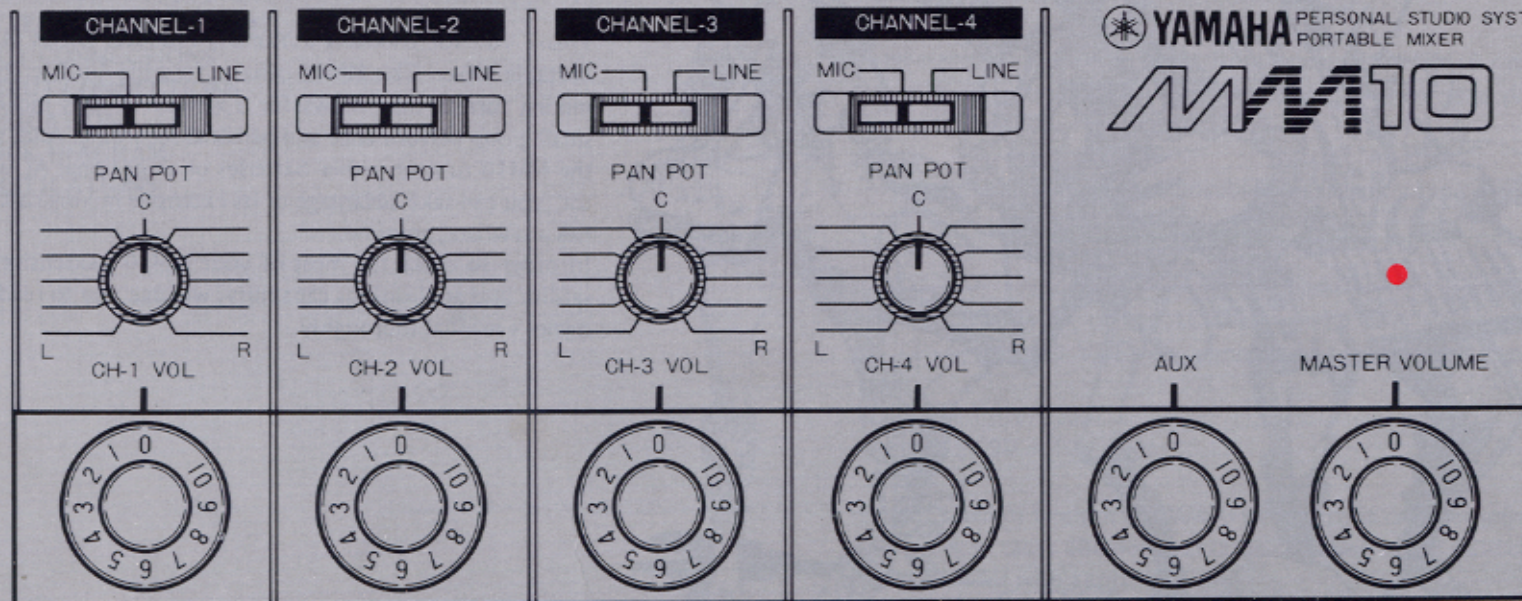


YAMAHA

Producer Series

OWNER'S MANUAL





INTRODUCTION

Thank you for choosing a Yamaha Producer Series MM10 Portable Mixer. The MM10 offers a versatile 4-in/stereo-out mixing format that allows for a variety of uses including small group performance and personal recording. And, since the MM10 runs on either batteries or an optional AC adaptor, you can take advantage of its extensive mixing capabilities anywhere, anytime.

In order to make the most of your MM10's extensive versatility and applications capability, we urge you to read this owner's manual thoroughly.

