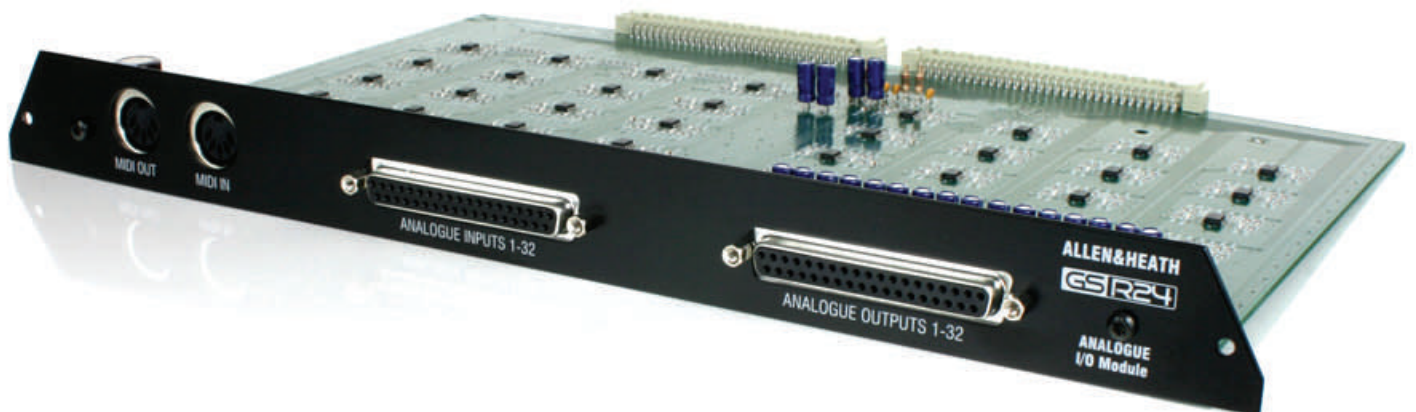


ALLEN & HEATH



Analogue Interface Module



USER GUIDE

Publication AP8348

Limited One Year Manufacturers 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 the place of purchase.

If this is not possible then please contact the authorised ALLEN & HEATH distributor or agent in your country 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 an authorised ALLEN & HEATH distributor or agent.

This warranty does not cover fader wear and tear.

The defective unit is to be returned carriage prepaid to the place of purchase, an authorised ALLEN & HEATH distributor or agent with proof of purchase.

Please discuss this with the distributor or the agent before shipping.

If the unit is to be repaired in a different country to that of its purchase the repair may take longer than normal, whilst the warranty is confirmed and parts are sourced.

Units returned should be packed to avoid transit damage.

In certain territories the terms may vary. Check with your ALLEN & HEATH distributor or agent for any additional warranty which may apply.

If further assistance is required please contact Allen & Heath Ltd.

IMPORTANT- PLEASE READ CAREFULLY:

By using this Allen & Heath product and the software within it, you agree to be bound by the terms of the relevant End User Licence Agreement (EULA), a copy of which can be found on the Allen & Heath website in the product's pages. You agree to be bound by the terms of the EULA by installing, copying, or otherwise using the software.

This product complies with the European Electromagnetic Compatibility directive 2004/108/EC and the European Low Voltage Directive 2006/95/EC.

This product has been tested to EN55103 Parts 1 & 2 1996 for use in Environments E1, E2, E3, and E4 to demonstrate compliance with the protection requirements in the European EMC directive 2004/108/EC. During some tests the specified performance figures of the product were affected. This is considered permissible and the product has been passed as acceptable for its intended use. Allen & Heath has a strict policy of ensuring all products are tested to the latest safety and EMC standards. Customers requiring more information about EMC and safety issues can contact Allen & Heath.

NOTE: Any changes or modifications to the console not approved by Allen & Heath could void the compliance of the console and therefore the users authority to operate it.

