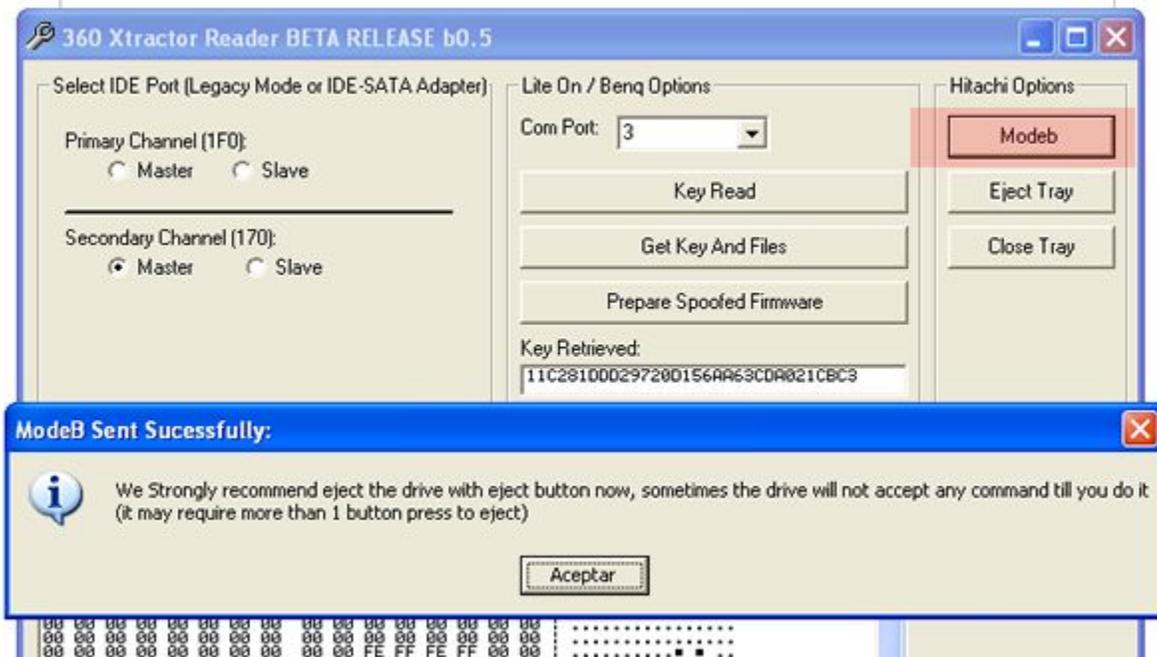
After your drive is in Modeb basically you only need to do a Windows Hardware Refresh (From device manager choose Detect New Hardware from the menu. After that your Hitachi Drive should get detected under windows.

If it happens that after ModeB you cannot get it visible under Windows, then its probably a conflict with Legacy Mode, what you can do is a reestart on the PC (leaving the drive powered on and on ModeB) and on the boot time change bios setting again to Native or Enhanced so when windows start again will see the drive. If you are using IDE-SATA adapter its almost sure you will not see the drive with Detect Hardware option, you will need to reboot the pc (not needed changes on bios if you are using IDE-SATA, just the reboot, since IDE port does not support hotplug).

APPENDIX C :Reading Key from Lite-on Drives

Direct hacking on the Lite-on Drives is not possible at this moment, but something will appear soon. At this moment the only possibility you have for Lite-on drives is to replace them with another brand drive (Benq, Samsung, Hitachi), with a technique known as spoofing. Basically you will make appear other drive as if it was a Lite-on.

The best drives to use as replacement are BENQ ones but basically is because they have more similarity with Lite-on Firmware, if you use Hitachi or Samsung drives there are voices saying it will be risky on Live because those firmwares does not have some commands that Benq and Lite-on has. So remember that since you choose to open the console you have risk of being banned and if you choose to replace the drive (even with a Benq) we cannot warrantee you will be on Xbox Live safely. Our best advice is get one Console for Live keep it original un-touched and other console for modding, like on the old times.

