



Xynergi Dis-assembly Procedure

Introduction

The following procedure outlines the process for disassembling a Xynergi Controller. This is a mechanically close-tolerance assembly. DO NOT attempt this procedure under time pressure. Ensure you have a Clean and Clear working area available.

It is expected that some technicians may wish to perform this procedure in order to diagnose and solve either button LED display issues, or encoder touch-sense issues. It is STRONGLY recommended that you contact either Joe (joe@fairlightau.com) or John D (johnd@fairlightau.com) for a copy of the "Xynergi Diagnostic Procedure" document, And perform this diagnostic test FIRST.

This will help accurately diagnose exactly what the fault condition is with the Xynergi controller, and ascertain exactly where the fault condition lies, (hardware, software, control).

Armed with this information, you can avoid un-necessary dis-assembly of your Xynergi controller, and save significant time in solving the problem.

Parts required

- Xynergi Controller
- Supporting padding
- 1.5mm Allen key
- #2 Phillips-head screwdriver
- #1 Pozi-drive screwdriver

Procedure

This procedure should NOT be performed while the Xynergi is still connected to a PC. Disconnect ALL USB and power connections, and move the Xynergi Controller to your cleared padded workspace.



- **Place the Xynergi Controller face UP on the padded work surface**
- **Remove the Jog Wheel**

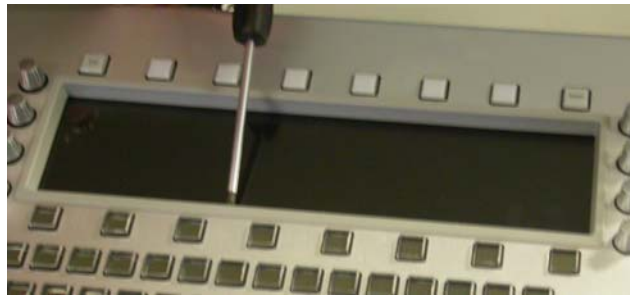
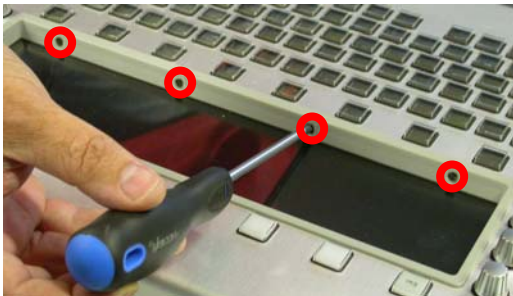
This is the same as with any other Fairlight console. Remove the rubber O-ring from the wheel. This will reveal an access hole for the locking grub-screw. Use a 1.5mm Allen key to loosen the locking grub-screw. DO NOT REMOVE the grub-screw from the wheel!



With the grub-screw now loose, the jog-wheel should be easily lifted straight up and away from the encoder shaft.

- **Remove the Display Bezel**

There are 4 screws on the lower edge of the display bezel. Using a #1 Pozi-drive screwdriver, remove each of these screws.



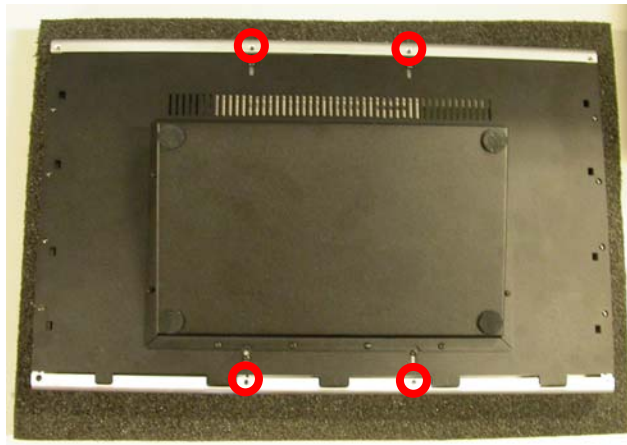
With the 4 screws removed, the bezel should hinge up along its top edge, and be easily removed.