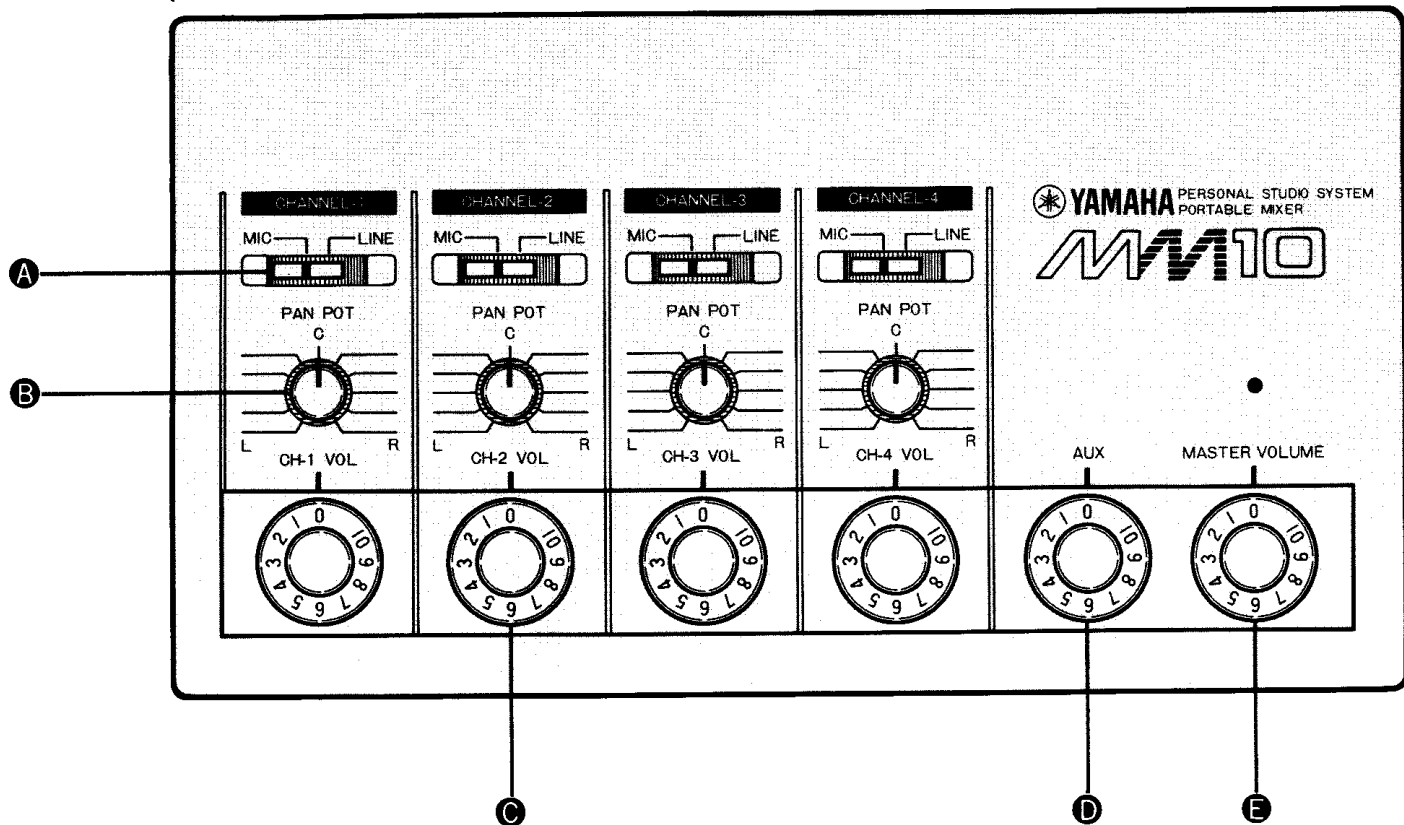
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CAUTIONS

- Be sure to turn down all volume controls when making input/output connections.
- Do not expose the MM10 to direct sunlight or other sources of heat such as radiators, etc.
- Irreparable damage may result from opening the MM10 cabinet or attempting to alter the internal circuitry. If there is a problem, contact your nearest Yamaha dealer.
- Avoid dropping your MM10 or subjecting it to any type of shock, as impaired performance may result.
- Use the AC adaptor supplied by the manufacturer specifically for use with the MM10, or any AC adaptor with safety standard such as UL, CSA, SEMKO VDE, etc. approval and the following specifications.
Input: AC120V/220V
Output: DC9V ~ 12V 300mA
- Do not attempt to clean the MM10 with benzine or other solvents, as these may cause discoloration or deformation of the cabinet. Clean the unit with a soft, dry cloth.;

FRONT PANEL



A MIC/LINE SELECTOR

Selects the appropriate input sensitivity according to whether a microphone or line source is connected to the respective channel's input jack. When a microphone or other low-output source is to be the input, this selector should be set to MIC. The selector should be set to LINE for high-output sources such as audio equipment guitars, keyboards and other electronic instruments.

B PAN POT

Determines where the respective input signal will be located in the output stereo sound field. At the "C" (Center) position, the input signal appears at both the left and right channel outputs with equal level, so the sound appears to be located in the center of the stereo sound field. Turning the PAN POT to the right (R) moves the sound towards the right channel, while turning the control to the left (L) moves the sound towards the left channel. If a PAN POT is turned fully to the right or left, that input channel's signal will be fed only to the respective stereo output channel (R or L).

C VOL (INPUT VOLUME) CONTROL (1 thru 4)

Adjusts the level at which the respective channel's (1 thru 4) input signal will be mixed with that of the remaining input channels.

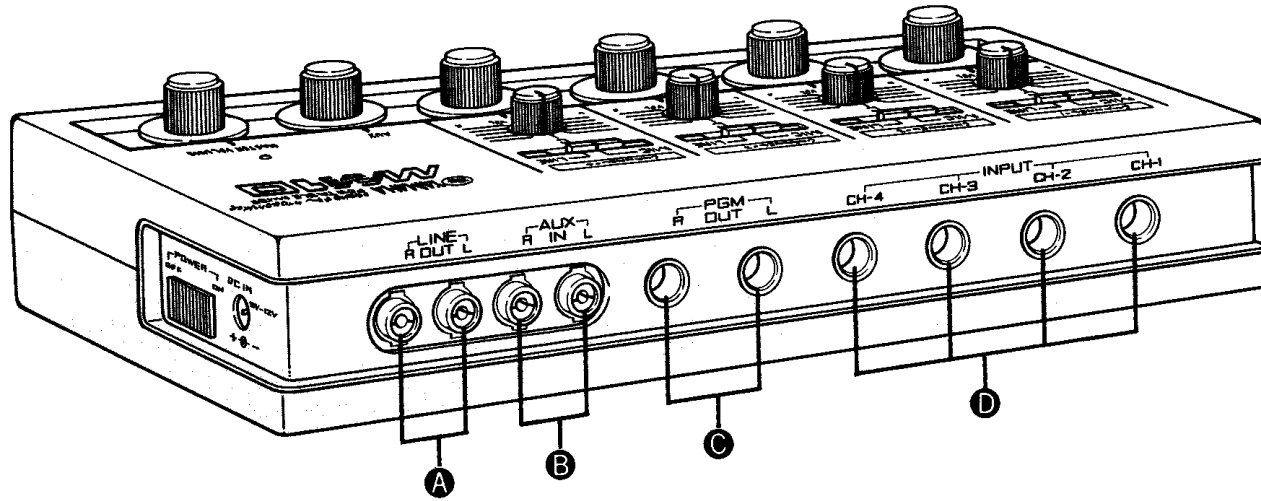
D AUX VOLUME CONTROL

Adjusts the level at which signals at the AUX IN (L, R) input terminals will be mixed with the signals of the four main input channels.

