


Avolites LTD Engineering Change Notice

ECN title	Sapphire Touch Impedance Matched Ethernet		
ECN Number	ECN-206		
Related Product(s)	All Sapphire consoles before SN 300		
Date / Author	27/06/2016	Toby Roworth	
Reasons for ECN	Ethernet link quality can degrade due to poor signal integrity		
Parts required	Assembled TNS etherCon snapoff board		
Tools required	PZ2 screwdriver, PZ1 screwdriver, 5.5 mm socket/nut driver		
Estimated time	15 Minutes		

Background:

Sapphire Touch consoles originally shipped without impedance matched tracks on the etherCon output board. This can lead to link quality issues, especially evident on Gigabit networks when using TitanNet.

1. Remove the 6 screws securing the back panel.



2. Remove the back panel lid.
3. Unplug the two RJ45 connectors going into the Ethernet board.



4. Remove the 4 screws holding ethernet sockets 1 and 2.



5. Remove the M3 nut holding the earth wires in place, next to the DMX boards. This may be easier if the nearby RJ45 and DVI cables are temporarily removed.



6. Withdraw the ethernet board.
7. Fit the new etherCon board (identified by the wiggly tracks on its underside) using the 4 screws previously removed.



8. Run the earth wire behind the two hex pillars, put the crimp over the earth stud and refit the M3 nut, ensuring all four earth wires are in place, and in contact with one another. (Note that consoles fitted with a DC-UPS will have a fifth earth wire on the stud, which also needs refitting).



9. Plug the RJ45 connectors back in, such that the numbers match the labels on the back panel.
10. Replace the back panel lid and fit using the 6 screws previously removed.

This concludes the ECN.