GS-R24 Analogue Interface Module User Guide AP8348 Issue 1

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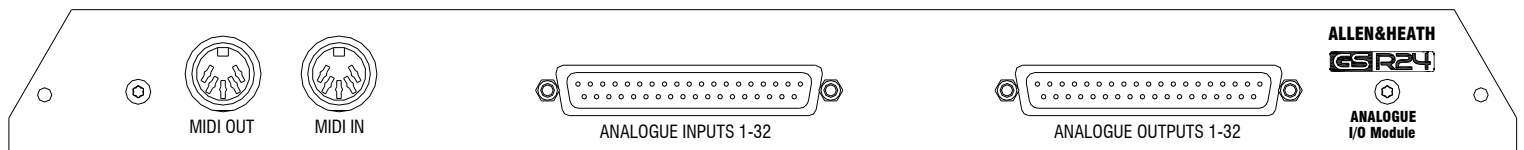
Allen & Heath Limited

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

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

PACKED ITEMS

Check that you have received the following:



GS-R24 ANALOGUE INTERFACE MODULE

Also Packed in the box

- Safety Instructions—English
- Safety Instructions—French
- Addendum note ROHS
- Sticker
- This User Guide

CONTENTS

Thank you for purchasing your Allen & Heath GS-R24 Analogue interface module. To ensure that you get the maximum benefit from the unit please spare a few minutes familiarizing yourself with the features and setup procedures outlined in this user guide. For further information please refer to the additional information available on our web site, or contact our technical support team.

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

This User Guide is to be read in conjunction with the GS-R24 console user guide AP7784 in order to understand the routing of the interface signals to and from the analogue system in the console. Also, some setup guides are included on the Website for Digital Audio Workstations (DAWs). Please check our website or with Tech Support for further information and setup guides.

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GS-R24 ANALOGUE MODULE SPECIFICATIONS

General Specifications	
Number of audio channels Output	32
Number of audio channels Input	32
Nominal Signal Level	0dBu
Analogue signal connector type	37 pin D sub
MIDI Input	5pin DIN
MIDI Output	5pin DIN

Headroom	
Digital domain headroom (nominal to 0dBFS)	21dB

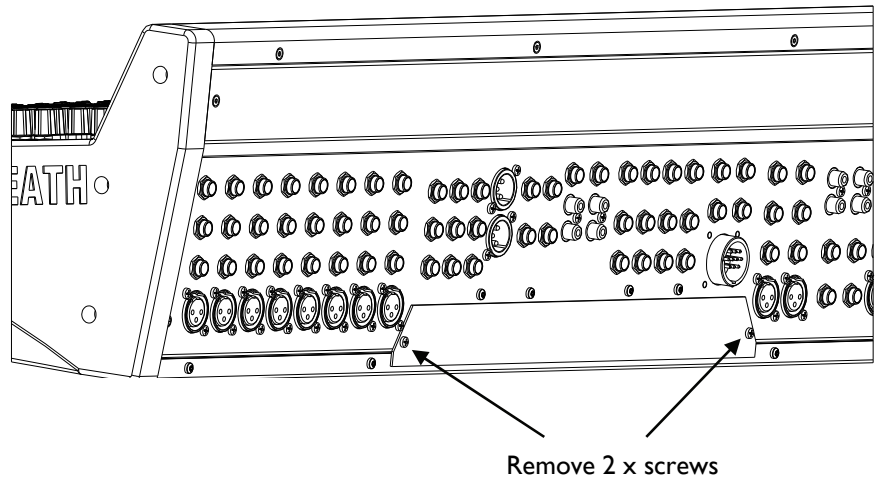
Channel Mapping to Interface	
Console Channels	Interface Channels
Mono Channels 1-24	1-24 *
Stereo Channel 1	25-26 (L-R)
Stereo Channel 2	27-28 (L-R)
Valve Channel 1	29
Valve Channel 2	30
Main Stereo (2 Track 1) out and DIG Master L-R in.	31-32 (L-R)

* The interface sends 17-24 can be switched from Mono channels 17-24 to Aux 1-4 and Groups 1-4 in order to record or process summed or grouped signals. This is done by pressing the under-panel switch on the GS-R24 labelled 17-24=Aux+Grp.

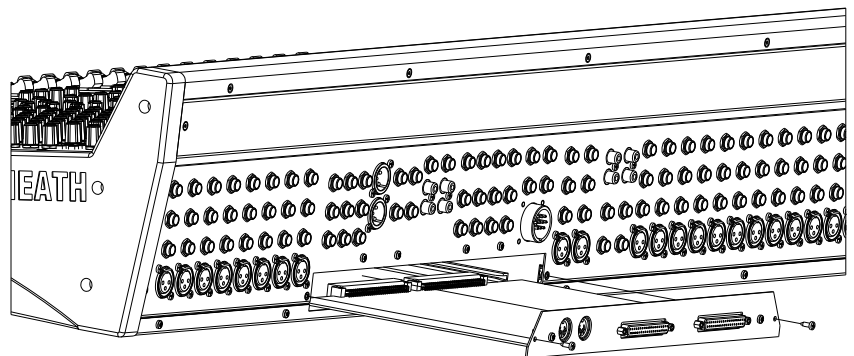
MODULE FITTING INSTRUCTIONS

Beware of ESD! Observe anti-static handling precautions—avoid touching the electronic devices on the circuit board, ensure any static build up is discharged to earth before handling the module. This can be achieved by ensuring the console is connected to the psu and the psu is plugged in to a mains outlet but switched OFF, then touching a metal part of the console panel such as a screw head.