E MASTER VOLUME CONTROL

Adjusts the overall output level of the mixed program signal appearing at the PGM OUT (L, R) jacks.

REAR PANEL



A LINE OUT L, R JACKS

These terminals output the mixed program from the four input channels (1 thru 4) and the AUX IN (L, R) terminals at a constant level unaffected by the setting of the MASTER VOLUME control. These outputs can be connected directly to a tape deck or stereo system.

B AUX IN L, R JACKS

Permit mixing a stereo source signal with the signals input at the four input channels (1 thru 4). The stereo output from a tape deck or another MM10 can be connected here.

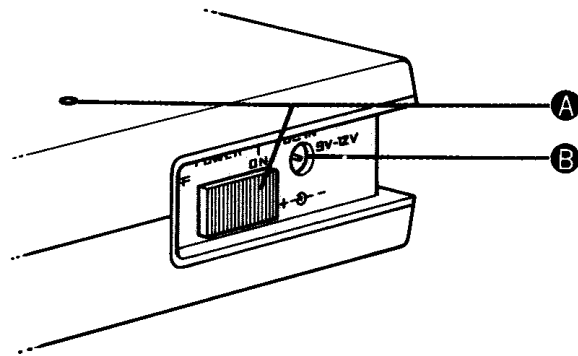
C PGM OUT L, R JACKS

The mixed stereo program from the four input channels (1 thru 4) and the AUX IN (L, R) terminals is fed to these jacks at a level determined by the setting of the MASTER VOLUME control. If the MASTER VOLUME control is set to "0", no sound will be output.

D INPUT CHANNELS (1 thru 4) JACKS

Accepts input from microphones, electronic musical instruments or any other monaural source. Each input signal can be placed anywhere from left to right in the output stereo sound field using the PAN POTs provided on each input channel.

SIDE PANEL



A POWER SWITCH

Turning this switch ON applies power to the unit and causes the power indicator LED to light. When the MM10 is connected to a power amplifier, be sure to turn on the MM10 before turning on the power amp. When turning off your sound system the opposite procedure applies: turn off the power amp before turning off the MM10.

B EXTERNAL POWER JACK

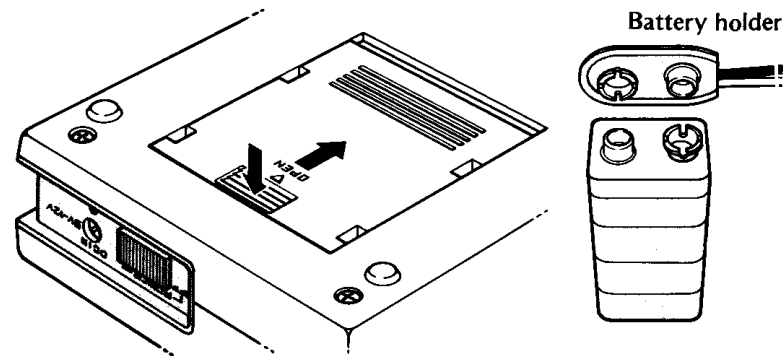
This connector accepts the plug from the optional PA-1 AC adaptor for use when an AC wall outlet is available (not battery operation).



AC adaptor PA-1

BATTERY COMPARTMENT

BATTERY REPLACEMENT

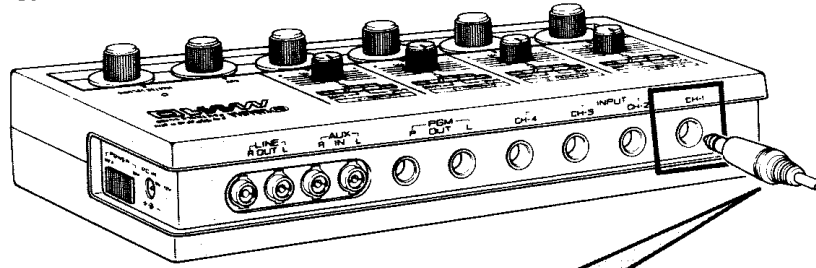


- ① Press and slide the battery compartment cover open as shown by the arrows in the illustration (without applying excessive force).
- ② Replace all the batteries in the battery holder, carefully observing the polarity (+, -) markings of each.

