GRAHAM BLYTH

In the year of our 30th anniversary, Soundcraft’s highly successful MH Series consoles have been taken a well established and classic Soundcraft microphone preamplifier to a new level of performance, resulting in the new GB30 preamp which boasts extraordinary clarity with exceptionally controlled overload characteristics.

Soundcraft’s legendary 4-band EQ has also been improved further with the addition of elements derived from Soundcraft’s highly successful MH Series consoles. This new design delivers the sound of the classic ‘British’ EQ enhanced even further with more focused HF and LF shelving sections.

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**TYPICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>GB4</th>
<th>GB8</th>
</tr>
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<tbody>
<tr>
<td>Frequency Response</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mic/Line Input to any output, 20Hz - 20kHz</td>
<td>-1dB</td>
<td>-1dB</td>
</tr>
<tr>
<td>THD + N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mic / In</td>
<td>-45dB</td>
<td>-45dB</td>
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<tr>
<td>Noise</td>
<td></td>
<td></td>
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<tr>
<td>Measured RMS, 22Hz to 22kHz Bandwidth</td>
<td>-72dBA</td>
<td>-72dBA</td>
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<tr>
<td>Mix Out</td>
<td>-4dB</td>
<td>-4dB</td>
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<tr>
<td>Mix Out, 30 inputs routed to mix</td>
<td></td>
<td></td>
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<tr>
<td>Group &amp; Centre Outputs</td>
<td>-43dBA</td>
<td>-43dBA</td>
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<tr>
<td>Aux Outputs (GB8 Groups only)</td>
<td>&gt;40dBA</td>
<td>&gt;40dBA</td>
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<tr>
<td>Power consumption</td>
<td></td>
<td></td>
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<tr>
<td>AC mains supply (internal PSU)</td>
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<tr>
<td>Operating conditions</td>
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<tr>
<td>Temperature range</td>
<td>-10°C to +30°C</td>
<td>-10°C to +30°C</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>5% to 90%</td>
<td>5% to 90%</td>
</tr>
</tbody>
</table>

Note: Power figures are typical of performance in a normal acoustically treated environment and are not stated. Performance may be degraded in severe conditions. All measurements refer to electronically balanced inputs and outputs.
THE FULLY PROFESSIONAL LIVE SOUND CONSOLE
YOU THOUGHT YOU COULDN'T AFFORD

Drawing on 30 years of Soundcraft experience, GB Series consoles set new standards in professional live sound mixing on a budget. The GB8 (8-bus) console is packed with the features you need to create a memorable FOH and monitor mix, combining totally re-engineered circuit topology with our ground-breaking GB30 mic preamp and EQ designs to deliver a sonic performance rivalling many high-price, high-end consoles.

The GB8 has plenty of bus power for sophisticated mixing applications. All eight Aux master controls can be swapped with eight Groups, and all Auxes are pre/post switchable globally per Aux bus from the Master Section. In addition to the eight Groups, the GB8 has L/C/R and eight Aux busses. Four mute groups provide quick and easy muting of groups of channels, ideal for scene changes or where groups of instruments need to be silenced. And the output matrix is essential when different zones in a venue require specifically tailored mixes, enabling the operator to create sub-mixes of the Group, L-R mix and C (mono) buses. Unlike other mixers in their class, GB Series consoles are built to last with a rigid steel chassis, high quality vertically mounted fibreglass PCB channel strips and individually nutted potentiometers ensuring reliability in both fixed installations and on the road.

And because Soundcraft understands the way that live sound engineers work, you'll find an intuitive control surface and a conveniently angled rear connector panel, so you can do all your patching without ever leaving the mix position.

