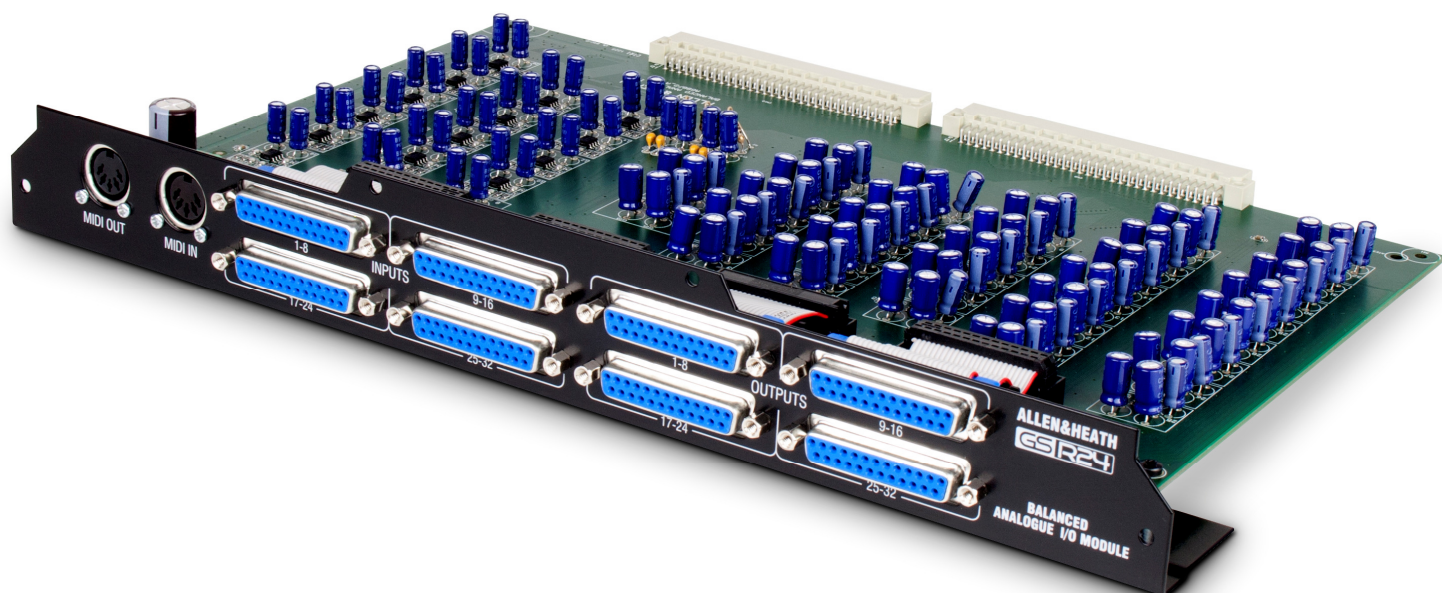


# ALLEN & HEATH



## Balanced Analogue Interface Module



## USER GUIDE

Publication AP9109



## **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 Balanced Analogue Interface Module User Guide AP9109 Issue 1

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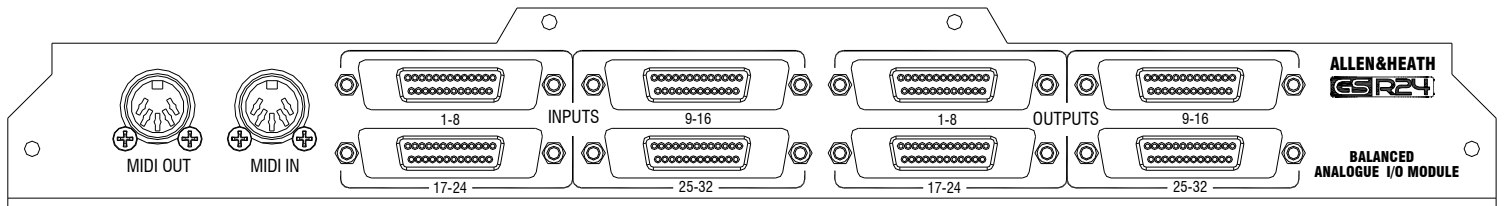
Allen & Heath Limited

