

How to install a reset switch in the xbox game controller

Tutorial written by: Xboxmod08 Team Of Sweden

Version 1.2.1 (Corrected a few things from the SCART section)

Version: 1.2 (Replaced some pictures with more high quality ones)

Version: 1.1 (Added info on how to install if using a Scart AV Pack)

Version: 1.0.1 (Added greeting and corrected some spelling)

NOTE: We take no responsibility if anything goes wrong or breaks when you try to do this!

These instructions are for making a reset switch and connect it to the Xbox Game Controller. Now you don't have to get up every time you want to play another game if you have it installed on the hard drive.

I've tested this on my Xbox with a composite (Standard) AV Cable. The modification also works with the Component High Definition AV Cable.

Requirements:

- 1 Xbox
- 1 Controller (Not wireless, if they are out yet)
- 1 Subminiature Momentary Pushbutton Switch ie.
If using scart, buy the one that is in the "on" state.
Otherwise buy the one that is in the "off" state when not hold down.
(<http://www.elfa.se/elfa/produkter/se/12/122375.htm>)
- 0,5 meters of wire.
- Electrical tape
- Soldering equipment & knowledge
- Screwdriver
- Multimetre



First you need to open up your controller and take out the whole circuit board. When you have the controller open like this, take something sharp to remove the plastic from where one of the screws is placed. This is how it should look like when you're done.



Next thing to do is to fit the switch on the bottom side of the circuit board (If you use Scart you

use the switch that is in the “on” state, and when its pressed it breaks the signal. You can now continue.)

My switch matched perfectly. You may have to adjust it a little bit if you get a different switch. Mount it like this:



Then put some electrical tape over it so it will stick. You can also use superglue.



Next you have to solder a wire from one of the legs on the switch to the connection of the yellow wire (It isn't used. Some say it's for a light pen, which you don't have anyway). If you have a different layout of the circuit board you have to find out which leg is connected to the yellow wire. Just remove the white connector on the bottom side of the circuit board and use the multimeter to check where the yellow wire connects on the other side of the board. When you have found it you just solder the wire from that leg to the leg on the switch. You can see how I did in this picture. "Yellow" is where the yellow wire from the other side connects.



Next you have to solder the other leg to Ground. I did this to a solder point next to the other wire.



Note: Make the wires a little bit longer than mine.

Now it's time to put it back together. To make it fit properly you have to remove some plastic from the other half of the controller. Just cut the little plastic thing on the picture, like you did on the other half of the controller.



It should look something like this when it's done.

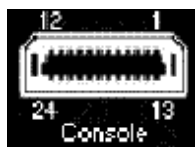


Now, open up your Xbox console. Remove the motherboard and turn it upside down. There are four different modes you should know about.

If you use:

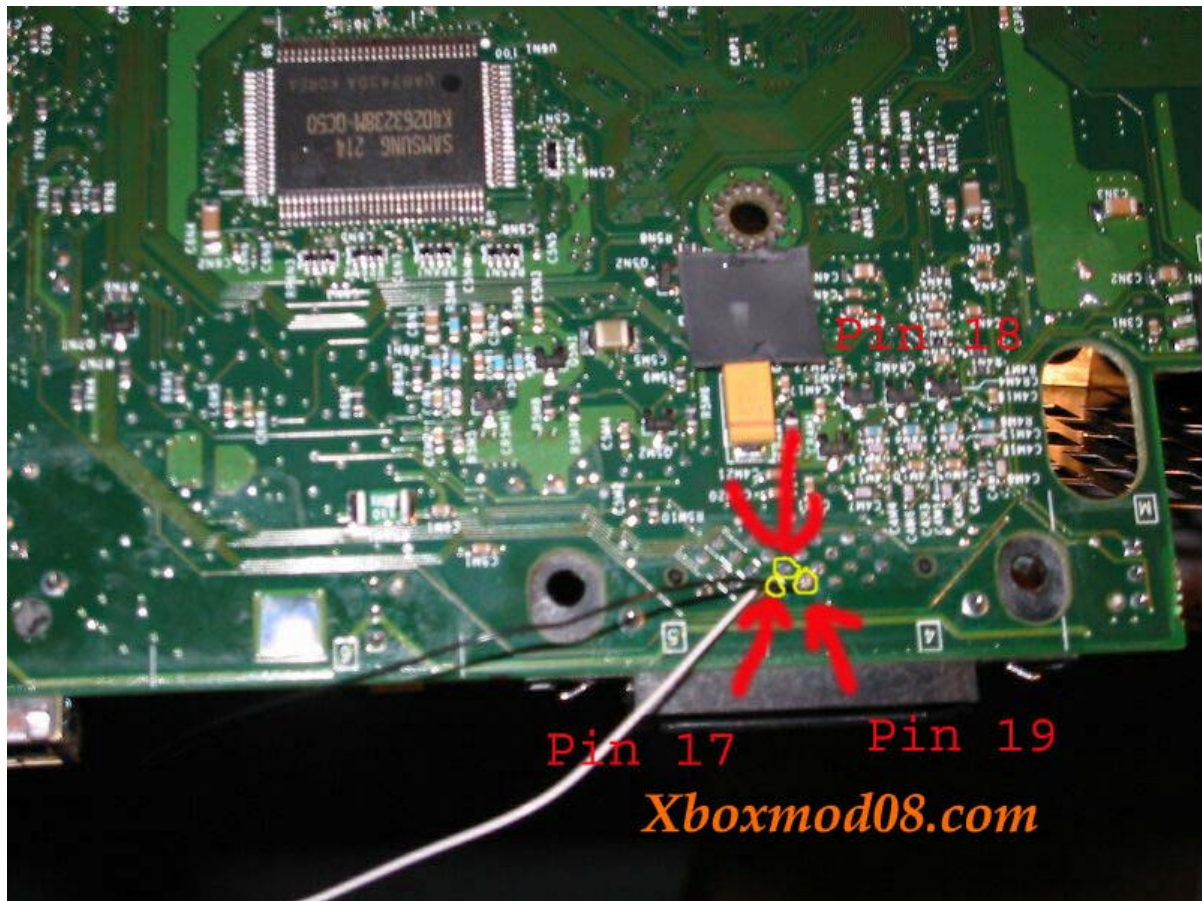
- Composite (AV Pack): You connect the yellow wire to Pin 19 (which is Component)
- S-video (AV Pack): You connect the yellow wire to Pin 19
- Component (AV Pack): You connect the yellow wire to Pin 17.
- SCART (AV Pack): You connect the yellow wire to preferably Pin 18

