

# SD5B Digital Mixing Console



[Full product information online](#)

## Specifications

### General Specifications

- Faders 37 x 100mm touch-sensitive, motorised
- Screens 3 x 15" LCD high – resolution touch screens
- Meterbridge 2 x Custom Mounted LCD high-resolution TFT-LCD screens
- Input Channels 253
- Busses Up to 128 plus masters Aux / Group busses with full processing – LR/LCR/5.1 Master Buss
- Matrix Up to 24 Input / 24 Outputs with full processing
- Control Groups Up to 24, selectable for VCA-style, Moving fader, Mute Group
- Graphic Eq 32 x 32-band, Gain +/- 12dB
- Internal FX Up to 24 stereo effects comprising up to 16 floating point reverbs and up to 24 delay/chorus/pitch/enhancer
- Local I/O 8 x mic/line I/O, 8 x AES I/O
- MADI interface 4 redundant interfaces, BNC connectivity
- Standard Optics (Dual Loop – Optional)
- Sampling rates 48kHz / 96kHz
- GPIO: 2 x DSub25
- Ext Sync Wordclock, AES, Video, MADI, Optics
- SD5B Dimensions: 1465 mm (w) x 838mm (d) x 458 mm (h)
- SD5B Weight: 116Kg /256lbs. (235Kg / 518lbs. with flightcase)
- SD5B Flightcase: 1600 mm (w) x 600mm (d) x 1200 mm (h)
- Power Requirements 90V-260V, 50-60Hz, 532VA (340W)

### Audio Specification

- Sample Rate: 48kHz or 96kHz
- Processing Delay: 2ms Typical @ 48k(60 Stereo Channels, Stage Input Through L-R Buss to Stage Output) 1.1ms @96k
- Internal Processing: Up to 40-bit, Floating Point
- A>D & D>A: 24-bit Converter Bit Depth
- Frequency Response: +/- 0.6dB (20Hz – 20kHz)
- THD: <0.05% @ Unity Gain,; 10dB Input @ 1kHz
- Channel Separation: Better Than 90dB: (40Hz – 15kHz)
- Residual Output: <90dBu Typical

- Noise: (20Hz – 20kHz)
- Microphone Input: Better Than -126dB: Equivalent Noise
- Maximum Output Level: +22dBu
- Maximum Input Level: +22dBu

## **Processing Channel Specification**

### **Input Channel**

- Name: User-Defined / Presets
- Channel Selection: Mono / Stereo / Multi
- Input Routing: Main & Alternate Input
- Analogue Gain: -20 to +60dB
- Phase: Normal / Reverse
- Digital Trim: -40 to +40dB
- Delay: >1 Sec (Coarse & Fine Control)
- DiGiTuBe: Drive 0.01 – 50.0
- Bias 0 – 6
- LPF: 20 – 20kHz, 24dB/Oct
- HPF: 20 – 20kHz, 24dB/Oct
- Insert A: (Pre EQ/Dyn) On/Off
- Equalisation: 4 Band EQ: Parametric or Dynamic (Low/Lowshelf, Lower-Mid/Lowshelf, Upper-Mid/Hi Shelf, Hi/Hishelf)  
On/Off  
Freq; 20 – 20kHz  
Gain; +/- 18dB  
Q: 0.1 -20 (Parametric) / 0.10-0.85 (Shelf)  
Dynamic EQ On/Off  
Over/Under  
Band On/Off  
Threshold; -60 – 0dB  
Attack; 500us – 100ms  
Release; 10ms – 10s  
Ratio; 1:1 – 50:1
- Dynamics 1: Single or Multiband (3-Band) Compressor: On/Off  
Threshold; -60 – 0dB  
Attack; 500us – 100ms  
Release; 10ms – 10s  
Ratio; 1:1 – 50:1  
Gain; 0 to +40dB with  
Autogain Option  
Link; Any Channel/Buss  
Hi Crossover; 20Hz – 20kHz  
Lo Crossover; 20Hz – 20kHz  
Knee : Hard, Med, Soft De-Esser: Threshold : 20us – 20ms

