

# K3 Theatre Typical Specifications



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H A Harman International Company



| Connections                   | Impedance               | Level                                 |
|-------------------------------|-------------------------|---------------------------------------|
| Low Impedance Input (XLR)     | 1.6kΩ balanced          | -70dBu to +10dBu (+30dBu max)         |
| High Impedance Input (Jack)   | >10kΩ balanced          | -20dBu to +10dBu (+30dBu max)         |
| Insert Send (Jack)            | 75Ω gnd comp/bal option | -2dBu (+21dBu max)/+4dBu (+21dBu max) |
| Insert Return (Jack)          | >10kΩ balanced          | -2dBu (+4dBu)/(+21dBu max)            |
| Direct Out (Jack)             | 75Ω balanced            | -2dBu (+26dBu max) into 5kΩ           |
| FX Return (Jack)              | (+4dBu)>10kΩ balanced   | +26dBu max (-10dBV)>10kΩ balanced     |
| 2 - Trk Input (Jack)          | >10kΩ balanced          | +12dBV max (+4dBu)>10kΩ balanced      |
| Group Insert Send (Jack)      | 75Ω gnd comp            | -2dBu (+21dBu max)                    |
| Group Insert Return (Jack)    | >10kΩ balanced          | -2dBu (+21dBu max)                    |
| Group Output (XLR)            | 75Ω balanced            | +4dBu (+26dBu max) into 1kΩ           |
| Aux Output (Jack)             | 75Ω balanced            | +4dBu (+26dBu max) into 1kΩ           |
| Matrix Output (XLR)           | 75Ω balanced            | +4dBu (+26dBu max) into 1kΩ           |
| L/R/Mono Insert Send (Jack)   | 75Ω gnd comp            | -2dBu (+21dBu max)                    |
| L/R/Mono Insert Return (Jack) | >10kΩ balanced          | -2dBu (+21dBu max)                    |
| L/R/Mono Output (XLR)         | 75Ω balanced            | +4dBu (+26dBu max) into 1kΩ           |

| EQ and Filter |       |                |
|---------------|-------|----------------|
| HP            | Freq  | 100Hz          |
|               | Slope | 12dB/Oct       |
| HF            | Freq  | 1kHz to 16kHz  |
|               | Gain  | ±15dB          |
|               | Q     | 1.5/Shelf      |
| HMF           | Freq  | 400Hz to 7kHz  |
|               | Gain  | ±15dB          |
|               | Q     | 2.6/1.3        |
| LMF           | Freq  | 70Hz to 1.1kHz |
|               | Gain  | ±15dB          |
|               | Q     | 2.6/1.3        |
| LF            | Freq  | 27Hz to 500Hz  |
|               | Gain  | ±15dB          |
|               | Q     | 1.5/Shelf      |

| Auxiliaries        |  |                        |
|--------------------|--|------------------------|
| 1/2, 3/4, 5/6, 7/8 |  | Pre/Post fade switched |

| Oscillator |  |   |
|------------|--|---|
|            |  | 63Hz to 10kHz/Pink Noise variable level |

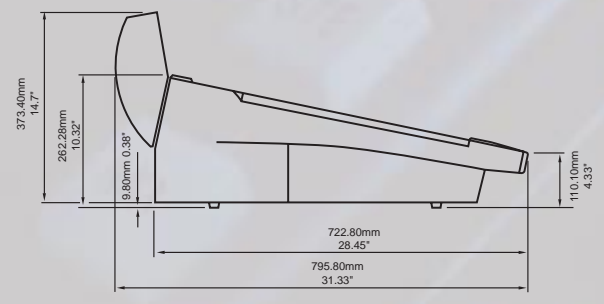
| Frequency response                                     |  |                        |
|--|--|------------------------|
| Any input to any output (measured at up to +50dB gain) |  | +0/-0.5dB, 20Hz -20kHz |

| THD and Noise  |  |                                   |
|--|--|-----------------------------------|
| High impedance I/P to Group or Mix O/P (measured at +20dBu output) |  | Less than 0.005%THD@ 1kHz         |
| Mic input EIN (22Hz - 22kHz bandwidth, unweighted)                 |  | Less than -127.5dBu (150Ω source) |
| Mix bus output noise (24ch routed)                                 |  | Less than -81dBu                  |

| Crosstalk (All measurements at 1kHz)         |  |                   |
|--|--|-------------------|
| Channel muting and Channel fader attenuation |  | Greater than 90dB |
| Channel routing                              |  | Greater than 85dB |

### Dimensions (Width/Weight)

| CH | mm   | inches | kgs | lbs |
|----|------|--------|-----|-----|
| 16 | 858  | 33.8   | 30  | 66  |
| 24 | 1112 | 44.8   | 39  | 86  |
| 32 | 1366 | 53.8   | 48  | 106 |
| 40 | 1620 | 63.8   | 57  | 126 |
| 48 | 1874 | 73.8   | 66  | 146 |



Console shown with optional overbridge fitted

Note: These figures are typical of performance in a normal electromagnetic environment. Performance may be degraded in severe conditions.



# Creative Control

The world of professional sound reinforcement demands better performance and more facilities than ever before. At all levels, whatever the application, engineers are looking for both uncompromised sound quality and advanced mixing features. This is why Soundcraft has created K3 Theatre.

This modular 8-bus mixer has been designed to satisfy today's requirements for high quality mid-range sound reinforcement consoles. That means advanced mute scene setting and MIDI control, plus 'big console' features, such as sophisticated and precise EQ, input metering, an advanced solo system, and eight pre/post auxiliaries. If your monitoring requirements are more complex then you can team your K3 Theatre up with Soundcraft's SM12 monitor console, which provides the flexibility of 14 foldback mixes.

K3 Theatre delivers an unprecedented degree of mixing control in a versatile package that will integrate into a wide range of live and installed sound situations. It offers an extensive range of frame sizes and modules, enhancing the inherent versatility of a modular 8-bus configuration.

But versatility is nothing without quality to match – K3 Theatre is designed and engineered to Soundcraft's customary high standards. That means it's built to last, with a rugged steel chassis protecting its circuitry and no compromises in design or component specification throughout. All

the rear panel XLRs are gold-plated and inside, the circuit boards employ advanced surface-mount technology.

The compact frame with its low sightline will fit in almost anywhere, and ensures excellent visibility from the mixing position. Larger K3 Theatre consoles, of 24-channels and above, can be fitted with an optional meter bridge.

K3 Theatre is the latest in a line of advanced PA console designs, running from the award-winning 200 Delta,

through the innovative and cost-efficient SM12 monitor console, to the class-leading Venue II. And, as with those popular standards, K3 Theatre comes with the unique pedigree of leadership in sound reinforcement technology that only Soundcraft can deliver.

**CONTROL AND VERSATILITY**  
Other advantages apart, K3 Theatre introduces a unique MIDI and muting system. 128 mute scenes, controlling mutes on all channels, groups and stereo

effects returns, are available at the touch of a button. Integrated MIDI control facilities allow the user to select programs in external effects units automatically when a mute scene is selected, and the DataFader provides real-time fingertip control of parameters via MIDI Continuous Controller information. For the first time, a console in this class combines audio excellence with truly integrated MIDI control facilities.

