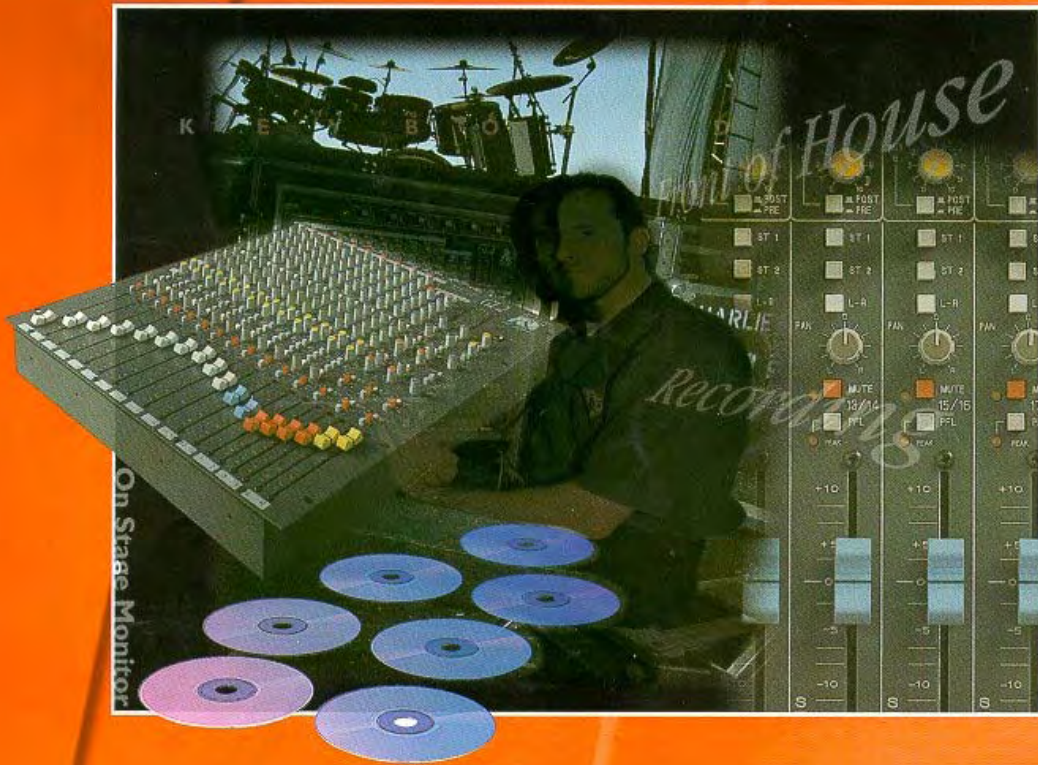


GL2 GL2S

WHEN YOU'RE
MIXING WITH
PROFESSIONALS



ALLEN
&
HEATH

2 and 4 Buss
Multi-application
Rack Mount Consoles

GL2

MASTER SECTION

The main difference between the GL2 and the GL2S lies in the Master Section, the GL2 is a complete multifunction mixer. The GL2S, a versatile multi-application mixer.

Each has its own very distinct advantages.

Groups

The Heart of the GL2 Multi Function Feature

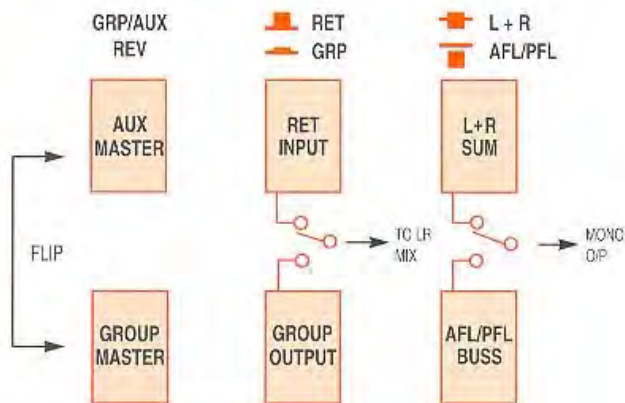
On the GL2 the group output section is where you discover just how adaptable the console really is. Naturally, in FCH mode it works in the same way as a conventional group facility. Groups are used to send individual mixes to different speaker arrays (such as a Bass drum/Bass guitar mix to the sub bass drivers) or sub mixing to the LR outputs.

