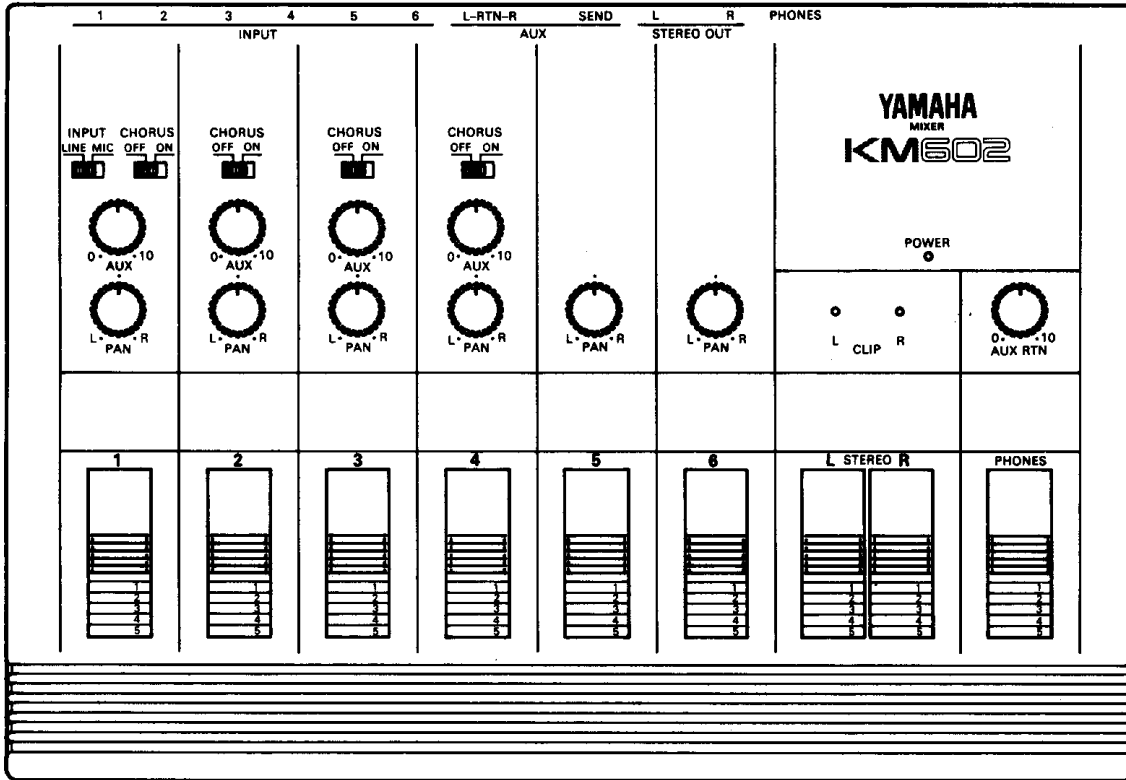


# YAMAHA



# KM602

COMPACT MIXER

TABLE DE MIXAGE

KOMPAKTMISCHPULT

OPERATING MANUAL

MANUEL D'UTILISATION

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Thank you for purchasing the Yamaha KM602 Mixer. The KM602 is a compact 6 in 2 out mixer especially designed with today's music in mind. It features a built-in chorus and stereo effects return. A unique space-saving design with highly visual faders make it a pleasure to use. In order to obtain the highest possible performance and make the most of the KM602's features, please read this owner's manual carefully.

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# FEATURES

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- Built-in chorus for rich sound.
- Stereo effect return lets you enjoy the full spacious sound of effect devices with stereo outputs.
- Highly visible fader position markers let you see volume settings even on dimly lighted stages.
- Stereo headphone monitoring jack with volume control independent from main output.

# PRECAUTIONS

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## LOCATION

Avoid placing the KM602 in direct sunlight or close to a source of heat. Also, avoid locations in which the device is likely to be subjected to vibration, excessive dust, cold or moisture.

## HANDLING

Avoid applying excessive force to the switches, dropping or rough handling. While the internal circuitry is of reliable, integrated circuit design, the KM602 should be treated with care.

## POWER CORD

Always grip the plug directly when removing it from an AC receptacle. Removing the plug from the AC receptacle by pulling the cord can result in damage to the cord, and possible a short circuit. It is also a good idea to disconnect the KM602 from the AC receptacle if you don't plan to use the device for an extended period of time.