Remove the blanking panel at the rear of the console by removing the two screws.

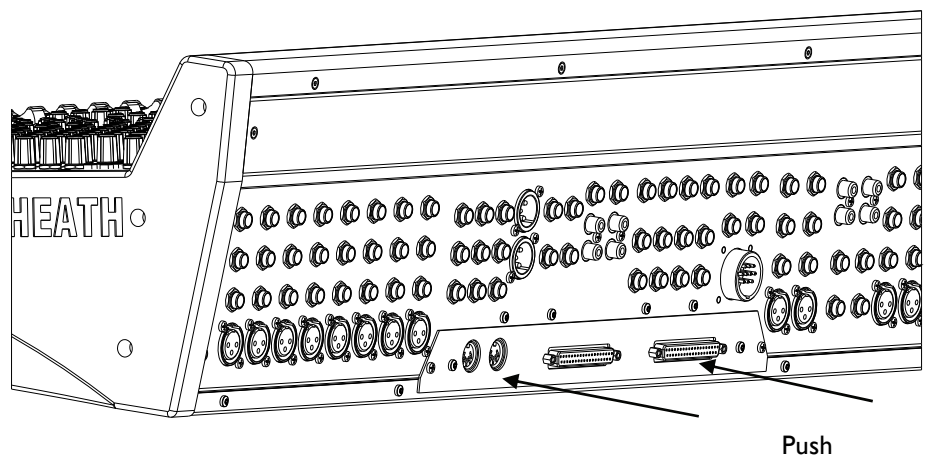


Locate the module circuit board in the plastic guide slots within the housing.



Slide the module into the housing and push firmly to insert the module connectors into the console connector sockets.

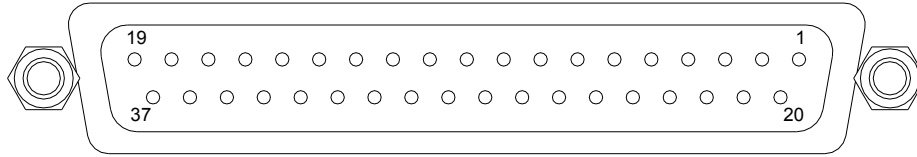
Re-fit the fixing screws at either end of the module panel.



To remove the module for any reason, the easiest way is to unscrew and remove the fixing screws at each end of the panel then use the D Sub cable connectors to gently pull out the module. A small side to side rocking action will help to displace the circuit board connectors from the internal mother-board.

37 PIN D TYPE CONNECTOR PINNING

Analogue Input & Output 37 way D connector pin ident.



View of rear connector. Observe pin numbering of connector to be wired.

Pin assignment (Input or Output connectors)

PIN No.	Designation
1	CHASSIS
2	CHANNEL 2
3	CHANNEL 4
4	CHANNEL 6
5	CHANNEL 8
6	CHANNEL 10
7	CHANNEL 12
8	CHANNEL 14
9	CHANNEL 16
10	CHANNEL 18
11	CHANNEL 20
12	CHANNEL 22
13	CHANNEL 24
14	CHANNEL 26
15	CHANNEL 28
16	CHANNEL 30
17	CHANNEL 32
18	SIGNAL 0V
19	CHASSIS
20	CHANNEL 1
21	CHANNEL 3
22	CHANNEL 5
23	CHANNEL 7
24	CHANNEL 9
25	CHANNEL 11
26	CHANNEL 13
27	CHANNEL 15
28	CHANNEL 17
29	CHANNEL 19
30	CHANNEL 21
31	CHANNEL 23
32	CHANNEL 25
33	CHANNEL 27
34	CHANNEL 29
35	CHANNEL 31
36	SIGNAL 0V
37	SIGNAL 0V

Connection guidelines & notes

The type of connection cable you will need depends on the type of equipment you are using. For this reason we do not supply cables with the module—they would almost definitely need customising.

Connection cables can be made up at service centres or by a competent practical minded person such as a studio engineer!

