

**KAWAI**

# 4 CHANNEL 8 INPUT MIXER

# MX-4S

Thank you for purchasing this **KAWAI MX-4S** 4 Channel Stereo Mixer. This Owner's Manual contains valuable information that will help you make full use of this instrument's many capabilities. Read it carefully and keep it handy for future reference.

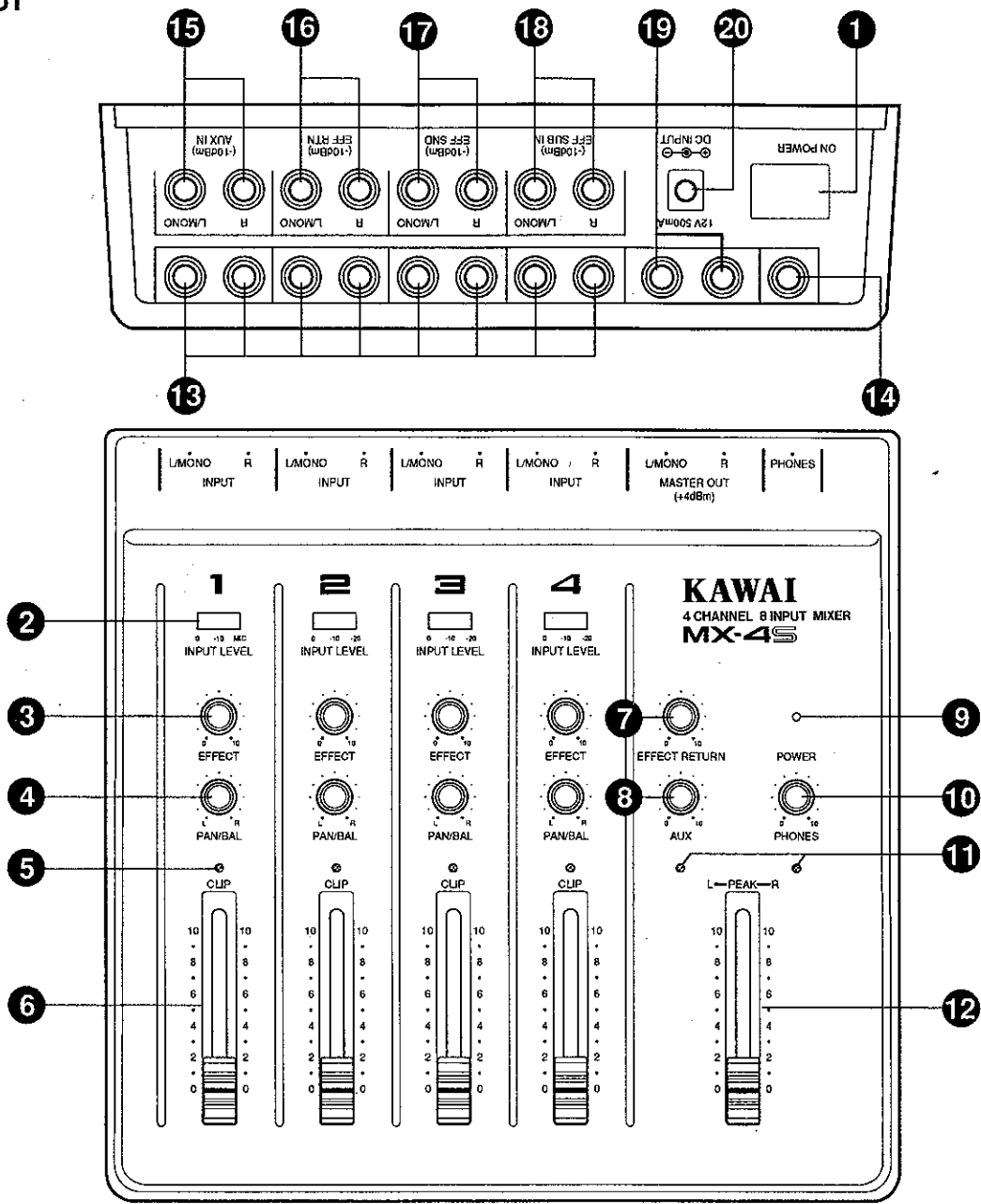
## Features

1. Each fader controls a stereo input. Therefore, the MX-4S can control up to eight inputs.
2. High signal-to-noise ratio, suitable for any mixing application.
3. 45mm long-throw faders give a professional feeling.
4. Cascade connection of two MX-4S's is possible with AUX IN and EFFECT SUB IN.
5. Half-rack size enables a perfect fit atop other half-rack modules.