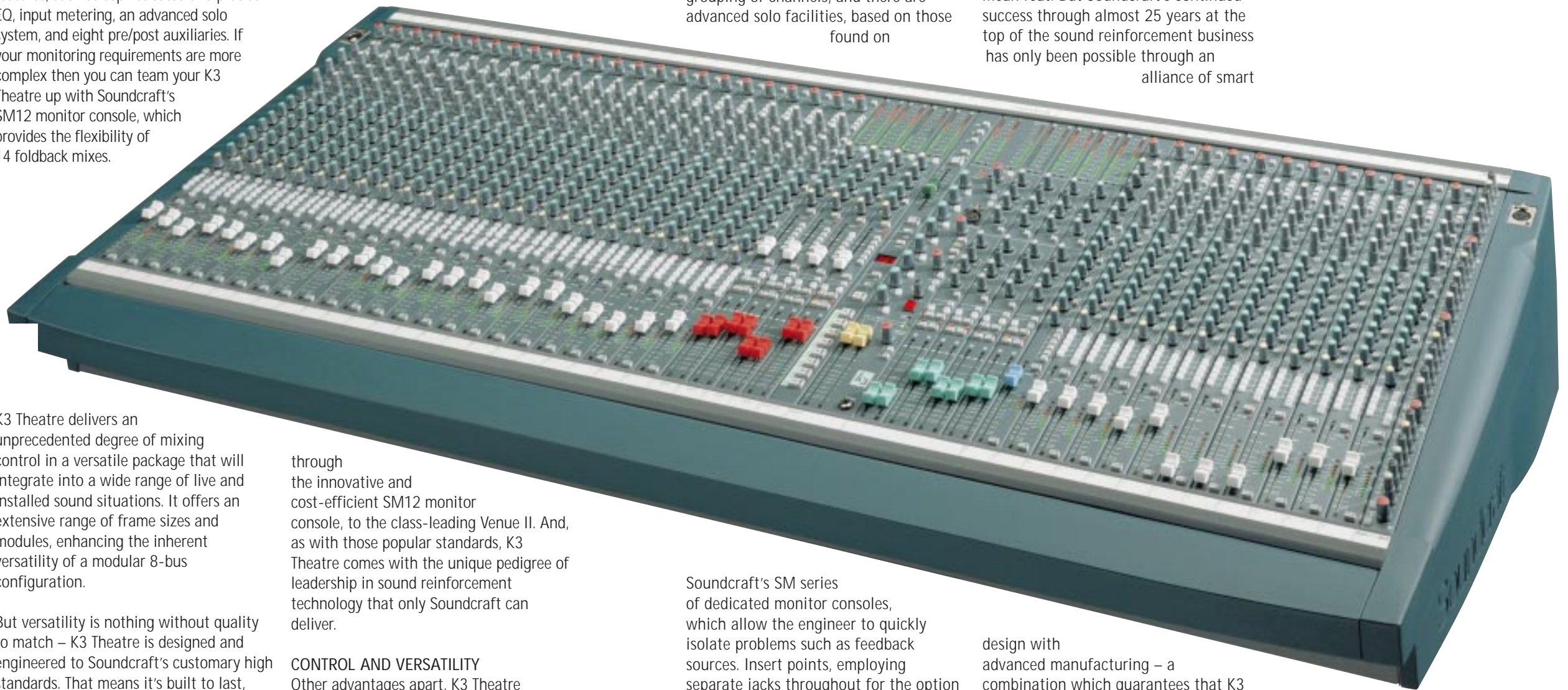
8-bus routing allows convenient grouping of channels, and there are advanced solo facilities, based on those found on

**MORE CHOICE**  
A wide range of options means that K3 Theatre can be configured for a variety of needs, with a choice of mono or stereo input modules, EQ or FX dual group output strips, MIDI modules, main output channels, and a powerful matrix section that allows a 12x4 matrix to be fitted in the space of a single input module.

**THE PROFESSIONAL MIXING PEDIGREE**  
Delivering all this in an elegant, ergonomically designed package, is no mean feat. But Soundcraft's continued success through almost 25 years at the top of the sound reinforcement business has only been possible through an alliance of smart

Soundcraft's SM series of dedicated monitor consoles, which allow the engineer to quickly isolate problems such as feedback sources. Insert points, employing separate jacks throughout for the option of a fully balanced signal path, allow external processors to be inserted in channels, groups and the mix busses.

design with advanced manufacturing – a combination which guarantees that K3 Theatre will fulfil the requirements of the most demanding production.





K3 Theatre represents the next generation of mid-range PA consoles from Soundcraft, offering the ultimate in control and quality. The modular 8-bus design builds on the success of the award-winning Venue II, providing options such as a choice of dual group modules, a stereo input module, and a powerful matrix module. K3 Theatre is designed for sound reinforcement mixing in a variety of situations, from installed or mobile theatre sound to presentations, audio-visual events, and live band concert hall front-of-house.

#### THE K3 THEATRE DIFFERENCE

The advantages of K3 Theatre become obvious as soon as the first source is plugged into the desk – whatever its level, the same XLR socket will take the signal via K3 Theatre's wide range input stage into the

choice of shelving or bell characteristics for the high and low frequency sections, and switchable Q for both mid bands. A separate high-pass filter removes unwanted rumble and mic popping and leaves the semi-parametric LF controls to be used creatively.

For maximum flexibility when setting up monitor mixes and effects sends, all eight auxiliaries are pre/post switchable in pairs – K3 Theatre can always provide the right combination, at the touch of a button. And individual group output routing, independent of the pan control, completes a channel input strip designed for total flexibility, allowing complex front-of-house and monitor mixes to be controlled with ease and confidence.

The advanced solo circuitry with Auto Cancel and Solo Clear functions allows

touch of a button, thanks to the integration of MIDI with the 128 mute scenes, controlling inputs, group **mains** and stereo returns. Spot effects or atmospheres can be triggered via MIDI at the moment a channel is un-muted. K3 Theatre allows combinations of mutes on groups of mics or instruments, handling the toughest of live mixing challenges. Any live event, however, varies from night to night, and the real-time parameter control afforded by the DataFader means that the operator can respond to the all-important dynamics of a performance. Precise real-time adjustments can be applied to any parameter that can be placed under continuous MIDI control; such as reverb decay to compensate for acoustic changes



K3 Theatre with optional meterbridge

foyer, or a central speaker cluster in the auditorium. The optional 12x4 matrix module makes light work of creating sends to

multiple speaker stacks, and providing foldback to on-stage and back-stage areas; the number of outputs is easily increased by adding further Quad Matrix modules. In addition, an optional line-level stereo input module provides similar EQ and routing flexibility while saving yet more space. And for sub-group output, there is a choice of two dual group modules - one providing powerful EQ, the other offering a stereo FX return with fader control. And additional dual group modules can be employed to provide fader controlled aux **main** sends, further enhancing K3 Theatre's foldback and FX facilities.

