

On-Air & Production Console

series 15

DUAL MIC INPUT MODULE

The Series15's Dual Mic Module is available in four variants; broadcast or production, and with or without EQ. There are two mic inputs on each channel with a push-button selecting the second signal. Phantom power is set via an internal jumper, while input sensitivity is adjusted by recessed presets at the top of the panel. Signal level is controlled via the 100mm VCA fader, with Pan control and Group buttons (Group buttons on production versions only) positioning the signal in the stereo mix. Cue light signalling can be controlled by the master fader when FDR is selected, and a warning LED shows when the fader is open. An auxiliary send routes the signal to the mono aux bus, with balanced insert points (pre EQ) selectable via an internal PCB switch. The optional 3-band EQ delivers $\pm 10\text{dB}$ gain at 180Hz, 3kHz and 10kHz, with a high pass filter also provided even if EQ is not specified.

STEREO MODULE

There are three variants of the Stereo Module; broadcast or production without EQ, and production with EQ. The Stereo Module has connections for two stereo line inputs; Line 1 has adjustable input sensitivity, while Line 2 is fixed at 0dB gain. Line 2 is selectable from the front panel. Remote Start and Stop functions may be controlled by the fader when FDR is selected, with these buttons lighting to display remote status. The Fader Open LED lights whenever a fader moves from its back stop. EQ, where specified, offers the same specifications as on the Dual Mic Module.

MONO OR STEREO TELCO MODULES

Both the Mono and Stereo Telco Modules allow connection to a telephone hybrid, enabling live connection of telephone callers on-air. The Stereo Telco Module's features are similar to those of the Stereo

Module - it is available in the same three variants - but it has a stereo clean feed output instead of insert sends, enabling signals to be relayed to a remote studio via ISDN lines. When PFL is selected, the console's talkback is routed to the clean feed, allowing a two way conversation to take place. The Mono Telco Module - complete with EQ in either broadcast or production variants - has a mono line input and clean feed output, with levels adjustable via recessed presets. The PFL switch routes the talkback to the clean feed as on the Stereo Telco Module and, when PFL is cancelled, a Hold button latches the telephone hybrid when waiting to put the caller on air. External talkback inputs are also provided.

STEREO GROUP OUTPUT MODULE

The Stereo Group Module has outputs via balanced XLR and unbalanced D-type connectors. Each stereo group can be

routed to the main stereo mix using the PGM switch, or can be summed to mono. The PFL switch routes the group output (pre-fade) to the PFL bus; this can be programmed to cancel on the opening of the fader. An optional limiter section has controls for threshold and release time, with gain reduction displayed via LEDs.

STEREO MASTER MODULE

The Series15 has three main outputs - stereo and mono programme and mono auxiliary; the Master Module offers global control over master levels for these busses. The production version of this module has a 100mm VCA fader to control stereo output, while the broadcast version has no master fader, thereby avoiding accidental or inadvertent ducking during transmission or layoff. The aux signal may be routed to the PFL bus via the AFL switch, with $+10\text{dB}$ of gain flexibility provided by the Aux Master control.

