EXBAWKS HUEG
giving your big girl a makeover

You know what time it is, bro? It's time to FEEL the POWER of the X BAWKS!!!!!!1

Okay, not really. The Xbox is arguably the first successful console to have a real "scene" building mods outside of sleazy chinks selling game copiers to poor kids. Being essentially a PC running Windows 2000 made it catnip for power users looking for better ways to pirate and Linux hackers who were already looking at ways to put a computer on your teevee. The scene collapsed after geohot cracked the PS3 and everyone migrated there, but the modern age of emulation (and scalping scumbags targeting everything older) is leading a reincarnated scene to pick up the pieces, starting with one-step softmodding and working up to a full Xbox Live replacement. There isn't a much better time than now to pick up one and get hacking.

Getting Started

You can still get a decent condition Xbox in the US for a reasonable price on eGay. Do it, they'll only get more expensive. You're also going to need:

•SATA to IDE adapter (unless you have a working IDE drive lying around) with a master/slave jumper

•Molex power splitter - for the hard drive swap

•USB to Xbox controller adapter - cheap on Amazon

•Flash drive 4GB or smaller - the vanilla Xbox firmware won't read anything bigger

•One of the save exploit Xbox games - Early printings of MechAssault, Agent Under Fire and Splinter Cell will do the job.

•Rocky's Xbox Softmodding Tool - includes all the shit needed to install a hacked dashboard and some basic brick protection too

•A big fat hard drive - I guess you can use an SSD but it'll rattle around without a bracket. Remember you can only use 2TB of it.

•FATX FUSE driver for PC - you'll need this to get the hack onto the USB drive in a format the Xbox can read

•Soldering tools - we'll get to why later
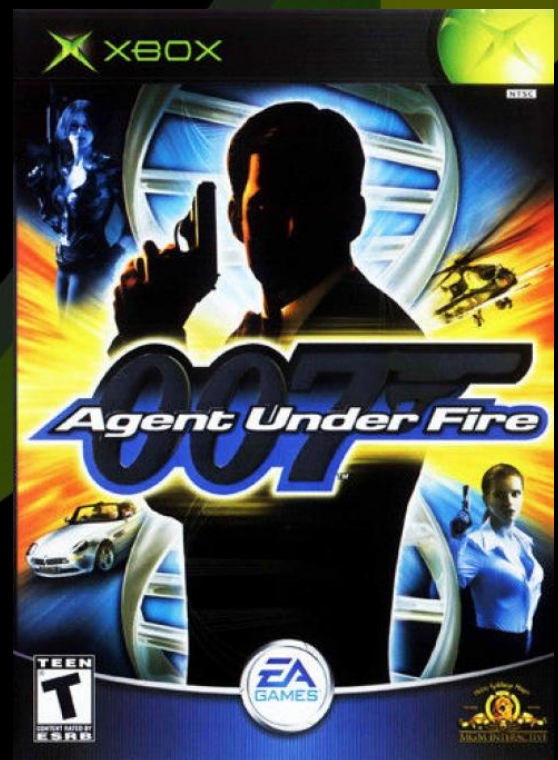
best modchip ever

Advice on getting controllers: NEVER buy an Xbox controller without pictures. Before wireless was really a thing MS used these breakaway dongles so that kids wouldn't pull their consoles off shelves by the controller cables anymore. The breakaway connector is round, the Xbox connector is oblong. Extension cables can be scrounged if you find you're missing one or more dongles, but really you should be looking at the seller's listing and making sure the dongle is physically present before you buy.

Identifying Your Hardware

Not all consoles are created equal. Microsoft kept fucking with the design over time to kill mods, limit hardware flaws and reduce costs. Your console revision affects your ability to install hardmods and to a lesser extent video quality; only the first and final revisions listed below are really worse than the others. You can figure out which model you have by either the manufacture date, the kernel revision in the Xbox menu (buried in the System Info screen) or by inspecting the motherboard.

•1.0: Made Jan 2001 to Oct 2002. Conexant NTSC video encoder, which allegedly means better quality. Kernel version 3944 through 4627. Controller ports are on a daughterboard. Has two HSFs, making it the loudest of an already loud console.

•1.5: The paranoid delusion of modchip makers. If you're trying to install a modchip and pin 2 of the LPC bus appears to be disconnected no matter what you try, send it to Ripley's Believe it or Not.

•1.6: Made Mar 2004 to Aug 2005. The shit one. Most importantly, you can't run them without a clock capacitor, but the halfassed "Xcalibur" video encoder glitches out in 480p and the empty RAM pads from earlier revisions (which could be populated by modders with balls of steel) have been nixed. Kernel version 5838. This is the only console with an external tell: if you see an Xbox at a yard sale and there's an exposed metal strip visible along the bottom of the AV port, put it back.