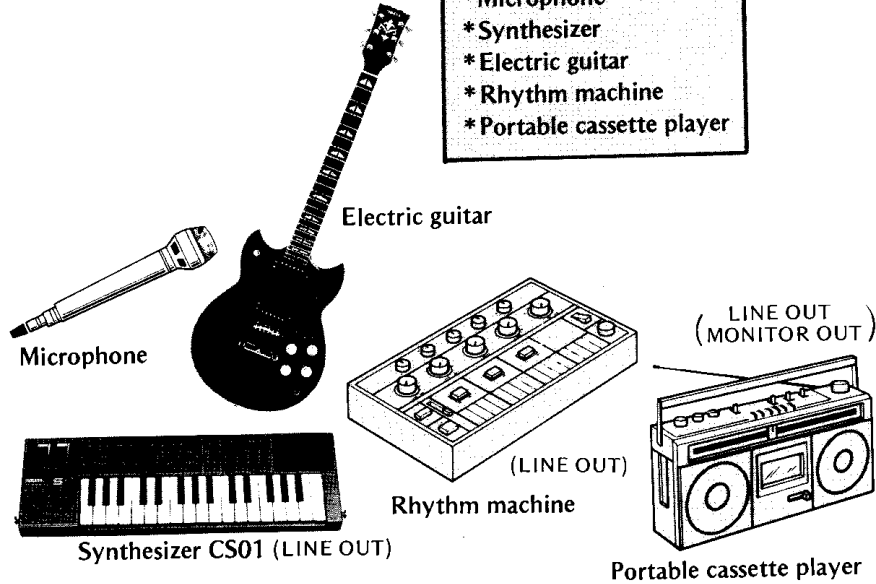
- * If you will not be using your MM10 for an extended period of time, the batteries should be removed from the battery compartment.
- * Replace batteries if you notice a decrease in the MM10's volume level or an increase in distortion. Be sure to replace all the batteries at one time.

INPUT CONNECTIONS

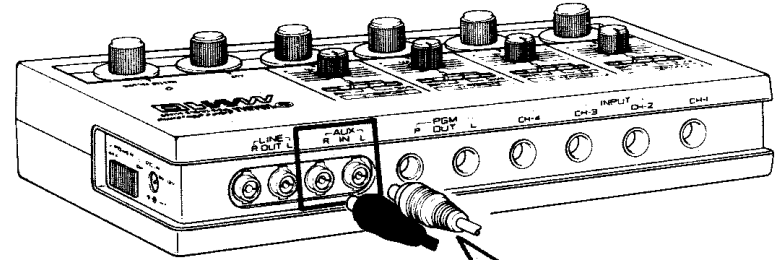
INPUT IN CHANNELS (1 THRU 4)



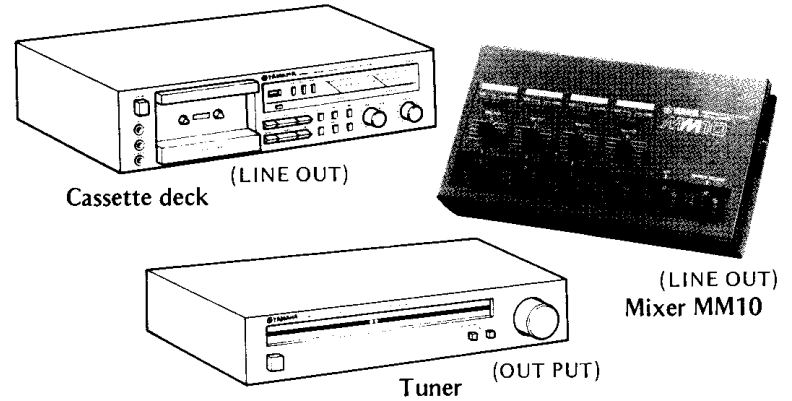
- *Microphone
- *Synthesizer
- *Electric guitar
- *Rhythm machine
- *Portable cassette player



AUX IN R AND L

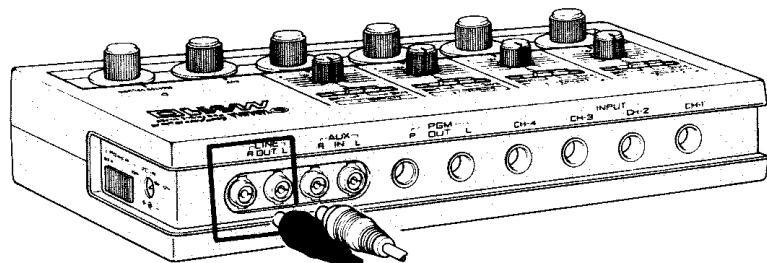


- *Cassette deck
- *Tuner
- *Another mixer

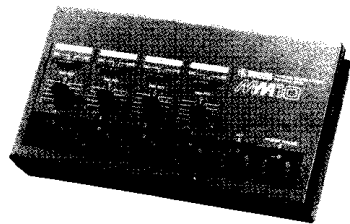


OUTPUT CONNECTIONS

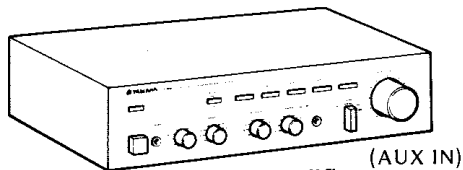
LINE OUT R AND L



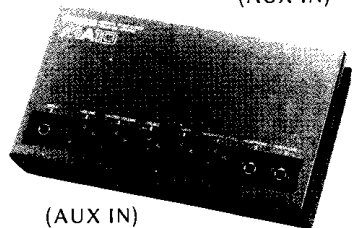
- * Cassette deck
- * Stereo amplifier
- * Headphone amplifier
- * Mixer



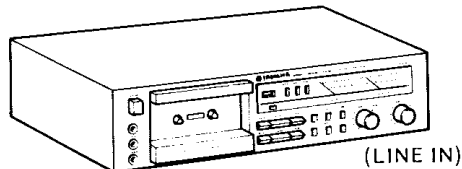
Mixer MM10
(AUX IN)