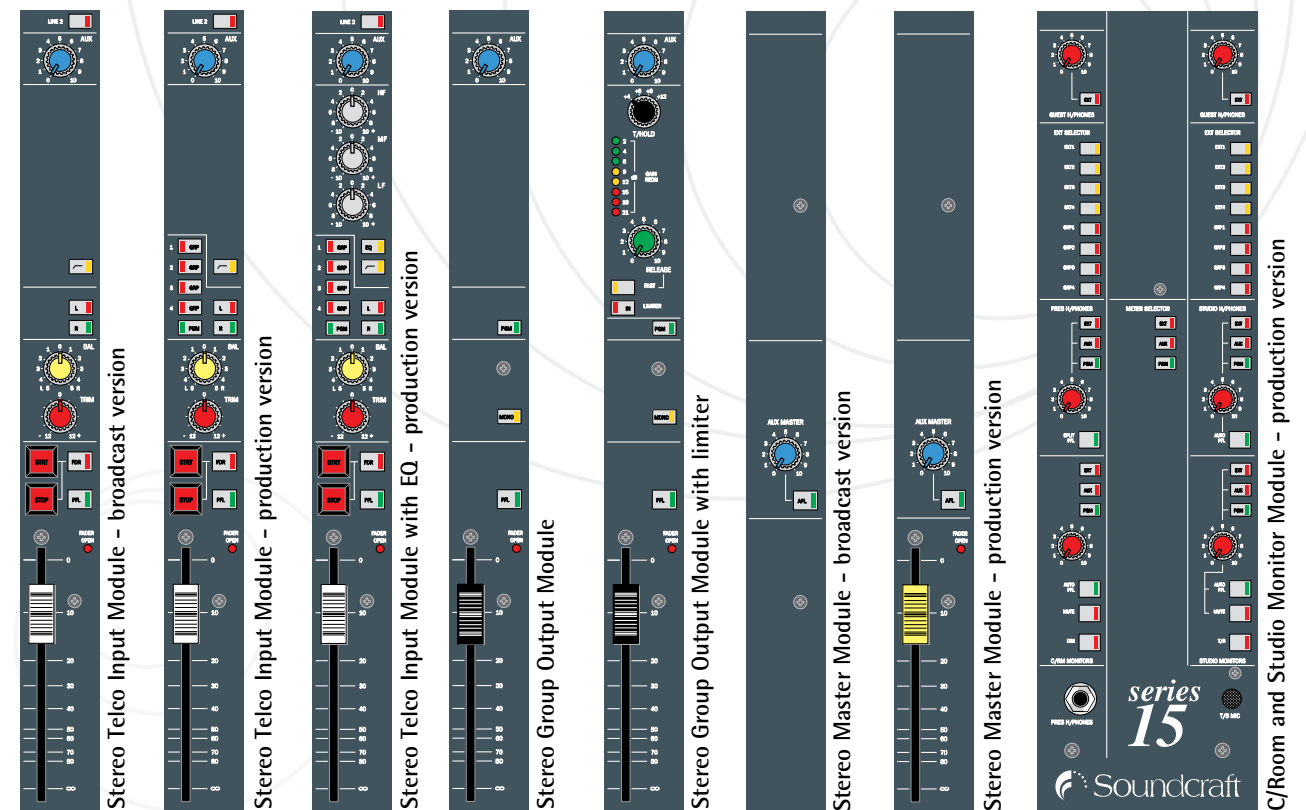
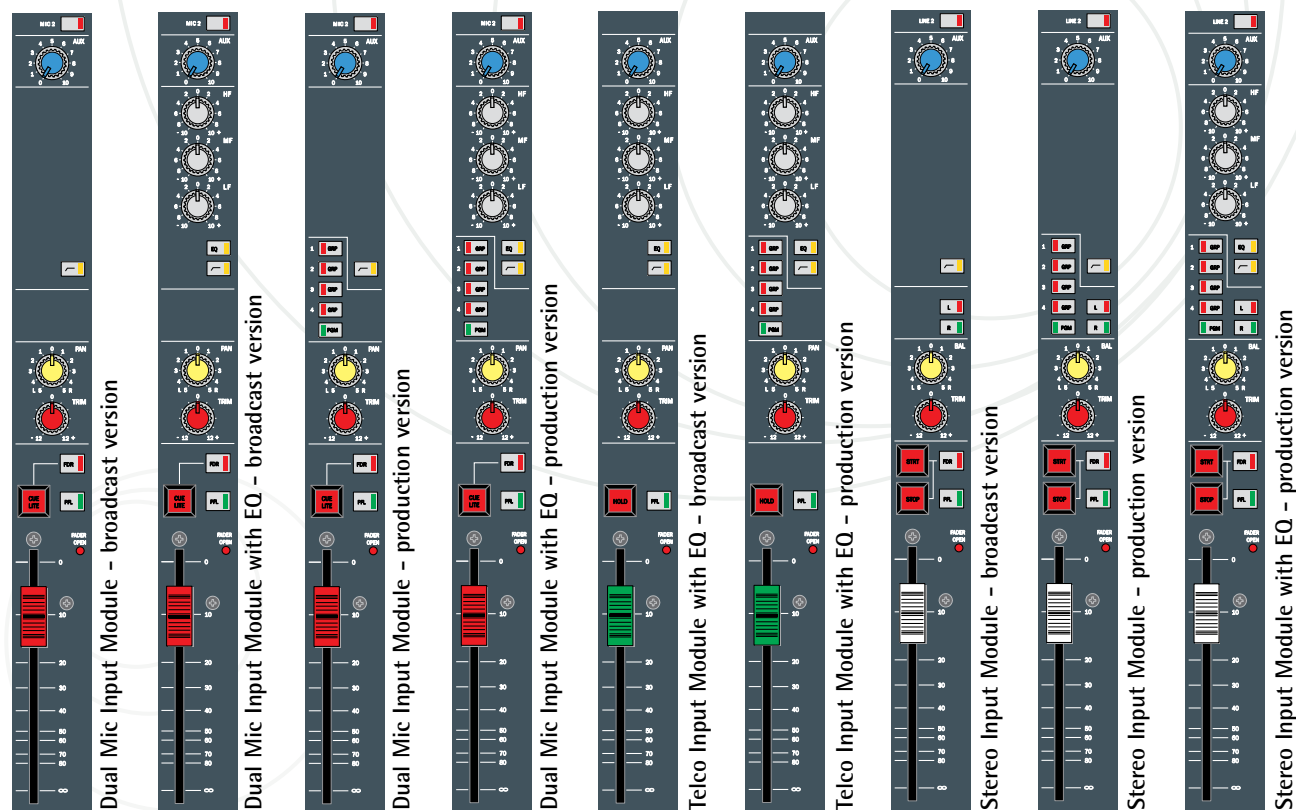
MONITOR MODULE