## CONNECTIONS

Before plugging or unplugging inputs, turn the power off or the volume down.

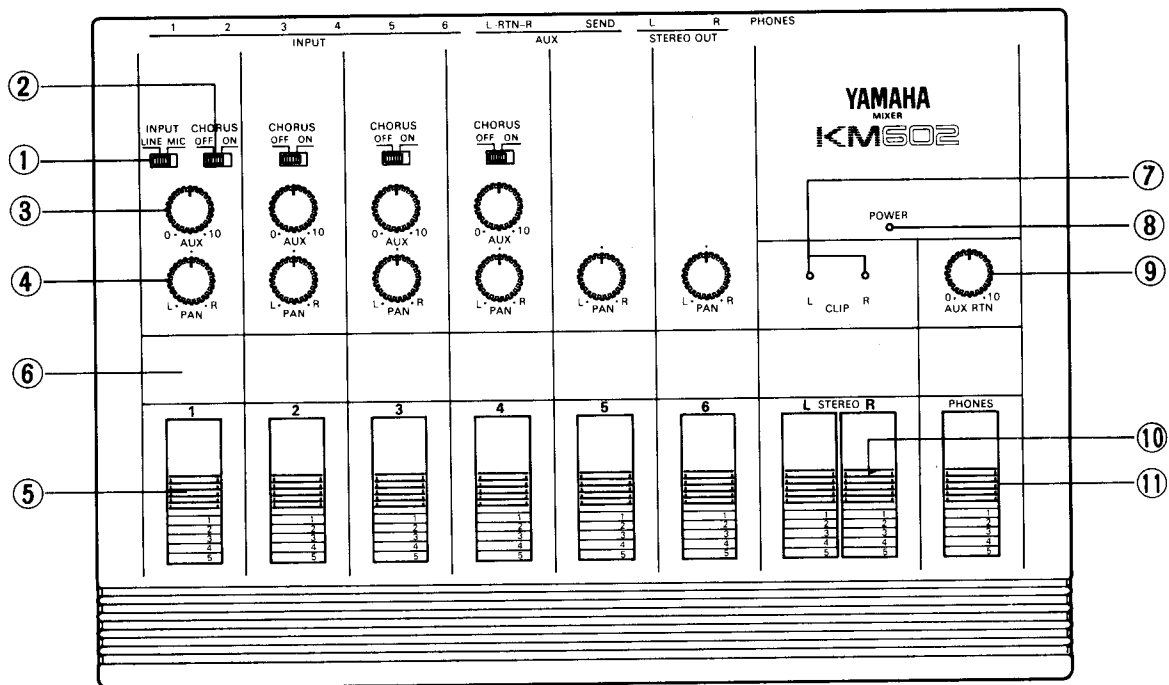
## DO NOT OPEN THE CASE

There are no user-serviceable parts inside.

## CLEANING

Use only a mild detergent on a cloth, and dry with a soft cloth. Never use solvents (such as benzine or thinner) since they can melt or discolor the surface.

# CONTROL PANEL OPERATION



## ① GAIN SELECT (Input 1 only)

When using this input with a low-level source such as a microphone, set GAIN SELECT to MIC position. For line-level instruments such as synthesizers, set it to LINE position.

## ② CHORUS (Inputs 1-4)

When CHORUS is selected, the input signal will be processed through the built-in chorus, and will be placed in the center of the left-right mix (i.e. PAN will not function).

## ③ AUX (Input 1-4)

This sends the post-fader signal to the aux output.

## ④ PAN (Input 1-6)

This sets the stereo position of the post-fader signal. PAN for channels 1-4 will function only when CHORUS is turned off.

## ⑤ CHANNEL FADER

This controls the output of the channel.

## ⑥ MARKING SPACE

You can ID the channels by writing on masking tape.

## ⑦ CLIP INDICATOR

These LEDs will light when the input signal reaches 3dB below clipping level. Setting the stereo output faders so that the clip indicators light occasionally will result in the best S/N ratio and the least distortion.

## ⑧ POWER INDICATOR

When power is turned on, the LED will light.

## ⑨ AUX RETURN

This determines the level at which the stereo signal received at AUX RETURN will be added to the stereo busses.