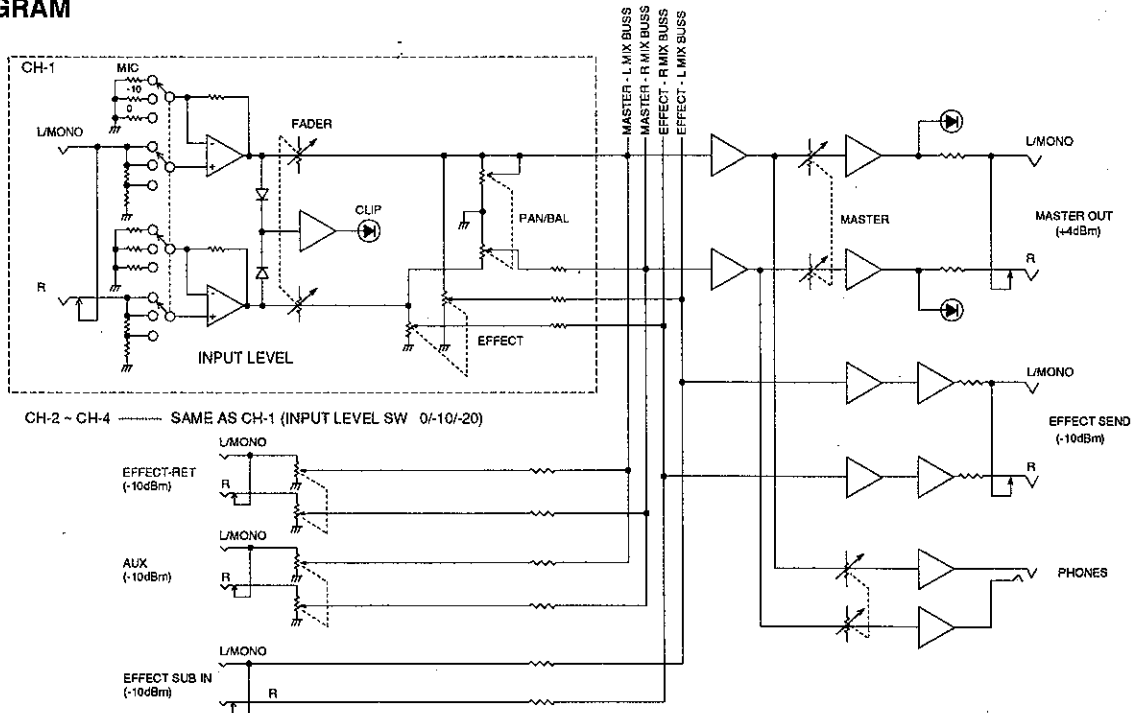
## Important Notes

- Always connect the mixer to the proper power supply.
- Use separate circuits for equipment that consumes a lot of power or generates line noise.
- Protect the mixer from dust, heat, humidity, and direct sunlight.
- Turn all power switches off before connecting or disconnecting equipment.
- Set the amplifier volume to its minimum setting before turning on the mixer.
- Clean the mixer with a clean dry cloth.
- Do not use benzene, paint thinner, or other solvents.