Stereo amplifier
(AUX IN)

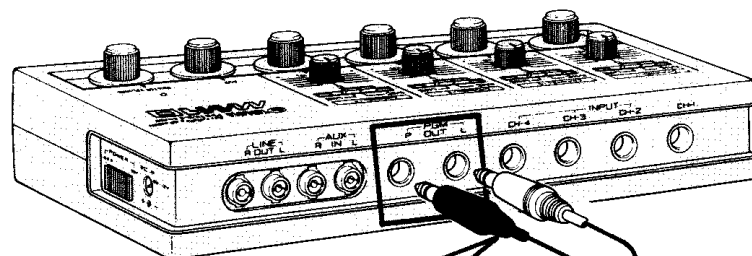


(AUX IN)
Headphone amplifier MA10

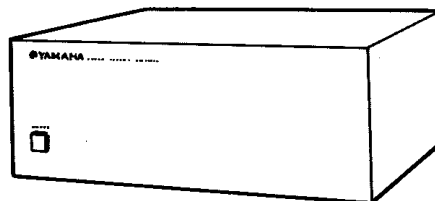


(LINE IN)
Cassette deck

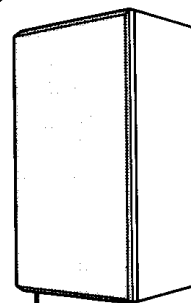
PGM OUT R AND L



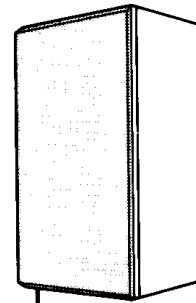
* Power amplifier



Power amplifier
(INPUT)



