# **ALLEN&HEATH** Service manual

XONE:DB4

# Qu-16

Service access Control data diagram

For other information see Technical Resources on distributor website



Work to be carried out by a competent, qualified engineer.
Allen & Heath cannot be held responsible for the actions of third party engineers.
Risk of electric shock.
Switch mode PSUs may present up to 400VDC.
The factory supported warranty may be invalidated if work is carried out by non-authorized persons.

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### **Limited One Year Warranty**

This product is warranted to be free from defects in materials or workmanship for period of one year from the date of purchase by the original owner. To ensure a high level of performance and reliability for which this equipment has been designed and manufactured, read this User Guide before operating. In the event of a failure, notify and return the defective unit to ALLEN & HEATH Limited or its authorised agent as soon as possible for repair under warranty subject to the following conditions

### **Conditions of Warranty**

The equipment has been installed and operated in accordance with the instructions in this User Guide. The equipment has not been subject to misuse either intended or accidental, neglect, or alteration other than as described in the User Guide or Service Manual, or approved by ALLEN & HEATH. Any necessary adjustment, alteration or repair has been carried out by ALLEN & HEATH or its authorised agent. This warranty does not cover fader wear and tear. The defective unit is to be returned carriage prepaid to ALLEN & HEATH or its authorised agent with proof of purchase. Units returned should be packed to avoid transit damage. In certain territories the terms may vary. Check with your ALLEN & HEATH agent for any additional warranty which may apply.

For further assistance please contact our distributor or your territory.





### **Servicing Precautions – General Notes**

### Service personnel:

Service work should be carried out by technically qualified service personnel only. Mains power is dangerous and can kill. Do not attempt to work on a linear or switched mode power supply if you are not suitably qualified to do so. Do not attempt to repair surface mount circuit assemblies unless you are suitably qualified and have the necessary facilities to do so. Replacement circuit assemblies can be ordered.

#### Service facilities:

Ensure a suitably sized work surface is available. Ensure this is clear of dirt, debris and obstructions which may damage the equipment surfaces. Ensure adequate lighting. Use the correct tools for the job and ensure they are in good working order. Ensure all workshop safety requirements are adhered to.

#### Service information:

Check that you have all the information you need before starting the service job. Refer to the Allen & Heath web site or contact Allen & Heath technical support for details on the latest information. Full technical information can be downloaded from the web site Distributor Zone (password required).

### Mains power:

Connect the equipment to mains power only of the type described in the user guide and marked on the rear panel. The power source must provide a good ground connection. Ensure you always use an isolation transformer when working on any mains power supply unit.

### Mains cord and fuse:

Use the correct power cord as supplied with the equipment. Do not remove or tamper with the ground connection in the power cord. Heed the Important Mains Plug Wiring Instructions printed in the user guide if it is necessary to rewire the mains cord. Always replace the equipment mains fuse with the correct type and rating as described in the user guide and marked on the equipment panel.

### **Opening the unit:**

Switch off and remove the mains power cord before opening the equipment. Ensure all power supply covers and safety shields are in place before applying power with the unit open for diagnostic fault finding.

### Closing the unit:

Before finishing, check the quality and accuracy of the service work carried out. Remove any dirt or debris as this may cause equipment failure in the future. Ensure all assemblies, harnesses and connectors are correctly aligned and plugged in. Ensure that jumper settings and control configurations are correctly set according to the requirements of the customer.

Continued -



### **Testing the unit:**

Before operating the equipment, read and adhere to the Important Safety Instructions printed in the user guide. Test that the service work has been successfully carried out.

### Shipping the unit:

Use adequate packing such as the original packaging or purpose designed flight case if you need to ship the unit. To avoid injury to yourself or damage to the equipment take care when lifting, moving or carrying the equipment.

### **Operation:**

To test the console make sure it is connected as described in the user guide. Check that the voltage setting marked on the rear panel is correct for the local mains supply.

### Fault finding:

For effective fault diagnosis trace the signal flow through the circuit path. Refer to the system block diagram. Replacement circuit assemblies are available from Allen & Heath.