All groups have the a mute facility, AFL for the engineers monitor, an insert point, -4dB Balanced XLR outputs, 100mm faders, and individual group output meters.

The most advanced difference between the GL2 and any other potential console is the GRP/AUX REV switch. This accessible but tamper proof switch is the heart of the Multi-Function facilities. By individually selecting which faders are to be used as On-Stage Monitor mixes the complete source to the group buss changes. The selected groups can now be fed from the corresponding Aux buss giving a maximum of six individual mixes for Monitors.

The change in routing of the source gives you every facility needed (and expected) on a professional Monitor console. Note there is now a 100mm fader easily accessible to the hand, an insert point for adding Graphic EQ and anti feedback devices, AFL (post insert naturally) so you can hear what the performer on stage is listening to on the engineer's wedge mix, output meters so you can visually detect any potential overload quickly, Mutes for quickly cutting off a rough monitor or shutting down unused monitors, and of course the Hi-level balanced XLR output for driving the long lines to the amps by the stage.

The diagram shows the various configurations that are available at the touch of a button.



MULTI FUNCTION MODE SWITCHING

FX Returns

More than just another Output

The GL2 RET/GRP switch acts as a Tape Send/Tape Return monitor switch. The switch determines whether the input will be taken from the Line In Return jack or the corresponding Group fader.

In recording applications these inputs can be used to return the off tape signal for monitoring purposes. The input to the recorder comes from either the direct outputs available on each of the input strips or the outputs from the four groups.

Mono Output

Tailor-made to Fit

The GL2 Mono Output is typically used for an L/R sum mix to a centre fill speaker system. This can be used independently from the L/R outputs for Mono only rigs. In an On-Stage Monitor configuration the Mono buss assumes the role of the engineer's wedge monitor mix. This mix is AFL interrupted by any PFL selection.



STEREO
RET

ST1, ST2, LR

MASTER SECTION

GL2S



FX Masters

More than just another Output

The FX Master facilities are identical on both the GL2 and the GL2S. The AFL switch is used on the GL2 to monitor the stage mixes in a full Front-of-House application. On the GL2S these are useful for determining what inputs are being sent to the FX units. On both the GL2 and the GL2S each Aux send/FX master has an optional Balanced output.

Stereo Returns

Specific Inputs for Specific Tools on the GL2S

The main stereo input channels are likely to be taken up by stereo instruments and 2 track sources. The EQ parameters have been selected to optimise the tone of CDs and special effects. Aux sends 5 and 6 are made available for special headphone mixes or other output feeds.

ST1, ST2, and LR Mix

Unrestrained Flexibility on the GL2S

- Installation: Zone mix to alternate rooms
- Sub mixer: Headphone mix
- Broadcast: Uplink or clean feed.
- FCH: Group feeds to individual speaker stacks, LR sub-mixes

The main LR mix has individual insert points on the Left and Right Balanced XLR outputs. This is ideal for inserting Compressor/Limiters, Graphics, Exciters etc. Each LR master has individual Mutes. Note that there are separate 2 track sends and returns on the GL2S for stereo recording.

	ST1	ST2	LR Mix
Stereo PA	2 Track Recording	Stereo Foldback	Main PA Mix
Club Musician	Stereo Foldback	Stereo Foldback	Main PA Mix
Install/Zone	Stereo Zone 1	Stereo Zone 2	Stereo Zone 3
Broadcast & DJ	Clean Feed	Comms	Transmitter/Club
Stereo Sub Mix	Feed to F-of-H	2 Track Recording	Monitors Mix

NB. These suggestions are only the tip of the iceberg!