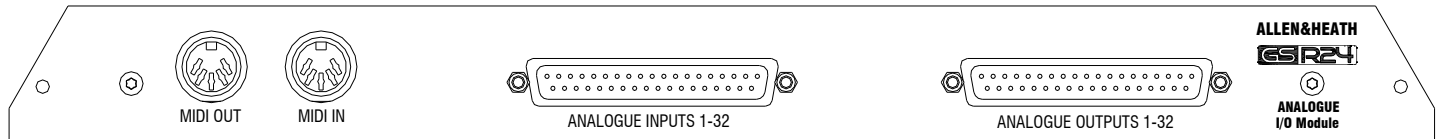
We can offer ready made 37way D sub cables—please check with your Allen & Heath sales representative or on our website.

To achieve the channel count, the analogue signals are unbalanced. To ensure best performance when connected to external equipment here are some guidelines to follow when wiring the cables.

- 1) Be aware that both input and output connectors on the module are female. This is deliberate to minimise the risk of damaged pins on the module. The cable connectors will be male for both input & output ports on the module. Ensure these are plugged in the correct position—it is sensible to colour code them!
- 2) If the source equipment has balanced outputs, connect the -ve phase to SIGNAL 0V on the module.
- 3) If the source equipment is unbalanced, connect the 0V of the source equipment to SIGNAL 0V.
- 4) Connect CHASSIS from the module to the chassis connection of the external equipment.
- 5) If the external equipment input circuitry is balanced, connect the -ve (or cold) pin of each input to SIGNAL 0V on the module.
- 6) If the external equipment input circuitry is unbalanced, connect the 0V of the external equipment to SIGNAL 0V on the module. Ideally this will be separate to Chassis.

Please refer to the allen-heath.com website for more information and connection details.

MODULE PANEL FEATURES



MIDI Input & Output

Standard 5 pin DIN MIDI connectors. The MIDI OUT carries the MIDI data generated by the MIDI controllers and switches on the GS-R24.

The MIDI IN is the MIDI data required to illuminate LEDs and provide moving fader information to the console.

The MIDI IN connector can also be used for programming the operating firmware in the console.

ANALOGUE INPUTS 1-32

Standard 37 pin D Subminiature type connector. These are the analogue signals (unbalanced) which provide the GS-R24 with playback from the multi-track recording medium. This could be in the form of external Digital to Analogue converters (DACs) or an analogue source such as a tape machine output.

ANALOGUE OUTPUTS 1-32

Standard 37 pin D Subminiature type connector. These are the analogue signals (unbalanced) which are sent from the GS-R24 to the multi-track recording medium. This could be in the form of external Analogue to Digital converters (ADCs) or an analogue system such as a tape machine.

PRODUCT SUPPORT

Investigate ALLEN & HEATH's other ranges at www.allen-heath.com



Large Live Sound mixers — iLive digital, and GL Series

Small Format Live Sound mixers — ZED, MixWizards and PA Series

DJ products — Xone Series

Sound Management Series — iDR Series

Registering your product

Thank you for buying the Allen & Heath GS-R24 module. We hope that you are happy with it and that you enjoy many years of faithful service with it, and record and mix some great music.

Please go to www.allen-heath.com/register.asp and register your product's serial number and your details. By registering with us and becoming an official Registered User, you will ensure that any warranty claim you might make is actioned quickly and with the minimum delay.

Alternatively, you may either copy or cut off this section of the page, fill in the details, and return it by mail to:
Allen & Heath Ltd, Kernick Industrial Estate, Penryn, Cornwall TR10 9LU, UK

Product Support: You can access Allen & Heath Tech Support by logging on to www.allen-heath.com/support



ALLEN&HEATH PRODUCT REGISTRATION

Thank you for buying an Allen & Heath product. We hope that you're happy with it and that you enjoy many years of faithful service with it.

SERIAL
NUMBER

Please return this section of the card by mail and retain the other part for your records. You can also register online at www.allen-heath.com. Thanks for your help.

Your Name: _____

Company Name: _____

Address 1: _____

Address 2: _____

Town/City: _____ County/State: _____

Country: _____ Postcode/Zip: _____

Telephone: _____

Email: _____

Why did you choose this console? _____

Which other products did you consider before choosing A&H? _____

Is there any thing you would like to improve on this mixer? _____

What audio magazines do you read? _____

If you were going to design a mixer for your work, what are the 6 most important features it should have (in order of importance)

1	2
3	4
5	6

We may use the information you provide to inform you of future product developments. We will not give or sell this data to third parties. Please indicate with an 'x' if you do not wish to receive any further communications from us.