Now I will explain what and where the pins are. If you take a look at the picture below of the AV output you can see that it is numbered from 1-24. This is where you put your AV cable. So you can use a multimeter to check where for example pin 17 in this picture is connected on the motherboard.



Note: If you use Scart, jump down a few pages and I'll explain how you will install it.

I will do this for both Composite and Component because I will buy the Component Av pack later, and I don't want to redo everything. You can use just one of these methods. I suppose you can use only pin 18 for both of these video modes. I haven't tested that though. I guess all motherboards are the same so I will show you where the pins are.



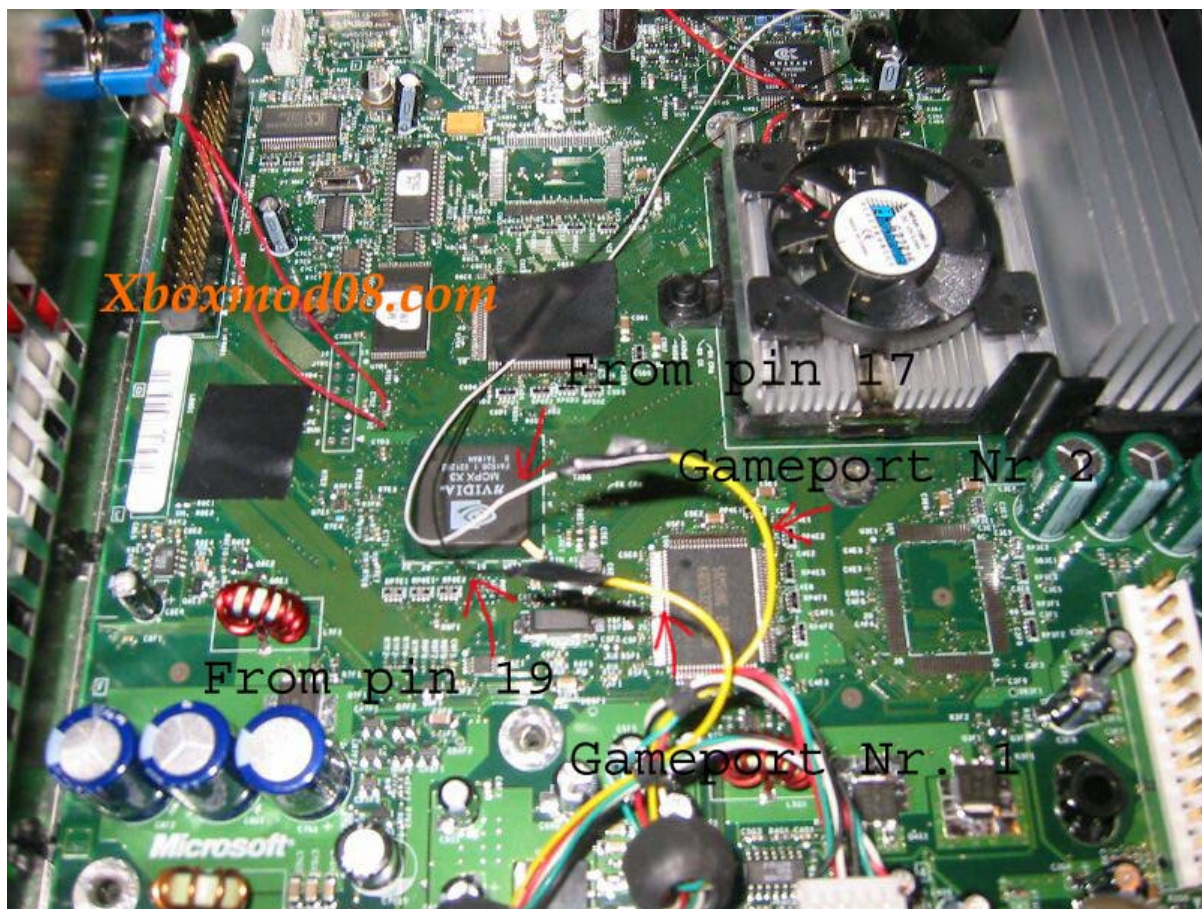
As you can see above I have soldered the black wire to pin 19 because I use Composite right now. I have also soldered the white wire to pin 17 for when I get the Component Av Pack.

