# Xenium Solderless Installation Manual



#### **Xenium Solderless Installation Manual**



Warning: The installation of your Xenium will void your console's warranty and may cause damage to your console if not installed correctly.

Please ensure that power is not applied to your XBox during this installation procedure.

If you have any concerns regarding the installation of the Xenium please seek advise in our message forums (http://www.ozxodus.com) or on the IRC at #ozxodus on EF Net.

# **Table of Contents**

Part 1 – The features of the Xenium S.

Part 2 – Disassembling the XBox.

Part 3 – Locating the LPC port and d0 point.

Part 4 – Installation of the Xenium.

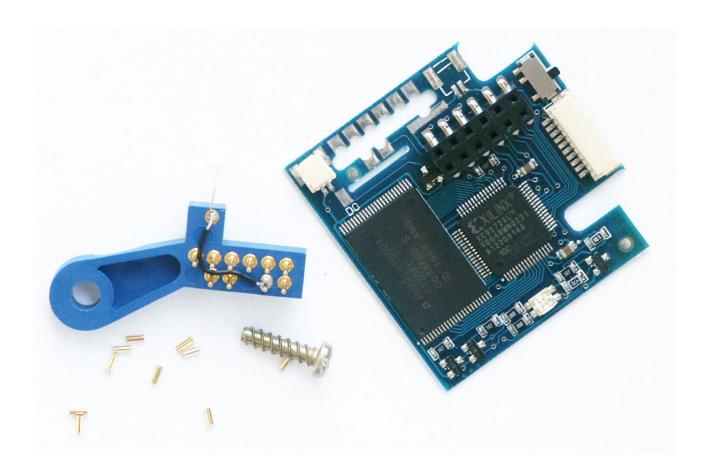
Part 5 – Troubleshooting.

Part 6 - Disclaimer.

# Part 1. The features of the Xenium S

The Xenium S package includes the Xenium, a solderless adaptor, a long screw and optional rivets.

# The Xenium S hardware:



# Part 2. Disassembling the XBox.

To disassemble your XBox console you must first remove the cover, you will need a Torx 20 screwdriver to do this and the image below indicates the location of six torx screws that must be removed.



You will need to lift the consoles feet up as displayed in the picture below to access four of the torx screws. The green circles above indicate the location of two torx screws that are hidden under stickers, remember that breaking these stickers will void your warranty but it is the only way that you can install the Xenium.



Firmly remove the console's cover and you will reveal the contents of the Xbox!



Now remove the IDE cable (marked in orange) and the power cable (blue) from the hard disk drive.

A torx 10 screw as indicated in green needs to be removed to allow the hard disk to be removed from the console.



With the hard disk removed you must now remove two torx 10 screws as indicated by the yellow circles.



Remove the IDE and power cables from the DVD-Rom drive as indicated by the red and blue circles. You can then remove the DVD-Rom unit and the IDE & Power cables.



## Part 3 – Locating the LPC port and d0 point.

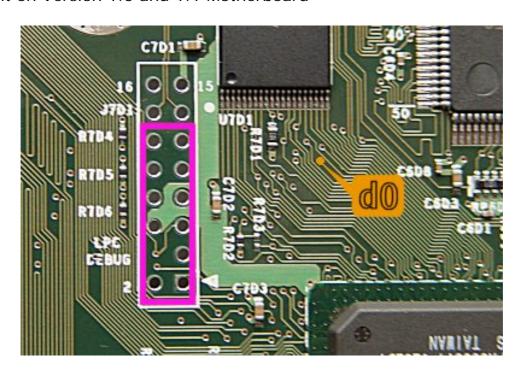
The following picture shows a yellow ring around the LPC port on the top side of the motherboard.



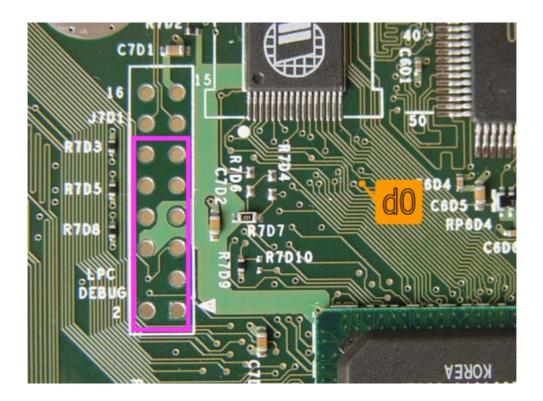
Version 1.0 motherboards have solder in the LPC port whereas later versions do not as shown in the picture below. The pink rectangle in these pictures indicates the area of the LPC that is used by the Xenium.