The Monitor Module is essentially three modules in one. On the left are the monitoring controls for the Control Room, Presenter's headphones and the first Guest headphone output, and on the right is an identical set of controls, this time applying to the Studio monitors, Studio headphones and the second Guest Headphone output. Each set offers a choice of PGM, AUX or EXT, with the EXT then being selected further up the module between the four stereo external inputs and the four subgroups (when they are installed on the production version of the console). When Auto PFL is pressed on either side, the PFL signal will be monitored. Dim and Mute buttons are provided for the Control Room side, with a T/B switch and mic on the Studio side for communicating to the Studio headphones and monitors as well as dimming the control room monitors. The

meter output is sourced from the Meter Selector switches which are located in the centre of the console - either EXT, AUX, PGM, or pre fade if any PFL is selected.

OPTIONS

- A recessed script tray or blank panel can be installed.
- Meterbridge options include: single or twin mono VU or PPM meters (large or small), custom bargraph panel, cue loudspeaker, and dual digital timer.
- Faders can be specified as either carbon or conductive plastic.
- The Master Module is available with or without master faders.
- The console is powered by an external CPS275 power supply which can be optionally rackmounted, and linked to an additional CPS275 for redundancy if required.



On-Air & Production Console

series
10

The Series10 is a fully modular on-air mixing console designed for use in local radio stations and smaller studios of national radio broadcasters. It has been designed specifically to meet the needs of broadcast and production engineers by offering total operational flexibility and a wide choice of configurations. 12, 20 or 28-input frames may be specified, which comprise Mono, Stereo, Telco and Source Select Modules.

MONO MODULE

The Line button at the top of the Mono Module toggles between the microphone and line level inputs. Sensitivity is adjusted by the recessed presets on the top of the front panel. An auxiliary send is provided for external effects, as a record feed, or for foldback purposes. An HP filter and three band EQ combine with a PFL bus and Pan and Gain controls to offer total versatility in the broadcast environment.

STEREO MODULE

Two line level stereo sources can be connected to the Stereo Module; the Line 2 button toggles between them. Independent L/R gain is adjustable via the recessed presets at the top of the channel strip, and fine control is afforded by the Balance pot. A high quality 100mm long-throw fader governs output level.

TELCO MODULE

Designed for connection to a telephone hybrid, the Telco Module's features are similar to those found on the mono module, but instead of a second input it offers a balanced clean feed output.