GB8 FEATURES:
- 16, 24, 32, 40 and 48 channel frame sizes
- 19 busses
- 4 full feature stereo channels
- 4 stereo returns
- 8 Aux sends (all are pre/post switchable)
- 8 sub groups (SWAP with all 8 Auxes)
- 11x4 output matrix
- Record output with limiter
- Alternate stereo output with limiter
- 1kHz oscillator
- Meterpod with 3 high definition LED VU meters (L/C/R)
- Internal jumpers switch pre-fade Aux sends to pre-EQ
- GB30 mic preamp and precision equalisation circuitry
- Direct outputs on every channel
- Talkback facility
- 100mm faders
- Switchable 48V phantom powering on every channel
- 18dB/octave high pass filter
- 4 mute groups
- 12-segment LED metering
With dual-mode topology derived from Soundcraft’s acclaimed MH Series, the GB8 and GB4 consoles provide ideal live sound mixing solutions for medium-sized venues including clubs, theatres and houses of worship. With a single button press on the GB4 (4-bus), any of the first four Aux master controls can be swapped with the respectively numbered Group fader, providing the flexibility to work at FOH, Monitors, or perform both duties simultaneously.

The GB4 has L/C/R and eight Aux busses in addition to its four groups and, like the GB8, there are four mute groups and an output matrix for creating zoned mixes. Like all GB series mixers, the GB4 uses GB30 mic preamps which use local linearisation techniques rather than global feedback to deliver an extremely open frequency response and excellent phase linearity. The GB30 EQ borrows the innovative designs developed for the Soundcraft MH4 console, providing GB users with the benefits of genuine high-end equalisation. And thanks to a meticulous ‘ground-up’ approach to circuit and mechanical design, the GB Series exhibits class-leading noise performance and channel isolation figures.

When it comes to recording a performance, the GB4 & GB8 are similarly well equipped with pre-/post-fader switchable direct outputs on every channel and a high-quality limiter on dedicated record outputs fed from the L-R mix bus.

**GB4 FEATURES:**
- 12, 16, 24, 32 and 40 channel frame sizes
- 15 busses
- 2 full feature stereo channels
- 2 stereo returns
- 8 Aux sends (4 are pre/post switchable)
- 4 sub groups (SWAP with Auxes 1-4)
- 7x4 output matrix
- Record output with limiter
- GB30 mic preamp and precision equalisation circuitry
- Direct outputs on every channel
- Talkback facility
- 100mm faders
- Switchable 48V phantom powering on every channel
- 18dB/octave high pass filter
- 4 mute groups
- 12-segment LED metering

Dedicated record outputs with a high-quality limiter are fed from the L-R mix bus.
Available in 16, 24 and 32 channel configurations, the GB2 is designed for installed sound and A/V applications that don’t require all the sophisticated functionality of the GB4 and GB8. However, the GB2 is a genuine GB Series console in every respect, with sound quality assured by GB30 Mic Pre and Equaliser designs, and reliability by the same rugged build quality that has made the GB4 and GB8 so dependable in demanding professional applications.

Along with six Aux busses and an integral 6 x 2 matrix, four subgroups are provided as two stereo pairs, with a unique facility for adjusting the width of the stereo signal across the stereo mix. The channel pan settings are retained on the group outputs, while the degree of stereo separation to the mix bus is independently adjustable from full stereo through to mono.

The GB2 also features two stereo input channels, with separate mic and line inputs. In normal use, the mic inputs are routed to the local channel and the line inputs act as a stereo return to the mix bus. Selecting the line input to the local channel overrides the mic inputs.

GB2 FEATURES:
• 16, 24, 32 channel frame sizes
• 12 busses
• 2 full feature stereo channels
• 2 stereo returns (on stereo channels)
• 6 Aux sends
• 4 sub groups (paired)
• 6x2 output matrix
• GB30 mic preamp and precision equalisation circuitry
• Direct outputs on every channel
• Talkback facility
• 100mm fades

• Switchable 48V phantom powering on every channel
• 100Hz high pass filter
• 12-segment LED metering
• Record output

Line inputs on the stereo channels can also act as a stereo return.
GB8, GB4 & GB2 INPUTS

MONO INPUT MODULE

Mic Input
A balanced XLR connector accepts balanced or unbalanced mic signals.

Line Input
A balanced 1/4" jack accepts balanced or unbalanced line level sources, such as keyboards.

48V Phantom Power
Phantom power is individually switchable on every channel, with front panel LED indication of status.

Phase Reverse
Phase reverse is individually switchable on every channel.