Back on the Spoofing, before you do the drive replacement you need to read Unique information of the Lite-on Drive so you can pass this unique information to the replacement Drive. For convention on this section we will call the Lite-on Drive as the "Source" drive, and the replacement drive as the "Target" drive to avoid confusion.

If you fail on pass the unique information to the target drive then it will not work properly on the console, things like games not booting or E66 at startup will appear. The information needed are 3 files, one containing the unique 16 bytes key (called "key.bin"), other containing Identify Response (called "identify.bin") and other containing Inquiry Response (called "Inquiry.bin"). With these 3 files you will be able to prepare a Replacement Firmware for the target drive.

To get these file you have 2 choices, one is going to MSDOS and using Geremia's dvdkey application, dont confuse with dvdkey32 wich is for running under windows. The other way depends if you sucessfully setup the Legacy Mode on your Bios. (Read First Appendix on this document). If you went sucess with it, then you can get these files directly under windows with applications like dvdkey32 or even better with the Xtractor Reader wich already has a Replacement Firmware Generation Wiizard.

Bridging TX/RX lines inside the Lite-on:

The Key reading is done thru a communication line known as TX inside of the Lite-on Drive, this line is also on the Power Bus on the drive but it needs a small bridge since there is no resistor from factory. You can use any 100 ohm small resistor to do the bridge or even can do the bridge directly with a piece of wire. Technically just 1 line is required (the TX line) but it is good idea to have both of them bridged just in case. The Key reading will work just fine if you just bridge the TX line.
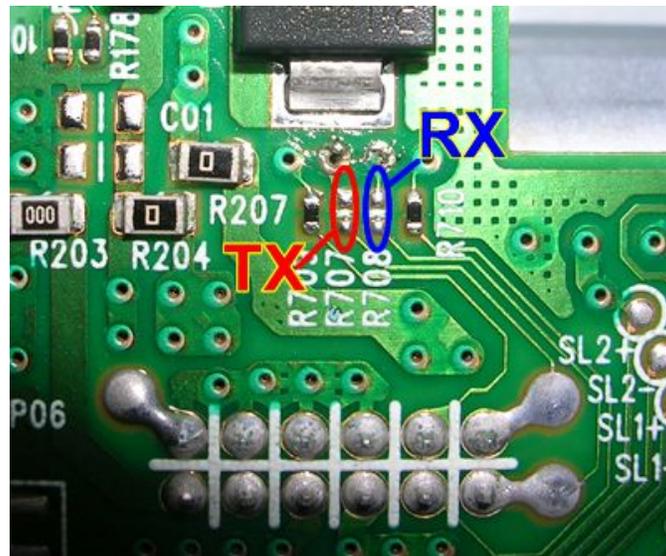
Set up the Lite-on Tray Status:

To be able to read the Keys the Lite-on Drive needs have the internal Tray Status on busy state. This is achieved having the tray on middle way open, it means NOT fully open and NOT fully close, basically you need to power up the Lite-on Drive with Xtractor, then press EJECT button so tray will open, after that just power off xtractor and manually push the tray half way close, this will not harm the drive, just do it softly. Once done you can power up again Xtractor and the drive will keep its tray open, that way is ready for the read commands.

Reading Keys MSDOS way:

There are several tutorials around to explain this step in detail, so will be redundant to cover it, basically you need to know the Sata Port Memory Address so the application can send commands to that location, take note under MSDOS you cannot use USB port on Xtractor, you will require a PC that has onboard RS232 com port (usually com 1) and a DB9 cable. Its important you dont plug the sata cable of the drive at PC boot since the Motherboard of the PC sends ATA commands to the drive that will cause the dvdkey utility dont read properly. The best moment to plug it is after all boot is done and before you run the dvdkey utility on the MSDOS. Make sure you have bridged TX line and have the tray status on half opened status.

You can find a lot of tutorials on internet this ones are the first that I found and have complete information:

English:

http://www.noeman.org/gsm/microsoft/59963-lite-tutorial-soulheaven-xbox360-modding.html

http://beta.ivancover.com/wiki/index.php/Xbox_360_Lite-On_DG16D2S_Extract_Key

Español:

http://www.nextgameday.com/foro/f129/tutorial-extracion-dvd-key-xbox-360-lite-dg16d2s-74294/

These tutorials have references to setup your own reader device that is not needed since you have Xtractor, just read the sections thats explain how to Know your sata address and also how to send the dvdkey command.