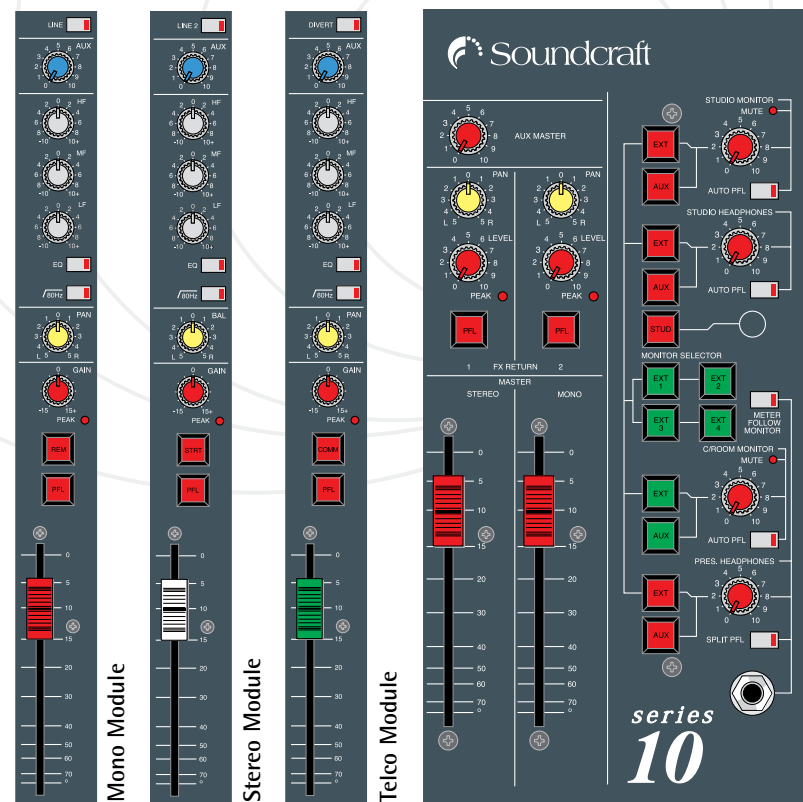
MASTER MODULE

The Series10 has two main outputs – Master Stereo and Master Mono. In addition to these it has an Auxiliary send for effects, foldback or an isolated record feed. The Production version has two mono effects returns with Level and Pan controls. Studio Monitor, Studio

Headphones, Control Room Monitor and Presenter's Headphones can all be derived from either of the Master busses, the Auxiliary send, or the four external inputs. Comprehensive presenter to studio talkback facilities are also available.

OPTIONS

- A recessed script tray with an equivalent width of eight modules can be specified.
- A six module wide script blank panel can be fitted.
- Meter bridge options include: Single or twin mono VU or PPM meters (large or small), custom bargraph panel, cue loudspeaker, and dual digital timer.
- A stereo Source Select Module is available, which allows connection of multiple stereo signals without using additional inputs.
- Faders can be specified as either carbon or conductive plastic.
- The Master Module is available with or without master faders.
- The 90-240V power supply can be optionally rackmounted.



On-Air Console

RM105

Designed for use in local radio and other broadcast applications where ease of use must be married with an added level of functionality, the Soundcraft RM105 is a fully modular on-air console which provides a versatile and cost-efficient studio control package.

The RM105's frame can be specified to be 8, 12 or 20 input channels wide. Mono, Stereo, Telco and Source Select input modules are available, in addition to a Master Module which is included as standard.

MONO MODULE

The Mono Module accepts an input source at microphone or line level, with 48V phantom power enabled internally if required. Input gain is attenuated by the recessed presets. An insert point allows external signal processing. The channel output is always sent to the PGM (Program) bus, and can be routed to the post-fade AUX (Auxiliary) bus via the Aux pot. The optional switchable 2-band EQ affords a gain range of $\pm 10\text{dB}$ at 100Hz and 8kHz.