Phones and Monitor

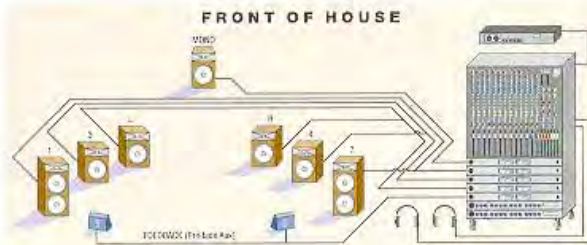
Cued Up is Clued Up

On the GL2 there are two headphone outputs, one on the back and one on the front. The source can be selected between the main mix pre or post LR fader, the 2 track monitor input, and the PFL/AFL buss. Note that the mix to the 2 track send (for stereo recording) can be sourced from either pre or post the LR faders using internal links.

On the GL2S the source selection matches the versatility of the mixer. All the main outputs have full monitor access. The Split PFL is ideal in club environments where the PFL signal can be used to cue the next sound in one ear whilst still monitoring the main LR outputs in the other ear. This overcomes any delay at the engineers position caused by the distance from the main PA speakers. The signal can be Mono if preferred. The Mono switch is used to check mono compatibility in broadcast applications.

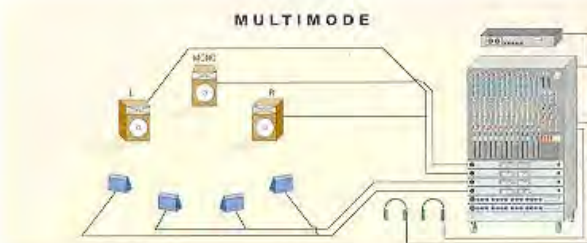
GL2

GL2 APPLICATIONS



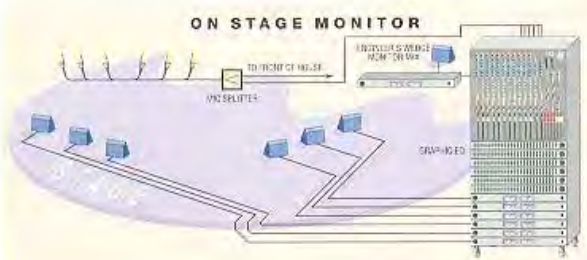
Front-of-House

A maximum of six individual speaker mixes are possible. In addition a Mono LR sum can be used to feed a centre fill system or sub bass unit. Normally aux 5 & 6 can be used to mix two separate On-Stage musicians monitors. In exceptional circumstances all six aux sends can be used. Note the option to balance the Aux send masters. There is a dedicated 2 track output send on phono for recording live performances.



Multi Mode

The flexibility of the GL2 is unique. Each group output can be selected as either a group or a monitor feed. In On-Stage Monitor mode the signal path includes: 100mm fader, Mute, Insert point, AFL Monitor, Output meter, and Balanced XLR Output.



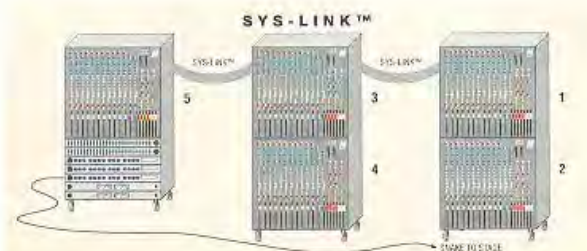
On-Stage Monitor

The GL2 is often used as a stand alone Monitor console. In its maximum configuration the GL2 can provide 6 individual Mono mixes and three stereo monitor mixes with separate output levels. The routing matrix is available on the outputs of the Aux masters. This is typically used to derive stereo mixes for in-ear monitors. Note that it is usual to have graphic EQ available on each Mono mix to assist and control the overall balance on the stage.



Recording

There are three recording options. 4 track, 8 track, and Stereo. Every GL2 has direct outputs on the rear panel. The direct outs are post fade. If pre fade signals are needed then the Insert send point takes the signal straight from the pre amp stage. Monitoring is achieved by using the four Line Return inputs in the master section. For 8 track work the additional two Stereo inputs can be used.



