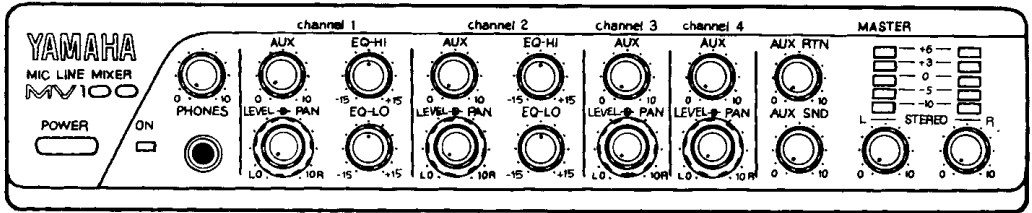


YAMAHA

MIC LINE MIXER MV100

Operation Manual



INTRODUCTIONS

Thank you for purchasing the YAMAHA MV100 Microphone Line Mixer. The MV100 is compact half-rack size unit equipped facilities for four inputs and stereo output. It is suitable for a variety of applications.

In order to obtain optimum performance from your new MV100 and to ensure its proper operation for listening enjoyment for years to come, please read this Operation Manual thoroughly before use.

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FEATURES

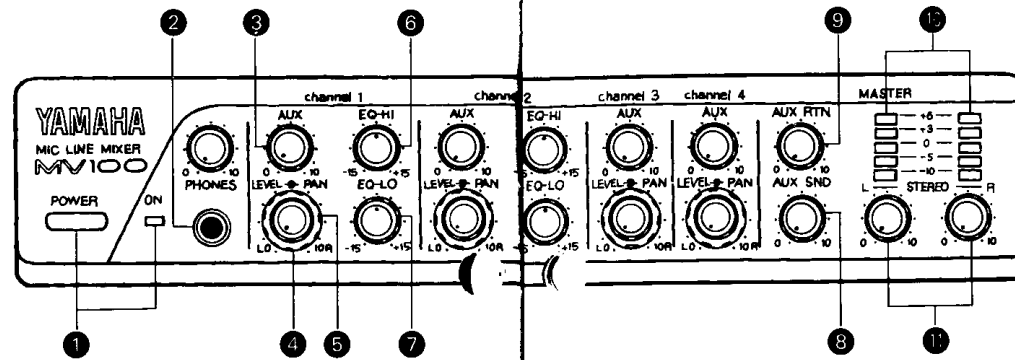
- Facilities for four input sources. Input signals can be mixed and output in stereo.
- LEVEL switch for channels 1 and 2 allows either microphone or line input. The built-in two-band (LOW, HIGH) equalizer permits manipulation of sonic characteristics.
- AUX SND/RTN jacks provide compatibility with stereo effecters.
- Convenient SUB IN (AUX, L, R) jacks allow easy addition of extra channels. LINE IN and REC OUT jacks are also provided.
- The master level meter lets you check the output level at a glance.
- Headphone jack with exclusive volume control for private monitoring.
- Due to its compact half-rack size and light weight the MV100 fits anywhere and is easy to transport.

PRECAUTIONS

- Always lower the MASTER volume control to the minimum before connecting or unplugging connector plugs or turning power ON/OFF. Otherwise, the speakers may be damaged.
- Always turn the power switch of other components (power amplifier, etc.) OFF before connecting them to this unit. Also, turn this unit ON first, and of the power amplifier last.
- Only use the YAMAHA PA-1B or PA-5 AC adaptor. Use of an adaptor of different voltage or polarity may result in damage to the unit.
- Avoid using the unit in locations like the following to prevent damage or trouble.
 - * Places subject to direct sunlight, near heating devices, etc.
 - * Places with extreme temperatures.
 - * Excessively humid or dusty places.
 - * Places subject to strong vibration.
- Do not apply force to switches and knobs.
- Do not open the cabinet or tamper with the internal circuitry to prevent damage and the danger of electric jolts.
- Do not use benzine, thinner or solvents for cleaning the unit, and avoid spraying aerosol-type insecticides near it (they may cause discoloration, etc.)
- After reading this Operation Manual, keep it in a safe place.