CAUTION! Make sure the bezel and see-through panel is protected from scratches while it is removed from the Xynergi chassis!



- Flip the Xynergi Controller over, so it is face DOWN on the padded work surface.
- Remove **ONLY** the screws shown below

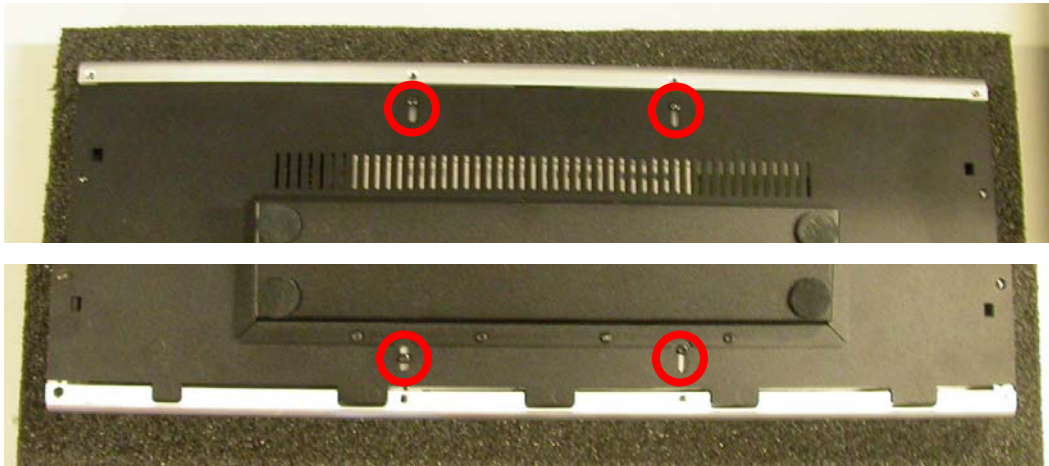
Using a #1 Pozzi-drive screwdriver, remove 4 x screws from the aluminium plate



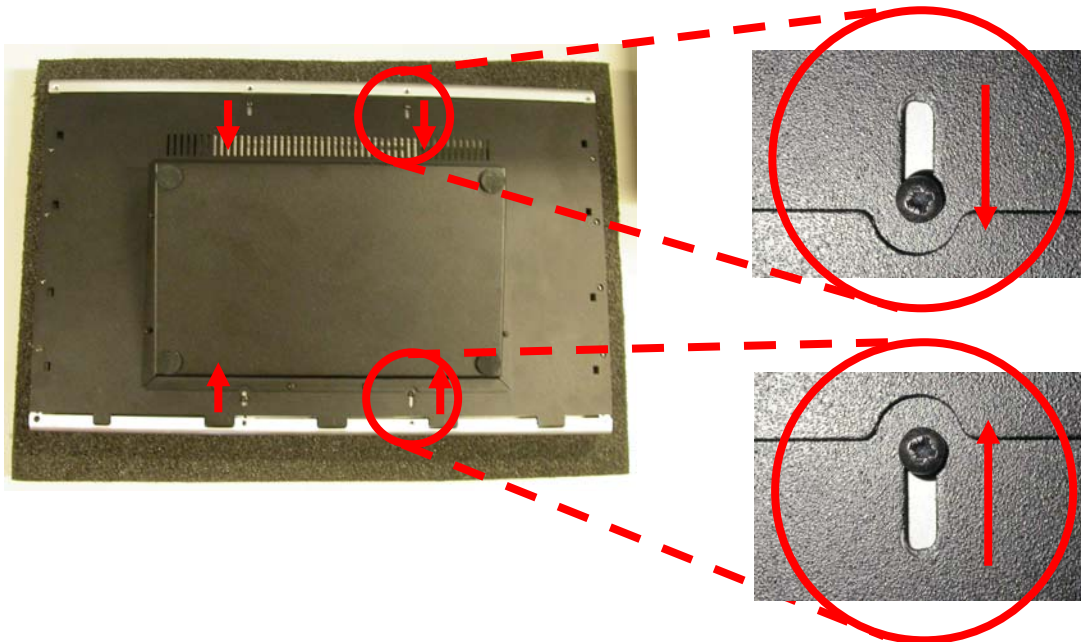
Using a #2 Phillips-head screwdriver, remove 8 x screws from the black baseplate