SYS-LINK™

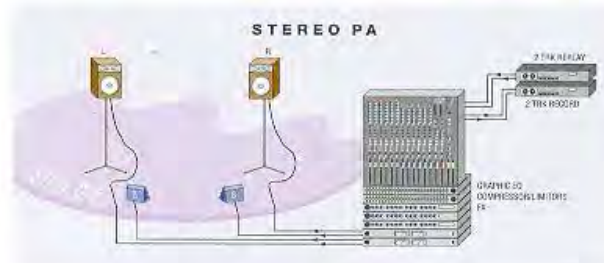
The Allen & Heath proprietary buss connection system SYS-LINK™ is probably the most advanced feature on the console. SYS-LINK™ not only provides expandability between GL2 consoles but also between all the other Allen & Heath consoles in the live and installation markets. Up to five GL2 consoles can be linked in this way giving a maximum of 90 inputs. In addition these five consoles can be configured as combined FOH and Monitors. SYS-LINK™ is optional.

GL2S APPLICATIONS

GL2S

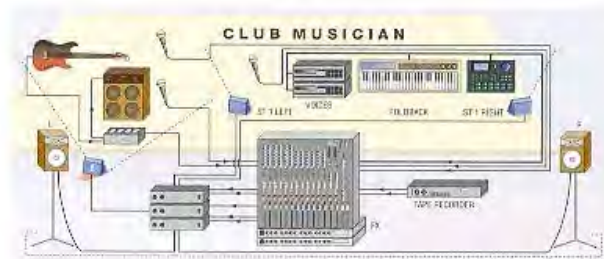
Stereo PA

The GL2S is ideal for applications where just a few microphones are needed but more stereo sources and effects would be useful. This includes small theatre productions and small bands that have electronic instruments to support vocal harmonies. In both cases the performance can be recorded using the dedicated 2 track sends. All the Mic inputs have Insert points that can be used to include Compressor/Limiters and Graphics in the signal path.



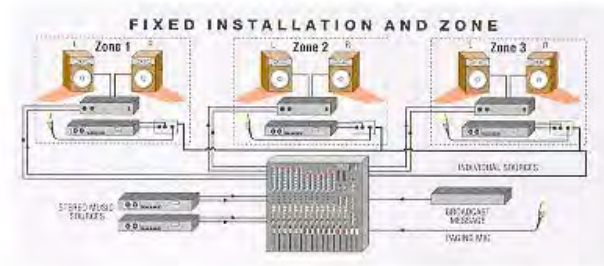
Club Musician

A selection of Stereo outputs on the GL2S have been included so musicians running their own PA sound can achieve a very high degree of control with no fuss. The illustration shows how the guitarist derives a monitor mix from aux 6 whilst the keyboard player derives a stereo monitor mix from the ST2 output. Note also that the mix to LR is all routed through the ST1 buss. This is so the intermission playback music can be fed directly to the LR with the band mix being switched in and out using the main ST1 LR switch.



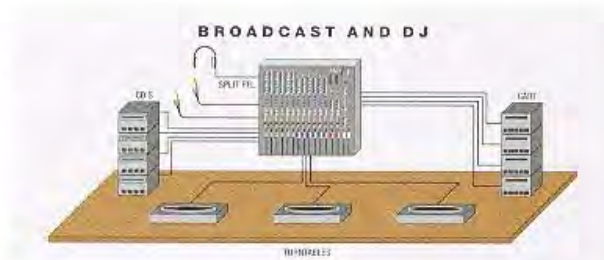
Installation and Zoning

The GL2S is a cost effective alternative for multi zone applications. The three stereo mix busses can be used to control the level to three separate areas of a building. The speaker systems can each be protected from overload by using compressors and limiters either at the source or in the case of the main LR mix, directly at the output. The number of inputs allows a substantial conference to take place without affecting the sound to the other zones. Conversely, in an emergency an announcement can be made across all zones by routing the source accordingly.