NAME AND FUNCTIONS OF PARTS

Front Panel



1 Power switch (POWER) and indicator

When the switch is in the ON position (—) the POWER indicator lights. To protect the speakers against damage, always turn the master volume control down to "0" before switching the MV100 on.

2 Headphone jack and level control (PHONES)

Plug headphones into this jack to monitor the mixer output signal. Use the level control to set the volume to the desired level.

3 AUX control (AUX): channels 1—4

These controls are used when effectors such as reverberation or delay processors are connected to the AUX SND jacks on the rear panel. Turn the knob for the channel whose input you want to process using the effector. Turn the knob to the right to increase the level of the signal sent to the effector. The level for each channel is set independently of the others.

4 Level control (LEVEL) inner knob: channels 1—4

Use these controls to adjust the input levels for the different channels.

* Leave the controls for unused channels in the "0" position.

5 Panpot control (PAN) outer knob: channels 1—4

Use these controls to set the left-right channel balance for any input signals for which you wish the two stereo channels to have different levels. When in the center position the left and right channels are evenly balanced. Turn to the left to emphasize the left channel and to the right to emphasize the right channel.

6 Equalizer control HI (EQ-HI): channels 1 and 2 only

Use to emphasize or attenuate the high frequency portion of the signal. At the standard frequency of 12 kHz, a boost or cut of up to ± 15 dB is possible. Turn the right to emphasize the high frequencies and to the left to attenuate them. No equalization is performed when the knob is in the center position.

7 Equalizer control LO (EQ-LO): channels 1 and 2 only

Use to emphasize or attenuate the low frequency portion of the signal. At the standard frequency of 100 Hz, a boost or cut of up to ± 15 dB is possible. Turn the right to emphasize the low frequencies and to the left to attenuate them. No equalization is performed when the knob is in the center position.

8 AUX send level control (AUX SND)

Use this control to adjust the level of the combined AUX signal mixed using the individual channel AUX controls 3. The adjusted AUX signal is output from the AUX SND jack on the rear panel.

9 AUX return level control (AUX RTN)

Use this control to adjust the level of the signal input from an effector connected to the AUX RTN jack on the rear panel. The resulting adjusted signal is mixed with the stereo L and R signals from all the channels.

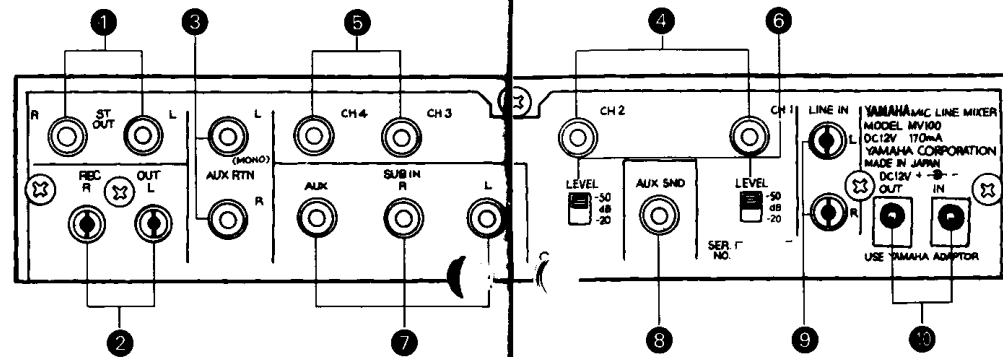
10 Level indicator

These indicators display the level of the left and right channel signals output from the ST OUT jacks on the rear panel within a range of -10 dB— $+6$ dB. Look at the readings on these indicators when adjusting the level of the stereo master volume control 11.

11 Stereo master volume control (STEREO L, R)

Use this control to adjust the level of the left and right channel stereo signals produced by mixing the input from channels 1—4, LINE IN (L, R) and the AUX return signal. The resulting level adjusted stereo L and R signals are output from the ST OUT jacks on the rear panel.

Rear Panel



1 Stereo out jacks (ST OUT L, R)

The left and right channel stereo signals produced by mixing the input from channels 1—4, LINE IN (L, R) and the AUX return signal are output from these jacks. Connect to a power amplifier, keyboard speaker, etc. Use the stereo master volume control on the front panel to adjust the output level. (Note) No signal is output when the stereo master volume control is set to "0."