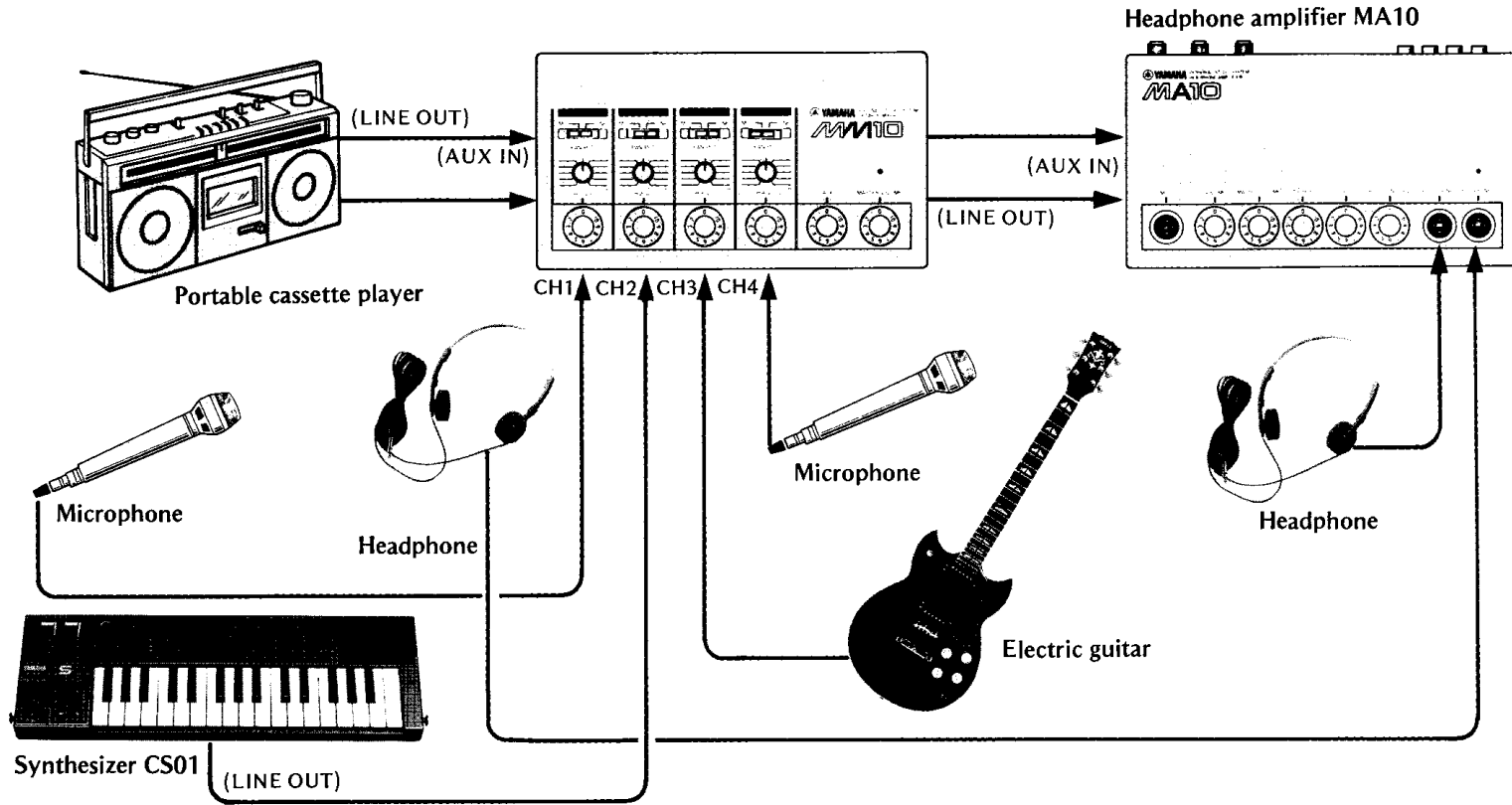
Speaker



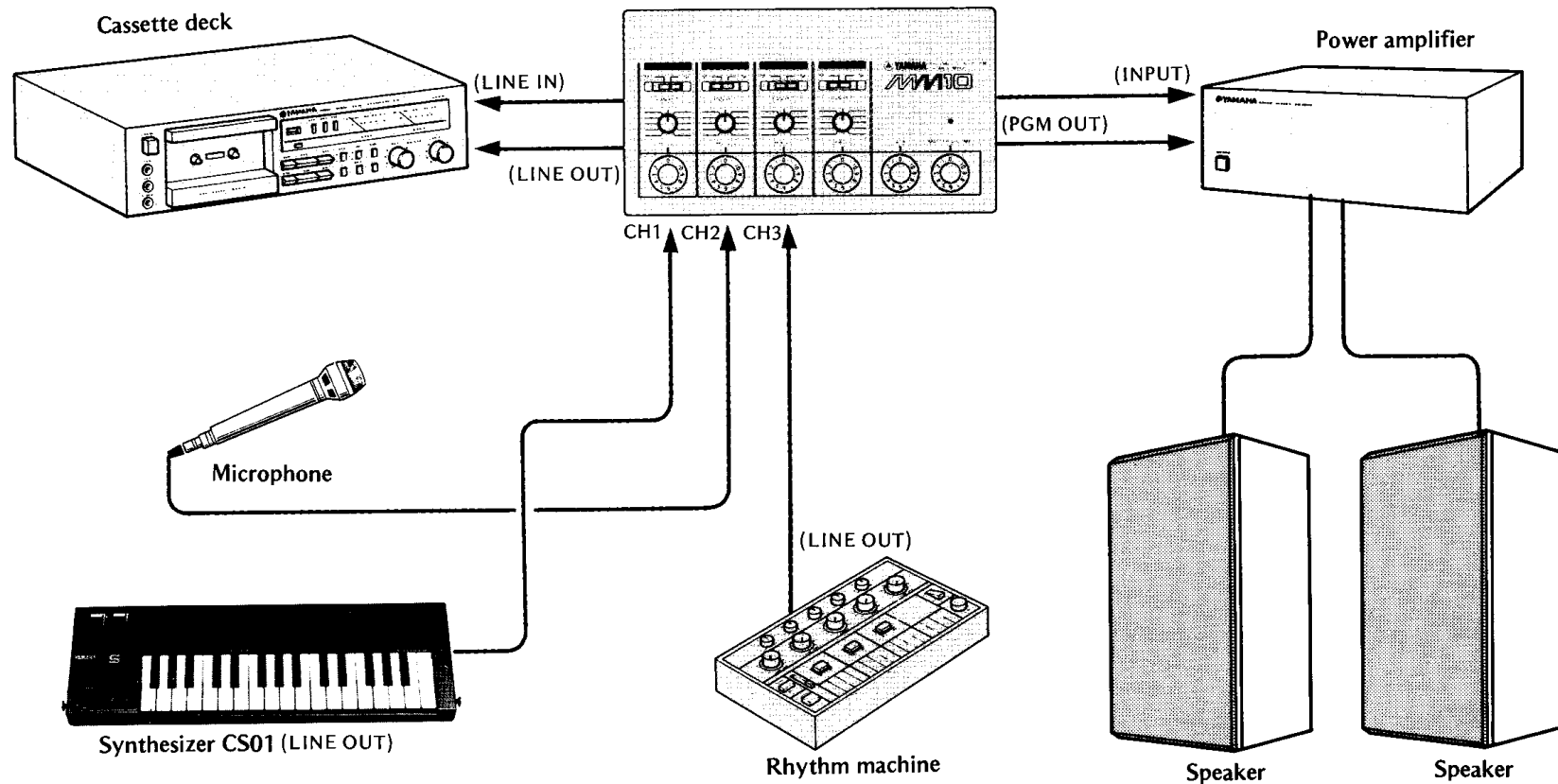
Speaker

APPLICATIONS

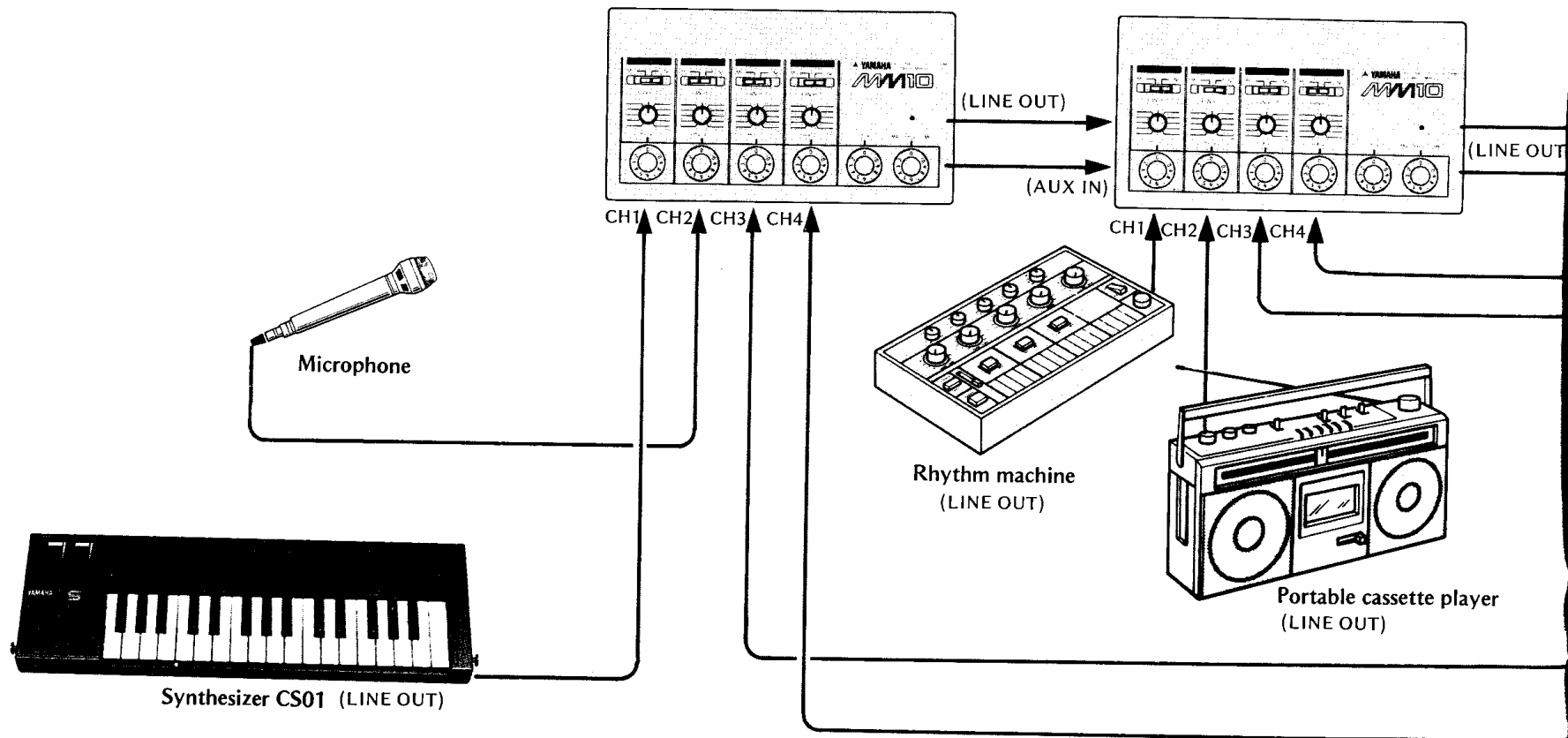
ENSEMBLE 1

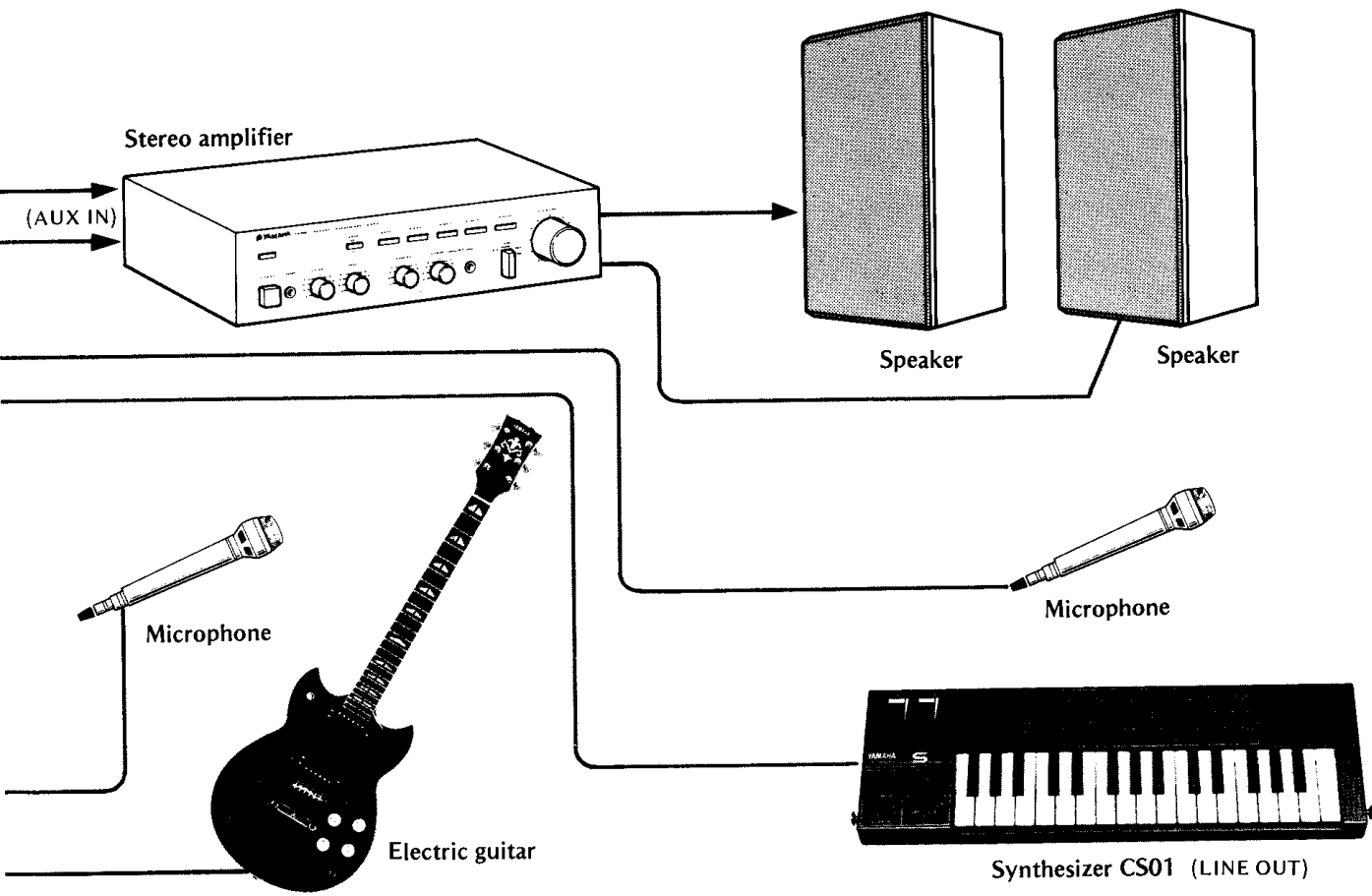


ENSEMBLE 2

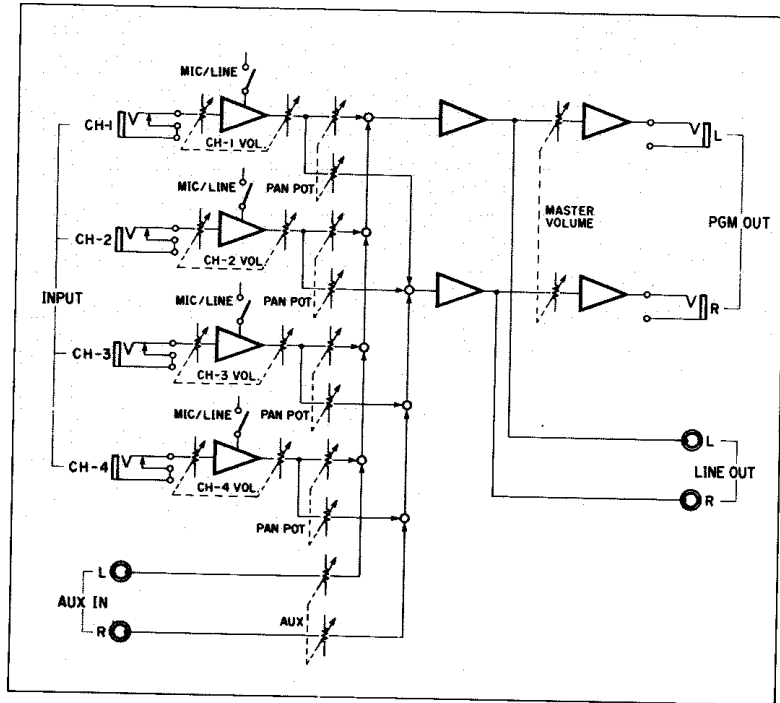


ENSEMBLE 3





BLOCK DIAGRAM



SPECIFICATIONS

FREQUENCY RESPONSE	+0 dB at 20Hz ~ 20kHz -2 dB at 20Hz ~ 20kHz (10kΩ, LINE OUT -20dB) (10kΩ, PGM OUT -10dB)
TOTAL HARMONIC DISTORTION	Less than 0.2% at 20Hz ~ 20kHz (10kΩ, LINE OUT -20dB) (10kΩ, PGM OUT -10dB)
* HUM & NOISE	Less than -110dB Equivalent Input Noise, input termination of 150Ω