### **Schematics:**

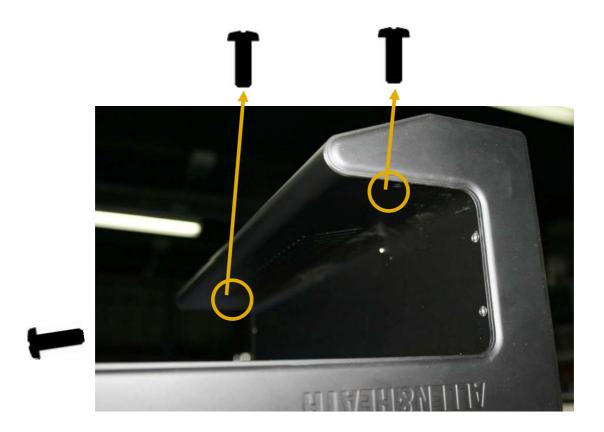
Allen & Heath do not publish schematics that contain digital audio and control circuitry.

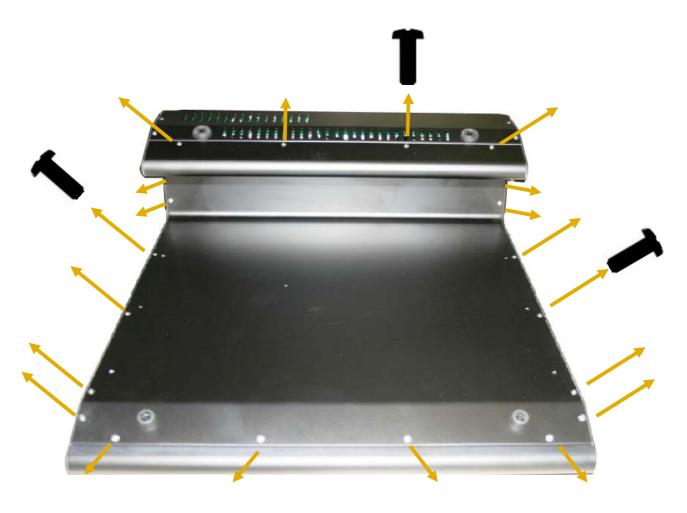
### **Parts Identification**

A Parts Identification document is published separately on the Technical Resources tab available when logged in as a distributor.



