

ALLEN & HEATH



GL3800

SERVICE INFORMATION

Publication AP6158

Introduction

This publication provides technical information on servicing the Allen & Heath **GL3800**. 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	www.allen-heath.com	Product information Technical downloads Distribution contacts Company contacts
Technical support	support@allen-heath.com	See web for local contact
GL3800 User Guide	AP6157	Operating instructions Performance specification
GL2800/GL3800 SYS-LINK Fitting Instructions	AP6159	Fitting instructions
GL2800/GL3800 SYS-LINK Applications Note	AP6284	System Description Cabling Details

GL3800 Service Information

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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 – GL3800

- 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 GL3800 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 console uses a rack mountable external linear power supply (RPS11). Due to the mains voltages present in the power supply, it 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 on the power supply 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	gl3800_layout_1.pdf
Surface and Main Parts	gl3800_parts_1.pdf
System Block Diagram	gl3800_blockdiagram_1.pdf
Mono Connector PCB	gl3800_003-228_mono_conn_3.pdf
Stereo Input PCB	gl3800_003-438_stereo_input_1.pdf
Group 1 & 3 PCB	gl3800_003-439_group_odd_4.1.pdf
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GL Series Meter PCB.....	glseries_meters_3.pdf

GL3800 - Historical Change Log

The following list identifies historical changes to the **GL3800**. 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.

Assembly	Description	From Serial Number	Date	Change Note Number
003-438	Stereo Input PCB noise improvement	-	01/06/05	1165
003-437	Mono Input PCB noise improvement	-	01/06/05	1166
003-437	Mono Input PCB up-issue to Issue 4	-	Sept 05	1206
003-437	Mono Input PCB up-issue to Issue 5	-	Oct 05	1214
Main	Littlelite ground wire addition.	126273	10/11/05	1223
003-437	Mono Input PCB up-issue to Issue 6	-	Nov 05	1225