The K3 Theatre console is available in 16, 24, 32, 40 and 48-channel frame sizes, with eight mono groups and eight auxiliaries. The choice of frames and modules means that a desk can easily be configured to match your needs and budget. And the management can rest assured that, with compact design and high module packing density, all this mixing power comes without the loss of valuable audience seating space. Above all, however, K3 Theatre brings confidence to the mixing process, with excellent ergonomics. Illuminated switches for all critical functions, logical colour coding of controls, LED channel metering, and an optional VU meterbridge, all go to ensure that K3 Theatre consistently delivers top quality live mixing results.



channel strip; and a high impedance jack socket is also provided. Input gain is adjusted by a Range switch and a single rotary control. And phantom power on every channel means that +48V DI boxes may be connected with ease.

With K3 Theatre's precise and powerful EQ, intelligibility and creative control are assured. All four bands are swept, with a

quick and easy troubleshooting of a complex mix. Solo-in-place is also provided, enabling the engineer to run through each input during a soundcheck and hear each source in its stereo position with any associated effects.

MIDI and mute control also offer advanced, yet accessible, facilities. Effects programs or instrument patches can be changed at the

between venues, or for decreased reverberation time as the venue fills up. MIDI SysEx facilitates the saving and loading of MIDI and mute configurations between individual productions.

Good routing is essential, especially with multi-speaker sound systems. K3 Theatre's **Main** Module provides a mono mix bus for applications such as a show relay in the



# K3 Theatre Modules and Rear Connectors

# Typical Configurations

## Input

The K3 Theatre Input Module, as fitted to the K3 Theatre, offers an advanced input facility for a single mic or line source. A high-impedance jack and a balanced XLR input are provided, with switchable phantom power to the XLR. The input amp employs a padless design, with a rotary sensitivity control and Range switch that enables the XLR input to accept signals from -70dBu to +10dBu. Phase reverse is available.

Pre-EQ insert points are provided for additional signal path processing, with separate ground compensated send and balanced return jacks.

The 4-band EQ section features four swept bands, each with 15dB cut/boost. Both the high and low bands offer switchable bell/shelving operation, and the two mid bands have a choice of two Q settings (1.3/2.6). The entire EQ section can be switched in and out at the touch of a button, and an additional high-pass filter is provided for dealing with unwanted low frequencies.

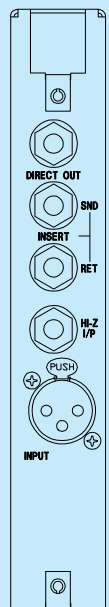
The SOLO switch feeds the pre-fade, pre-mute signal to the monitor and phones outputs. Pressing solo cancels all other solos or AFLs if Auto Cancel is active. If solo-in-place is active, pressing SOLO will mute all other channels.

The channel can be muted via the electronically latching CUT switch, which is also used to assign the channel to a mute scene. Integral LEDs on the SOLO and CUT switches make it easy to check which channels are active in the mix.

Individual rotary send controls are provided for all eight aux busses, switchable in pairs between pre and post-fade operation. Internal jumpers allow the pre-fade signal to be post-mute, pre-mute, or pre-EQ/pre-insert. A DIR switch allows Aux1 to be re-routed to the channel direct output on the rear panel.

The channel signal can be routed, via a 100mm fader and a pan control to the stereo mix bus, individually to the groups, and to the mono bus. 8-segment LED input meter and a peak LED, adjacent to the channel fader, provide an accurate check on input levels.

Module options:  
Transformer balancing.  
Parallel multiway connector.  
Balanced insert send.



## Stereo Input

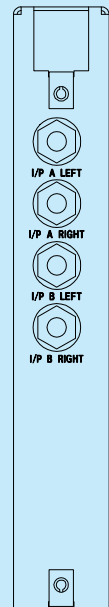
The Stereo Input Module provides input facilities for stereo line level sources in a single-width module which may optionally replace any K3 Theatre Input. The stereo source is switch selected from two sets of balanced jack inputs on the rear panel. 3-band EQ is provided, with a swept mid band. A WIDTH control provides extensive variation in image width, from mono through normal stereo (centre detented) to phase-enhanced wide stereo.

Solo and mute facilities operate as on the mono channels.

The eight independent aux sends are post-fade mono signals, except for 7 and 8 which can be switched by internal jumpers to stereo operation.

The channel signal is routed in stereo to pairs of groups or the stereo mix bus via a balance control and the 100mm fader, or in mono to the mono bus. 4-segment LED metering is provided next to the channel fader.

Module options:  
Transformer balancing  
Parallel multipin connector.



## Dual Group/EQ Module

The module contains two group output sections, with integral metering, and two 3-band EQ sections above the group main faders. The module is intended to function either as a subgroup main section with group EQ or, alongside the normal subgroup section on a console, as a fader-controlled aux main section.

Insert send and returns are provided on separate jacks, for additional processing of grouped signals. The group output appears on a balanced XLR.

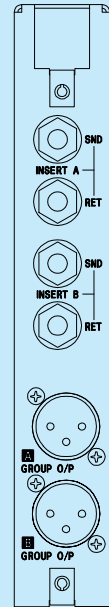
Each EQ section features shelving high and low bands, with 15dB of cut/boost at 60Hz and 12kHz, and a swept mid band covering 250Hz to 4kHz.

The two group signals are controlled by 100mm faders and can be routed to the mix bus in stereo or mono. In stereo mode, odd numbered groups are routed to the left mix bus and even numbers are routed right, whilst in mono mode both groups go to the centre of the stereo image.

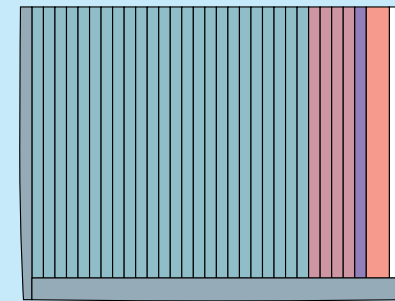
20-segment LED bargraph meters provide accurate monitoring of post fade output levels, and can be set via internal jumpers to peak or average response.

The AFL switch sends a post fade group signal to the monitor and phones outputs, with the same intercancel facility as on mono channels.

Mute facilities also operate as on mono channels, and may be assigned to mute scenes.