- **Loosen the screws shown below. They should NOT be removed!**



The loosened screws should now be able to freely slide along the slot in the baseplate. With the screw loose, you should be able to slide it into the "UN-Locked" position, towards the centre of the Xynergi, as shown below.



- **Flip the Xynergi face UP**

With all of the underside screws either removed or "unlocked", you should now CAREFULLY flip the Xynergi controller so that it is "face UP" on the work surface.

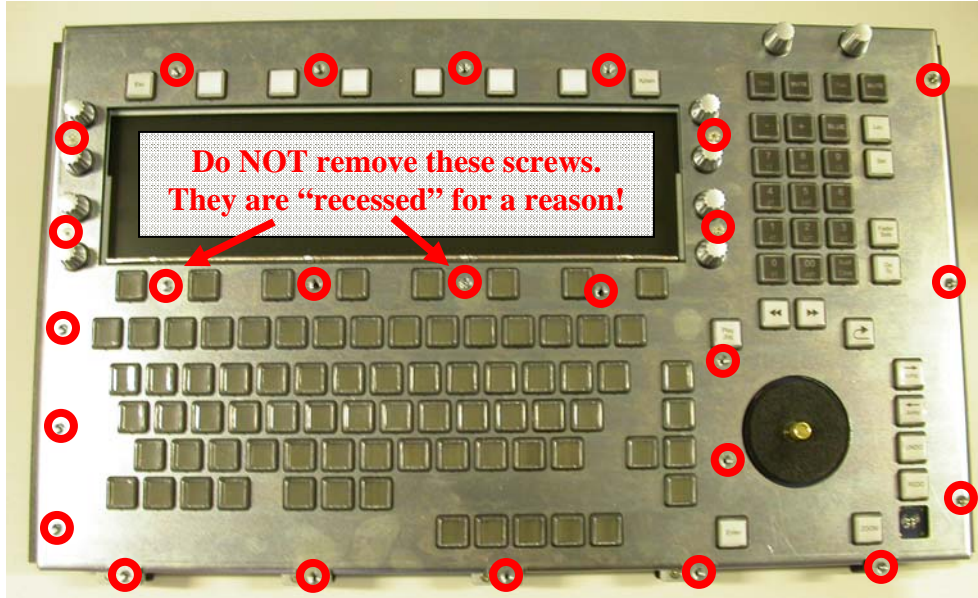
- **Remove Top faceplate**

With the jog-wheel and the display bezel removed, the brushed aluminium faceplate can now be carefully removed from the Xynergi.

- **Remove Top plate screws**

Using a #1 Pozi-drive screwdriver, remove the screws shown below.

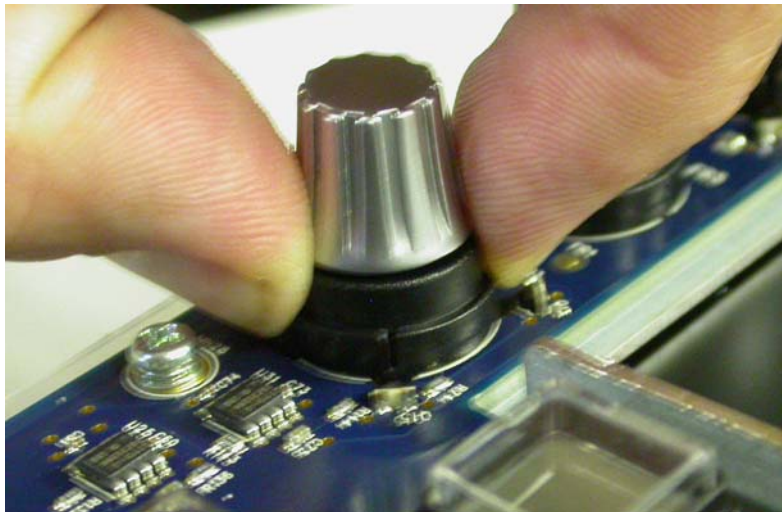
NOTE! Do NOT remove the 2 x Recessed Screws noted!!!



