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Si EXPRESSION TYPICAL SPECIFICATIONS

• **Frequency Response**

- Mic / Line In to any Output: +/-1.5dB, 20Hz-20kHz

• **T.H.D.**

- Mic Sensitivity -30dBu < 0.01% @ 1kHz

• **Noise**

- Residual noise -86dBu

- Mic Input E.I.N. 22Hz - 22kHz, Unweighted. (max gain)

-126dBu (150Ω source)

- Mix noise, masters at unity < -86dBu

- 1 input to mix at unity gain -84dBu

- CMRR mic @1KHz (max gain) -80dBu

• **Crosstalk (@ 1kHz)**

- Channel ON attenuation <120dB

- Channel Fader attenuation <120dB

- Mic – Mic -100dB @ 1KHz, -85dB@10kHz

- Line – Line -100dB @ 1KHz, -85dB@10kHz

• **Input Gain**

- Mic Gain -5dB – 58dB integrated pad design, 1dB steps

- Line Trim -10dB - +16dB

• **Gate**

- Threshold -60dBfs - -6dBfs

- Depth -60dB – 3dB

- Attack 0.1ms – 200ms

- Release 20ms – 500ms

- Side-chain HPF 22Hz – 2.5kHz

- Side-chain LPF 160Hz – 20kHz

• **Compressor**

- Threshold -52dBfs - -6dBfs

- Ratio 1:1 – 20:1

- Attack 0.1ms – 200ms

- Release 5ms – 900ms

- Makeup Gain 0dB – 24dB

• **EQ**

- HI MID & LO MID 22Hz – 20kHz, +/-15dB Q 6-0.3

- Shelf (HF) 800Hz – 20kHz, +/-15dB

- Shelf (LF) 20Hz – 500Hz, +/-15dB

- HPF 40Hz – 1kHz

• **Delay**

- User adjustable delay 1sample – 500ms

- GEQ 31Hz – 16kHz 1/3 octave

• **Digital I/O**

- AES Sample rate converter range 8kHz – 200kHz

- External Word Clock In range 48kHz +/-7Hz (internal systems), +/-3Hz with stageboxes.

- Word clock out jitter +/- 7ns

- Analogue out for 0dBfs +21.5dBu

- Converter resolution 24-bit

- DSP resolution 40-bit floating point

• **Latency**

- Mic In to Line Out <0.8 ms

- Analogue in to AES out <0.6 ms

- AES in to Line Out <0.8ms

- AES in to AES out <0.5ms

- Stagebox Mic In to Stagebox <0.9ms

• **Input & Output Levels**

- Mic Input +22dBu max

- Line Input +22dBu max

- Mix Output +21.5dBu max

- Headphones (@150Ω) 300mW (recommended impedance 75Ω to 200Ω)

• **Input & Output Impedances**

- Mic Input 3kΩ

- Line Input 10kΩ

- AES Input 110Ω

- Outputs 150Ω (balanced), 75Ω (unbalanced)

- Word Clock used as Output 50Ω

- Word Clock used as Input 4k7Ω

- AES Output 110Ω

• **USB**

- Max current 200mA

• **Lamp Output**

- 12v DC 100mA max (per socket)

• **Power**

- Consumption (typical) <130w Si EXPRESSION 3

- AC Input voltage range 88-264VAC auto sensing

- AC Frequency range 47-63Hz

• **Operating Conditions**

- Operating Temperature Range 5°C to 45°C

- Humidity 0%-90%, non condensing Ta=40°C (104°F)

- Storage Temperature Range -20°C to 60°C (-4°F to 140°F)

E & OE.

Soundcraft reserves the right to change specifications without notice.