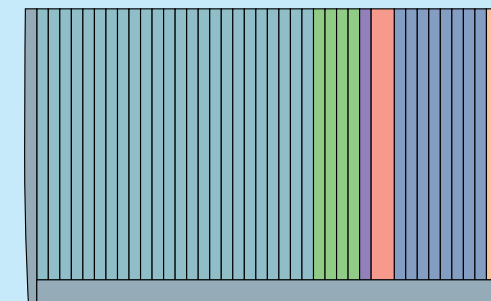


- Input
- Stereo Input
- Dual EQ Group
- Dual FX Group
- Main Module
- MIDI Scene Set Module
- Blank Module
- Quad Matrix Module
- Meterbridge



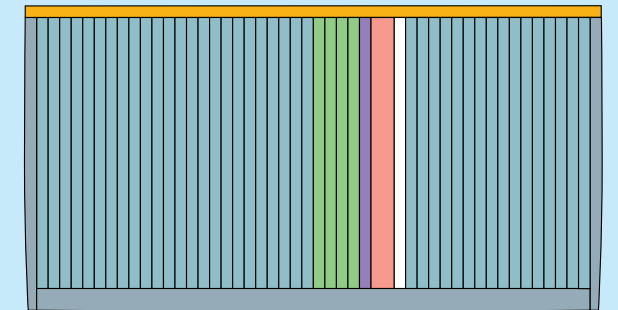
24 Inputs • 4 Dual EQ Groups • 1 MIDI Scene Set Module • 1 Main Module • 1 Blank Module

The basic configuration provides the operator with a compact, cost-effective 24-channel package with four band mid-sweep EQ, stereo routing to groups, three band equalisation on group outputs and full MIDI muting for inputs and groups, as well as control of external devices, making this an ideal choice for installations where size is a priority.



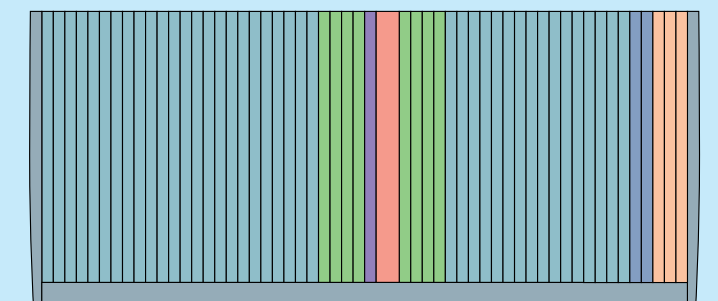
24 Inputs • 4 Dual EQ Groups • 1 MIDI Scene Set Module • 1 Main Module • 8 Stereo Inputs • Quad Matrix Module

This compact 32-channel frame has been adapted to allow 40 inputs, and is optimised for theatrical productions requiring a high degree of pre-recorded playback material. 24 mono and eight stereo line level inputs may be connected, to provide precise control over individual on-stage microphones and instruments, while saving space and cost in pairing the stereo lines.



40 Inputs • 4 Dual FX Groups • 1 MIDI Scene Set Module • 1 Main Module • 1 Blank Module

This 40 channel touring configuration offers four-band swept mid input EQ, stereo routing and four segment LED input meters. An eight way meterbridge is fitted, giving VU indication of Group, FX Return or Aux signals. The 40-channel configuration gives a convenient split layout for multiple-act events.



40 Inputs • 2 Stereo Inputs • 8 Dual FX Groups\* • 1 MIDI Scene Set Module • 1 Main Module • 3 Quad Matrix Modules

This fully-featured 44-channel theatre console includes inputs for 40 mono mic or line sources and two stereo inputs for playback machines. Eight groups with four stereo FX returns are provided, as well as a 12 x 12 output matrix. The Auxiliary outputs utilise group-style output modules for use in critical foldback applications, providing insert points, fader control, metering and additional stereo returns. The compact frame ensures that the largest console will fit into a modest control space.

\* 4 used as Aux Mains

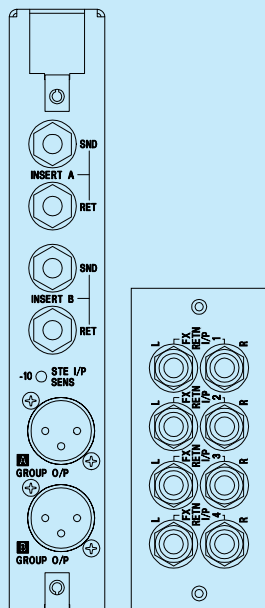
### Dual Group/FX Module

This module contains two identical group output sections, plus a fader-controlled stereo input for effects returns or additional line level sources. Like the Dual Group/EQ module, Dual Group/FX modules can also be used to create fader controlled aux main sends, providing a stereo effects send, return and metering in one module width. The pre-fade insert point allows dynamics or other processors to be used across a section of the mix. The output is on a balanced XLR connector.

Group output and metering facilities are the same as on the Dual Group/EQ Module, though the meters can also be switched to display the stereo return signal.

The stereo return section features a WIDTH control, as on the stereo input channels, enabling the operator to manipulate the stereo line source before routing to the mix. 2-band shelving EQ, at 60Hz and 12kHz, provides tonal balance control, and the stereo signal is routed via a balance control and a 60mm fader to any pair of groups, to the stereo mix bus, or in mono to the mix bus. Aux busses 1-4 can be addressed from the stereo return, via two rotary send controls, switchable to 1 and 2 or 3 and 4. Pre or post-fade status is set by internal jumpers.

Full muting facilities are available on both the group output and stereo return, with PFL or solo-in-place on the return and AFL on the group output.



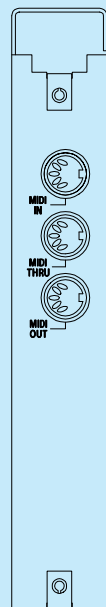
### MIDI Scene Set Module

The MIDI Scene Set Module contains all the K3's facilities for internal mute configuration and external MIDI control. Up to 128 mute groups can be set up and selected from the front panel. In addition, the module can transmit a MIDI program change message on any channel when recalling a scene, to change an effects program, or select a new preset on an external device. MIDI control can also operate the other way around, using an external unit to select mute scenes or individual channel cuts on the K3. Any of the 128 mute groups can be instantly accessed by each of the 8 scene recall buttons.

The DataFader on the MIDI module gives accurate control over almost any parameter on a range of effects and other units, such as reverb depth or pre-delay, using MIDI continuous controllers. Any single controller on any channel may be assigned in this way for each cue.

A PREVIEW button is provided, which allows the operator to visually check any scene without forcing its operation.

Additionally, an ALL function allows a common set of mutes to be copied to every scene before individual adjustments and programs are set. MIDI SysEx dumps in and out allow entire shows to be stored and recalled.



### Quad Matrix Module

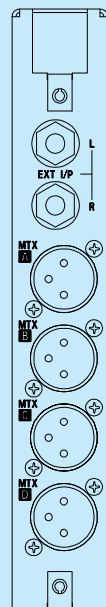
The single-width Quad Matrix Module provides facilities for distributing signals to a multiple speaker system which is especially useful in theatre applications. Each matrix send can be fed from the eight subgroups, from the mono and stereo mix busses, and from a stereo external input at the rear of each matrix module.

The external input can be set, by jumpers on the PCB, either to feed a mono sum signal to each matrix output or to feed the left input to odd numbered outputs and the right input to even numbered outputs. The slimline design of this module means that a full 12x4 matrix can be fitted into a console at the cost of only one input module.

K3 Theatre consoles are fitted with one blank module which may be used for the first Quad Matrix Module.

