**KORG SoundLink MW-1608 Analog-Digital Mixer**

**Architectural and Engineering Specifications**

1. GENERAL CONFIGURATION

The mixer shall accommodate 18 total analog and stereo digital inputs. Channels 1-8, shall be configured as 8 microphone inputs and 8 mono line inputs; and 8 microphone signals; Channels 9-16 shall be configured as 4 microphone inputs, 4 stereo line inputs; Channels 17-18 shall be configured as 1 stereo pair of 1/8” Tape inputs. The mixer shall also include 1 Talkback microphone input; 1 balanced stereo pair of Main Mix outputs with XLR and ¼” jacks; 8 balanced Subgroups outputs; 4 Aux outputs; two additional ¼” AUX 3-4 Musicians Phones outputs; 2 balanced Monitor outputs; 1 quarter-inch stereo Headphone output; one USB 2.0 Type B port that can connect to a Mac or Windows PC for recording and stereo input to Channels 15-16; and 1 quarter-inch Foot Switch Jack. The mixer shall be fitted with 1 rocker-type Power switch; 1 three-pin IEC power receptacle that accepts 100-240 VAC; and shall be entirely self-contained.

2. MIXER INPUTS.

CHANNELS 1–8: Each channel shall include an electrically balanced, mono microphone input, using an XLR-3-F-type connector that shall accept nominal levels from -60 dBu to +10 dBu; and an electrically balanced, mono line level input, using balanced ¼” connector that shall accept nominal levels from -10 dBu to +40 dBu;

CHANNELS 9-16: Each channel shall include an electrically balanced, mono microphone input, using an XLR-3-F-type connector that shall accept nominal levels from -60 dBu to -10 dBu; and an electrically balanced, stereo line level input, using balanced ¼” connector that shall accept nominal levels from -40 dBu to +10 dBu;.

CHANNELS 1-8, 9-10,11-12, 13-14, 15-16: Each channel shall include one HiVolt Class A solid-state microphone preamplifier with ±16.5V internal operating voltage. Phantom power shall be globally enabled/disabled by a rocker switch.

OTHER INPUTS: The mixer shall include a Talkback microphone input that utilizes one HiVolt Class A solid-state microphone preamplifier with 48V phantom power always present; 1 stereo 1/8” Tape input jack; and 1 Class One USB connector. The Tape input source shall feed mixer Channel 25/26.

CHANNEL STRIP METERING: Each input channel strip shall include an Overload LED and -20 dB Signal Present LED. Channels 1-8 shall have a Compressor activity LED.

3. MIXER OUTPUTS.

MAIN OUTPUTS: The mixer’s Main mix-bus stereo outputs shall be fitted using balanced XLR jacks and TRS jacks, delivering a maximum output of +26 dBu. Each pair of Main mix-bus stereo outputs shall have an output impedance of 75Ω.

AUX OUTPUTS shall consist of 4 balance XLR outputs and two special Musicians’ Phones ¼” outputs associated with AUX 3 and AUX 4.

OTHER OUTPUTS: The mixer shall have 8 dedicated Subgroup outputs, which shall be fitted with balanced XLR jacks, delivering a maximum output of +22 dBu with an output impedance of 75Ω; and 2 Monitor outputs, which shall be fitted with balanced TRS ¼" jacks, delivering a maximum output of +22 dBu with an output impedance of 75Ω. The mixer shall also include 1 stereo Headphone output, using an unbalanced TRS F phone jack (tip=left, ring=right, sleeve=ground), and with a maximum output level of 100 mW per channel.

4. CHANNEL STRIP DYNAMICS PROCESSING, EQ, AND OTHER CHANNEL CONTROLS.

CHANNEL STRIPS 1-8 shall be provided with a one-knob, soft knee Compressor and activity LED; and the following equalization via rotary controls HI (12k, shelving), MID (peak, sweepable from 250hz to 5k) and LO (100 Hz, shelving), ±15dB boost/cut; and High Pass Filter: 12dB/octave at 80Hz.