Removing the Clock Cap

All Xbox consoles have a time bomb hiding on the motherboard, just waiting to rape your face when you least expect it. Instead of doing something sane like having a separate clock chip and battery, the Xbox keeps time with a nasty supercapacitor tied to the northbridge to save ten cents. Because this fucker is always charging and about 20 years old, it has a fun tendency to jizz electrolyte or explod Bionic Commando style and kill the components around it. Unless you like playing with fire (or have a 1.6, you poor bastard) you should desolder it double-quick. Kill it before it kills you.

Ouch! That's a lotta damage!™

You can find it behind the port for Controller 1, underneath the CD drive. Teardown your console and make sure it hasn't corroded anything. If it has (and you'll know) your console is fucked. While you might be able to fix dead traces with some bodge wire and a hobby knife, if you're reading this you're better off just selling it as "for parts" and leaving it for some other bozo to deal with. If it hasn't exploded yet, desolder the piece of shit ASAP. If the surrounding PCB seems sticky that means it leaked electrolyte, rub down the area with high-percentage isopropyl alcohol and pray there isn't any invisible damage. If you're not dealing with a 1.6 you can leave the space where the clock cap was bare and the console will just yell at you to set the time on power-on, which we'll be fixing with a new dash anyway. If you feel like replacing it with a less explod-y capacitor and are willing to deal with money orders, www.console5.com sells a drop-in replacement.

Let's Crack This Fucker Open

Format your USB device to FATX and follow the readme that came with Rocky's for your game of choice. If all goes well you'll be left in the UnleashX dashboard, after which you should ALWAYS run NKPatcher Settings and go to EEPROM > Advanced Features > Hard Drive > Null Key. This changes the password the Xbox BIOS uses to freeze the hard drive against prying eyes from a random string to all ones. This means if your hard drive dies you can always replace it by flashing a barebones image, because you'll know what password the Xbox expects. Back up your EEPROM while you're in there.

Loading More Homebrew

Your dashboard will have an FTP server enabled by default, with the IP address in plain view. This is how you load stuff onto the console. Unless something is horribly wrong the credentials to get in will be xbox/xbox. Connecting to the server, you should see folders named C, D, E, and F. C contains OS stuff and usually should not be touched. D is the contents of the DVD drive. E is the saves drive and place for core homebrew that shouldn't be misplaced. F is a scratch drive for any space left after the first 8GB created when softmodding; after you replace the hard drive with a bigger one this is where you'll put game rips. Homebrew should be unzipped into E/Applications or F/Applications. Recommended homebrews to install first are:

•Chimp - for hard drive upgrades (see below)

•Mimesis - downloader for mods and title updates that would otherwise be lost to time

•DVD2Xbox - Rips games on DVD to your Xbox hard drive, because you never know

•DVDX - DVD player without the cheesy hardware dongle, because you never know

Hard Drive Upgrade

Here it is, the big chungus. First thing is to open your Xbox. unplug the molex connector for the DVD drive and put the splitter in between. Plug in your new drive to the newly split molex connector with the master/slave jumper set to slave mode and power on the Xbox. Launch Chimp from your dashboard, unplug the DVD drive from the IDE cable when prompted and plug it into your new hard drive. Once you're done with this, scan for IDE devices, then clone from master (your old drive) to slave.

If you have a real IDE drive or an SATA drive with less than 1TB of space, choose to have F occupy all available space. If you have an SATA drive with more space, choose to split the available space between F and G. Rest the new drive on top of the DVD drive and DON'T TOUCH ANYTHING. After Chimp says it's complete, say Yes when asked to lock the new drive or you won't be able to swap it. After you get back to the main menu, turn off and unplug the Xbox. You should now be safe to swap the old hard drive with your new drive, move the jumper back from slave to master and reboot.

Dealing With ISOs (Fuck You, Redump)

You got your console set up with a comically oversized storage drive and you're ready to stuff its moist folds with all the games you wanted to play as a kid but couldn't because your parents kept buying you Reader Rabbit. You boot up LimeWire and start grabbing Redump-verified ISO rips, because Redump is The Shit and you don't want to deal with whatever retardation the scene was doing in the early 2000s. You FTP them over to F/ Games, park your ass in a comfy chair to play and pick the ISO from your dashboard. Your Xbox crashes. What the fuck?

- Xbox liek water

This happens because Xbox DVDs are mastered in a very particular way to fuck with pirates. The first "partition" is the only one anything expecting a real DVD will see, and has a standard video loop that acts like the old "take me out of your CD player or I'll tell your mom about your Google search history" warning from the Playstation days. The actual game data is in a hidden second partition; any imaging tool not designed for the ecksbawks will either ignore it or shit itself.

You get around this by unspooling the game into a folder and FTPing that instead. You do this with a tool called "extract-xiso"; get it from shithub. 95% of the time this will work perfectly.