Outputs appear on individual balanced XLR connectors; external inputs utilise balanced jacks.

Manual CUT and logic-controlled AFL buttons are illuminated for ease of use.



### Main Module

The Main Module contains all controls for the stereo mix bus, mono and monitor outputs, plus main solo controls, oscillator, and 2-track returns. The stereo mix left and right signals are controlled by 100mm faders, and appear on balanced XLRs at the rear panel.

The pre-fade main bus insert points employ a ground-compensated send and a balanced return, on separate jacks. The mono bus output can be controlled either by the right hand fader, with the left hand fader providing stereo level control, or fixed at unity gain if the faders are used as a regular L/R pair. The Fader Mode switch is recessed below the front panel.

Two 2-track returns, both electronically balanced, are provided on rear panel jacks. Either can be routed to the post-fade stereo bus, via a level control, and monitored by pressing the 2TRK button on the monitor output section before routing to the mix.

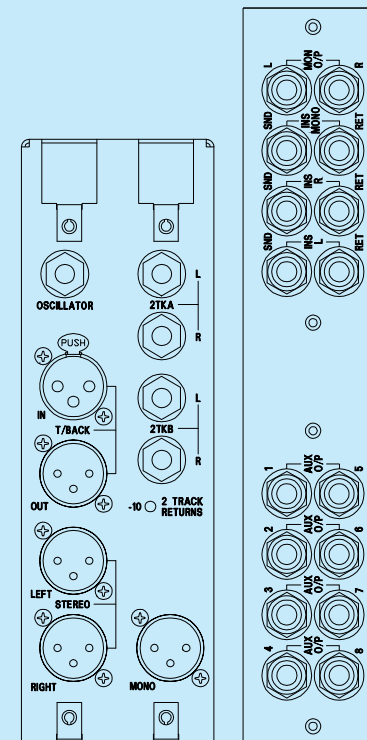
The advanced logic-controlled solo system offers PFL (pre-fade listen) on inputs and AFL (after-fade listen) on outputs. The summed signals appear at the monitor and phones outputs, overriding the stereo main signal that normally appears there. The Solo Clear button lights when any PFL or AFL is active – pressing it clears the solo.

When Auto Cancel is selected, selecting any PFL or AFL will cancel any currently active solo, so only one of these can be active at any time. Solo-in-place is also available via the SIP button, muting all channels apart from that selected for solo. All channels can be protected from muting in this way via internal jumpers.

Two 20-segment meters at the top of the module read the post-fader stereo mix output level, or the 2-track return input. A third meter monitors the post-fade mono level, and AFL or PFL signals.

The talkback section provides an XLR input for a dynamic mic. Talkback can be routed to groups or aux busses, or to another console via the talkback output XLR. 2-way automatic communication with another Soundcraft console (eg. an SM12) is achieved via the external talkback in/out connections. The oscillator may be used to produce pink noise or a sine wave, between 63Hz and 10kHz, in two ranges.

The eight auxiliary sends are each routed via a rotary control to a balanced jack on the rear panel. AFL is provided, and internal jumpers allow the rotary controls to be disconnected so that additional group modules can provide fader-controlled aux sends.



## SM12 - The stage partner of K3 Theatre

For situations where monitoring requirements are complex enough to require a separate console, the SM12 is designed as a stage partner for live mixers such as K3 Theatre. Offering 14 foldback mixes, it is the all-encompassing monitoring solution for touring or fixed PA applications.

Soundcraft's unique advanced solo system, as used on the SM16 and SM24 consoles, speeds up soundchecks with its logical method of operation and reduces the risk of feedback by quickly isolating problematic sources. Every input channel features a wide range XLR connector for mic or line level input, together with phantom power, phase reversal, and low frequency roll-off. The EQ section features four sweepable bands, and the twelve aux sends are switched in pairs to be pre or post fade.

The SM12 is fitted with six dual output modules, each of which accepts an external input for submixing or FX returns. Meters are 16-segment LED bar type and are selected internally to read either peak or average. A phase reversal switch will correct non-standard wiring or help cancel feedback on stage. The main module contains controls for the stereo mix, engineer's output, solo system and talkback facilities. The engineer's output may be used in stereo or mono as required, and is controlled by a long-throw 100mm fader. A stereo mix is also provided, for use as a side fill send or as a main L-R for front-of-house.

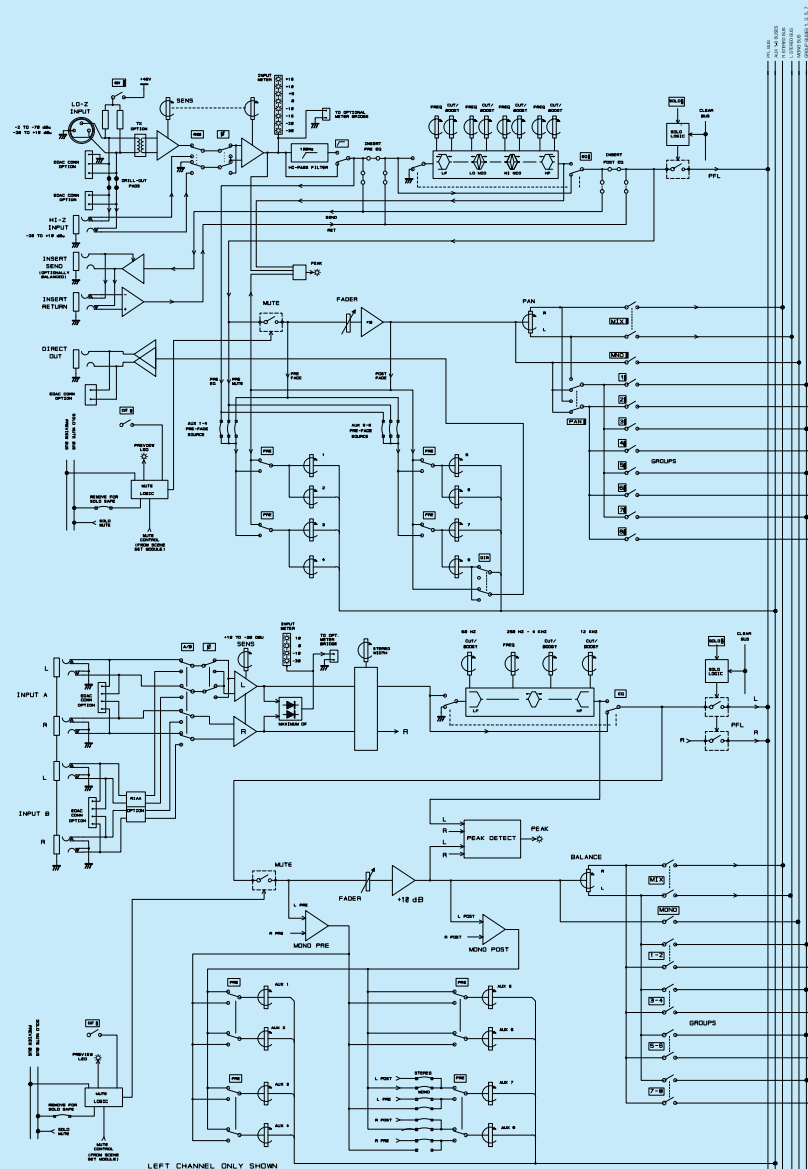
The SM12 is packed with features to ensure that both your monitor and front-of-house mixes are produced to the highest possible standards. Whether you use your SM12 purely as a foldback mixer alongside K3 Theatre, or as a front-of-house console in its own right with outstanding monitoring capabilities, your live sound will be in the best possible hands.