# Remove base

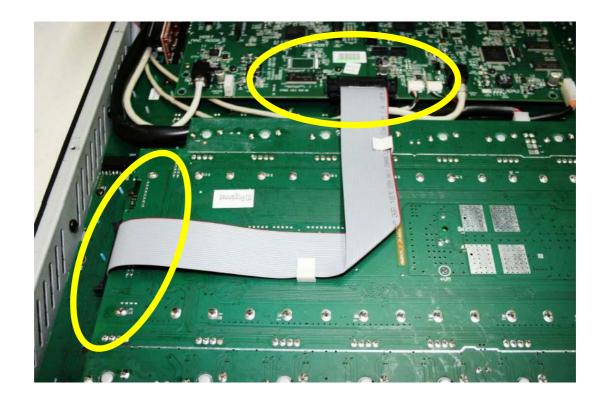




# Remove knobs and headphone jack

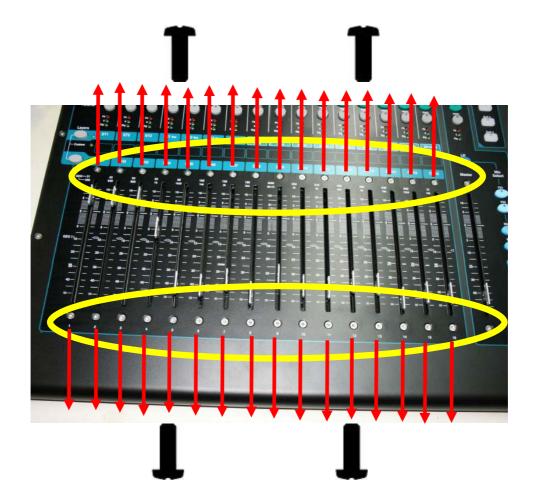


# **Disconnect harnesses and cables**

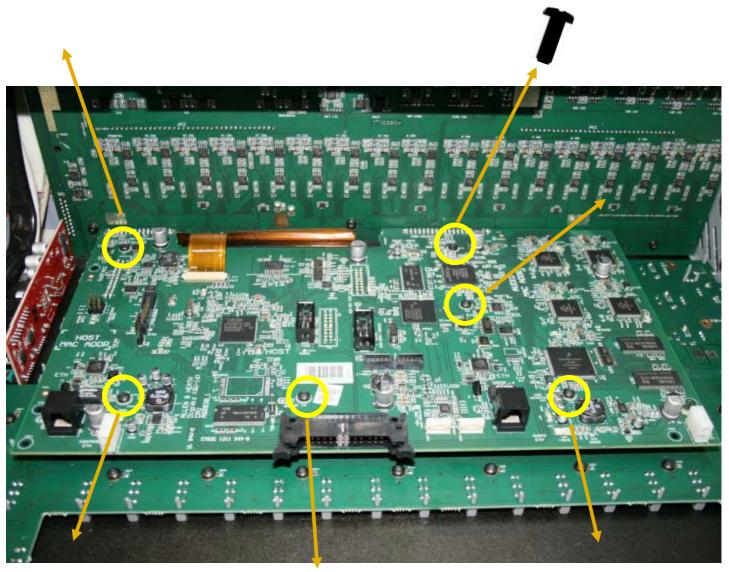




# **Remove fader PCB**

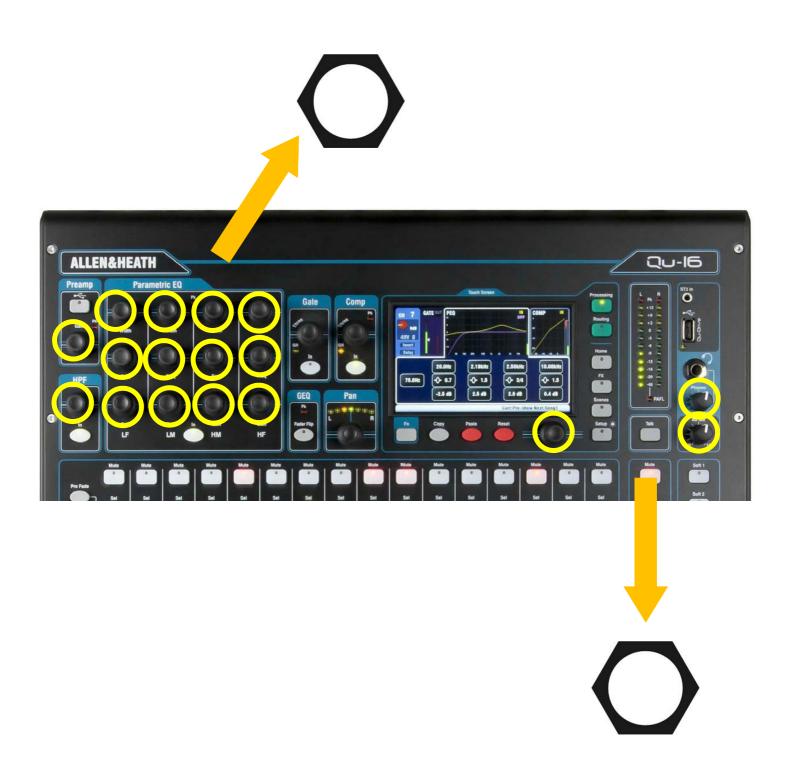