STEREO CHANNELS 9-10,11-12, 13-14 and 15-16 shall have Stereo HI (12k shelving), HI MID (2.5k shelving), LO MID (250 hz shelving) and LO (100Hz shelving) Equalization

CHANNEL CONTROLS: Each channel shall have a rotary Pan Control; Assign Switches for Stereo Buses 1-2, 3-4, 5-6, 7-8; and Mute control with lighted indicator.

AUX SENDS: All channels shall have 4 AUX sends. AUX 1 and 2 shall be Pre-Fader. Aux 3 and 4 shall be default Post Fader, with optional switch to Pre-Fader.

5. MASTER FADER SECTION.

MAIN MIX: The Master fader section shall supply 1 stereo fader for the Main bus, providing up to 10 dB gain and marked at ∞, -30, -30, -20, -10, -5, Unity (0) , +5, and +10 dB.

SUB GROUP MIX: Four faders shall control Submix Groups 1-2, 3-4, 5-6, 7-8, all with PFL. Four buttons shall select Subgroup Assign to L/R.

6. MASTER CONTROL SECTION.

The mixer shall provide a Master Control section that includes the following:

MAIN METERING: The Master Control section shall provide individual level meters for the left and right channels of each Main mix bus. Each meter shall include a Red indicator representing Overload.

MUTE GROUPS: The mixer shall have four programmable Mute Groups which can be stored and recalled. Each of the Mute Groups can mute any combination of mixer channels. Mute Group A through D selectors shall blink during programming and remain illuminated when in use. Channel Strip Mute indicators shall change color as follows: Red when muted by the channels Mute button; Yellow when muted by the Mute Group Button or Break Function

TALKBACK shall have assignment buttons to L/R or AUX via a rotary gain control.

FX CONTROLS: FX RETURN shall be provided by one fader with PFL option. FX shall be assigned to AUX 1 or AUX 2 or muted by a button with indicator light.

AUX MASTERS AND MUSICIANS PHONES. The mixer shall have four AUX returns, each with AFL switch and LED indicator. Routed through additional rear panel ¼” outputs, Musicians Phones PHONES LEVEL and INJECT L/R shall allow musicians to control the ratio of their instrument or vocal mixer channel to the main Left/Right Output.

OTHER CONTROLS: The mixer shall have a rotary gain control for Channels 17-18 (1/8” Tape In); Monitor and Phones Level controls; and a Break switch that mutes Channels 1-16 and receives inputs for Channel 17-18 only.

**6. DIGITAL SECTION.**

GENERAL: This section shall consist of a multi-purpose backlit LCD display, 9 Control buttons; Dynamics to L/R, AUX 1 or AUX 2 buttons; Equalization to L/R, AUX 1 or AUX 2 button, Auto Feedback Controls; Overview and Spectrum Analyzer activation; DFX Select with TAP tempo button; jog-shuttle knob; Reset and Global controls.

EFFECTS: There shall be twenty 32-bit digital effects with up to 10 available at one time and 4 test tones. Various FX parameters are adjustable via the Control button and shuttle knob.

DYNAMICS shall consist of Compressor, Limiter and Noise Gate, assignable to Aux 1 Aux 2 or L/R, each with adjustable parameters

EQUALIZATION: Equalization shall be of two types: 9-band Graphic Equalization with 2-octave bandwidth or Hybrid 31-9-band equalization. Hybrid mode shall allow selection of any 9 of 31 bands in narrow Q mode.

SPECTRUM ANALYZER: The mixer shall have a 31-band Spectrum Analyzer, as a selectable function in its digital LCD display. The display monitors L/R output and can be set to fast, slow, fast peak or slow peak modes.

11. MEMORY AND GENERAL SETTINGS.

The mixer shall provide digital memory (storage) for the status of all digital mixer parameters: Mute Enable fader (Mute, FX Mute, Mute Group, Break); Mute Group Program contents; Dynamics, Equalization and FX settings, Feedback suppressor bus assign and current screen display.

18. PHYSICAL CONFIGURATION.

The MW-1608 shall be made of steel and shall weigh 17.6 lbs / 8.0kg. Dimensions of the mixer (WxHxD) shall be 15.6” x 7.36” x 20.89" / 396 mm x 187 mm x 530 mm (10.6” / 256 mm wide without side panels).

**The mixer shall be a KORG SoundLink MW-1608**