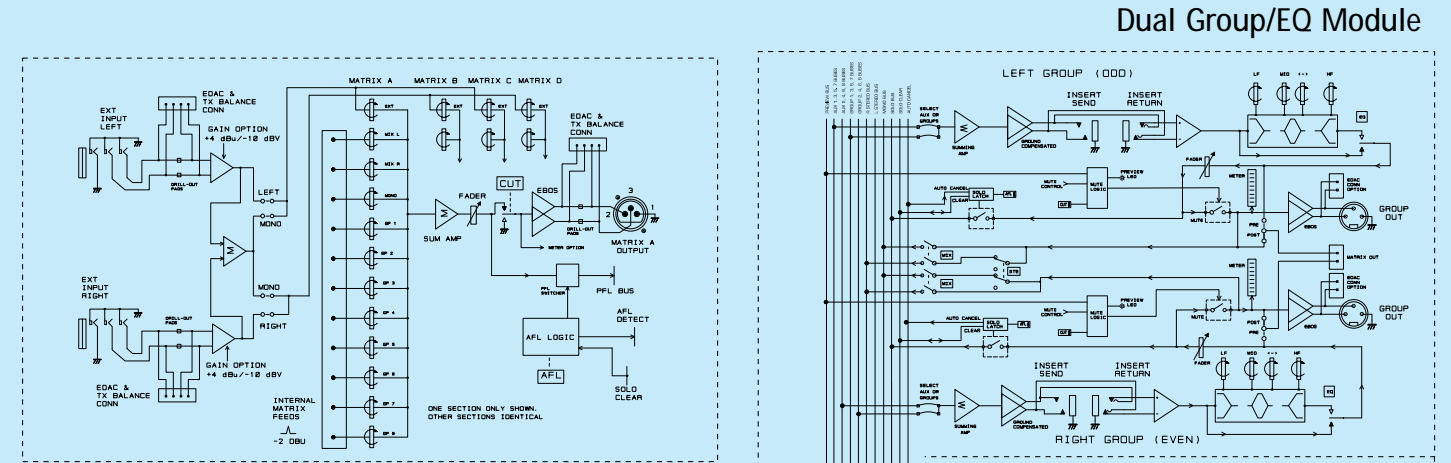
# K3 Theatre Block Diagrams



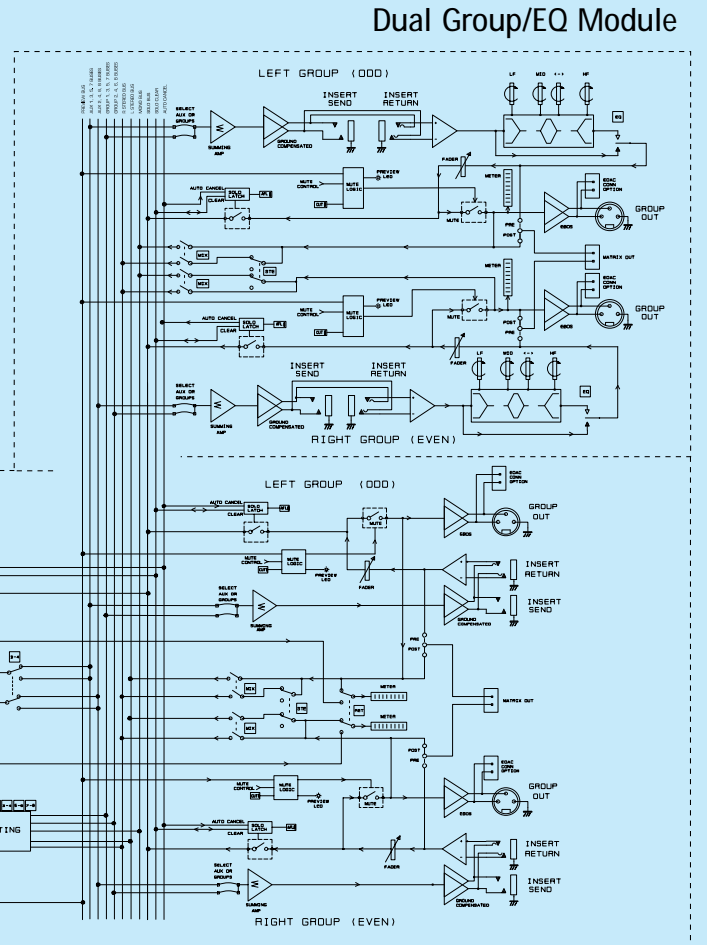
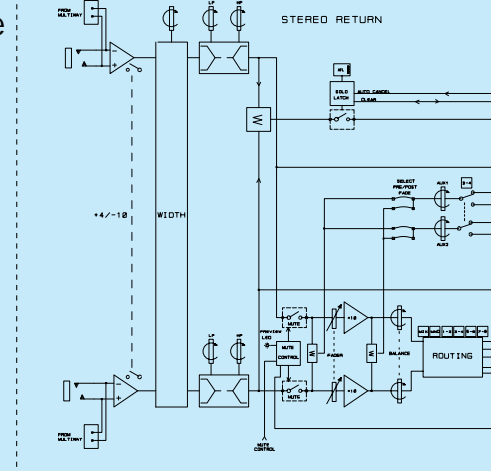
Input Module