STEREO MODULE

The Line 2 button at the top of the channel strip switches between the two stereo line level inputs. Recessed presets attenuate the L/R sensitivity, and the optional switchable 2-band EQ offers a gain range of $\pm 10\text{dB}$ at 100Hz and 6.5kHz. The signal can be routed to the AUX bus via the post-fade Aux pot.

TELCO MODULE

Providing an efficient means of connecting telephone callers straight to air, the Telco Module accepts a balanced input and offers a balanced clean feed. A pre-fade insert point allows external signal processing. The optional switchable 2-band EQ offers $\pm 10\text{dB}$ at 100Hz and 8kHz. The Aux pot permits routing to the AUX (Auxiliary) bus.

MASTER MODULE

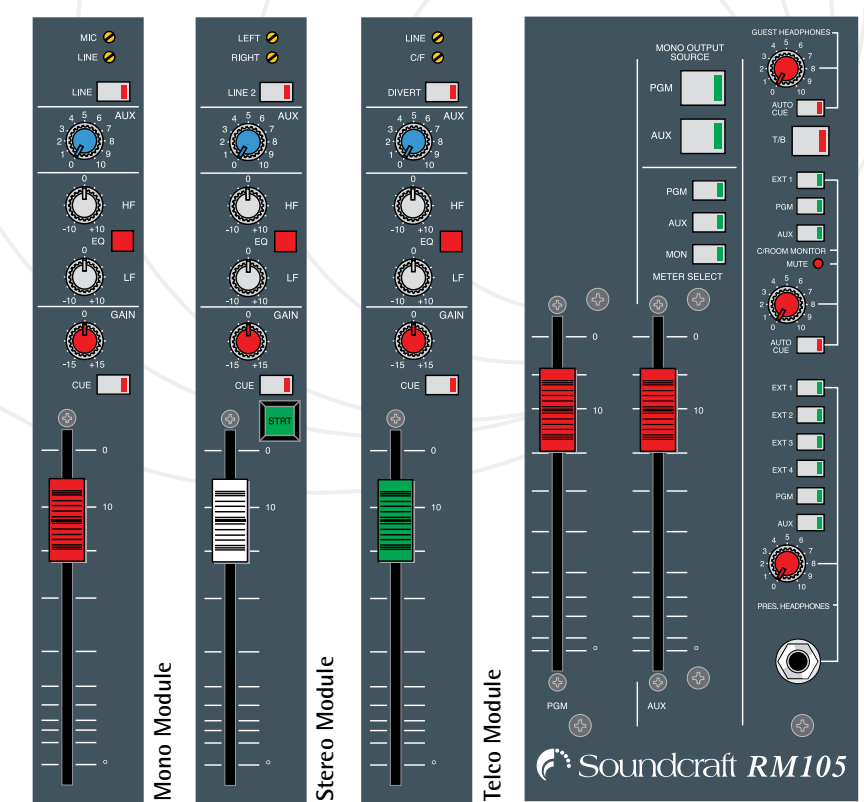
The RM105 has three main outputs – stereo Program, stereo Auxiliary and a Mono output that can be sourced from either PGM or AUX. The line level Control Room Monitor output can be derived from PGM, AUX or Ext 1, and the Presenter's and Guest Headphones are independently selectable between PGM, AUX, and the four external inputs (which are connected via a 15-pin D-connector). The meters can be set to measure PGM, AUX, or to read the Control Room Monitor selection.

OPTIONS

- A seven module wide script tray can be installed.
- PPMs can be specified instead of VUs.
- The deluxe meterbridge provides a digital machine timer and Cue speaker.



- The 20-channel frame is fitted with four meters, one pair being permanently fed from the PGM output.
- A stereo Source Select Module is available, which allows connection of multiple stereo signals without using additional inputs.
- The VCA faders can be specified as either carbon or conductive plastic.
- The Master Module is available with or without master faders.
- The 90-240V power supply can be optionally rackmounted.



On-Air Console RM100

The Soundcraft RM100 is a fully modular radio on-air console which is ideal for use in local radio and other smaller broadcast applications. Designed with ease of use as the prime consideration, it offers a fully-featured yet affordable studio control package.

