

# ALLEN & HEATH



## MixWizard WZ<sup>3</sup> 20S

## SERVICE INFORMATION

Publication AP6319

## Introduction

This publication provides technical information on servicing the Allen & Heath **WZ<sup>3</sup>20S**. Included are internal layout drawing, block diagram and circuit schematics with board layouts and spare parts lists. 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>WZ<sup>3</sup>20S</b> User Guide	AP6318	Operating instructions Performance specification
<b>WZ<sup>3</sup>16:2 / 12:2 / 20S</b> SYS-LINK fitting instructions	AP5735	Fitting instructions
<b>WZ<sup>3</sup> SYS-LINK</b> Applications Note	AP5736	System Description Cabling Details

### WZ<sup>3</sup>20S Service Information

Issue status: **wz3-20s\_ap6319\_1.doc**

Print date: **05 December 2005**

Copyright © 2005 Allen & Heath. All rights reserved

# 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 – WZ<sup>3</sup>20S

- 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 WZ<sup>3</sup>20S uses conventional thru-hole and 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 consoles have built-in switched mode power supplies which should be serviced by suitably qualified personnel only.
- 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.

## Contents Log

Internal Layout drawing .....	wz3-20s_layout_1.pdf
Surface and Main Parts.....	wz3-20s_parts_1.pdf
System Block Diagram .....	wz3-20s_blockdiagram_1.pdf
Fader Switch Options .....	wz3-20s_fader_switch_1.pdf
Power Supply PCB.....	wz3-20s_003-171_psu_4.pdf
Connector PCB .....	wz3-20s_003-475_connector_2.pdf
Mono Input PCB.....	wz3-20s_003-476_mono_input_1.1.pdf
Stereo Input PCB .....	wz3-20s_003-477_stereo_input_3.pdf
Aux Master PCB .....	wz3-20s_003-478_aux_master_2.pdf
Distribution PCB.....	wz3-20s_003-513_distrib_1.pdf
Master LR PCB.....	wz3-20s_003-514_master_lr_4.1.pdf
SYS-LINK V2 Out PCB .....	wz3-162-122_003-262_sys-link_3.pdf