Now, turn the motherboard again. Remove the yellow wire that goes from the first controller port on the Xbox. I then soldered the black wire (Pin 19) to the first controller port (Gameport Nr 1, in the picture), and then removed the yellow wire from the second controller port (Gameport Nr 2, in the picture) and soldered it together with the white wire (Pin 17). So when I use the Standard AV Pack (composite) I put the controller into the first controller port, when I then get the High Definition AV Pack (Component) I just put the controller into the second controller port and the reset switch will still work.

Note: If you don't plan to change AV Pack you only have to remove one of the yellow wires, not both. I did it because I'll get the High Definition AV Pack later.

The discoverer of this feature explains how it works. Thanks MajahTom!

"All you have to do is to momentarily switch between two dissimilar video modes e.g. composite and HDTV. This is done by changing the modes on the AV cable (by grounding or leaving open Mode1 (pin17), Mode2 (pin18) or Mode3 (pin19). I currently use the std AV cable... hence composite... pin 17 (mode1) is connected to pin 5 (mode1 gnd). To make a reset switch I added a momentary pushbutton which connects pin 19 (mode3) to pin 7 (mode3 gnd) - setting it to component while the button is pressed. When the button is pressed, the XBox detects the video mode change and resets the xbox. MajahTom."

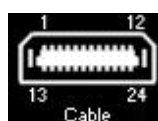


Before you close the Xbox take some electrical tape to protect the connections between the wires so that it doesn't get in contact with the motherboard or something else. Now close the Xbox and do a test run. It works flawlessly on my Xbox and it's the coolest thing I've done so far on the Xbox.

Scart users

I haven't tried this yet and will update it with pictures when I get to do this. But here is how you do it.

Open up the Xbox, turn the motherboard upside-down and connect a cable from pin 18 (you can see the pin layout in a picture below) to the yellow cable on Game port #1. Then open your AV plug and connect a cable from Pin 18 (you can see the layout in the picture below) to pin 5, 6 or 7 which is ground. Put the plug back together. Then you have to change the switch in the controller to a momentary switch that "breaks" the connection and you should now have a working reset switch for the Scart AV Pack.



| Pin | Description | Pin | Description |
|-----|----------------------|-----|-------------------|
| 1 | Audio Right | 13 | Vcc |
| 2 | Audio Right GND | 14 | Audio Left |
| 3 | SP-DIF Digital Audio | 15 | Audio Left GND |
| 4 | V-Sync (VGA Mode) | 16 | H Sync (VGA Mode) |
| 5 | Mode GND | 17 | Mode Select 1 |
| 6 | Mode GND | 18 | Mode Select 2 |
| 7 | Mode GND | 19 | Mode Select 3 |
| 8 | GND | 20 | +12v |
| 9 | Variable | 21 | Pin 22 GND |
| 10 | Pin 9 GND | 22 | Variable |
| 11 | Variable | 23 | Pin 24 GND |
| 12 | Pin 11 GND | 24 | Variable |

Greetings goes to:

- **MajahTom** for discovering this feature and all the help concerning it.
- **xmltok** for pointing out that the yellow wire could be used in the Game Controller
- **Dreamcazman** for the info on how to install if you use the Scart cable.
- **EvolutionX** team who have made a fantastic job on there Bios.
- **Xboxhacker.net** and **Xbox-scene.com** for having the two best Xbox websites on the scene.
- **Gamesx.com** for contributing with the picture of the pin layout of the AV output.
- **Tim Rettmann** for the research of the pin layout.
- All **developers/programmers** for all the cool utilities.
- **Microsoft** for putting in that extra yellow wire :)

Expect more from the Xboxmod08 Team Of Sweden.

Best regards, *Xboxmod08.com*