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

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

# PACKED ITEMS

Check that you have received the following:



## GS-R24 BALANCED 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	+4dBu Balanced
Analogue signal connector type	25 pin D-Sub Female (TASCAM standard pinout)
MIDI Input	5pin DIN
MIDI Output	5pin DIN

Headroom	
Analogue Headroom	21dB

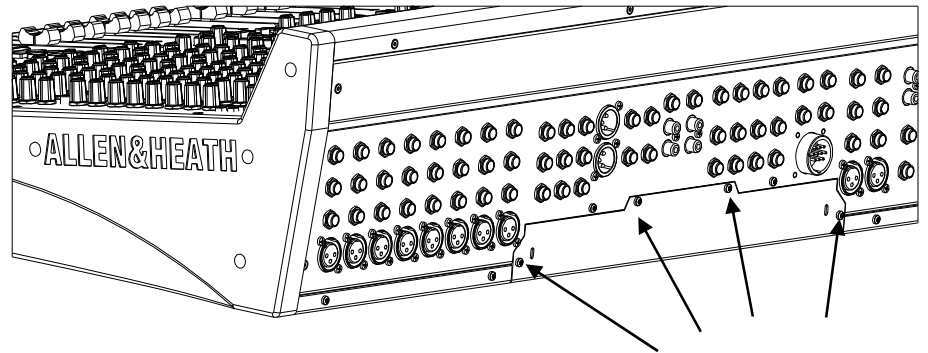
Channel Mapping to Interface	
Console Channels	Interface Channels
Mono Channels 1-24	1-24 *
Stereo Channel 1	25-26 (L-R)
Stereo Channel 2	27-28 (L-R)
Valve Channel 1	29
Valve Channel 2	30
Main Stereo (2 Track 1) out and DIG Master L-R in.	31-32 (L-R)

\* 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

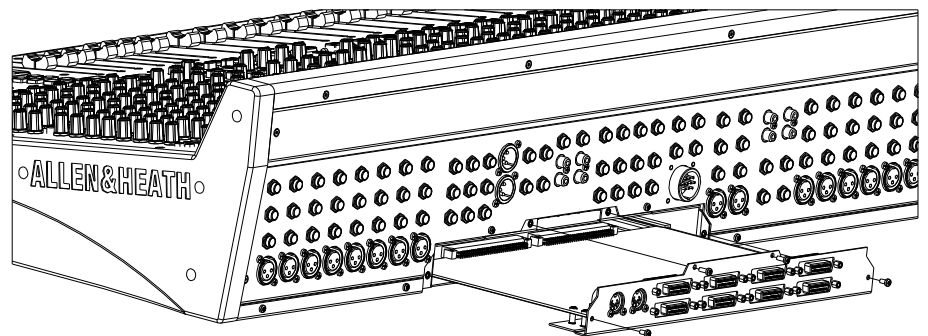
**Beware of ESD! Observe anti-static handling precautions—avoid touching the electronic devices on the circuit board, ensure any static build up is discharged to earth before handling the module. This can be achieved by ensuring the console is connected to the psu and the psu is plugged in to a mains 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 4 screws.