MAXIMUM VOLTAGE GAIN	30dB (INPUT to LINE OUT at MIC position) 0dB (INPUT to LINE OUT at LINE position) 40dB (INPUT to PGM OUT at MIC position) 10dB (INPUT to PGM OUT at LINE position) 0dB (AUX IN to LINE OUT) 10dB (AUX IN to PGM OUT)
CONTROLS	VOLUME PAN POT INPUT LEVEL switch (MIC/LINE) AUX MASTER
JACK	INPUT x 4 (PHONE JACK) AUX x 2 (PIN JACK) LINE OUT x 2 (PIN JACK) PGM OUT x 2 (PHONE JACK) DC IN (DC 9V ~ 12V)
LIFE OF BATTERY	24 hours in continuous use (with S-006P)
POWER SOURCE	DC 9V Battery (S-006P) AC, Adaptor (DC 9V ~ 12V) PA-1
DIMENSIONS (W x H x D)	8-7/8" x 2" x 5" (223.5 x 52 x 129.5 mm)
WEIGHT	1.1 lbs (500g) (Not include Battery)
ACCESSORY	DC 9V Battery

} CH1 ~
CH4

• In above specifications, when dB represents a specific voltage, 0dB is referenced to 0.775V r.m.s.

* Measured with -6dB/oct filter @12.47kHz equivalent to a 20kHz filter with infinite dB/oct attenuation.

Specifications subject to change without notice.

SERVICE

The MM10 are supported by Yamaha's worldwide network of factory trained and qualified dealer service personnel. In the event of a problem, contact your nearest Yamaha dealer.

SINCE 1887  **YAMAHA**
NIPPON GAKKI CO., LTD. HAMAMATSU, JAPAN