

# SD9 Digital Mixing Console



[Full product information online](#)

## Specifications

### General Specifications

- Faders:: 24 x 100mm Touch-sensitive, motorised
- Screens:: 1 x 15" (38cm) LCD high – resolution touch screen
- Meters:: 24 x 8-Segment LED bargraph
- Input Channels:: 96 Input Channels
- 48 Aux/ Sub-Group Busses
- Solo Busses: 2 Stereo Busses
- Matrix: 12 x 8 Matrix (additional to busses above)
- Control Groups: 12, Selectable for VCA-style, Moving Fader, Mute Group
- Graphic EQ: 16 x 32-band, Gain +/- 12dB
- Internal FX: 12 Stereo FX Processors
- Local I/O: 8 x Mic/Line I/O, 4 x AES/EBU: I/O (Mono)
- MADI Interface: In / Out
- Optional Optics
- MIDI Interface: In / Out / Thru
- VGA Port: DB-15 Mini-Female (1024 x 768 Resolution)
- USB Ports 3 x USB2
- Light Connection 2 x XLR3 1.2 – 12V
- Ext Sync: Word Clock, MADI
- Headphone: TRS Unbalanced / 8-600 Ohms 1/4 Inch Jack
- GPI: 2 x 1/4" Jack
- GPO: 2 x 1/4" Jack
- SD9 Dimensions: 878mm (w) x 785mm (d) x 262mm (h)
- SD9 Weight: 36Kg (105Kg with optional flightcase)
- SD9 Flightcase: 1063mm (w) x 1131mm (h) x 472mm (d) (Optional):
- SD9 Power: 90-264 VAC, 47-63Hz Auto Sensing. 208 watts, 232VA Requirements
- Redundancy: Internal PSU x 2 (Optional)

### Audio Specification

- Sample Rate: 48kHz or 96kHz
- Processing Delay: 2ms Typical @ 48k (48 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/Highshelf)  
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/OffGate / 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: 4 Band Parametric or Dynamic  
: Parametric Only  
(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, SoftDe-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/OffGate / 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