Input Stage
Precision, low noise mic preamps deliver continuous variable gain between 5dB and 60dB. A Peak LED indicates internal signal levels in excess of +1dBu.

High Pass Filter
A steep 15dB per Octave High Pass Filter is included straight after the preamplifier to reduce low frequency rumble on stage and clean up overall performance.

Insert
A pre-fader, pre-EQ (but post HPF) insert point is provided for patching in Limiter, Graphic Equalizers or other signal processes. It may also be used for recording.

Direct Output
A direct output is also available on every mono channel with individual pre/post fader switching situated on the rear panel. This allows the direct outputs to be equally useful for effects send applications or multitrack tape feeds.

EQ Section
GB Series consoles incorporate the GB8/4/2-band equaliser section - based on that used in the high-end MH Series. Both the HF and LF shelving sections have steeper slopes than usual which substantially reduces mid frequency harshness in the HF band and muddiness in the LF. This increase in “cleanliness” of response is further enhanced by an element of underdosing and boost in the boost/cut response. It has two swept mid frequency carefully selected for optimum control during live performances. All bands provide 15dB of cut or boost. The Low frequency equaliser response shelves at 80Hz. The swept Lo Mid control operates at frequencies between 550Hz and 13kHz. The fixed High frequency equaliser response shelves at 13kHz.

EQ Switch
The EQ section can be bypassed using the EQ switch, allowing comparison of treated and untreated sounds without having to reset controls. The EQ Switch is also provided in the GB4’s stereo return channel.

GB2 Stereo Return
The stereo inputs on the GB2 can be switched for mono or stereo, or to stereo when used in SWAP mode.

GB4 Stereo Return
The stereo inputs on the GB4 can be switched for mono or stereo, or to stereo when used in SWAP mode.

GB4 OUTPUTS & MASTER

GROUP SECTION

Group Outputs
Each Group has an impedance-balanced XLR output connector, allowing long cable runs on stage.

Insert Points
Pre-fader Group inputs are provided on jack connectors, for the connection of Limiters, Graphic Equalizers or other signal processors.

Group Metering
GB4 has four 12-segment peak reading bargraph meters which display Group (or Aux 1-4 in SWAP mode) output levels.

Matrix Assignment
Four rotary controls per Group allow individual assignment to Matrix 1-4.

Matrix Masters
The level at each Matrix output (balanced jack) on the rear panel is controlled by a rotary control, with a button for AFL.

Auxiliary Masters
The level at each Auxiliary output (balanced jack) on the rear panel is controlled by a rotary control with a button for AFL.

STEREO INPUT MODULE

The stereo inputs (2 on the GB2/4, 4 on the GB8) allow connection of stereo sources, or asoppelicated effects returns. GB4 has four stereo inputs. The stereo input channels share all features with the mono input channels, with the exception of the following:

Connections
Each channel is equipped with both balanced jack and XLR pairs. The left and right input can be selected, if required, as a single, mono source to be routed to both paths. Alternatively both the left and right signals can be mono-summed.

EQ Section
The equaliser section provides 15dB of cut or boost at each of 4 bands: HF shelf at 12kHz; Hi-Mid at 3kHz; Lo-Mid at 450Hz; and a LF shelf at 80Hz.

GB2 Stereo Return
The stereo inputs on the GB2 can be switched for mono or stereo, or to stereo when used in SWAP mode.

GB4 Stereo Return
The stereo inputs on the GB4 can be switched for mono or stereo, or to stereo when used in SWAP mode.

Rec/Aux Output
GB4 has a single Rec/Aux section. Outputs are provided on impedance balanced 1/4" jacks and unbalanced -10dBm stereo connectors. They provide a post-fader send from the L-R mix. The C (mono) bus may be added and/or the mix can be mono summed. A rotary control governs level and a switchable limiter is provided.

Talkback Section
Once connected, the engineer’s talkback mic can be routed to all Groups and/or Aux 1, 3, 4, 5, 6 & 7-8. A rotary control governs talkback level.