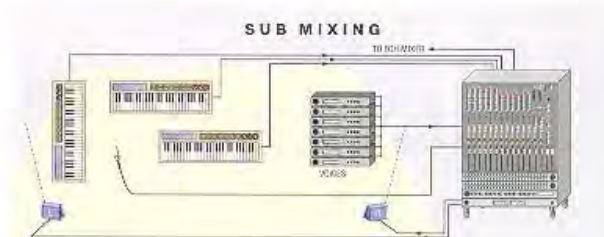
Broadcast and DJ

The self-op broadcast environment for local and community radio requires many stereo inputs and a few Mic inputs. Clean feeds to outside units or uplinks can be provided through ST1 and ST2 busses. For DJ work the RIAA EQ option on the secondary B input phono means that many different stereo inputs can be connected whilst only accessing the one needed at the time. The Split PFL facility is ideal for these types of applications. Optional remote start faders can be fitted.



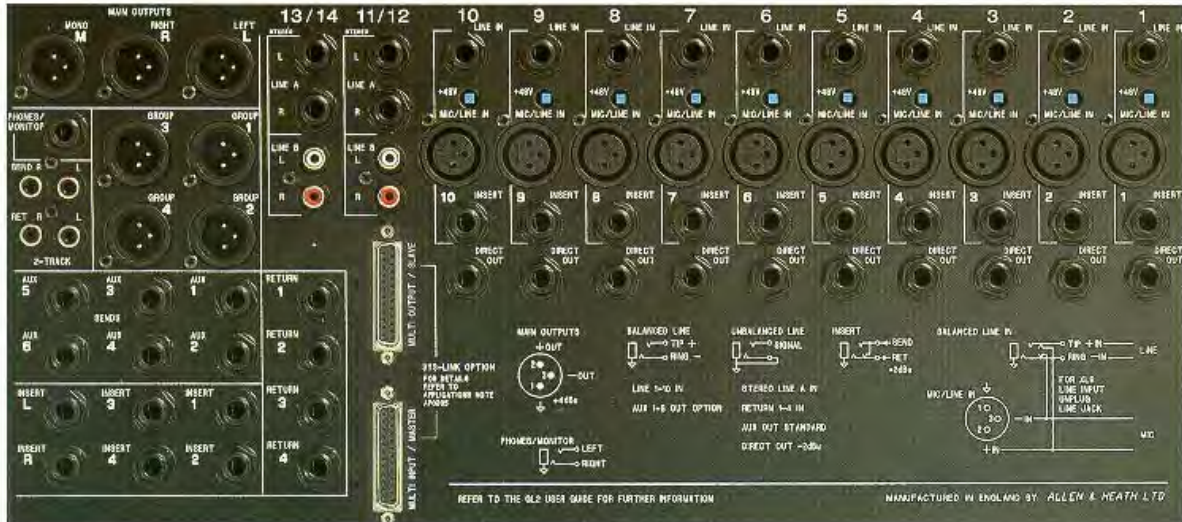
Stereo Sub mixing

Sub mixers are becoming a very significant requirement for many applications. In particular Keyboard sub-mixes, Drum sub-mixes, Outboard FX Returns, Audio Visual post production, and Backing Vocal mixing. With the ability to expand the system using SYS-LINK™ the GL2S becomes an important component in the Allen & Heath equipped PA company.



