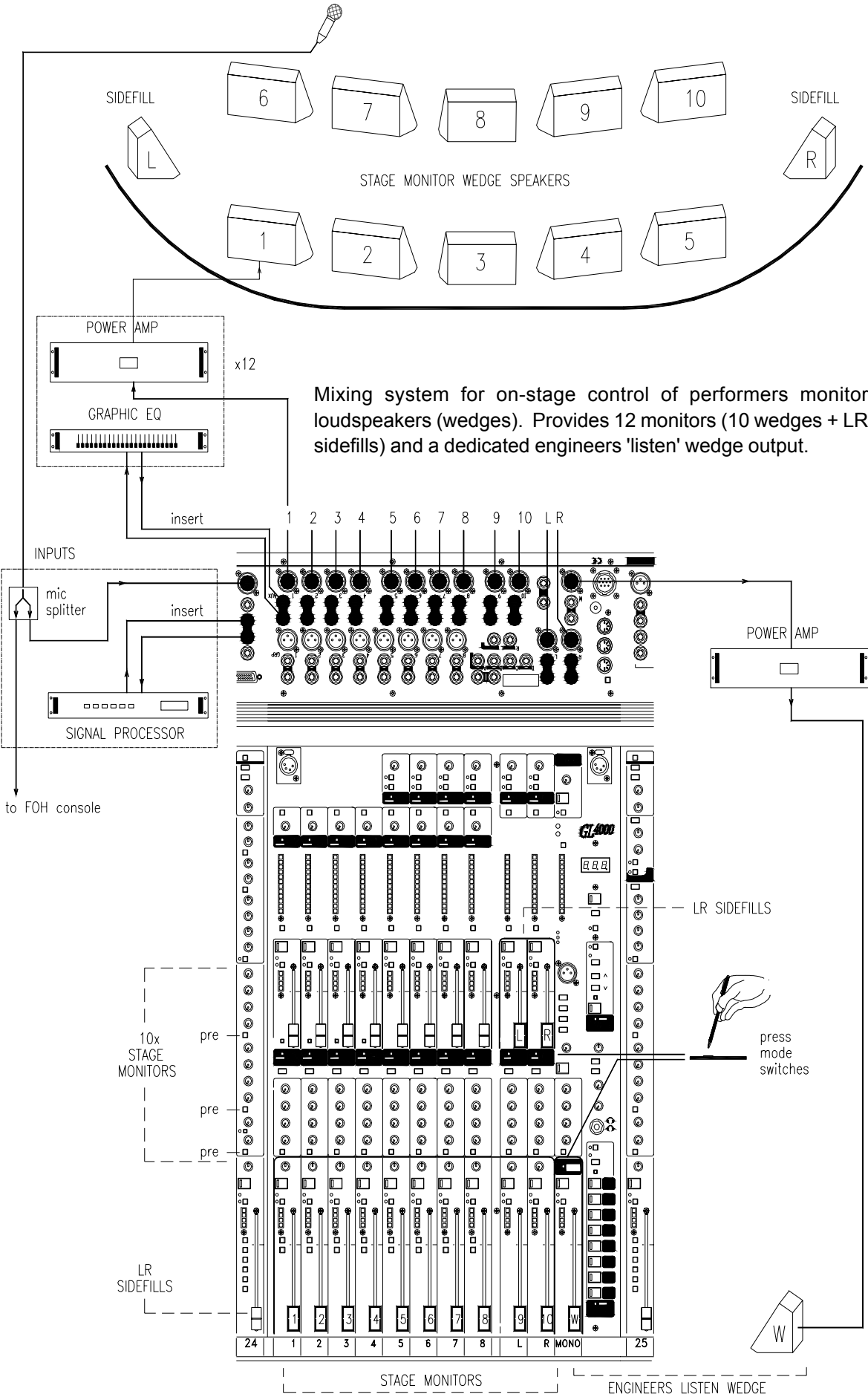


ON-STAGE MONITOR



USING THE *GL4000* AS A MONITOR CONSOLE

The *GL4000* can be easily configured to function as a dedicated 12 buss on-stage monitor console. Here, the console is positioned at the side of the stage giving the monitor engineer a clear view of the performers on stage. The sound sources are split to feed both the front-of-house console which controls the PA mix, and the monitor console which controls only the mix to the musicians own monitor speakers.

SPLITTING THE SOURCES TO THE CONSOLES

Use on-stage mic splitters or DI boxes to feed each source to both consoles. Decide which console is to provide phantom power.

