

# ALLEN & HEATH



## **Xone:92** PROFESSIONAL DJ MIXER

## SERVICE MANUAL

Publication AP5296

## Introduction

This publication provides technical information on servicing the Allen & Heath **XONE:92**. Included are system block diagram, internal layout drawing and circuit schematics with board layouts. Whilst we believe this information to be reliable we do not assume responsibility for inaccuracies. We also reserve the right to make changes in the interest of further product development.

## Additional Resources

Allen & Heath web site	<a href="http://www.allen-heath.com">www.allen-heath.com</a>	Product information Technical downloads Distribution contacts Company contacts
Technical support	<a href="mailto:support@allen-heath.com">support@allen-heath.com</a>	See web for local contact
<b>Xone:92</b> user guide	AP5345	Operating instructions Performance specification User jumper link options

### **Xone:92** Service Information

Issue status: **xone92\_ap5296\_1.doc**

Print date: **20 April 2004**

Copyright © 2004 Allen & Heath. All rights reserved

## **ALLEN&HEATH**

Manufactured in the United Kingdom by Allen & Heath

Kernick Industrial Estate, Penryn, Cornwall, TR10 9LU, UK

<http://www.allen-heath.com>



## 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.
- 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.



## Servicing Notes – XONE:92

- User maintenance:** There are several user configurable jumper links inside. These are described in the user guide together with instructions on how to change the default settings.
- Technology:** The XONE:92 uses SMT (surface mount) PCB technology. In certain cases it may be better to replace a faulty assembly rather than try to fix it without the appropriate tools and training. The power supply is a built-in universal mains input, switched mode circuit which should be serviced by suitably qualified personnel only.
- Operation:** The XONE:92 is a performance club mixer. To ensure optimum performance and reliability it should be connected and operated as described in the user guide.
- Fault finding:** Refer to the system block diagram and circuit drawings to follow through the signal path during fault diagnosis. Replace suspected faulty components only with those specified by Allen & Heath. The use of lower grade alternatives may degrade the performance. Ensure the RCA phono insert jumper links are pressed fully in if fitted.

## Contents Log

XONE:92 – Historical Change Log.....	xone92_ap5296_1.pdf
Removing the Top Panel.....	xone92_top_panel_removal_1.pdf
Internal Layout drawing.....	xone92_layout_1.pdf
Surface and Main Parts.....	xone92_parts_1.pdf
Block Diagram.....	xone92_blockdiagram_1.pdf
Stereo Fader PCB Assembly .....	xone92_002-684_stereo_fader_3.pdf
Mic/Stereo Return PCB Assy .....	xone92_003-136_mic_stereoreturn_1.pdf
Stereo Input PCB Assembly.....	xone92_003-137_stereo_2.pdf
Filter 1 & 2 PCB Assembly .....	xone92_003-138_143_filter_2.pdf
Master PCB Assembly.....	xone92_003-139_master_1.pdf
Crossfader PCB Assembly.....	xone92_003-140_xfade_1.pdf
Slave PCB Assembly.....	xone92_003-141_slave_1.pdf
Connector PCB Assembly .....	xone92_003-142_connector_1.pdf
Linear Fader PCB Assembly .....	xone92_003-144_linear_fader_1.pdf
Rotary Fader PCB Assembly .....	xone92_003-145_rotary_fader_1.pdf
PSU PCB Assembly .....	xone92_003-233_psu_1.pdf

## **XONE:92 – Historical Change Log**

The following list identifies historical changes to the **XONE:92**. The effective dates, serial numbers and related change note documentation are included for reference to help identify the correct issue circuit boards and components. Whilst we believe this information to be reliable we do not assume responsibility for inaccuracies. We also reserve the right to make changes in the interest of further product development.

<b>Assembly</b>	<b>Description</b>	<b>From Serial Number</b>	<b>Date</b>	<b>Change Note Number</b>
<b>003-138/143</b>	Value change to Filter 1 & 2 PCBs	<b>060507</b>	25/02/04	993