Stereo Returns
GB4 has two stereo returns - provided for use with effects units, or as stereo simple instrument inputs. The rotary controls govern level. Ste Ret 1 and 2 can be routed to Groups 1/2 and 3/4 respectively, or the main L-R mix.

CONTROL ROOM SECTION

The control room section allows the engineer to monitor either the 2-track return, the C (Mono) Bus, or the Mix via the control room output or headphone feeds. A headphone jack is provided for use with headphones with impedances of 100-300ms or greater. Both the control room and 2-track return levels can be altered using the associated controls. It is also possible to replace the Mix output signal with the 2-track return by pressing “2 Track Mute” button. This allows easy playing of pre-show music at a single button press, without having to make any alterations to the band’s settings.

Metering
Three 12-segment Peak reading bargraph meters display L-R mix and C (mono) bus output levels when the appropriate control room selection is made. If any input or Auxiliary master is soloed then the PSU/LF, AFL and Master meters show PUW/PEU levels instead.

Matrix Assignment
Any of the four Group masters, Left, Right and C (mono) bus outputs can be routed to any of the four matrix outputs via individual rotary controls.

100mm Master Faders
All C (Mono) Bus output levels are controlled by custom-built 100mm long throw faders. The Mix outputs may be routed to the C (Mono) bus should only a mono PUW be required, or an induction loop feed need to be fed.

PSU Indicators
A red LED illuminates if the console is powered up, showing the status of the +5V/-17V voltage rails.

Integral Power Supply
The PSU is fitted with a high-efficiency SMPS design (Switched Mode Power Supply) that makes for cooler operation and lighter weight. The PSU is capable of accepting a wide range of AC input voltages without any internal or external switch changes. An external DPS-5 power supply may be connected for redundancy operation.
THE GB8 OUTPUTS & MASTER SECTION HAVE THE SAME FEATURES AS THE GB4, PLUS THE FOLLOWING PERFORMANCE ENHANCEMENTS.

GROUP SECTION

Group Metering
GB8 has 8 12-segment peak reading bargraph meters which display Group (or Aux 1-8 SWP mode) output levels.

Group/Aux SWAP
GB8 has eight push buttons which swap the functions of Auxiliary 1-8 master rotary controls and Group master faders. NB: The 12-segment peak reading bargraph meters always display the signal selected to the Group faders, i.e. Groups in normal operation, or Auxes when used in SWP mode.

MASTER SECTION

Rec/Alt Output
GB8 features separate Record and Alternate output sections. Outputs are provided on impedance balanced 1/4" jacks and unbalanced -10dBv phono connectors. They provide a post-fade send from the L-R mix. The C (mono) bus may be added and/or the mix can be mono summed. A rotary control governs level and a switchable limiter is provided.

Talkback Section
GB8 additionally features a 1kHz oscillator with identical routing to the talkback provided.

Stereo Returns
An independent 2 TRK rotary level control labelled “2TRK In” allow pre-show music to be replayed. An external DPS-3 power supply is also provided.

GB8 OUTPUTS & MASTER

Rec Output
Recording outputs are provided on -10dBv phono connectors. They provide a post-fade send from the L-R mix.

Talkback Section
Once connected, the engineer’s talkback mic can be routed to all Groups and/or Auxes. A rotary control governs talkback levels.

Stereo Returns
Stereo returns are accommodated via the stereo inputs. These can be switched for simultaneous mic/stereo return use, or for line inputs (see inputs).

CONTROL ROOM SECTION

The control room section allows the engineer to monitor either the 2-track return, Groups 1 & 2 and 3 & 4, or the Mix via the control room outputs or headphones. A headphone jack is provided for use with headphones with impedances of 100 Ohms or greater. Both the control room and 2-track return levels can be altered using the associated controls. It is also possible to replace the Mix output signal with the 2-track return by pressing “2 TRK TO MIX”. This allows easy playing of pre-show music at a single button press, without having to make any alterations to the band’s settings.

Metering
12-segment Peak reading bargraph meters can be selected to display 2-track return, Groups 1 & 2 and 3 & 4, or the Mix when the appropriate control room selection is made. If any input or Auxiliary master is soloed then the PFL/AFL LED illuminates, and the meter meters show PFL/AFL levels instead.