You also need to locate the d0 point on your motherboard, the location of the d0 point will differ for motherboard versions 1.0-1.1 and 1.2-1.5.

d0 point on Version 1.0 and 1.1 Motherboard



d0 point on Version 1.2, 1.3, 1.4 and 1.5 Motherboard

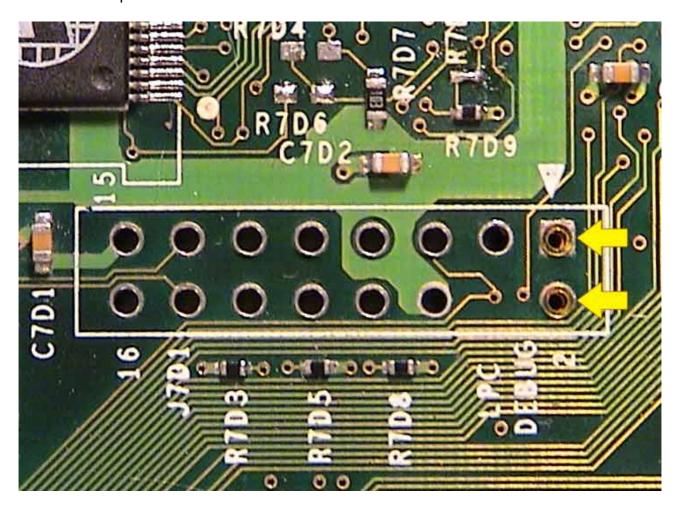


#### Part 4 - Installation of the Xenium.

The Xenium Solderless Adaptor is supplied with some small rivets which may be inserted into the LPC to ensure a better connection with the spring loaded pins on the adaptor. The installation of these rivets is optional and should be inserted as shown in the photo below:

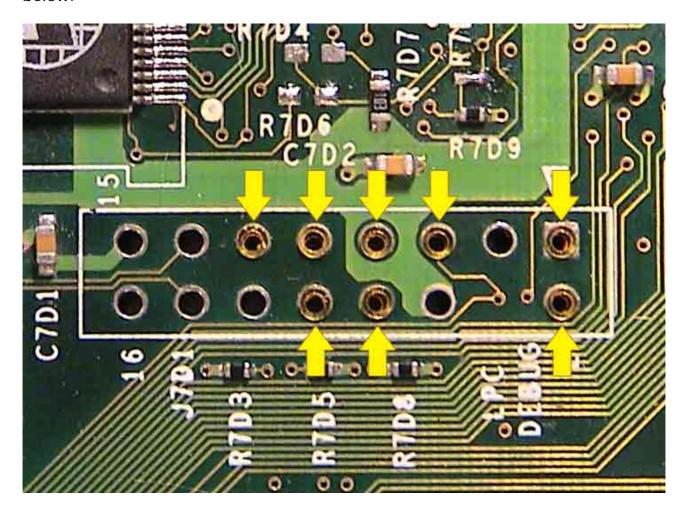
#### **Suggested Rivet Installation**

Should you experience any weird symptoms or malfunction we recommend you first attempt to install two of the supplied gold rivets in pin positions 1 and 2 as shown in picture below



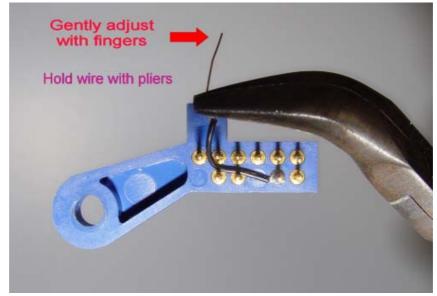
### **Optional Rivet Installation**

Make sure you have thoroughly clean the LPC points shown below with some alcohol and brush before proceeding to insert the rivets as shown in the photo below.