Stereo Input Module

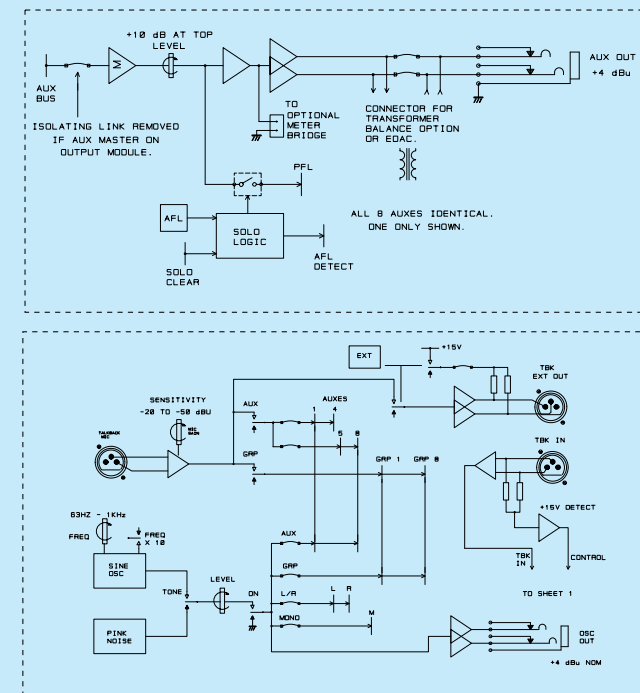


Quad Matrix Module

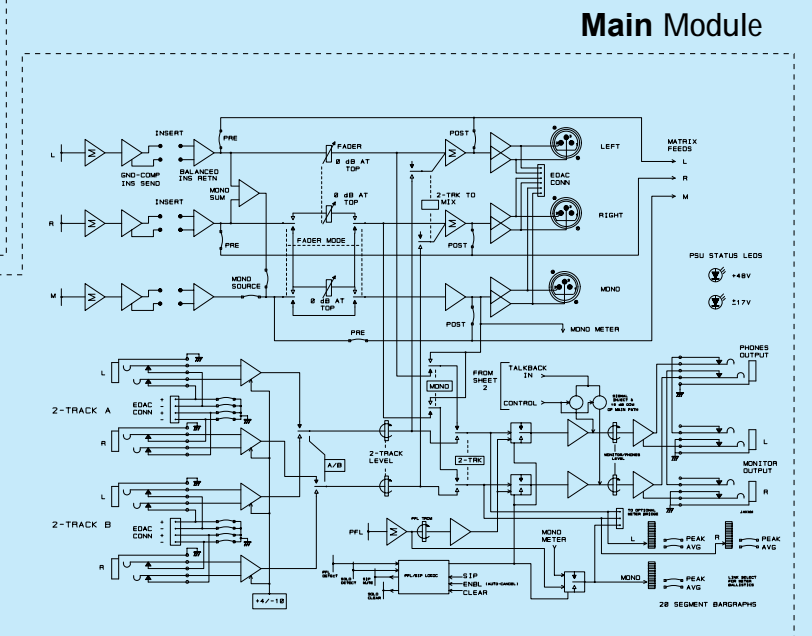


Dual Group/EQ Module

Aux Main Section



Dual Group/FX Return Module



Main Module

# Part Numbers and Options



## Fully-fitted Consoles

|   |        |
|---|--------|
| K3 16 channel console fitted with 16 Theatre inputs + 4 Dual Eq Groups              | RW5205 |
| K3 24 channel console fitted with 24 Theatre inputs + 4 Dual Eq Groups              | RW5206 |
| K3 32 channel console fitted with 32 Theatre inputs + 4 Dual Eq Groups              | RW5207 |
| K3 40 channel console fitted with 40 Theatre inputs + 4 Dual Eq Groups              | RW5208 |
| K3 48 channel console fitted with 48 Theatre inputs + 4 Dual Eq Groups <sup>1</sup> | RW5209 |
| K3 16 channel console fitted with 16 Theatre inputs + 4 Dual FX Groups              | RW5241 |
| K3 24 channel console fitted with 24 Theatre inputs + 4 Dual FX Groups              | RW5242 |
| K3 32 channel console fitted with 32 Theatre inputs + 4 Dual FX Groups              | RW5243 |
| K3 40 channel console fitted with 40 Theatre inputs + 4 Dual FX Groups              | RW5244 |
| K3 48 channel console fitted with 48 Theatre inputs + 4 Dual FX Groups <sup>1</sup> | RW5245 |

All consoles fitted with Main Module, MIDI Module and one blank module.  
All consoles supplied with single CPS275 power supply, except <sup>1</sup> supplied with 2x CPS275

## Meterbridge Options *(Please check power supply requirements before ordering)*

|                              |        |                              |        |
|------------------------------|--------|------------------------------|--------|
| K3 24 channel VU Meterbridge | RW5247 | K3 40 channel VU Meterbridge | RW5249 |
| K3 32 channel VU Meterbridge | RW5248 | K3 48 channel VU Meterbridge | RW5250 |

All meterbridges provide eight output meters, switched between Aux, Group and Matrix.

## Module Options

|                                      |             |  |             |
|--------------------------------------|-------------|--|-------------|
| K3 Theatre Input Module              | RS4703/5703 | K3 MIDI Scene Set Module                   | RS4708/5708 |
| K3 Stereo Input Module               | RS4704/5704 | K3 Quad Matrix Module                      | RS4709/5709 |
| K3 Dual EQ Group Module <sup>2</sup> | RS4705/5705 | K3 Blank Module                            | PB0672      |
| K3 Dual FX Group Module <sup>2</sup> | RS4706/5706 |  |             |
| K3 Main Module                       | RS4707/5707 | <sup>2</sup> may be used as Dual Aux Mains |             |

## Power Supplies

|                                    |        |
|------------------------------------|--------|
| Spare CPS275 19" x 2U Power Supply | RW8022 |
|------------------------------------|--------|

Supplied with DC link cable

## Flightcases

|                                      |        |   |        |
|--------------------------------------|--------|---|--------|
| K3 16 channel Flightcase with wheels | PL1201 | K3 32 channel Flightcase with wheels and cablebox | PL1206 |
| K3 24 channel Flightcase with wheels | PL1202 | K3 40 channel Flightcase with wheels and cablebox | PL1207 |
| K3 32 channel Flightcase with wheels | PL1203 | K3 48 channel Flightcase with wheels and cablebox | PL1208 |
| K3 40 channel Flightcase with wheels | PL1204 | 19" x 6U Power Supply Case                        | PL1186 |
| K3 48 channel Flightcase with wheels | PL1205 |   |        |

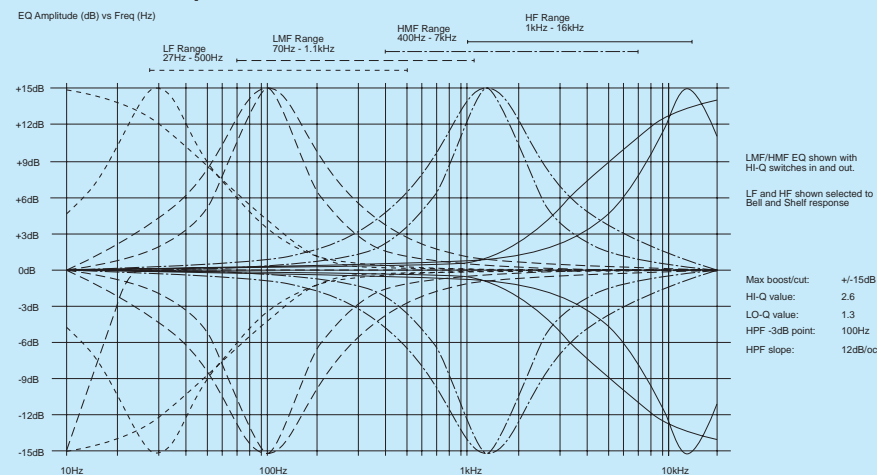
Console flightcases do not accommodate Power Supplies. For flightcases for consoles with meterbridges, please contact your appointed Soundcraft representative