# **Remove CPU PCB**

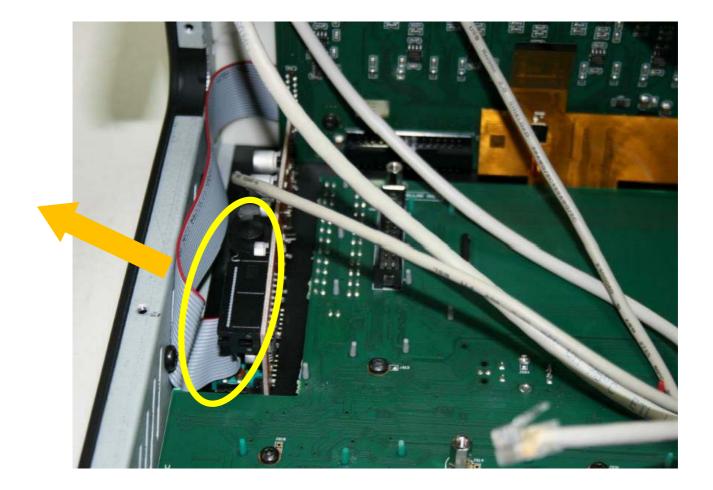




## **Remove Pot nuts**

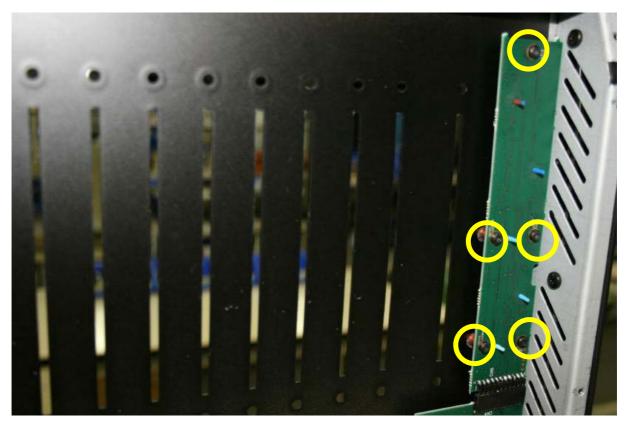


# **Disconnect headphone PCB audio harness**



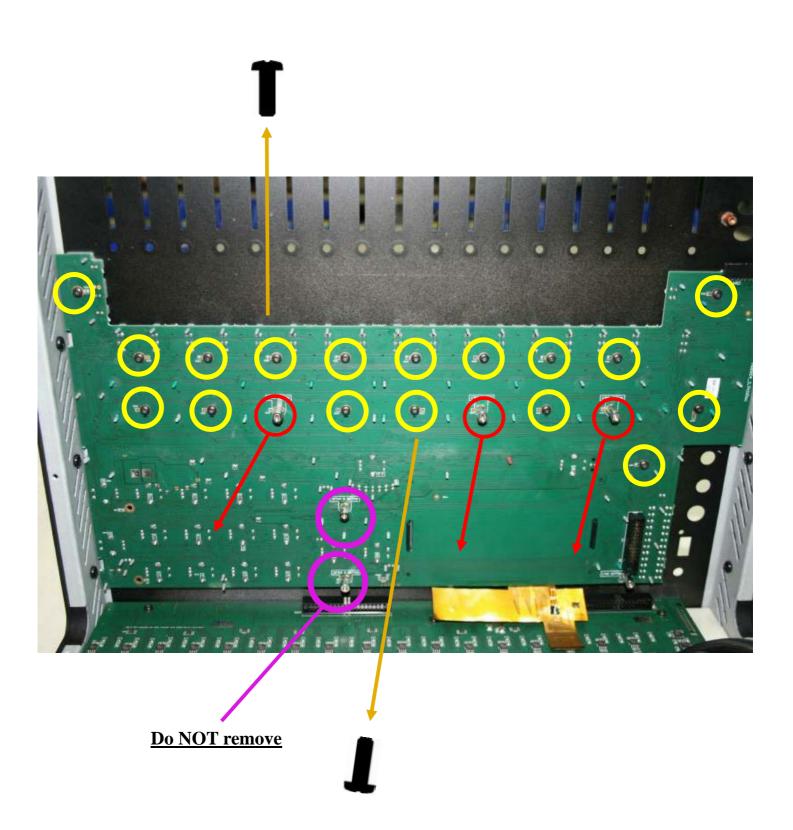
# **Remove Mix select PCB**







# **Remove