## ⑩ STEREO MASTER FADER L, R

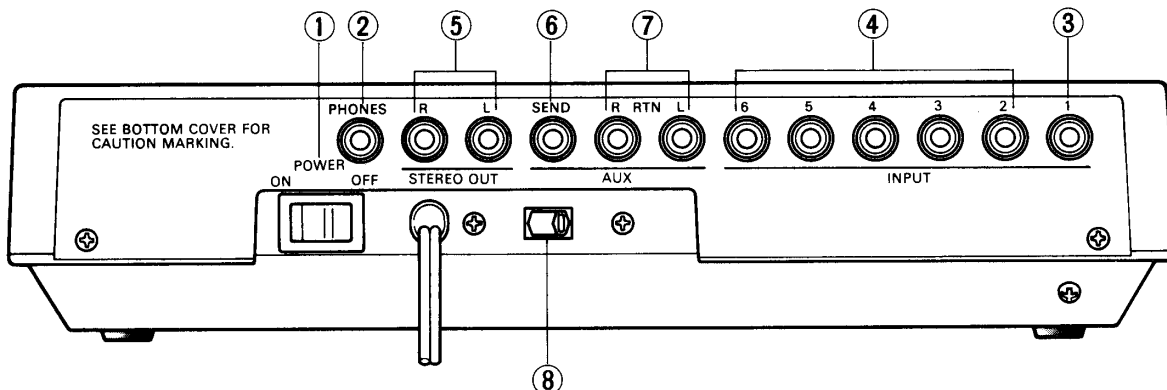
These determine the final level of the stereo output.

## ⑪ PHONES FADER

This determines the level of the phones output. The phones output is independent of the stereo master.

# REAR PANEL/BLOCK DIAGRAM

## REAR PANEL



### ① POWER SWITCH

When the power is turned on the power indicator will light.

### ② PHONES

This outputs the stereo signal from the phones fader. Any standard stereo headphones can be used.

### ③ INPUT 1

Standard 1/4" phone plug for less than 10 k-ohm line or 50-600 ohm microphone input.

### ④ INPUT 2-6

Standard 1/4" phone plug for less than 10 k-ohm line input.

### ⑤ STEREO OUT L, R

This outputs the signal from the stereo master fader L and R.

### ⑥ AUX SEND

This outputs the combined signal of the channel aux send controls.

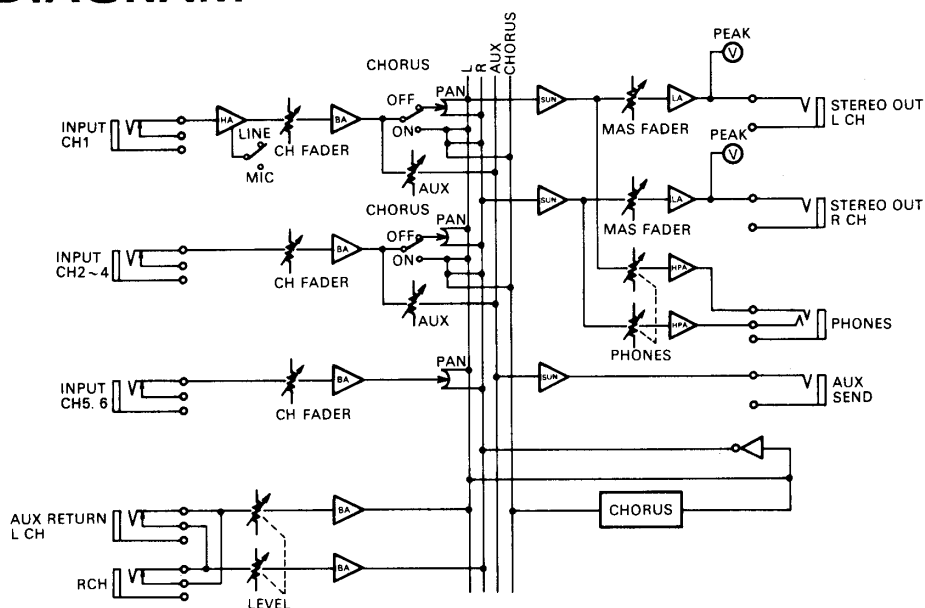
### ⑦ AUX RETURN (L, R)

Signals input here are sent to the aux return. If only one source is plugged in (L or R), it is treated as a mono source and sent to both L and R of the aux return.