## Spares and Manuals

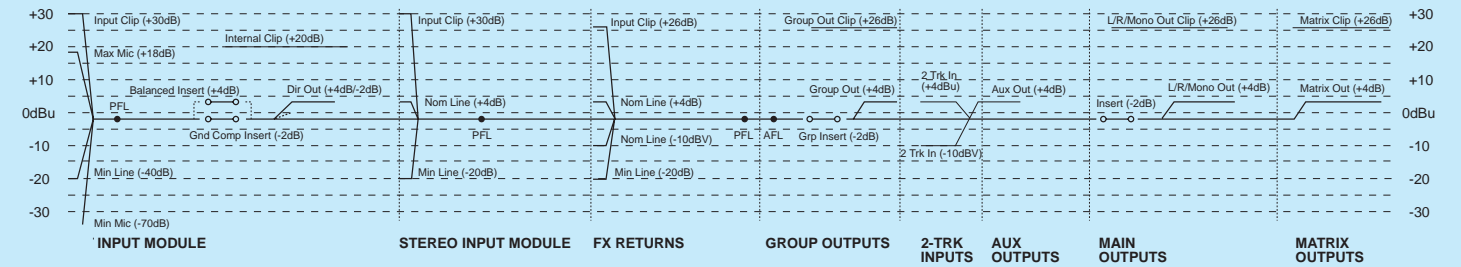
|                                  |        |                   |        |
|----------------------------------|--------|-------------------|--------|
| Microphone Input Transformer kit | RW1302 | Spare User Manual | ZM0090 |
| Customer Spares Kit              | RZ2390 | Technical Manual  | ZM0091 |

# EQ Curves

## K3 Theatre Input EQ



# Level Diagram



# Architect's Specification

The **Mixing Console** shall be of a fully modular construction available in 16, 24, 32, 40 and 48 input frames. The mixing console shall provide eight auxiliary sends, eight mono subgroups, as well as stereo and mono main outputs. A Mute Scene Set system shall be included, enabling up to 128 scenes to be stored and recalled, with eight instant recall presets. The console shall be provided with 4 Dual Groups, 1 Main Module and 1 MIDI Scene Set Module. Frames up to 40 channels will be supplied with a separate PSM300 or CPS275 19 inch rack-mounting Power Supply. 48 channel frames shall be supplied with dual power supplies. The Group Modules shall have a choice of stereo effects returns or dual EQ for the outputs. There shall be a choice of Mono or Stereo Inputs as well as a fully flexible matrix system.

The **Theatre Input Module** shall have the following features; an electronically balanced low-impedance input via an XLR socket and high-impedance input on a three-pole balanced jack with a continuously variable gain giving a sensitivity range of -2dBu to -70dBu (high gain range) and -20dBu to +10dBu for high level inputs, switchable 48V phantom power, a 100Hz filter and phase switch A by-passable 4-band semi-parametric equaliser shall be provided with HF and LF controls switchable between shelving and bell response covering 1kHz to 16kHz and 27Hz to 500Hz and two mid-frequency controls covering the range of 400-7kHz and 70Hz to 1.1kHz with a switched Q of 1.3 or 2.6. All bands shall have a cut and boost of 15dB (centre detented). 8 auxiliary sends shall be provided with individual level controls and pre/post fader switching in pairs with internal selection to pre-EQ, pre-mute and pre-insert. Aux 1 shall be routable to the channel post fade direct output. Routing to the 8 subgroups shall be via individual illuminated switches and switchable pan control which always feeds the stereo mix bus via the illuminated mix switch. Solo and Cut switches shall control the main signal path and allow the prefade signal to be monitored at all times, or post-fade solo-in-place signal to be monitored when the console is selected to that mode. An 8 segment LED meter and a separate

peak indicator shall be provided, plus a Preview LED to indicate the mute status of each channel for the previewed scene. There shall be a selectable pre or post EQ insert point using separate send and balanced return jacks. All connectors shall be integral with the main module. The **Stereo Input Module** shall have the following features; two switchable stereo line level sources on balanced jacks with a continuously variable gain range giving a sensitivity of -20dBu to +10dBu and a width control to vary the image from mono to a phase-enhanced stereo, a by-passable 3-band equaliser with shelving HF and LF operating at 12kHz and 60Hz and a mid control covering the range of 300-3kHz with a Q of 1, all controls having 15dB of cut and boost. Access to all eight auxiliaries shall be possible with paired switch selection of pre and post fader, with Aux 1-6 being fed with a mono sum of left and right while Aux 7 and 8 shall be internally selectable to be a stereo pair. A 100mm fader, and illuminated Cut switch with Preview LED, a stereo balance control and routing switches to the main mix and 8 subgroup buses shall be provided. A Peak LED and illuminated Solo switch will allow monitoring at all times.

Eight Group Outputs shall be provided, using any combination of Dual Group/EQ and Dual Group/FX Modules. The **Dual Group/EQ Module** shall have; 2 x 100mm faders, illuminated Solo, Stereo and Mix switches to route the signal to monitors or the main mix bus with a further option to route in mono or stereo. Two 20-segment LED peak or average reading meters shall monitor the group output. A dual mono EQ shall be included with 12kHz and 60Hz HF and LF controls and mid control covering the range of 250Hz-4kHz, all bands having a cut and boost of 15dB on a centre detented control. The **Dual Group/FX Module** shall contain 2 x 100mm faders, illuminated Solo, Stereo and Mix switches to route the signal to monitors or the main mix bus with a further option to route in mono or stereo. Additionally the module shall provide a single stereo effects return input. The stereo input shall have width and balance controls, two-band shelving EQ, a 60mm linear fader, routing to all 8 groups and the mix busses, illuminated Cut and Solo switches and

two Aux sends providing access to either Aux 1 and 2 or 3 and 4. The **Main Module** shall have 2 x 100mm main faders which may be selected to control L and R or L/R and Mono outputs, 8 rotary aux main controls with associated AFL control, Solo Clear, Solo-in-Place and Auto Cancel selection, two 2-trk returns, Talkback microphone socket and switching, oscillator and monitor controls and 20-segment LED L/R main and Mono/PFL meters.

The **MIDI Scene Set Module** shall be capable of storing up to 128 scenes comprising channel and group mutes, MIDI Program changes and continuous controller number. A three-digit LED display shall be used to show scene number, MIDI channel, controller number or program change for the current or preview scene. Eight preset buttons shall be used to assign instant recall scenes. A Preview facility shall be provided which will display the mute status of the console for any scene without affecting the audio mutes. Presetting of external devices shall be possible via MIDI Program Changes and Note On/Off data. One external device parameter shall be continuously controllable from a 60mm linear DataFader which may be re-assigned with every new scene.

The optional **Quad Matrix Module** may be fitted in any quantity and each output shall receive a contribution from each of the 8 groups, Mix L, R and Mono, as well as an external input. Each matrix output shall be controlled by a rotary main fader with associated illuminated Cut and AFL controls, the output being electronically balanced.

The dimensions and specifications shall be as published on the rear cover of this brochure.

The console shall be the Soundcraft K3 Theatre.