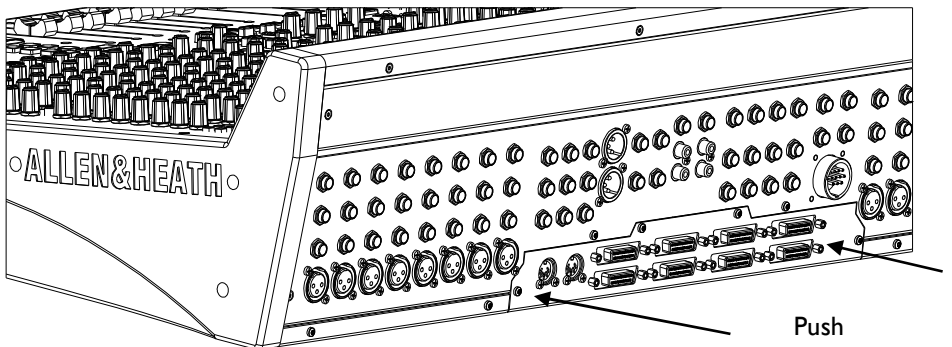
Remove 4 x screws

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 4 fixing screws to the module panel.

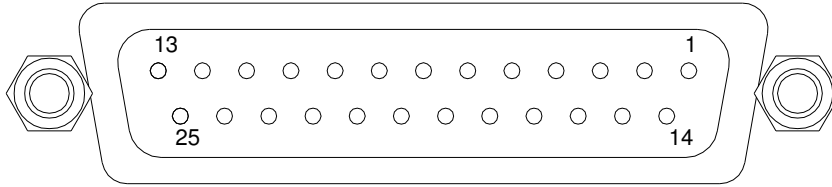


Push

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.

# 25 PIN D TYPE CONNECTOR PINNING

## Analogue Input & Output 25 way D connector pin ident.



### Pin assignment (Input or Output connectors)

IN No.	Designation
1	CH 8 HOT
2	CH 8 GROUND
3	CH 7 COLD
4	CH 6 HOT
5	CH6 GROUND
6	CH 5 COLD
7	CH 4 HOT
8	CH 4 GROUND
9	CH 3 COLD
10	CH 2 HOT
11	CH 2 GROUND
12	CH 1 COLD
13	NOT CONNECTED
14	CH 8 COLD
15	CH 7 HOT
16	CH 7 GROUND
17	CH 6 COLD
18	CH 5 HOT
19	CH 5 GROUND
20	CH 4 COLD
21	CH 3 HOT
22	CH 3 GROUND
23	CH 2 COLD
24	CH 1 HOT
25	CH 1 GROUND

### Connection guidelines & notes

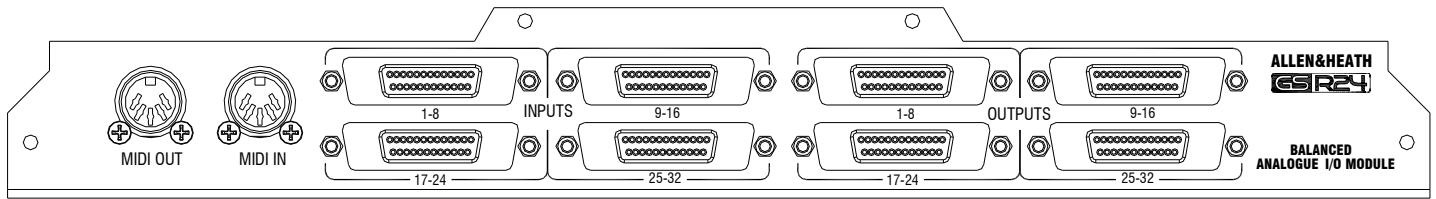
The pin assignment of the 25 pin D Sub Miniature type connectors conforms to the TASCAM DB-25 pin-out standard developed over 15 years ago.

Multicore cable assemblies are readily available from audio equipment suppliers or general electronic component suppliers such as Farnell and CPC in the UK.

When choosing ready made cable assemblies, ensure that the cable mounted D Sub connector is a 25-Pin Male type.



# 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 25 pin D Subminiature type connector carrying 8 channels on each connector. These are the analogue signals (balanced) 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 25 pin D Subminiature type connector carrying 8 channels on each. These are the analogue signals (balanced) 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](http://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](http://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](http://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](http://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.