Channel PCB**

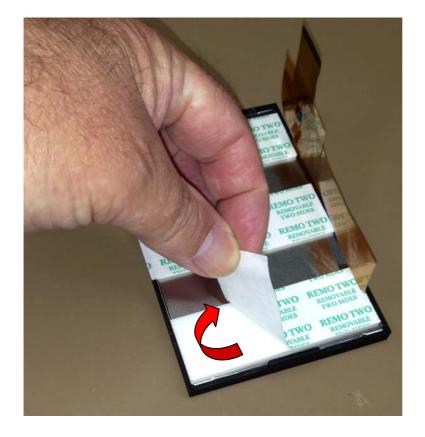


## **Touch Screen**

# Do Not Remove adhesive protector. Screen does NOT STICK to mixer.

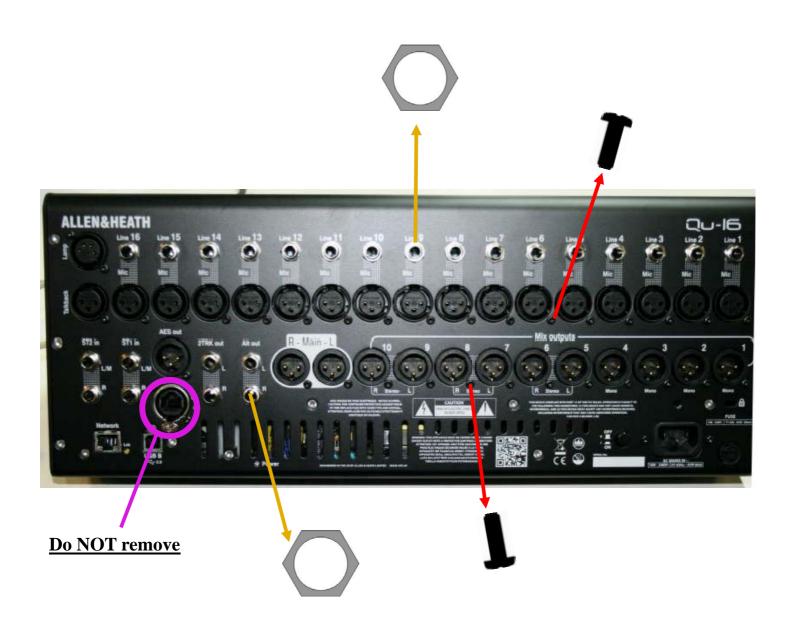








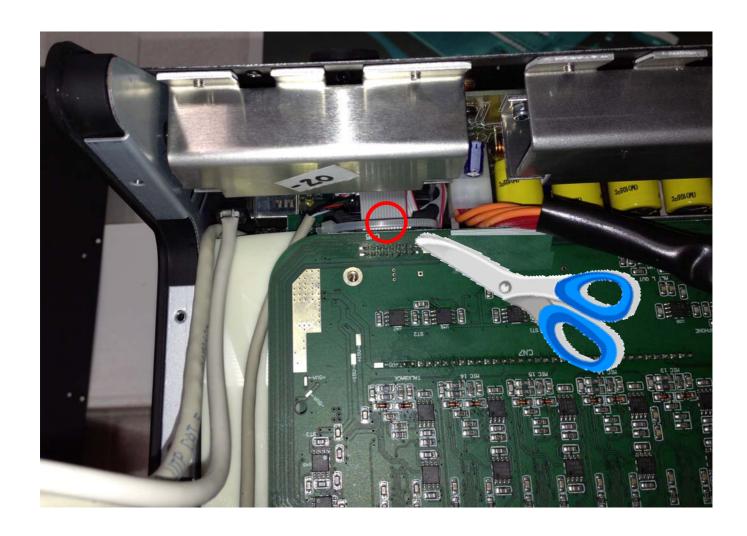
### **Remove Audio PCB and Connector PCB**