2 Record out jacks (REC OUT L, R)

The left and right channel stereo signals produced by mixing the input from channels 1—4, LINE IN (L, R) and the AUX return signal are output from these jacks. The output level of these jacks is preset and therefore unaffected by the position of the stereo master volume control. Connect to the tape recorder's line in jacks to record the signal.

3 AUX return jacks (AUX RTN L(MONO), R)

The stereo signal processed by an external effector is input here. For monaural input, use the L(MONO) jack only.

4 Input jacks (CH 1, 2)

These jacks are for input from microphones or electric (electronic) musical instruments. When using microphone input, set the level switch 6 to the "-50" position.

5 Input jacks (CH 1, 2)

These jacks are for input from electric or electronic musical instruments.

6 Level switch (LEVEL -50/-20 dB)

Set this switch to the position which corresponds to the output level of the device(s) connected to input jacks 1 and 2. Set to the "-50" position when using microphone input, and to "-20" for input from electric or electronic musical instruments.

7 Sub-input jacks (SUB IN AUX, L, R)

This jack allows you to increase the number of channels by connecting a second MV100. The signal input to this jack is mixed with the stereo AUX, L, R signals from the other channels and output from the ST OUT L, R and AUX SND jacks. (See "SYSTEM EXAMPLES, 3" on page 9.)

8 AUX send jack (AUX SND)

The AUX signal produced by mixing the signals from channels 1—4 is output from this jack. Connect a delay or reverberation processor here. Use the AUX send level control to adjust the signal level.

* No signal is output when the AUX send level control is in the "0" position.

9 Line in jacks (LINE IN L, R)

This is the stereo signal input jack. Connect to the LINE OUT terminals of a tape deck, etc. The input signals is mixed with the channel 1—4 L, R stereo signals.

* The level of the input signal cannot be adjusted using the controls of the MV100. Use the level control on the output side (tape deck, etc.).

10 Power supply terminals (DC12V IN, OUT)

This unit requires a DC +12V power supply. Plug the AC adaptor cord into the DC12V IN terminal.

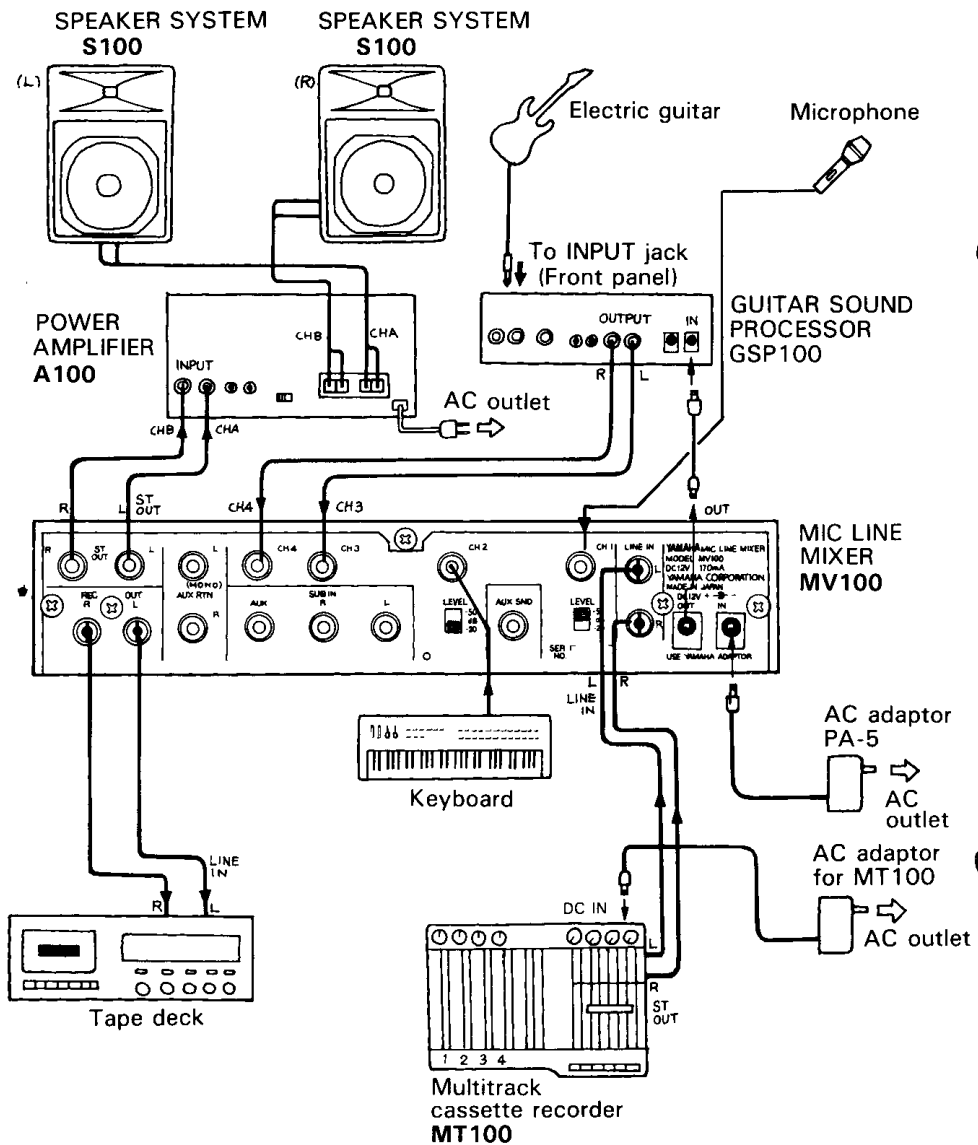
* Use only YAMAHA PA-1B or PA-5 AC adaptors. Using an AC adaptor other than these might cause damage to the unit.