The RM100 is available in three frame sizes of 8, 12 or 20 input channels. The modules are selected from the range of Mono, Stereo, Telco and Source Select. A Master Module is standard with every console.

MONO MODULE

A mono source at microphone or line level can be connected to the Mono Module. 48V phantom power can be enabled internally, with input sensitivity adjusted via the recessed presets. An insert point allows external signal processing. The signal can be routed to the PGM (Program) and AUD (Audition) busses using the large illuminated routing switches. Channel level is controlled by a high quality carbon or conductive plastic 100mm VCA fader.

STEREO MODULE

Two stereo line level sources can be connected to each Stereo Module; the B switch toggles between them. L/R gain is adjustable between -12dB and +9dB via recessed presets, and the signal can be routed to the PGM and AUD busses.

TELCO MODULE

Designed for connection to an external telephone hybrid, the Telco Module's input gain and clean feed output attenuation are adjusted via recessed presets. A pre-fade insert point allows external signal processing. Routing controls are similar to those on the Mono Module.

MASTER MODULE

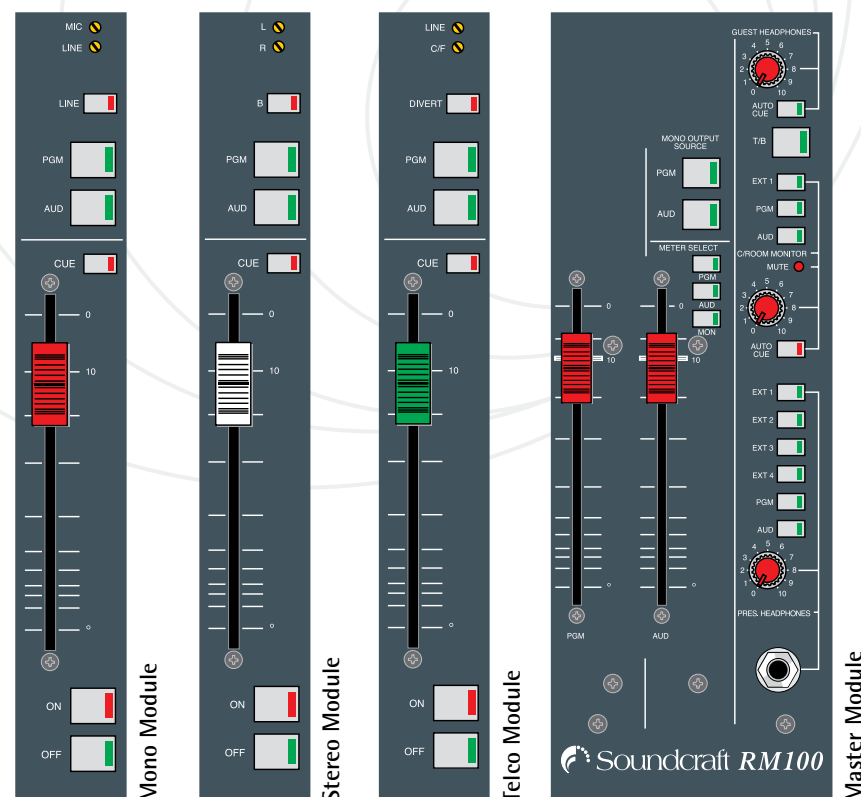
The RM100 has three main outputs - stereo Program, stereo Audition and a Mono output that can be sourced from either PGM or AUD. The line level Control

Room Monitor output is derived from either PGM, AUD or Ext 1, and the Presenter's and Guest Headphones sources can be independently selected from PGM, AUD, or the four external inputs (which are connected via a 15-pin D-connector). The meters can be set to measure PGM, AUD, or to follow the Control Room Monitor source.

OPTIONS

- A script tray with an equivalent width of seven modules can be specified.
- PPMs are available instead of VUs.
- The deluxe meterbridge provides a digital machine timer and integral Cue speaker.
- The 20-channel frame is fitted with four meters, one pair being fed from the PGM output.

- A stereo Source Select Module is available, which allows connection of multiple stereo signals without using additional inputs.
- The VCA faders can be specified as either carbon or conductive plastic.
- The Master Module is available with or without master faders.
- The 90-240V power supply can be optionally rackmounted.