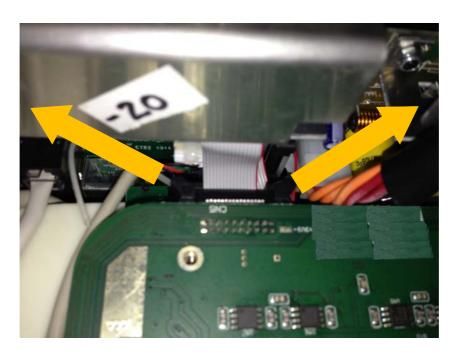


Remove jack nuts

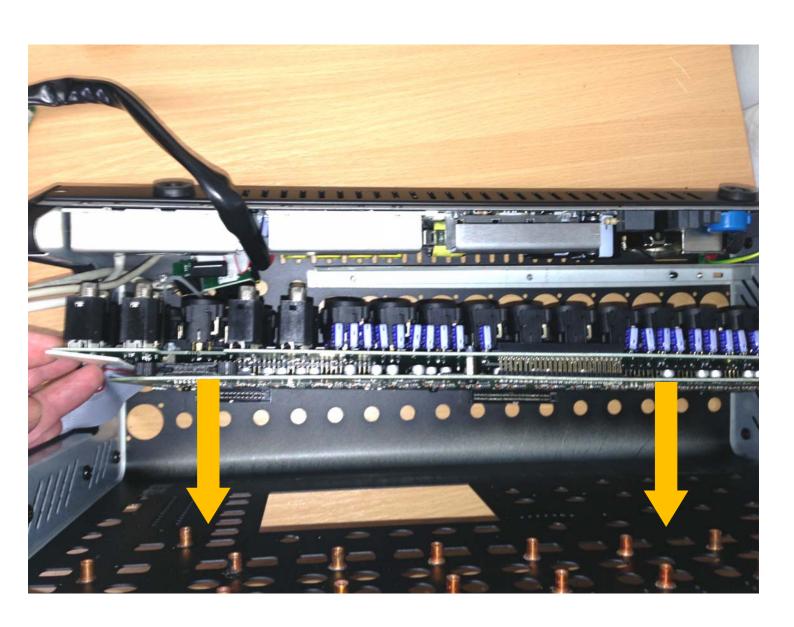
Remove XLR screws

# **Cut cable tie and disconnect PSU harness**

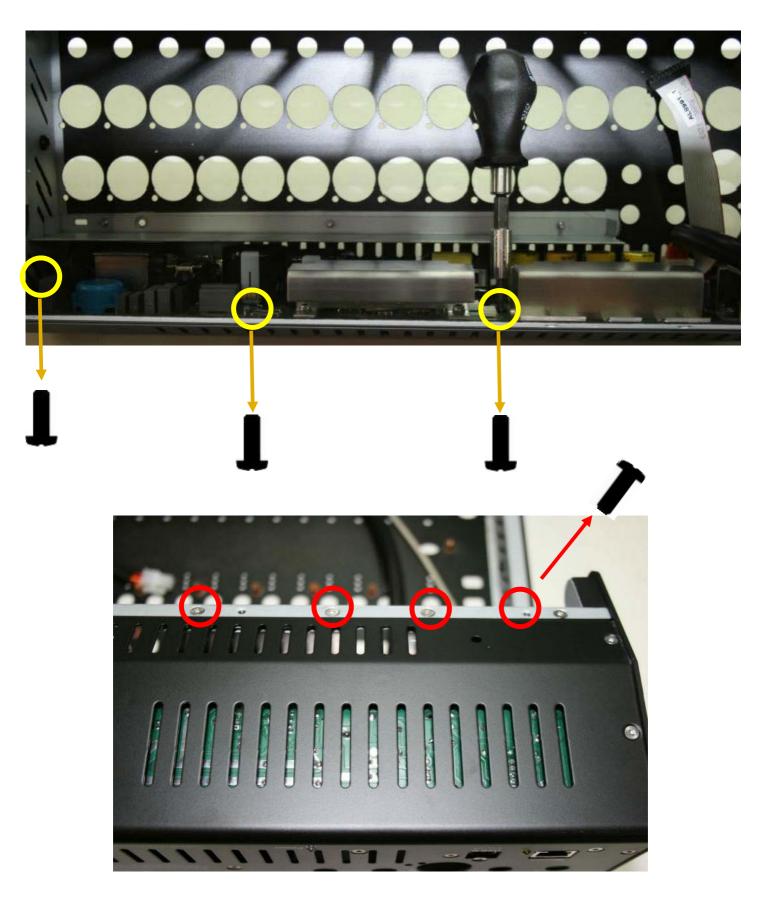




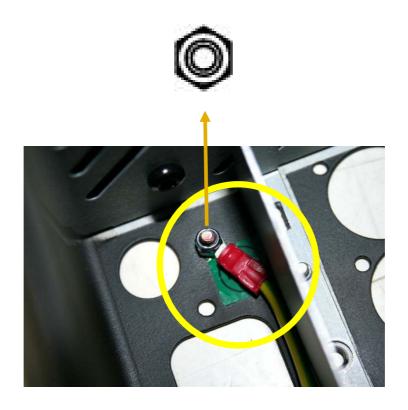