Reading Keys under Windows:

If you managed to setup Legacy Mode properly then you can do all reading inside windows and you have the possibility to use the USB port to read the keys.

You need Xtractor Reader Application wich you can get from product page (www.maximusgames.net/360xtractor.php), you only need to indicate wich IDE Port (Primary Master, Primary Slave, Secondary Master o Secondary Slave) is the one that it has the Lite-on Drive attached

If you are unsure on wich IDE port you can choose then its better to use the "SEND IDENTIFY ATAPI" button and wait for answer, if you get an error then its not the right port try other. The Lite-on Drive drive should be powered on with Xtractor and also the Sata Cable plugged between the PC and the drive. Also the tray status should be half opened and TX line bridged as explained earlier on this tutorial.

Also you should select the Serial Port you will use to read the keys, if you are using onboard

COM port its commonly COM1, if you are using USB port then you should check wich COM port that windows has assigned to it on Device Manager (Under COM and LPT ports). Make sure you download and install the drivers before plugging the xtractor, read first parts of the manual to know how to get the drivers.
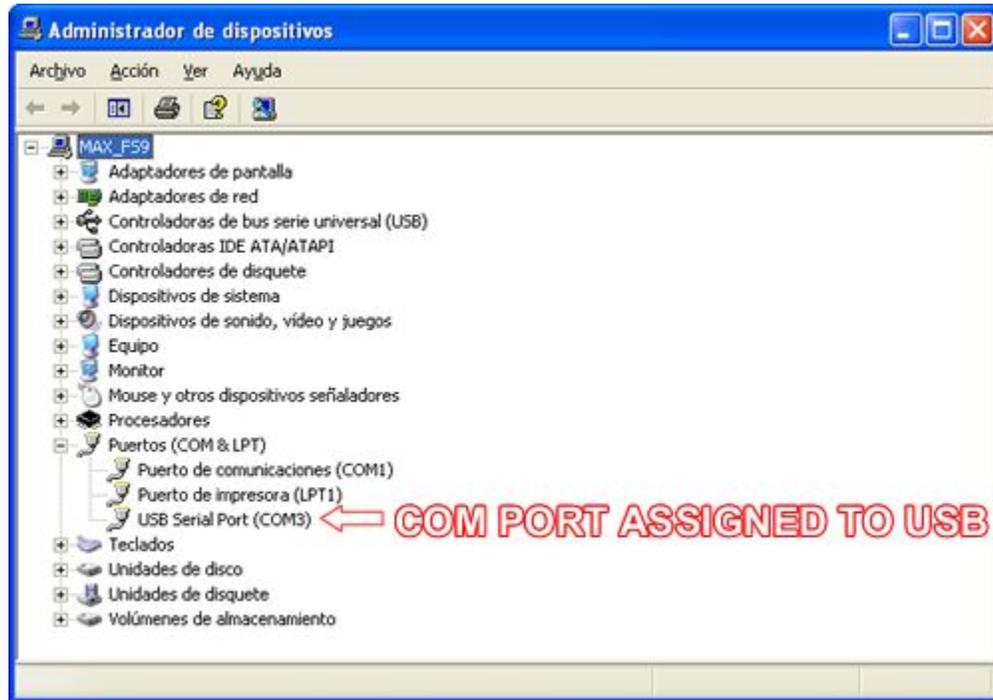
STEP 1. Connecting Everything