GL2

SPECIFICATIONS

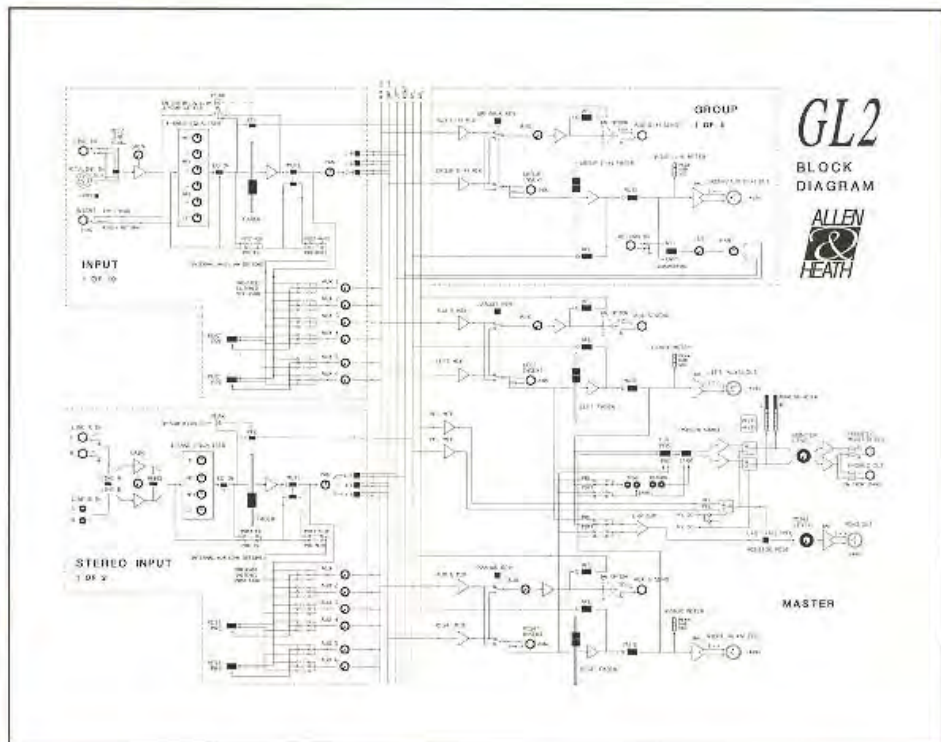


KEY POINTS

- Internal Operating Level -2 dBu
- Internal Headroom +23 dB
- Maximum Outputs
 - bal +27 dBu into 600 ohms
 - unbal +21 dBu into 2 ohms
- Meters
 - Peak responding bargraph
 - OVU = +4 dBu
- Peak LEDs
 - On 5 dBu before clipping
- Signal Present LEDs
 - Dynamic response, On @ -20 dBu
- Frequency Response
 - 20 Hz to 22 kHz +0/-1 dB
- Distortion
 - THD 0.01% Line into mix out @ 1 kHz
- Crosstalk
 - Output mute better than 100 dB @ 1 kHz
 - Channel mute better than 80 dB @ 1 kHz
- Noise
 - 22 Hz to 22 kHz MIC EIN -127 dB into 150 ohms
 - Line pre-amp @ 0 dB -88 dBu MIX noise -85 dB

DIMENSIONS / POWER

- Width : 483 Packed Width : 640
 - Depth : 82 Packed Depth : 640
 - Height : 488 Packed Height : 220
 - Weight : 10.5 Packed Weight : 14
- (Dimension / mm - Weight / kg)



OPTIONS

Deskstand

Both the GL2 and the GL2S mixers have an optional Deskstand accessory. The unit is easily bolted onto the base. The Deskstand also has an integral carry handle.