Production Console BB100



With the relentless expansion of Broadcasting in all parts of the world, we have recognised the market's need for a new, more cost-effective, small format audio console which is not only well-featured, but also able to deliver the performance and build quality expected by today's Broadcast professionals.

The BB100 is a versatile member of our range of professional audio mixing consoles with a flexible design aimed primarily at broadcasters, yet suitable for use in many other applications.

FEATURES:

- Up to 32 channels can be fitted
- Up to 8 subgroups can be fitted
- 8 Aux sends, Aux 1-2 can be configured as stereo

- Up to 5 Stereo FX returns (depending on the number of subgroups fitted)
- Four chassis sizes are available - typical configurations are: 8 + 2 stereo / 4 / 2; 16 + 2 stereo / 4 / 2; 24 / 8 / 2; 32 / 8 / 2
- Mono channels have 3 band EQ. Stereo channels have 4 band EQ. Both have swept mids with adjustable Q and In/Out switch
- LED indication on all important switches
- Major inputs and outputs are balanced
- Stereo PFL/AFL bus
- Many internal jumper links for user configuration
- Line up oscillator with 3 frequencies
- Metering uses 28 segment led meters and moving coil meters

FEATURES USEFUL TO BROADCASTERS:

- Up to 4 Cleanfeed Outputs with talkback. These outputs can be changed (using

- internal jumpers) to an output matrix fed from the groups and main output
- Fader Starts and External Mutes
- "Soft" Mute circuits
- Stereo channels have M-S (Sum and Difference) Switches
- Control Room Monitor with external inputs and outputs for Main and Nearfield speakers. One of the sources has a 4 input sub mixer for returns from video machines
- Direct Outputs on all mono input channels
- Channel Meters reading the prefade signal
- Studio Monitor with talkback. This output is automatically muted by the On Air switch or when a channel fader is open and that channel is selected to "Mic"
- Conductive plastic faders
- The On-Air Switch also inhibits line-up tone and oscillator signals and provides an output which can be used to operate an external On-Air lamp. The On-Air function can also be activated from outside the console

MODULES AVAILABLE:

- Mono Input
- Stereo Input
- Dual Subgroup
- Aux Master & Comms
- Master & Monitor

TECHNICAL SPECIFICATIONS:

NOISE
EIN - 200Ω source, Gain 70dB,
20kHz band RMS-127dBu
One Line input to Stereo, Gain unity,
20kHz band RMS-86 dBu

THD
Mic input to Main output with 10k or 600Ω
load, Test signal -30dBu @ 1kHz, Gain 40dB<0.03%
Line input to Main output with 10k or 600Ω
load, Test signal +20dBu @ 1kHz, Gain unity<0.01%

FREQUENCY RESPONSE
All Filters & EQ out, output load 10k
Mic input to Main output, Gain 60dB,
test signal -40dBu+/- 0.5dBu
(20Hz - 20kHz)
Line input to Main output, Unity gain,
test signal +20dBu+/- 0.5dBu
(20Hz - 20kHz)

CROSSTALK
Channel breakthrough Better than -90dBu
(40Hz - 15kHz)

(CH1 to Subgroup 1, CH4 to Subgroup 4, Gain unity,
Test signal +20dBu to CH1, 200Ω load to CH4,
Measured @ Subgroup 4 output)

Channel Pan cut-off Better than -65dBu
(@ 1kHz)

(CH1 to Subgroup 4, Pan hard right, Gain unity,
Test signal +20dBu to CH1,
Measured @ Subgroup 3 output)

MAXIMUM SIGNAL HANDLING
Mic input+25dBu (with PAD)
Line input+25dBu
Subgroup & Main Outputs+25dBu
(600Ω load or higher)

IMPEDANCE
Mic input> 1 kΩ (20Hz - 20kHz)
Line input15k (20Hz - 20kHz)
Outputs75Ω (@ 1 kHz)

POWER CONSUMPTION
10-4-2console approx. 0.5 kW
32-8-2console approx. 1.2 kW

Also available: Production Consoles

Finding the right console for demanding broadcast applications has never been easy. The varied requirements of live TV broadcast, production and OB installations means that only highly customised versions of existing mixers have been suitable, especially where space is at a premium.