STEP 2. Run "Key Read". Having all set up you only need click on KEY READ button, this will show you the keys on the drive after a few seconds, if you get an error saying it cannot read the Lite-on drive then its probably you need to reestart the Lite-on drive and the app, having all set up just you need to power off and on again the xtractor and exit and reload the application.
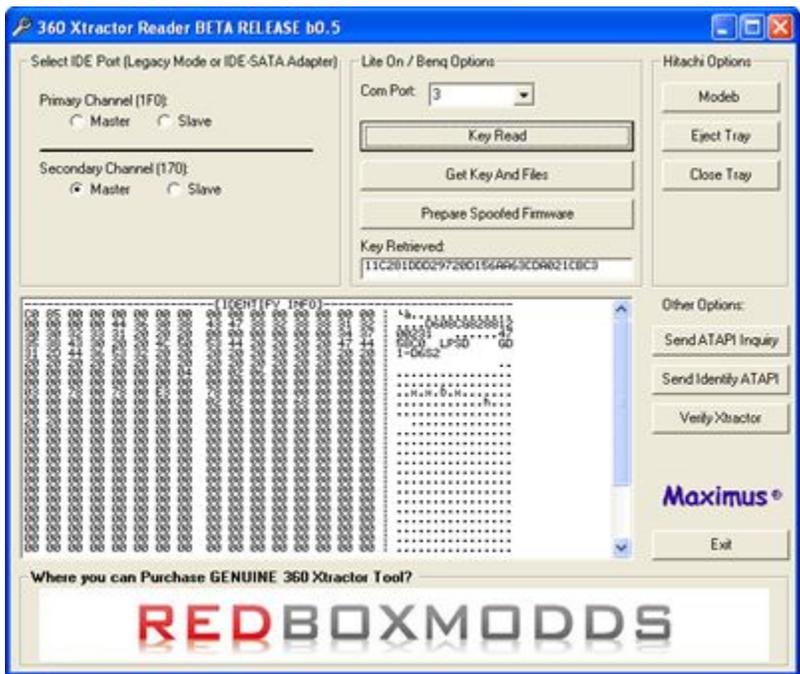
STEP 3 Run GET KEY AND FILES. If you managed to get the keys on previous step then you are ready to generate the 3 needed files just click on the "GET KEY AND FILES" button, after few seconds you will be prompted to save the files, you will get 3 prompts (1 per each file, make sure you save them on appropiate backup folder and note the file you are saving (it will show you on the prompt window title), its **HIGHLY** recomended you save key file as *KEY.BIN*, the inquiry file as *INQUIRY.BIN* and the identify file as *IDENTIFY.BIN,* having these names will be easier for you to ask for help on forums, etc.

Thats it, having these 3 files you can go to next Appendix where we explain how to generate a replacement firmware for your target drive.

APPENDIX D : Preparing a Lite-on Replacement Firmware

If you managed to get to this step congratulations, all the hard work is done by now, so basically now you will join all information together to generate a Replacement Firmware for your Target drive.

Note, If your target drive is a Hitachi drive then the best option at this moment is to do the spoofing directly on Maximus Firmware Toolbox, this is because if you do it with the below method the output file will not be opened by toolbox to flash it to your target Hitachi drive. We are releasing Firmware Toolbox 4.9 in a few days more to be able to handle the output file from the below method. (mean while open the base firmware on toolbox and patch the keys and then go to spoof firmware option and select "Custom (ask for inquiry.bin)" and then flash the firmware to your hitachi drives, if you target drive is not a hitachi then keep reading this Appendix.

For this step we will be using the Xtractor Reader Application wich you can get from product page (www.maximusgames.net/360xtractor.php), even if you dont get the files with that application you can use it to merge all information into your replacement firmware.