## Optional d0 wire adjustment

Once you have located the d0 point, place the d0 gold plated wire on the solderless adaptor into the d0 point, then position the solderless adaptor over the LPC port. The gold plated d0 wire can be adjusted as seen in the photos below, adjustments to this wire should be done very cautiously as the wire is quite delicate.



Once you have determined which d0 point you wish to use for your installation, insert the tip of the gold wire into the d0 point and then seat the adaptor over the LPC points. The spring loaded pins of the adaptor should lock into the rivets (or solder) and the adaptor should be positioned as shown below.

Tighten the screw provided whilst holding the adaptor in the locked position, there should be very little to zero play once the screw has been tightened.



Ensure that the d0 wire is firmly in position once the screw has been tightened.



Position the Xenium on the solderless adaptor as shown in the photo below, ensure that both rows of pins on the adaptor are correctly lined up to the Xenium's pin header and gently push the Xenium into position.



Your console should now be ready to be reassembled and you can continue to perform the setup of your Xenium after consulting the Xenium-OS Manual.

# Part 5 - Troubleshooting

After disassembling your XBox there are a number of things that can prevent your console from operating correctly. You may experience trouble when booting the console and you would be presented with either a flashing Eject LED or a Service Code on screen. The following are a description of these errors and some hints that may assist you rectify the problem.

## Flashing LED Error Codes.

Flashing RED & GREEN (FRAG): Probably a bad chip or bad installation, FRAG indicates that your d0 wire is installed correctly.

- Check that the Xenium is installed correctly and that it's LED is lit Red.
- Realign the solderless adaptor on the LPC points.

SOLID GREEN/No EJECT/No AUDIO/No VIDEO: Probably a bad solder point or overheated console.

- Check all solderless adaptor alignment again.
- It could also be a heat problem, make sure your fan is connected and don't put your xbox near heat sources. You can also try to open the top of the xbox and check if it goes better.

SOLID GREEN/No AUDIO/No VIDEO: This is probably a problem with your audio settings. Try to boot your XBox with a standard A/V pack instead of a HD pack.

ORANGE/GREEN Flashing: No AUDIO/VIDEO (A/V) pack. This may be caused by solder splash on the motherboard or a damaged track.

ORANGE Flashing: This may also be down to a solder splash on the board or a damaged track. May also be due overheating.

SOLID RED: System overheated, hardware failure!

#### Service Error Codes.

- 5 kernel HDD not locked (retail bioses require the HDD to be locked)
- 6 kernel Cannot unlock HDD
- 7 kernel HDD timeout
- 8 kernel No HDD found
- 9 kernel HDD parameters (PIO/DMA/or size {debug}, certain size minimum is required for debug)
- 10 kernel DVD timeout
- 11 kernel No DVD Found
- 12 kernel DVD parameters (PIO/DMA)
- 13 kernel Dashboard launch fail (due to missing/bad key, or anything else that would prevent it from running) and the dashboard didn't specify why it failed.
- 14 dashboard Error loading dashboard (dashboard generic error)
- 16 dashboard Other files to do with dashboard / dashboard settings (specific dashboard error)
- 20 kernel The dashboard was attempted to load and failed; It was a cold boot, and the dashboard didn't specify why it failed, but it (for some reason) needed to be noted that the DVD passed the challenge/response authentication

Credit goes to Superfr0 for his interpretation of these service codes and his awesome contribution to the XBox scene.

#### Part 6 - Disclaimer

By purchasing a Xenium you agree that the usage of this product is strictly your responsibility. OzXodus are not responsible for any damage or loss of data caused during the installation or use of the Xenium.

The Xenium is designed for use as a development tool and is shipped with blank bios banks so that the end user is able to install their own bios. The developers of the Xenium are aware that various hacked bios versions are available that contain copyrighted Microsoft code and can be used for piracy and in no way do we endorse or condone the use of such bioses. Our primary purpose for the development of this device is to encourage users to exploit the full capabilities of their console through the use of the legal Linux bios. For further information regarding Linux on the XBox we encourage you to visit http://xbox-linux.sourceforge.net/

For more information please check out our website at <a href="http://www.ozxodus.com">http://www.ozxodus.com</a>