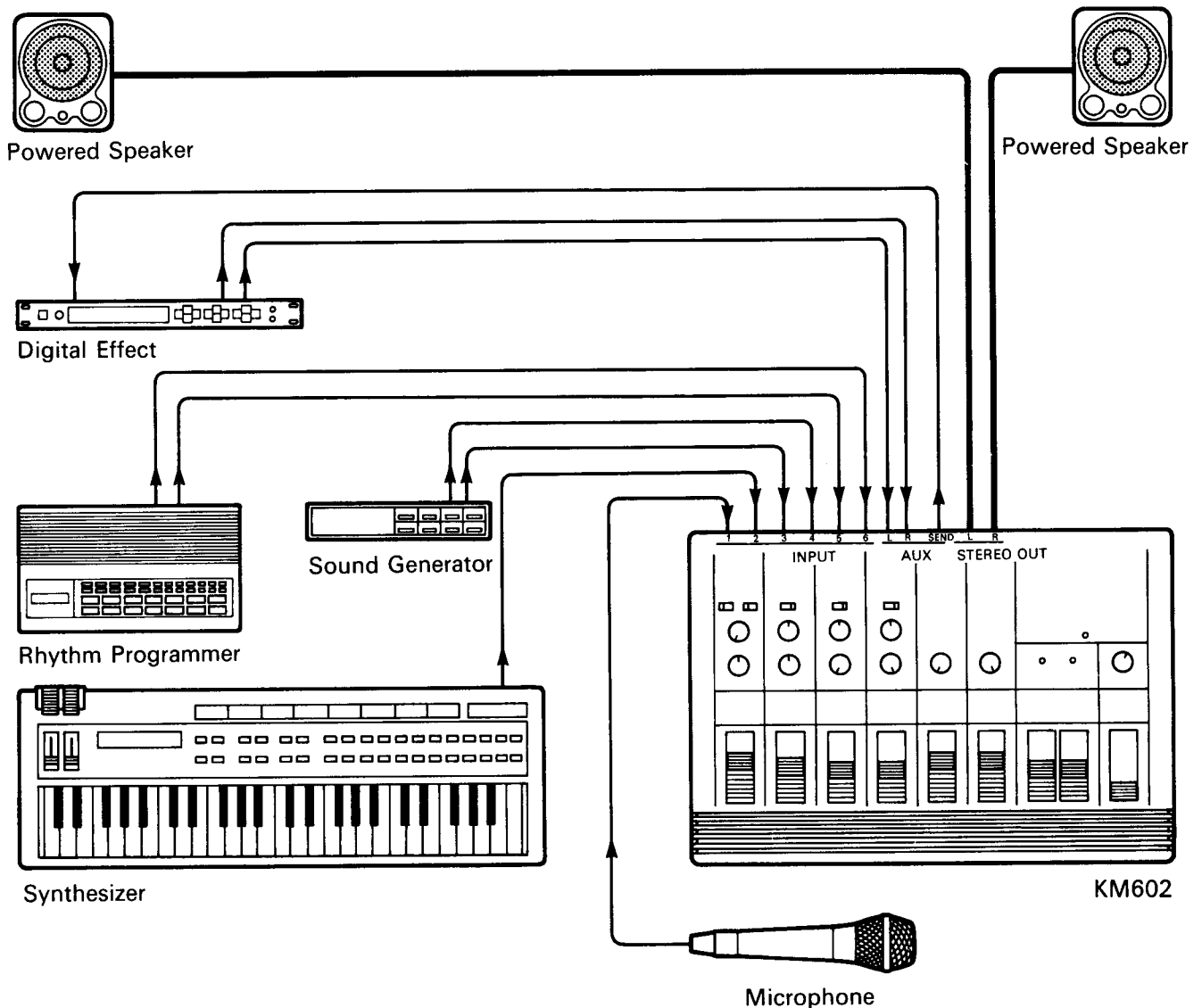
### ⑧ VOLTAGE SELECTOR (General model only)

You can select the voltage using this switch. Set to the voltage in your area.

## BLOCK DIAGRAM



# EXAMPLE SETUP



The KM602 can be the center of a home recording studio as shown in this diagram. We will use the DIGITAL MULTI-EFFECT PROCESSOR SPX90 digital effects unit to provide stereo reverb. A microphone can be connected to input 1, using the MIC position. The built-in stereo chorus effect could be added to the solo voice produced by the PROGRAMMABLE ALGORITHM SYNTHESIZER DX100 connected to input 2. The stereo signal from the FM SOUND GENERATOR FB-01 is connected to inputs 3 and 4. We can use the AUX sends of inputs 1-4 to add reverb to each signal as needed, and adjust the total level of the effect with the AUX return control. Since we won't be using reverb on the drums, the stereo output of the DIGITAL RHYTHM PROGRAMMER RX21 is connected to inputs 5 and 6.