- **Remove the top Chassis Plate**

With the screws removed, the top chassis plate can be CAREFULLY removed from the Xynergi controller. This will expose the main PCB, encoders, and circuitry.

Encoders can be removed by simply “pinching” the black plastic base, and lifting the encoder assembly away from the circuit board.



- **Inspect the Encoder contact points**

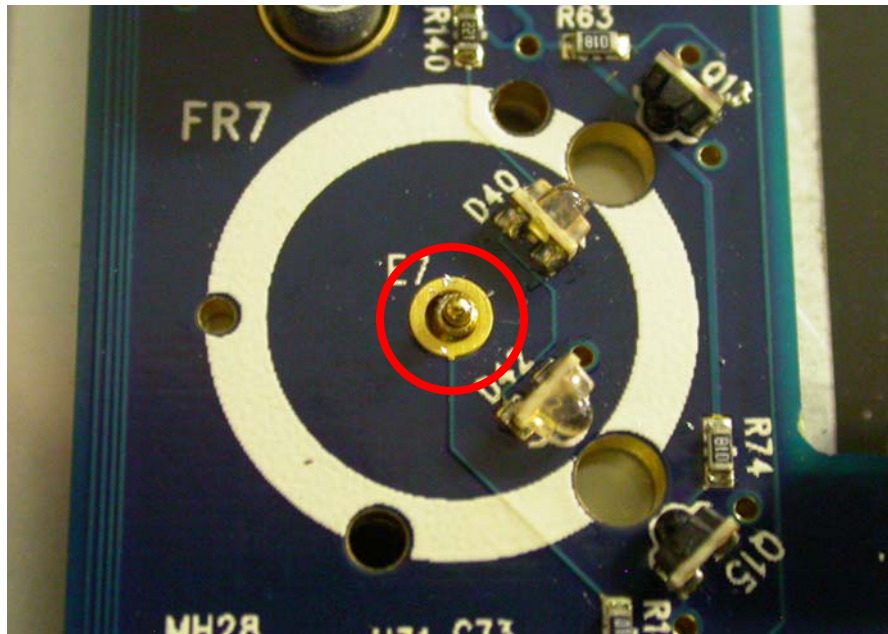
Below is a comparison of the old and new Xynergi encoders.



The encoder at left with the gold-coloured contact point is the original design. These encoders are prone to oxidation, especially in high humidity environments. They may be cleaned with electronic CRC cleaning fluid and a suitable static-free lint-free cloth.

However, the preferred fix is to replace the encoders with the newer versions, as shown at right, with the "silver" contact point. These encoders use a totally different material for the contact point, and are far less prone to oxidation.

The image below shows the spring-loaded contact on the Xynergi PCB, that makes electrical contact with the encoder.



The gold "tip" highlighted can in some circumstances become stuck in the down-position. This would cause it to NOT make contact with the encoder, and thus cause the touch sense for that encoder to fail.

- **Re-assembling the Xynergi**

Re-assembling the Xynergi is essentially the reverse of the above procedure. Take care not to exert un-necessary pressure or force on any of the parts during re-assembly. If a component is not easily fitting into position, STOP! and confirm the cause of the issue.

If everything is performing as designed, you should be able to re-install your serviced Xynergi Controller, and resume normal editing operations... 😊

Regards,
Fairlight TechSupport