Soundcraft changes all this with the B400 and B800, specialised yet highly flexible modular broadcast consoles enabling the user to configure a powerful, compact mixing solution that precisely meets their needs.

To obtain further information on any of these consoles, please contact Soundcraft for a brochure, or visit the website.

B 400

Based on the B800, the B400 delivers a level of configurability unrivalled in its class. Input frames can comprise any combination of Mono, Stereo and Stereo Telco modules. 8 Mono or 4 Stereo Groups can be specified while the individual Monitor, Communications and Stereo Master Modules, fitted to the B400 as standard, offer a range of facilities to satisfy the most demanding engineer. Yet despite its specification, the B400 provides a budget-friendly solution for facilities of all sizes.



B 800

Extensive configuration options available within modules mean that the features and flexibility you would previously have expected only on a customised desk are available within the B800's compact frame. In terms of audio routing, remote control and signalling facilities, the B800 sets a new standard for versatility, and compact, ergonomic efficiency.

Five frame sizes are available, accepting up to 48 inputs. The desk can be configured with 8 mono or 4 stereo groups,



and there are two fully independent stereo master output modules. 6 mono and 2 stereo aux sends are provided. Extensive monitoring and cue facilities include stereo AFL/PFL, and several sets of speaker and phones outputs. There are 4 VCA groups for additional level control.

	Series15	Series10	RM105	RM100
FREQUENCY RESPONSE Mic / Line input	20Hz-20kHz, +0, -0.5dB	20Hz-20kHz +0, -0.5dB	20Hz-20kHz +0, -1dB	20Hz-20kHz +0, -1dB
NOISE (20Hz-20kHz bandwidth unweighted) Mic E.I.N. Line E.I.N.	<-128dBu <-86dBu	<-127dBu <-83dBu	-127dBu -85dBu	-127dBu -85dBu
DISTORTION THD and noise	0.015% @ 1kHz	<0.01% @ 1kHz	<0.02% @ 40Hz-20kHz	0.02% @ 40Hz-20kHz
INPUT LEVELS* Microphone input Maximum input level Mic/Line /Telco insert point Mono line input Stereo line input Telco input	-70dBu to -20dBu 0dBu n/a Line 1: -10dBu to +4dBu Line 2: 0dBu -10dBu to +4dBu	-70dBu to -23dBu -2dBu n/a -10dBu to 0dBu Line 1: -10dBu to 0dBu Line 2: 0dBu or -10dBV -10dBu to 0dBu	-70dBu to -20dBu +4dBu -10dBu unbal -30dBu to +6dBu -10dBu to +4dBu -10dBu to +4dBu	-70dBu to -20dBu +6dBu -10dBu unbal -48dBu to +2dBu -12dBu to +9dBu -12dBu to +9dBu
INPUT IMPEDANCES Microphone input Mono line input Stereo line input Telco	~2k2Ω n/a >10kΩ >10kΩ	>1.5kΩ >20kΩ >10kΩ >10kΩ	2.2kΩ >20kΩ >40kΩ >40kΩ	>1.5kΩ 20kΩ 40kΩ 40kΩ
OUTPUT LEVELS Balanced outputs Max output level	STE, MON, AUX, Insert, Clean feed, Groups +26dBu (All)	Left, Right, Mono, Aux, Clean feed +21dBu (All)	PGM, AUX, Mono, Clean feed +26dBu (All)	PGM, AUD, Mono, Clean feed +26dBu into 600Ω (PGM, AUD, Mono) +20dBu into 600Ω (Telco clean feed)
Nominal output level	0dBu for PPM4 (+4dBu for 0VU)	0dBu for PPM4 (+4dBu for 0VU)	0dBu for PPM4 (+4dBu for 0VU)	0dBu for PPM4 (+4dBu for 0VU)
OUTPUT IMPEDANCES Output impedances	>75Ω	>75Ω	<75Ω	<75Ω

*All channel inputs are electronically balanced