# SPECIFICATIONS

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## MAXIMUM OUTPUT LEVEL

(20Hz ~ 20kHz, 10 k-ohms, THD 0.2%) + 20 dB

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## FREQUENCY RESPONSE

(10 k-ohms 0dB (STEREO OUT) 20Hz ~ 20kHz  
-10dB (AUX SEND) (+1, -2dB)

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## TOTAL HARMONIC DISTORTION

(20Hz ~ 20kHz, 10 k-ohms, +10dB) Less than 0.05%

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## HUM & NOISE (20Hz ~ 20kHz) $R_s = 150$ ohms, GAIN = MAX. (CH 1)

Input Noise (CH 1) -122dB Equivalent  
Residual Output Noise (STEREO OUT) -90dB  
STEREO OUT Master fader at nominal and all CH fader  
at minimum -76dB  
STEREO OUT Master fader and CH 1 fader at nominal  
level -72dB  
AUX SEND CH AUX level controls at minimum level -88dB  
AUX SEND CH1 fader and AUX level control at  
nominal level -82dB

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## CROSSTALK (1kHz)

AUX Send to STEREO OUT -60dB  
Adjacent Input -60dB

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## MAXIMUM VOLTAGE GAIN

CH1 IN to STEREO OUT 62dB  
CH2-6 IN to STEREO OUT 22dB  
AUX RETURN to STEREO OUT 32dB  
CH1 IN to AUX SEND 52dB  
CH2-4 IN to AUX SEND 12dB

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## POWER REQUIREMENTS

(US & Canadian Model) AC120V, 50/60Hz  
(General Model) AC110 - 120, 220 - 240V, 50/60Hz

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## DIMENSIONS (W x H x D)

290 x 65 x 204 mm  
(11-7/16" x 5-1/2" x 8-1/16")

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## WEIGHT

1.5kg (3lbs, 5oz.)

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\* Hum & Noise are measured with 6dB/octave filter at 12.7kHz: equivalent to a 20kHz filter with infinite dB/octave attenuation.

\*\* 0dB is referenced to 0.775V rms.

### INPUT CHARACTERISTICS

Connection	Gain Trim	Actual Load Impedance	For Use With Nominal	Input Level			Connector In Mixer
				Sensitivity	Nominal	Max. before clip	
CH Input 1 ch	MIC	10 k ohms	50-600 ohm Mics	-62dB (0.62mV)	-50dB (2.5mV)	-26dB (55mV)	Phone Jack
	LINE		600 ohm Lines	-22dB (62mV)	-10dB (245mV)	+14dB (3.1V)	
CH Input 2-6 ch	-	10 k ohms	600 ohm Lines	-22dB (62mV)	-10dB (245mV)		Phone Jack
AUX RETURN (L, R)	-	10 k ohms	600 ohm Lines	-32dB (19mV)	-20dB (78mV)		Phone Jack

(1) Sensitivity is the lowest level that will produce an output of 0dB (0.775V), or the nominal output level when the unit is set to maximum gain.

### OUTPUT CHARACTERISTICS

Connection	Actual Source Impedance	For Use With Nominal	Output Level		Connector In Mixer
			Nominal	Max. before clip	
STEREO OUT (L, R)	600 ohms	10 k ohm Lines	0dB (0.775V)	+20dB (7.75V)	Phone JACK
AUX SEND	600 ohms	10 k ohm Lines	-10dB (245mV)	+20dB (7.745)	Phone JACK
PHONES OUT	100 ohms	8 ohm phones	-22dB (61.6mV)	-4.5dB (462mV)	STEREO Phone Jack

(2) 0dB is referenced to 0.775V.

### **SERVICE**

The KM602 is 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.



Bescheinigung des Importeurs

Hiermit wird bescheinigt, daß der/die/das

Keyboard Mixer Typ : KM602

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(Gerät, Typ, Bezeichnung)

in Übereinstimmung mit den Bestimmungen der

VERFÜGUNG 1046/84

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(Amtsblattverfügung)

funk-entstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes  
angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung  
der Bestimmungen eingeräumt.

Yamaha Europa GmbH

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Name des Importeurs

