## Roland

**Powered Speaker** 

# **MA 100**

## **OWNER'S MANUAL**

### Introduction

We want to thank you for your purchase of the Roland MA-100 Powered Speaker. The MA-100 is a compact monitor amp designed for use with equipment such as the RA-30 Realtime Arranger and the KP-24 Acoustic Keyboard Pickup.

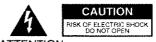
To ensure correct use of the MA-100, please read the sections "IMPORTANT SAFETY INSTRUCTIONS" and "IMPORTANT NOTES" before using your new powered speaker. Also, to take full advantage of the outstanding functions the MA-100 has to offer, please read through this manual carefully. Keep this manual handy so that you can refer to it quickly if any questions arise.

### **Main Features**

- The MA-100 is a compact monitor amp with a built-in 16 cm (6 5/16 inches) full-range speaker that can deliver 15 W of output.
- Input jacks for Line In as well as microphone input are provided, making it possible to enjoy ensemble play.
- An echo effect can be applied to mike input for richly resonant vocals.
- The MA-100 has a DC Out jack for connecting the RA-30. This lets you hook up the RA-30 without having to use an AC adaptor.
- ◆ The MA-100 takes up very little space when not in use, it can be stowed away under the keyboard of an acoustic piano, even with the RA-30 installed on top of the amp. Rolling casters can also be installed at the base to facilitate moving.
- The attractive wood-grain design of the MA-100 accents any acoustic piano.

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ATTENTION: RISQUE DE CHOC ELECTRIQUE NE PAS QUYRIR

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

# IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

WARNING - When using electric products, basic precautions should always be followed, including the following:

- 1. Read all the instructions before using the product.
- Do not use this product near water for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
- This product should be used only with a cart or stand that is recommended by the manufacturer.
- 4. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
- The product should be located so that its location or position does not interfere with its proper ventilation.
- The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
- The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.

- 8. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
- Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- 10. The product should be serviced by qualified service personnel when:
  - A. The power-supply cord or the plug has been damaged; or
  - B. Objects have fallen, or liquid has been spilled onto the product; or
  - C. The product has been exposed to rain; or
  - D. The product does not appear to operate normally or exhibits a marked change in performance; or
  - E. The product has been dropped, or the enclosure damaged.
- 11.Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

-For the USA

This product may be equipped with a polarized line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.

For Canada

For Polarized Line Plug

CAUTION: ATTENTION:

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

**ATTENTION:** POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU' AU FOND.

For the U.K.-

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE: NEUTRAL BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED. Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

#### **■ IMPORTANT NOTES**

In addition to the items listed under IMPORTANT SAFETY INSTRUCTIONS inside the front cover, please read and observe the following:

#### **Power Supply**

- Before connecting this unit to other devices, turn off the power to all units; this will help prevent damage or malfunction.
- Do not use this unit on the same power circuit with any device that will generate line noise; an electric motor or variable lighting system for example.

#### **Placement**

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.

#### Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzene, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

#### **Additional Precautions**

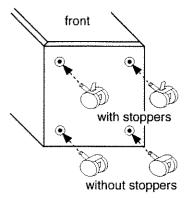
- Protect the unit from strong impact.
- A small amount of heat will radiate from the unit during normal operation.
- Before using the unit in a foreign country, consult with qualified service personnel.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels, especially when it is late at night.

## ■ Before You Use the MA-100

#### Installing the Casters

Insert the casters included with the MA-100 into the holes on the bottom of the amp. Two kinds of casters are provided: two with stoppers and two without stoppers. Insert the two casters with stoppers in the holes closest to the front side of the amp.

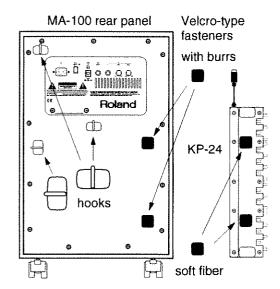
\* Once the MA-100 has been set up in place by the piano, lower the stoppers to lock the casters. This will prevent the MA-100 from moving if accidentally bumped. Lift up the stoppers to release the casters when you need to move the MA-100 again.



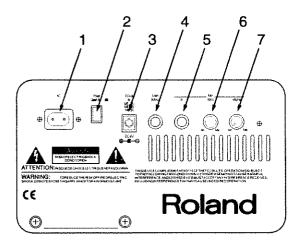
## ☐ Installing the Hooks and Velcro-type fasteners

The hooks and Velcro-type fasteners that come with the MA-100 should be installed on the back of the MA-100 and KP-24 as shown below.

The Velcro-type fasteners are made up of two partsone has a burred surface, while the other is covered with soft fiber. The part with the burrs should be stuck onto the MA-100 and the other part should be affixed to the KP-24.



## ■ Names and Functions



#### 1. AC inlet

Connect the included power cord to this inlet.

#### 2. Power switch

This switches the power on and off.