- Release : 1ms – 100ms
- Ratio : 1:1 – 50:1
- Ess-Band : Listen On/Off
- Ess-Band Filter Freq / Width: 20Hz – 20kHz
- Dynamics 2: On/Off Gate / Ducker: Threshold; -60 – 0dB
  - Attack; 50us – 100ms
  - Hold; 2ms – 2s
  - Release; 5ms – 5s
  - Range; 0 – 90dB
  - Key; Any Source
  - Key Listen
  - Freq/Width; 20 – 20kHz Compressor: On/Off
  - Threshold; -60 – 0dB
  - Attack; 500us – 100ms
  - Release; 10ms – 10s
  - Ratio; 1:1 – 50:1
  - Gain; 0 to +40dB with Autogain Option
  - Link; Any Channel / Buss
  - Hi Crossover; 20Hz – 20kHz
  - Lo Crossover; 20Hz – 20kHz
  - S/C Source : Any Source
  - S/C Listen : On/Off
  - S/C Filter Freq/Width: 20Hz – 20kHz
- Insert B: (Post EQ/Dyn) On/Off
- EQ/Dyn order: EQ/Dyn or Dyn/EQ
- Mute: Channel Mute / Hard Mute
- Solo: Solo Buss 1 / Solo Buss 2 / Both, Auto Solo
- Channel Safe: Input, EQ, Dyn, Aux, Pan, Fade/Mute, Inserts, Buss, Directs, Full Safe
- Output Routing: Buss, Insert A, Insert B, FX
  - Direct: On/Off, Pre-Mute / Pre-Fade / Post-Fade, Level +/- 18dB
- Fader: 100mm Motorised Fader  $\infty$  to +10dB

## Processing Channel Specification

### Aux / Group / Matrix Output

- Name: User-Defined / Presets
- Phase: Normal / Reverse
- Digital Trim: -20 to +60dB
- Delay: >1 Sec (Coarse & Fine control)
- DiGiTuBe: Drive 0.01 – 50.0
  - Bias 0 – 6
- LPF: 20 – 20kHz, 24dB / Oct

- HPF: 20 – 20kHz, 24dB / Oct
- Insert A: (Pre EQ/Dyn) On/Off
- Equalisation: 8 Band EQ: 4 band Parametric and 4 band parametric or Dynamic (Low/Lowshelf, Lower-Mid/Lowshelf, Upper-Mid/Hi Shelf, Hi/Hishelf)  
On/Off  
Freq; 20 – 20kHz  
Gain; +/- 18dB  
Q: 0.1 -20 (Parametric) / 0.10-0.85 (Shelf)  
Dynamic EQ On/Off  
Over/Under  
Band On/Off  
Threshold; -60 – 0dB  
Attack; 500us – 100ms  
Release; 10ms – 10s  
Ratio; 1:1 – 50:1
- Dynamics 1: Single or Multiband (3-band) Compressor: On/Off  
Threshold; -60 – 0dB  
Attack; 500us – 100ms  
Release; 10ms – 10s  
Ratio; 1:1 – 50:1  
Gain; 0 to +40dB  
with Autogain Option  
Link; Any Channel / Buss  
Hi Crossover; 20Hz – 20kHz  
Lo Crossover; 20Hz – 20kHz  
Knee : Hard, Med, Soft De-Esser: Threshold: 20us – 20ms  
Release: 1ms – 100ms  
Ratio: 1:1 – 50:1  
Ess-Band: Listen On/Off  
Ess-Band Filter Freq/Width: 20Hz – 20kHz
- Dynamics 2: On/Off Gate / Ducker: Threshold; -60 – 0dB  
Attack; 50us – 100ms  
Hold; 2ms – 2s  
Release; 5ms – 5s  
Range; 0 – 90dB  
Key; Any Source  
Key Listen  
Freq/Width; 20 – 20kHz Compressor: On/Off  
Threshold; -60 – 0dB  
Attack; 500us – 100ms  
Release; 10ms – 10s  
Ratio; 1:1 – 50:1  
Gain; 0 to +40dB  
with Autogain Option

Link; Any Channel/Buss

Hi Crossover; 20Hz – 20kHz

Lo Crossover; 20Hz – 20kHz

S/C Source : Any source

S/C Listen : On/Off

S/C Filter Freq/Width: 20Hz – 20kHz

- Insert B: (Post EQ/Dyn) On/Off
- EQ/Dyn Order: EQ/Dyn or Dyn/EQ
- Mute: Channel Mute / Hard Mute
- Solo: Solo Buss 1 / Solo Buss 2 / Both, Auto Solo
- Channel Safe: Trim, EQ, Dyn, Fade/Mute, Inserts, Outputs, Full Safe
- Output Routing: Outputs, Insert A, Insert B, FX
- Fader: 100mm Motorised Fader  $\infty$  to + 10dB