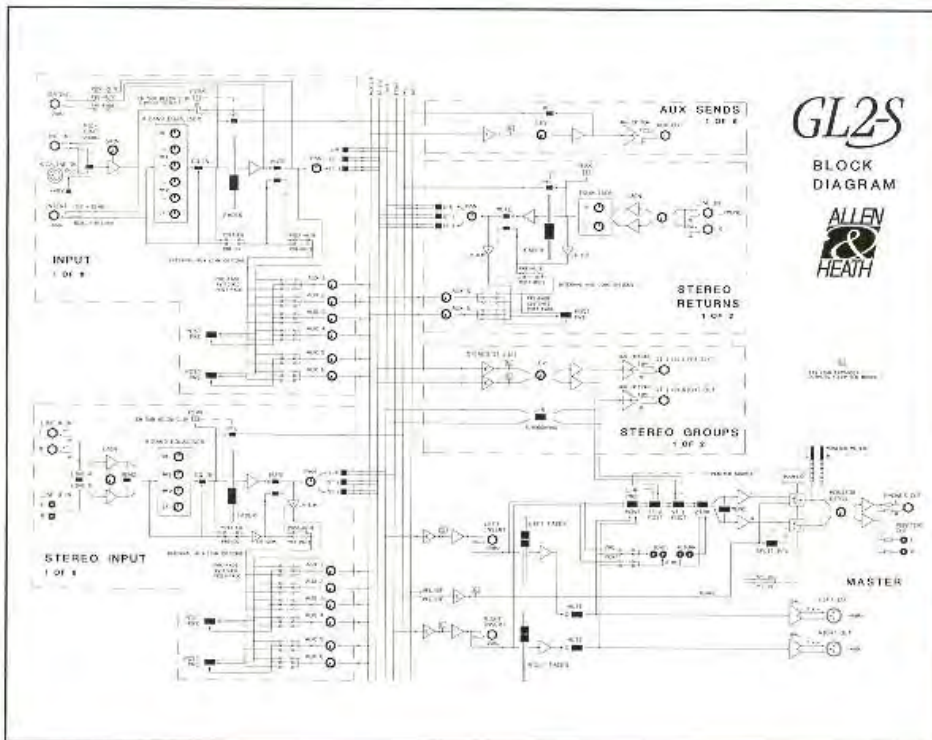
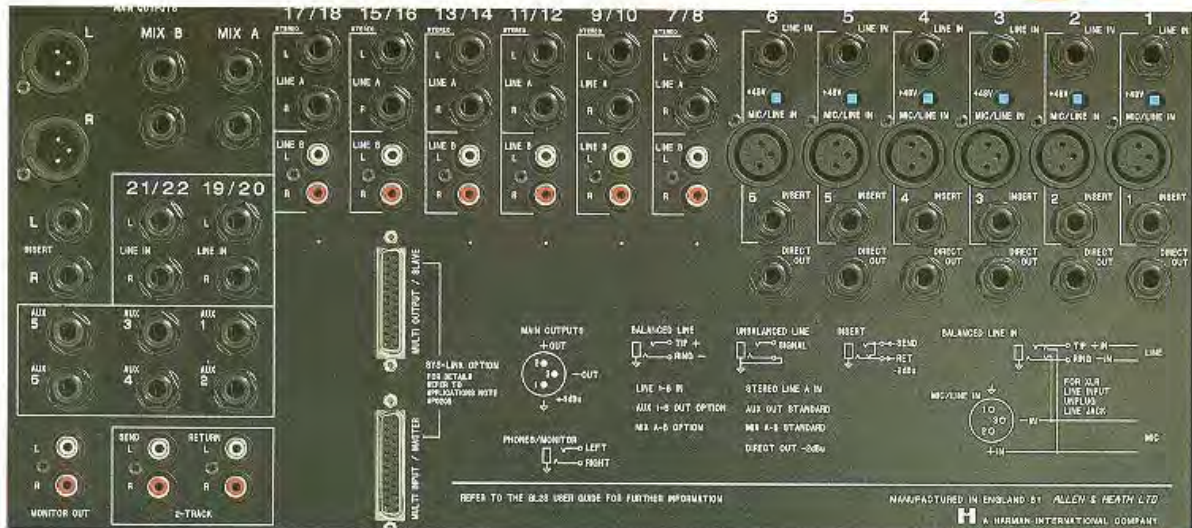
Balanced Aux Outputs

All Aux Master Sends have an option for balanced operation. The ST1 & ST2 outputs on the GL2S also have a balanced output option.