# PANEL LAYOUT



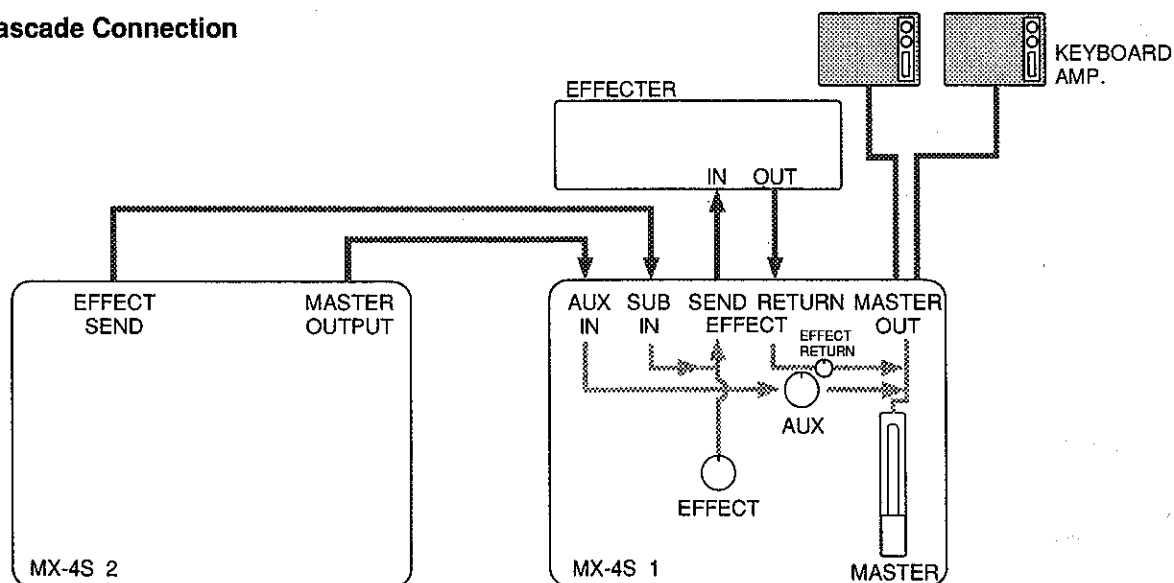
# BLOCK DIAGRAM



## ■ Controls

- 1 **Power switch** : turns on and off power to the mixer. Make sure that the MASTER FADER control is at its minimum level before turning this switch on or off.
- 2 **Input level switch** : adjusts the channel gain to match the input level. Input channel 1 also substitutes a microphone (MIC) position.
  - (Ch 1: 0, -10, MIC)
  - (Ch 2-4: 0, -10, -20)
- 3 **Effect send volume** : controls the amount of the signal sent to the EFFECT mixing bus. (POST FADER)
- 4 **Panpot/Balance** : This knob controls the left-right balance for a stereo input or the stereo panning for a mono input.
- 5 **Clip indicator** : lights when the input level exceeds the maximum, resulting in clipping distortion. The gain switches can be used to eliminate clipping.
- 6 **Channel fader** : controls the volume of the each channel.
- 7 **Effect return volume** : controls the volume of signals from effect devices.
- 8 **Aux input level switch** : adjusts the input level of the instruments, such as an external mixer, connected to aux input.
- 9 **Power Indicator** : lights when the power is on.
- 10 **Headphone volume** : This knob controls the volume of the headphone output.
- 11 **Peak indicator** : This LED lights when the output level is 2 dB below output clipping level. Adjust the output level with MASTER FADER so that this LED does not flash.
- 12 **Master fader** : controls the volume of the master mixed output.
- 13 **Inputs 1-4** : accepts outputs from the instruments. Channel 1 also accepts output of a microphone.
- 14 **Headphone jack** : accepts a standard stereo headphone jack. Instruments such as cassette tape players can be connected by using the STANDARD -RCA pin adaptors included with your MX-4S.
- 15 **Aux Input** : When you connect another MX-4S to this jack, you can use them together as an 8 channel stereo mixer (Cascade function). Other instruments (such as CD players, cassette tape players) can also be connected.
- 16 **Effect return (R, L/MONO)** : is the effect input to the master mixed output. Connect the return signals from your effect devices to this input. If a device's output is monaural, connect it to the L/MONO jack. This input can also be used as an aux input.
- 17 **Effect send** : is the output of the effect bus. Connect this output to the input of your effect device.
- 18 **Effect sub in (R, L/MONO)** : When you use 2 MX-4S's with cascade connection, connect the effect send of the other mixer to this terminal.
- 19 **Master out** : Connect these outputs to a power amp. or monitor speaker with power amp. The master fader will affect the level of this output. The L terminal will send both L and R signals when using only one output. When you use two MX-4S's with cascade connection, connect these jacks to the AUX IN of the other MX-4S and you can use them as an 8 channel stereo mixer.
- 20 **DC Input** : Connect this jack to the included AC adaptor. Be sure to use only the included adaptor for the MX-4S.