The DC12V OUT terminal supplies DC +12V power to suitable YAMAHA components like the GSP100, the Q100, etc. However, the total current consumption of this unit (170 mA) and connected YAMAHA components must be within the maximum current supplied by the AC adaptor. When connecting two or more extra devices, we recommend you to use the YAMAHA PA-5 AC adaptor, which offers a maximum current supply of 2A.

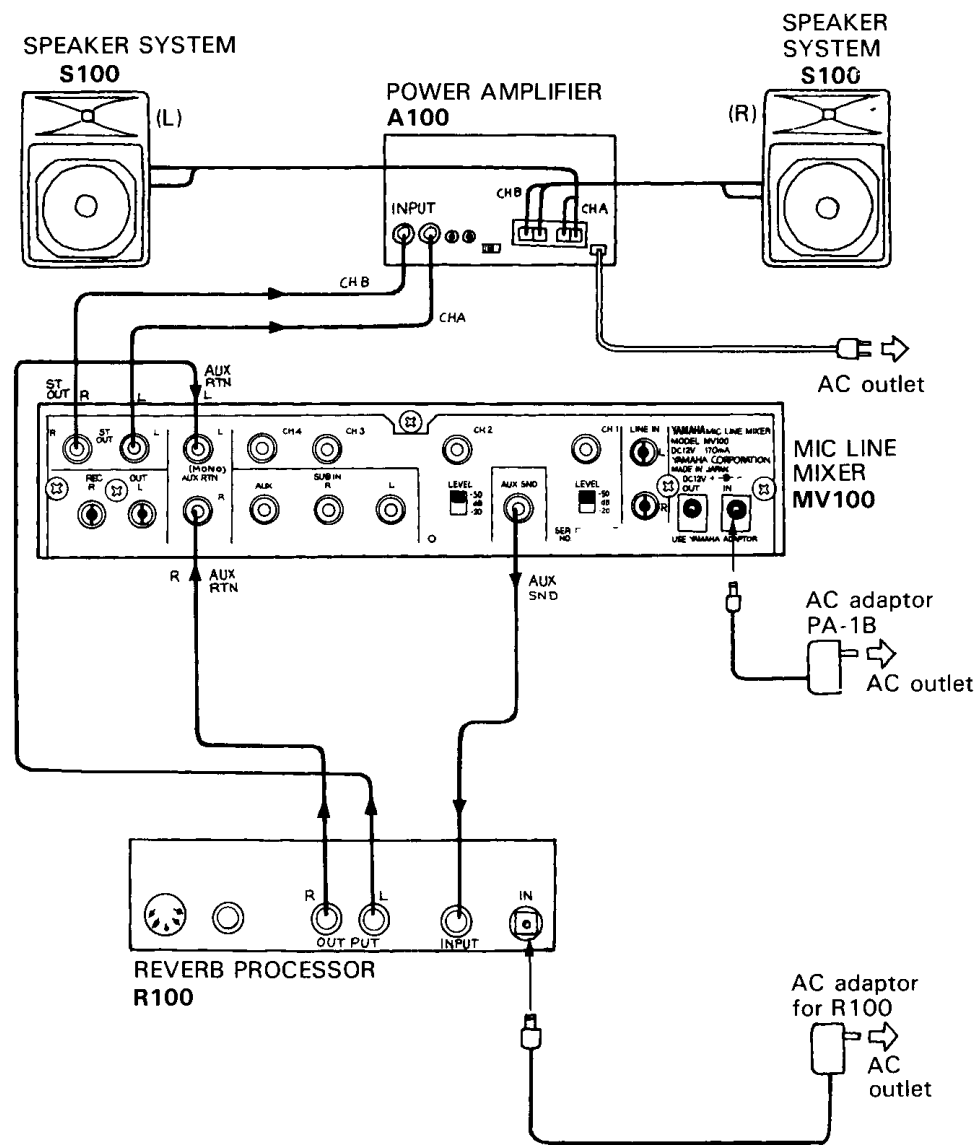
* Don't use a cascade arrangement with reverb processor R100 for the power supply connection.