THE MUSICIANS MONITORS

These are usually wedge shaped speakers positioned in front of and facing each musician or group of musicians. Each mix is created to supplement the sound field heard by the musician. Good visual and audible communication is important to achieve the balance required by each performer. Up to 10 such monitor mixes can be created using the channel aux sends. Graphic EQs are used to minimise acoustic feedback.

Configure monitor mode by pressing  **GRP REV** for aux outputs on the main faders. Set the aux sends **PRE** so that they operate independent of the faders.

Plug a graphic EQ into each aux **INSERT**. Set this up by 'ringing out' the system (tuning out the frequencies most prone to feedback). Use **AFL** to check the processed output.

Set the **STEREO PFL METER** switch up so that the meters 9 and 10 (LR) are not interrupted by PFL. The post-insert, pre-fade signal level can be checked on the buss meters, the output level on the main meters.


Use **TB TO AUX** to talk to each monitor as required.

THE STEREO SIDEFILLS

Use the LR outputs to feed a monitor speaker positioned at each side of the stage. This is used to supplement the sound field heard across the stage and is balanced using the channel faders and pan controls. The output is controlled using the small faders.

THE ENGINEERS LISTEN WEDGE

It is important that the engineer is able to check each monitor exactly the way it is heard by the performers. This is best done by using an identical monitor speaker (wedge) positioned next to and facing the engineer.

Configure the mono output as the listen wedge feed by selecting  **MONO SOURCE** for AFL/PFL.

Check the required monitor mix by pressing **AFL**. Check any channel source by pressing **PFL**. PFL overrides any selected AFL so that you can quickly check a problem source while listening to a monitor output. With no AFL or PFL selected the monitor is quiet.

Set the **PFL TRIM** control to adjust the PFL listen level relative to AFL. It is often the case that monitors are run 'cold' resulting in AFL listening levels a lot quieter than PFL on a correctly set channel.

It is best not to insert a graphic EQ into the engineers monitor output. Listening to a monitor by pressing **AFL** lets you hear the effect of the graphic plugged into that monitor exactly as the musician hears it.

Note that pressing **TALK** automatically dims the listen wedge by 20dB to prevent feedback between the speaker and talkback mic.

STEREO IN-EAR MONITORING

The LR mix can be used to feed a stereo in-ear monitoring system, often preferred by lead performers. A more precisely balanced mix can be created using the channel faders and pan controls. It is usual to plug limiters into the LR inserts to avoid possible hearing damage to the performer. Check the in-ear mix using the stereo headphones or by feeding the local monitor output to a duplicate in-ear system.

USING THE GROUPS AND MONO IN MONITOR MODE


Groups 1 to 8 and L-R are available from their respective XLR outputs and inserts. In monitor mode they are controlled on the small faders as the auxes are reversed on to the main faders. The post-fade outputs can be monitored using **AFL** and checked on the main meters by selecting the meter switches to **SML**. The mono mix M has no dedicated output but has an insert and is accessed through the matrix. The LR outputs are used as previously described to feed the stereo sidefills or in-ear monitor system. However, the 8 groups are available as subgroups to LR, feeds to the matrix, recording sends, effects sends or additional monitor outputs :

SUBGROUPS TO LR - The groups always feed the pan control and LR, M routing switches. By selecting **LR** you can create stereo or mono subgroups to the LR sidefills or in-ear monitor.

FEEDS TO THE MATRIX - The groups, LR and M always feed the matrix send controls pre or post fader as selected. The 4 matrix outputs can be used for recording, effects, additional local monitoring and so on. Note that the **monomix** is available through the matrix.

EFFECTS SENDS - Use the group outputs (XLR) or matrix outputs (jack) for effects sends. These can be returned to the monitors through the stereo input channels.

ADDITIONAL MONITOR OUTPUTS - The groups can feed additional monitors if required. Balanced XLRs drive the amplifiers and you can patch the graphics into the inserts. The group signals follow the channel fader and pan controls and so could be used to set up additional stereo in-ear monitors.

MULTITRACK RECORDING - The groups outputs can be connected to a multitrack to record the show independent of the monitors if required. The output level can be separately adjusted to match the multitrack operating level by selecting  **TRIM ON**.

RECORDING FROM THE MONITOR CONSOLE

The **GL4000** provides the unique facility to record the show from the monitor console rather than additional dedicated recording console. This significantly adds to the value of the service offered to the performers in situations where the front-of-house engineer is overworked or budget and time are tight.

MONO - Record from the mono mix through the matrix.

2-TRACK - Record from the LR mix with full fader and pan control.

MULTITRACK - Record as many tracks as you require from the groups and channel direct outputs, all with level trim.

Monitor the recording using the stereo headphones and local speaker monitor independent of the monitor listen wedge.