If the game complains about your being a naughty, naughty pirate or refuses to boot, you have one of the 5% of games that either disagrees with how FATX works or goes out of its way to cockblock you when run from a hard drive. A clunky but simple way to make these games work is to burn a DVD with only the game data on it (extract-xiso can build a suitable ISO) and rip it with DVD2Xbox, which comes bundled with patches to work around issues like these. You can also neatly evade all this horseshit by downloading scene rips, which will have any patching done for you.

What Happens Next

Okay, you've got your mods, you've got your games, life is good. You could easily stop here and everything will be fine. Maybe fuck around with emulators since there were some pretty nifty dashboards built around that, or install DVDX and XMBC4Xbox to build a retro entertainment center like some kind of hipster. If you want to go Even Further Beyond, you can explore the wilderness of TSOP flashing or be among the first to play Xbox Live in more than a decade.

BIOS Flashing

The Xbox stores its OS kernel and BIOS in a "TSOP" reprogrammable flash chip on the mainboard. With some soldering, you can reflash this chip with a hacked BIOS that can do whatever. It's like a modchip but free, or like custom firmware on a PS3 or 3DS.

While you obviously don't need to do this when softmodding lets you pirate games just fine, a good BIOS has a number of perks:

•Better brickproofing - a missing or dead DVD drive, an unlocked hard drive, or a missing clock cap on 1.6 consoles won't kill your Xbox dead.

•UDMA support - gets you faster load times with a quality IDE adapter.

•Support for truly massive hard drives - if you're the kind of autistic who wants the ENTIRE library available to not play at your fingertips.

•Macrovision deleted - because we can.

•Support for 128MB RAM - for those with balls of steel, a hot air rework station, and a burning need to play Virtua Cop.

BIOS selection and flashing is a clusterfuck which we don't have time to fully go into here. The current top of the heap is CerBIOS, but other choices can be just as fine if you don't need large hard drive support and just want brickproofing or debug support. Good luck and godspeed.

Insignia

Meanwhile, your "friendly" neighborhood clout chasers have been hard at work on Insignia, a replacement for the original Xbox Live servers. Like the Nintendo Wi-Fi Connection emulators, but significantly more impressive because nobody was smart enough to be wiresharking their gaylo sessions back in 2007. Insignia is currently invite-only, so follow the normal precautions at and don't name your account xXNiggerKiller88Xx, no matter how funny it would be. Setup is a little more complicated than for other consoles due to Xbox Live being designed from the ground up to take your money; the invite email will tell you how to register your console ID and convince your Xbox that you have a real account with a credit card and shit. The only real gotcha is that Insignia is DNS-based (so any anti-semitic DNS protection you have on your router will fuck with it) and you should be using a retail BIOS as hacked BIOSes gimp Xbox Live as a defense mechanism.

Hardware Mods

What? You're still not done? You know you should actually play a video game on this thing at some point, right? There are still a couple more things you can do to really pimp out your console.

•**HDMI** - If you didn't get a chance to buy a CRT after reading our buyer's guide a couple issues back, Chimeric Systems (https://chimericsystems.com) sells a rather snappy upscaler that plugs directly into the multi-AV port... when they have it in stock. Behar Bros (https://www.beharbros.com) sells the Xedusa, which is basically the same thing but in stock. If dongles murdered your dog, look up the XboxHD+ for an internal solution; this obviously requires fucking around with a soldering iron and a dremel, but has the benefit of being 100% digital.

•**Controllers** - The OGX360 is an open sores, Arduino-based doohickey that maps XInput compatible controllers to look like original Xbox controllers. Why would you use this when you probably have a working controller already? One reason: You can play Steel Batallion with this motherfucker. That's right, scrounge up a 360 controller with that stupid fucking Yahoo Messenger keyboard and you too can play one of the fuckingest mecha games ever made without paying a scalper an idiotic sum of money. Sure, it's clunky, but until someone hacks this thing to work with (almost as expensive as the Steel Batallion panel) flight sim equipment it's as close as you're going to get.

•**Fan Swap** - The cooling fan on the Xbox is an oddball size, old, and noisy. You can cut back on the noise by playing in a cool room and using dashboard settings to keep it from going full blast, but a better solution is to get a 3D printed bracket and slap a modern PC fan in there. Stone Age Gamer (https://stoneagegamer.com) sells them in 70mm "Nexus" and 60mm "Noctua" flavors; other fans from other brands should work if they're the same diameter, as long as they have mounting holes in roughly the same places. They also sell 2.5-inch drive cages for the Xbox's weird-ass HDD tray, if you didn't follow my advice earlier about letting an SSD rattle around in there.

That's it. Now go and play. And please don't start by playing fucking Halo. Xbox-chan is a good girl and deserves better than that.