Step 1. Click on the "PREPARE SPOOFED FIRMWARE" on the Xtractor Reader Application, the following window wil appear
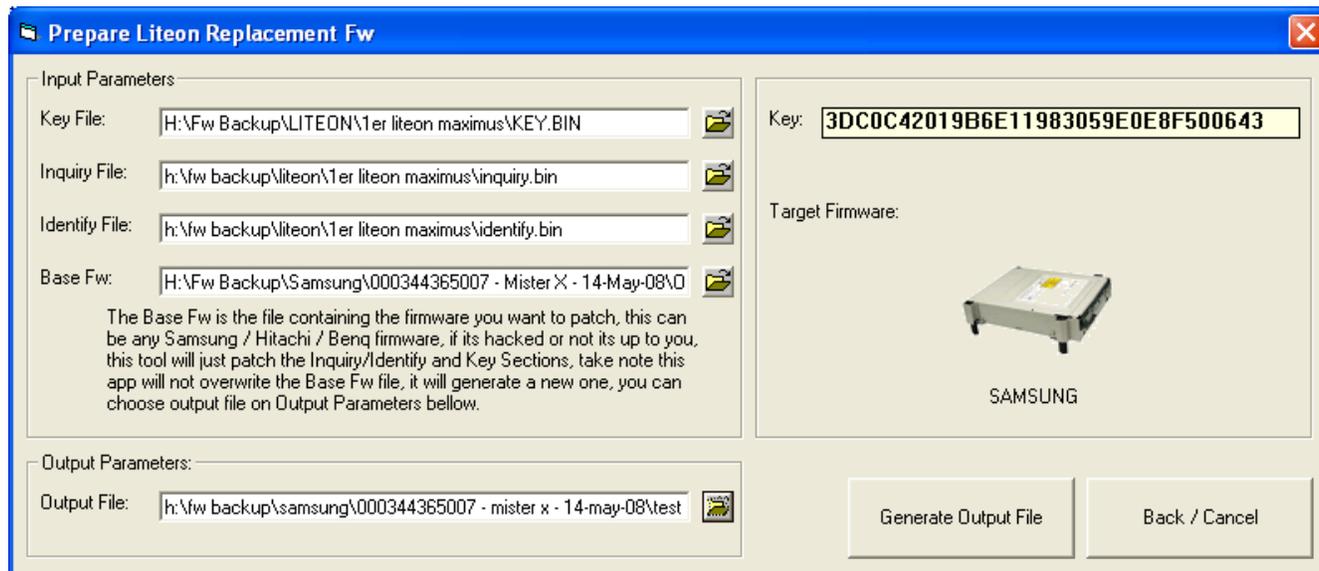
Step 2.- Click on the Folder button next to Key File text box and browse for the folder you saved your Lite-on files, locate the Key.bin file and double click on it. If you choose to name the files on standard names (key.bin inquiry.bin identify.bin) and you keep these on same folder as key file then the application will fill up the next 2 textboxes for you. Its strongly recomended you have 1 folder per Lite-on with all 3 files inside to keep them sorted. The application will show to the right the Key contained on key.bin

Step 3.- Choose the Base Firwmare, this is basically to tell the application wich firmware will be taked as base to generate the Output file, by example you can browse here for a Hitachi/Samsung/Benq firmware file, the application will show you at the right the target picture image according to the firmware you choose. If you want to choose a hacked firmware or an original firmware is up to you, ofcourse its not likely you choose an original firmware as base but you can. If you want to choose a hacked firmware look for the hacked firmware on the releases of c4e.

Step 4.- Choose Output File. As safety measure this app will not overwrite your base file (template), you need to specify an output file to be generated, this is the firmware file that you will end flashing to your target drive.

Step 5.- Generate Output File, just click on "GENERATE OUTPUT FILE" button and the output file will be generated, this is the last step for file generation.

Step 6.- After generate the file you can now flash it to the target drive, we will not go in detail here since is a common procedure, if you are using a samsung drive use mtkflash /r m xxxxx.bin, if you are using Benq then use dosflash (under dos or windows, its up to you), and if you are using Hitachi use Toolbox.

Note, If your target drive is a Hitachi drive the output file will not be opened with toolbox since that application is not ready to handle such generated files so you need another way to flash it (59flash, 47flash, etc), we will be releasing Toolbox 4.9 in folowing days to allow you open and flash these files to your hitachi target drives.

Special Thanks To:

We want to give thanks to several people who helped on the design/development of this product, on all stages it has been put extra care, time and dedication.

Thanks to

My Family: Please forgive me all the time I dedicate to this project instead of being with you.

Yoshihiro for the usb addon idea

Geremia for the Lite-on Key Dump method

Redeath for not leave me abandon the project at earlier stages

End Customers who support our product over competitors products.

Resellers for they support and trust