SYSTEM EXAMPLES

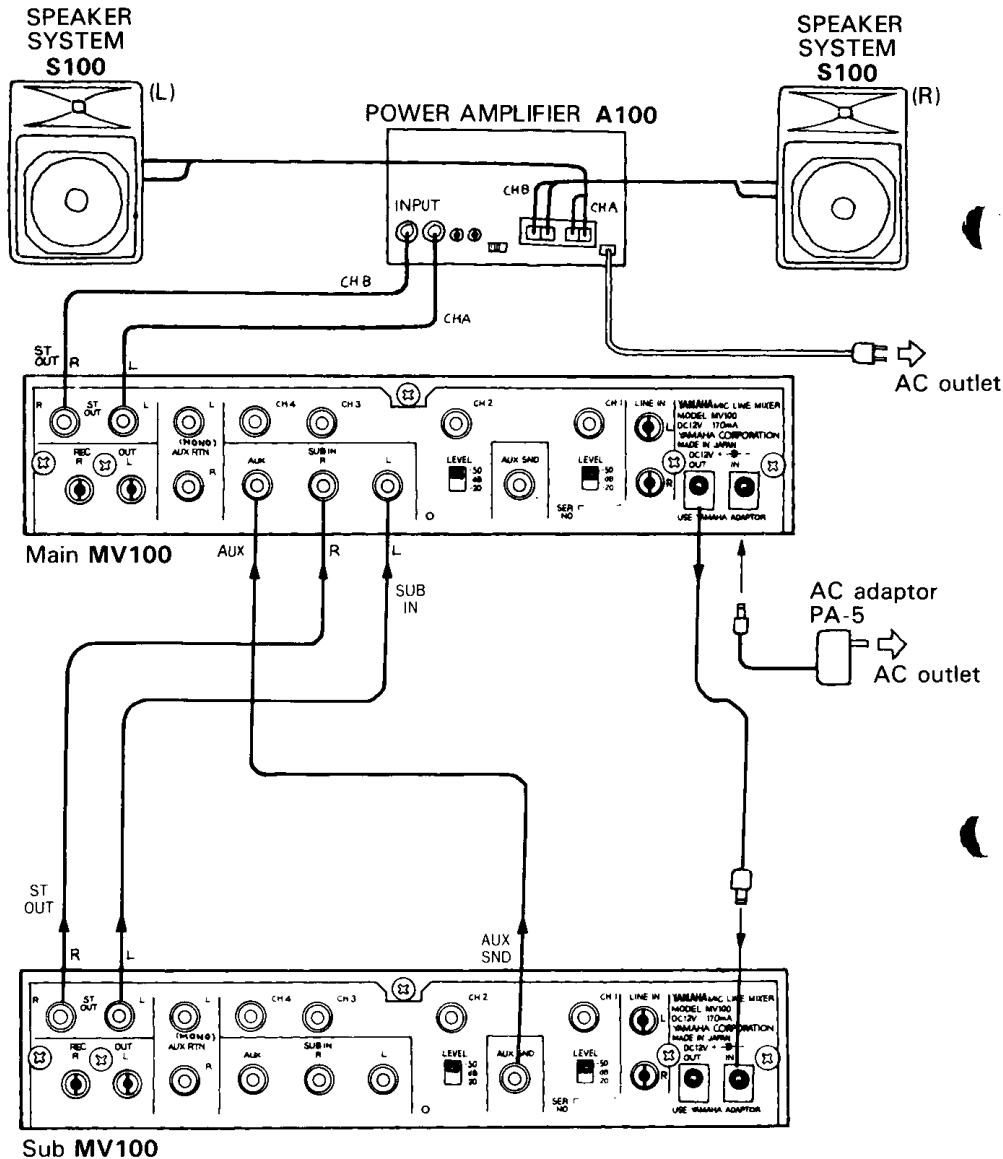
1. Basic connections



2. Connecting a signal processor ... Using AUX SND and AUX RTN



3. Connecting two MV100s to increase the number of channels ...



SPECIFICATIONS

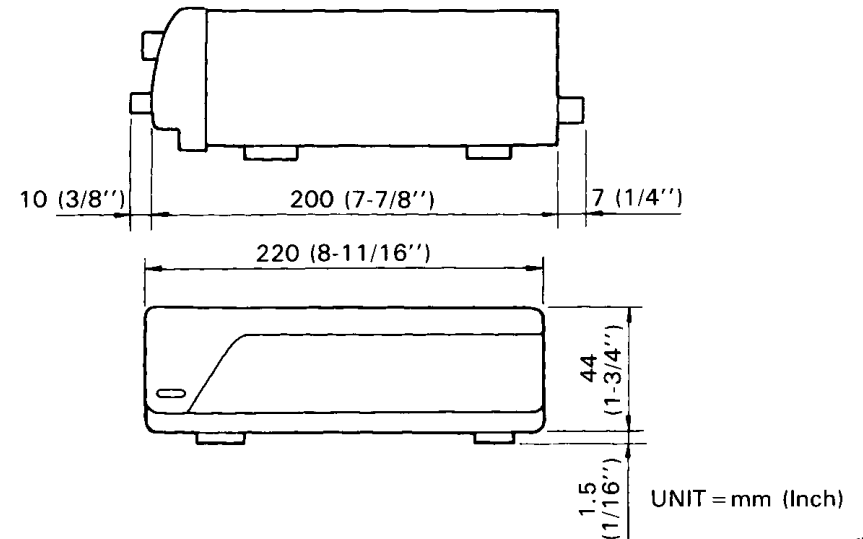
Functions: Channel level control × 4, PAN control × 4, AUX level control × 4, LOW equalizer × 2 (channels 1 and 2 only), HIGH equalizer × 2 (channels 1 and 2 only), -20 dB/-50 dB switch × 2 (channels 1 and 2 only), AUX RTN level control × 1, AUX SND level control × 1, master volume control (L, R) × 1, PHONES level control × 1, L/R level indicators, AC adaptor IN/OUT terminals

Electrical characteristics
 Frequency response: 20 Hz ~ 20 kHz, 0 ± 1.5 dB
 Total harmonic distortion: Less than 0.1%
 Channel separation: Over 50 dB
 Input conversion noise: -122 dB
 Equalizer characteristics: ± 15 dB (100 Hz, 12 kHz)

Other
 Power supply: AC adaptor (DC + 12V) <OPTION>
 Current consumption: 170 mA
 Dimensions (W × H × D): 220 × 45.5 × 217 mm (8-11/16" × 1-13/16" × 8-9/16")
 Weight: 1.3 kg (2 lbs. 14 oz)
 Attachment: DC cascade power supply cable × 1

* 0dB = 0.775V rms
 * Specifications and design are subject to change without notice.