100dB Master Faders
Output levels are controlled by a 100dB long throw mix fader. The Mix outputs may be routed to the C (mono) bus should only a mono PA be required, or an induction loop need to be built.

Integral Power Supply
The console is fitted with a high-efficiency SMPS design (Switched Mode Power Supply) and that makes for cooler operation and tighter weight. The PSU is capable of accepting a wide range of AC input voltages without any internal or external switch changes. An external CPS-2 power supply may be connected for redundancy operation.

GB8 outputs & Master

GB2 OUTPUTS & MASTER

Rec Output
Recording outputs are provided on -10dBv phono connectors. They provide a post-fade send from the L-R mix.

Talkback Section
Once connected, the engineer’s talkback mic can be routed to all Groups and/or Auxes. A rotary control governs talkback levels.

Stereo Returns
Stereo returns are accommodated via the stereo inputs. These can be switched for simultaneous mic/stereo return use, or for line inputs (see inputs).

CONTROL ROOM SECTION

The control room section allows the engineer to monitor either the 2-track return, Groups 1 & 2 and 3 & 4, or the Mix via the control room outputs or headphones. A headphone jack is provided for use with headphones with impedances of 100 Ohms or greater. Both the control room and 2-track return levels can be altered using the associated controls. It is also possible to replace the Mix output signal with the 2-track return by pressing “2 TRK TO MIX”. This allows easy playing of pre-show music at a single button press, without having to make any alterations to the band’s settings.

Metering
12-segment Peak reading bargraph meters can be selected to display 2-track return, Groups 1 & 2 and 3 & 4, or the Mix when the appropriate control room selection is made. If any input or Auxiliary master is soloed then the PFL/AFL LED illuminates, and the meter meters show PFL/AFL levels instead.

100dB Master Faders
Output levels are controlled by a 100dB long throw mix fader. The Mix outputs may be routed to the C (mono) bus should only a mono PA be required, or an induction loop need to be built.

Integral Power Supply
The console is fitted with a high-efficiency SMPS design (Switched Mode Power Supply) and that makes for cooler operation and tighter weight. The PSU is capable of accepting a wide range of AC input voltages without any internal or external switch changes. An external CPS-2 power supply may be connected for redundancy operation.

GB2 Outputs & Master
### GB2 SYSTEM BLOCK DIAGRAM

![GB2 System Block Diagram](image)

### TOP PANEL, CONNECTORS, DIMS & WEIGHS

**OVERHEAD VIEW**

![Overhead View](image)

**REAR PANEL CONNECTIONS**

![Rear Panel Connections](image)

**DIMENSIONS & WEIGHTS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Frame Size</th>
<th>Width</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>GB8</td>
<td>16 Ch</td>
<td>984mm (38.74&quot;)</td>
<td>25kg (55.1lbs)</td>
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<tr>
<td></td>
<td>24 Ch</td>
<td>1208mm (47.56&quot;)</td>
<td>30kg (66.1lbs)</td>
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<td></td>
<td>32 Ch</td>
<td>1442mm (56.77&quot;)</td>
<td>35kg (77.2lbs)</td>
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<td></td>
<td>40 Ch</td>
<td>1666mm (65.59&quot;)</td>
<td>40kg (88.2lbs)</td>
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<td></td>
<td>48 Ch</td>
<td>1889mm (74.37&quot;)</td>
<td>45kg (99.2lbs)</td>
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<tr>
<td>GB4</td>
<td>12 Ch</td>
<td>730mm (28.73&quot;)</td>
<td>20kg (44.1lbs)</td>
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<tr>
<td></td>
<td>16 Ch</td>
<td>842mm (33.13&quot;)</td>
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<td>24 Ch</td>
<td>1065mm (41.93&quot;)</td>
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<td>32 Ch</td>
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<td>40 Ch</td>
<td>1523mm (59.96&quot;)</td>
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<td>GB2</td>
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<td>32 Ch</td>
<td>1247mm (49.09&quot;)</td>
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*NB The Meterpod is only available on the GB8.