## ■ Example of a Cascade Connection



## SPECIFICATIONS

Inputs		Input <sup>1</sup> Sensitivity	Input Level <sup>2</sup> Rating	Maximum Input Level	Input <sup>3</sup> Impedance	Suitable Source Impedance
CH INPUT	LEVEL SW					
	0(CH1~4)	-6dBm	0dBm	+17dBm	more than 12kΩ	less than 1kΩ
	-10(CH1~4)	-16dBm	-10dBm	+7dBm	more than 12kΩ	less than 1kΩ
	-20(CH2~4)	-26dBm	-20dBm	-3dBm	more than 12kΩ	less than 1kΩ
	MIC(CH-1)	-51dBm	-45dBm	-28dBm	more than 12kΩ	less than 1kΩ
EFFECT RETURN		-16dBm	-10dBm	+20dBm	more than 12kΩ	less than 1kΩ
AUX INPUT		-16dBm	-10dBm	+20dBm	more than 12kΩ	less than 1kΩ
EFFECT SUB INPUT		-10dBm	-10dBm	+10dBm	more than 15kΩ	less than 1kΩ

Outputs	Output Level Rating	Maximum Output Level	Output Impedance	Suitable Source Impedance
MASTER OUT	+4dBm	+10.5dBm	1kΩ <sup>5</sup>	more than 5kΩ
EFFECT SEND	-10dBm	+10.5dBm	1kΩ <sup>5</sup>	more than 5kΩ
HEADPHONES	-	50mw~50mw <sup>4</sup>	22Ω	more than 8Ω

<sup>4</sup> load 100Ω

<sup>5</sup> STEREO OUTPUT

\*1 PAN/BAL.....CENTER, FADER · Other VOLUME.....ALL MAX

\*2 PAN/BAL.....CENTER, MASTER FADER.....MAX  
CH FADER · Other VOLUME....."8"

\*3 STEREO INPUT

<b>Connectors</b>	INPUT JACK (PHONE)	8
	MASTER OUT JACK (PHONE)	2
	EFFECT * POST FADER (PHONE)	SEND2, RETURN2
	AUX INPUT JACK(PHONE)	2
	HEADPHONE JACK(PHONE)	1
	EFFECT SUB IN JACK(PHONE)	2
<b>Controls</b>	CH LEVEL SW (0 / -10 / MIC)	1
	CH LEVEL SW (0 / -10 / -20)	3
	EFFECT VOLUME	4
	PANPOT/BALANCE	4
	CH FADER	4
	MASTER FADER	1
	EFFECT RETURN VOLUME	1
	AUX IN VOLUME	1
	HEADPHONE VOLUME	1
	POWER SW	1
<b>Indicator</b>	CLIP INDICATOR	4
	PEAK INDICATOR	2
	POWER INDICATOR	1
<b>Frequency Response</b>	CH LEVEL SW ... MIC	40Hz~50KHz <sup>+0.5</sup> <sub>-3</sub> dB
	CH LEVEL SW ... except for MIC	15Hz~55KHz <sup>+0.5</sup> <sub>-3</sub> dB
<b>Equivalent Input Noise</b> (IHF-A curve, input terminals short-circuited)	CH-1 LEVEL SW (MIC)	-124dBm
<b>Residual Noise</b> (IHF-A curve, input terminals short-circuited)	MASTER FADER (MIN)	less than -98dBm
	MASTER FADER (MAX), ALL CH FADER (MIN)	less than -82dBm
	MASTER FADER (MAX), ALL CH FADER (MAX) CH LEVEL SW (-10)	less than -81dBm
	MASTER FADER (MAX), 1CH FADER (MAX) CH LEVEL SW (-20)	less than -80dBm
<b>Total Harmonic Distortion</b>		less than 0.05% (50Hz~10KHz, +4dBm output)
<b>Crosstalk</b>	between L&R, between Channels	less than -70dB (1KHz)
<b>Dimensions(W x D x H)</b>		219 x 215 x 65(m/m), (8-5/8" x 8-1/2" x 2-5/8")
<b>Weight</b>		960g, 2.12 lbs
<b>Power consumption</b>		4.0W
<b>Accessories</b>	Standard-RCA Pin Plug	2
	AC adaptor	1
	Warranty, Service Manual	

## CORRECTION SHEET FOR MX-4S OWNER'S MANUAL

	<b>Error</b>	<b>Correction</b>
■ Controls ⑬ inputs 1 - 4	: accepts outputs from the instruments. Channel 1 also accepts output of a microphone.	: accepts outputs from the instruments. Channel 1 also accepts output of a microphone. Instruments such as cassette tape players can be connected by using the STANDARD-RCA PIN adaptors included with your MX-4S.
■ Controls ⑭ Headphone jack	: accepts a standard stereo headphone jack. Instruments such as cassette tape players can be connected by using the STANDARD-RCA PIN adaptors included with your MX-4S.	: accepts a standard stereo headphone jack.