SPECIFICATIONS

GL2S



KEY POINTS

Internal Operating Level -2 dBu

Internal Headroom +23 dB

Maximum Outputs
bal +27 dBu into 600 ohms max load
unbal +21 dBu into 2 kohms max load

Meters
Peak responding bargraph
CWU = +4 dBu at XLR outputs

Peak LEDs
Turn on 5 dBu before clipping

Signal Present LEDs
Dynamic response, On @ -20 dBu

Frequency Response
20 Hz to 30 kHz +0/-1 dB

Distortion
THD 0.01% Line into mix out @ 1 kHz

Crosstalk
Output mute better than 98 dB @ 1 kHz
Channel mute better than 88 dB @ 1 kHz
Fader shunt better than 88 dB at 1 kHz

Noise
22 Hz to 22 kHz MIC EIN -127 dB into
160 ohms
Line pre-amp @ 0 dB -88 dBu
MIX noise -87 dB rel 0VU

DIMENSIONS / POWER

Width : 483 Packed Width : 840
Depth : 90 Packed Depth : 640
Height : 488 Packed Height : 220
Weight : 10.5 Packed Weight : 14
(Dimension / mm - Weight / kg)

OPTIONS

SYS-LINK™

The SYS-LINK™ option allows any Allen & Heath Live or Install series product to be expanded. The GL2 series can be used to extend GL4, and GR1 products.

RIAA EQ

All Phono inputs on the GL2S can have an optional RIAA EQ Module fitted.



GL2

10 Mono Balanced XLR Mic/Line inputs
2 Stereo Line inputs
4 Mono FX Returns
4 Group Outputs
6 Auxiliary Sends on individual controls
2 Pre post switches per Channel
Aux send P/P fader, P/P EQ, P/P Mute, and Switch bypass
LR and Mono Outputs
2 Track Recording Input and Output
4 Band EQ with 2 Mid sweeps
100mm faders throughout
Wide ranging Mic Pre amp gain structure
Phantom Power switchable on every Mic channel
Insert Points on all Mic inputs, Group Outputs, and LR
Direct Outputs on all Mic Inputs
Mutes on all Inputs, Group Outputs and LR
Comprehensive PFL and AFL Monitoring
Balance Option on Aux Master Outputs
A and B input options on Stereo Line inputs
Removable Integrated PSU
Front and Rear Headphones sockets
SYS-LINK™ compatibility
11U Rack Mounting
Deskstand option
Maximum Balanced Output +27dBu
Crosstalk better than 90dB at 1kHz
-127 dB Mic EIN

Used for
*Front-of-House PA mixer
On-Stage Monitor mixer
8 track Live Recording
Console expansion*

GL2S

6 Stereo Line inputs
3 Stereo Mix Outputs; ST1, ST2, and LR
6 Mono Balanced XLR Mic/Line inputs
2 Stereo FX Returns
6 Auxiliary Sends on individual controls
Comprehensive Split PFL and AFL Monitoring
2 Band EQ on FX Returns
LR Balanced XLR Output
2 Pre post switches per channel
Aux send P/P fader, P/P EQ, P/P Mute, and Switch bypass
2 Track Recording Input and Output
4 Band EQ with 2 Mid sweeps
100mm faders throughout
Wide ranging Mic Pre amp gain structure
Phantom Power switchable on every Mic channel
Insert Points on all Mic inputs and LR
Direct Outputs on all Mic Inputs
Mutes on all Inputs, and individual Mutes on LR
Balance Option on Aux Master Outputs and Stereo Outputs
A and B input options on Stereo Line inputs
RIAA EQ Option on phono inputs
Removable Integrated PSU
Front panel Headphones socket
SYS-LINK™ compatibility
11U Rack Mounting
Deskstand option
Maximum Balanced Output +27dBu
Crosstalk better than 90dB at 1kHz
-127dB Mic EIN

Used for
*Keyboard, Drum, Vocal, and FX Sub mixing
Club Musician mixer
Installation and Zone mixing
Broadcast and DJ mixing
Console expansion*



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DEALER



The GL2 and GL2S products
comply with the European
Directives for Electromagnetic
Compatibility 89/336/EEC &
92/31/EEC

ALLEN
&
HEATH

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