DIMENSIONS



INPUT/OUTPUT SPECIFICATIONS

INPUT CHARACTERISTICS

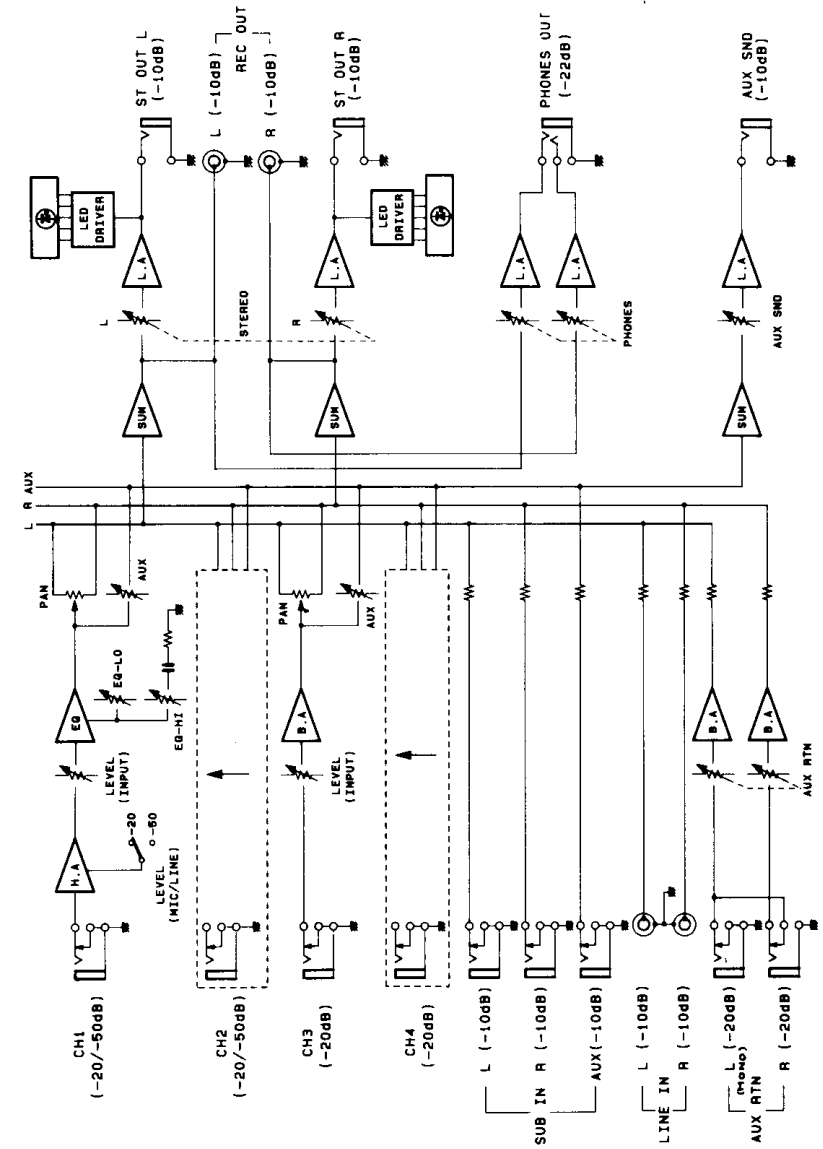
	Input sensitivity	Input impedance	Jack type
CH 1, 2	-20/-50 dB (77.5/2.45 mV)	20 k Ω	Phone jack
CH 3, 4	-20 dB (77.5 mV)	20 k Ω	Phone jack
AUX RTN (L(MONO), R)	-20 dB (77.5 mV)	20 k Ω	Phone jack
SUB IN (AUX, L, R)	-10 dB (245 mV)	20 k Ω	Phone jack
LINE IN (L, R)	-10 dB (245 mV)	20 k Ω	Pin jack

OUTPUT CHARACTERISTICS

	Output level	Output impedance	Jack type
ST OUT	-10 dB (245 mV)	600 Ω	Phone jack
AUX SND	-10 dB (245 mV)	600 Ω	Phone jack
REC OUT (L, R)	-10 dB (245 mV) fixed	600 Ω	Pin jack
PHONES	-22 dB (61.56 mV) 8 Ω	100 Ω	Stereo Phone jack

* 0 dB = 0.775 Vrms

BLOCK DIAGRAM



YAMAHA

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8812 R2   Printed in Japan