# **Remove Audio PCB and Connector PCB**

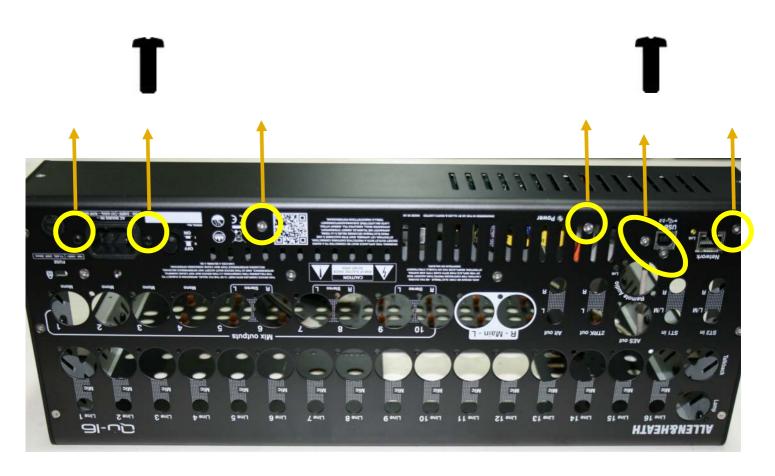


### **Remove PSU**



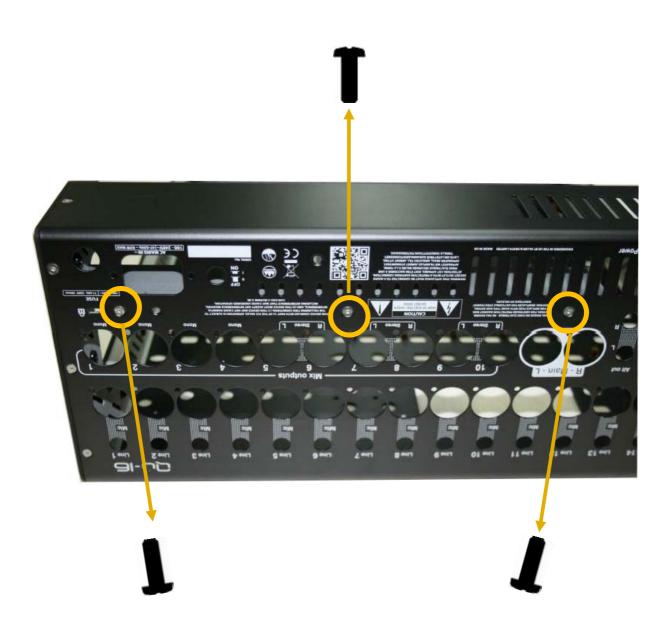
# **Remove PSU**





# **Remove shield**





# **Remove sides**