#### 3. DC Out jack

Connect this to the DC In jack on the RA-30 to power the RA-30.

\* In addition to the RA-30, this jack can also be used to power the MT-200 or MT-120. If you are using the MT-200 or MT-120 instead of the RA-30, just substitute "MT-200" or "MT-120" wherever you see "RA-30" in the explanation that follows.

#### 4. Line In jack

Connect this to the Output L (MONO) jack on the RA-30. This is a 1/4 inch phone type jack.

#### 5. Mic input jack

Plug in a mike (available separately) to this jack.

#### 6. Echo knob

Use this to adjust the amount of echo applied to the mike input.

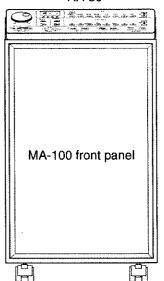
#### 7. Mic Volume knob

Use this to adjust the volume of the mike input.

## ■ Installing the RA-30

Install the RA-30 on top of the MA-100 as shown below.

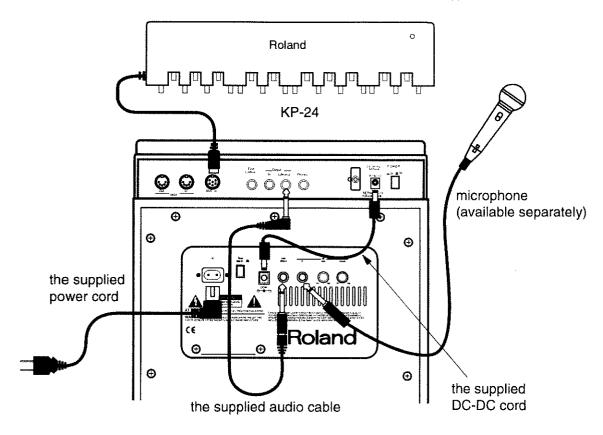
**RA-30** 



## **■ Making the Connections**

Hook up the RA-30 as shown below.

\* Be sure to make the connection to the Output L (MONO) jack on the RA-30 with the supplied audio cable.



## **■** Turning On the Power

- 1. Rotate the MA-100's Mic Volume and Echo knobs all the way to their lowest setting ("Min").
- 2. Turn the Volume knob on the RA-30 to its lowest setting ("Min").
- 3. Flip on the Power switch for the RA-30.
- 4. Turn on the Power switch for the MA-100.

  The MA-100 and RA-30 are now both powered up.
- \* The MA-100 is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.
- 5. Slowly turn the RA-30's Volume knob clockwise to adjust the sound to the desired level.

- Adjust the volume for the mike by slowly turning the Mic Volume knob clockwise until the desired sound level is reached.
- 7. To adjust the amount of echo applied to the mike input, slowly turn the Echo knob clockwise.
- \* Howling (a screeching sound) may occur when the mike and speaker are positioned in certain ways. If this happens, here's how to correct the problem:
  - 1. Move the mike so it points in a different direction.
  - 2. Move the mike away from the speaker.
  - 3. Turn the Mic Volume knob counterclockwise to lower the volume.

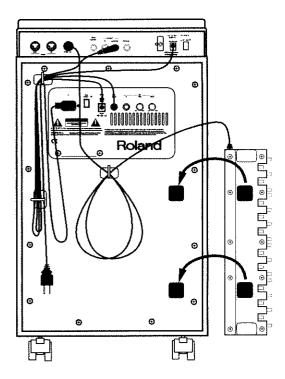
## **■ Turning Off the Power**

- 1. Push the power switch on the MA-100 to turn it off
- 2. Switch off the power switch on the RA-30.

## ■ Stowing the unit

When not in use, you can store the MA-100 under the keyboard of the acoustic piano. Here's what to do:

- 1. Attach the KP-24 to the fasteners on the back of the MA-100.
- 2. Secure the cables on the hooks.



\* Using the hooks to bind and secure the power cord and other cables can help prevent accidentally tripping over the cables, which may cause the MA-100 to tip over or pull out the cables.

## **■** Main Specifications

#### MA-100: Powered Speaker

#### ●Power Output

 $15 \,\mathrm{W} \,/\, 5 \,\Omega$ 

#### ●Nominal Input Level

Line In: -4 dBm Mic In: -46 dBm

#### •Input Impedance

Line In:  $56 \text{ k}\Omega$ Mic In:  $10 \text{ k}\Omega$ 

#### **OInput Sensitivity**

Line In: -4 dBm Mic In: -46 dBm

#### Speakers

 $16 \text{ cm} (6-5/16 \text{ inches}) \times 1$ 

#### ●Controls

Mic Volume Knob Echo Knob Power Switch

#### Connectors

Line In Jack (1/4 inch phone type) Mic In Jack (1/4 inch phone type) DC Out Jack (DC 9V) AC Inlet

#### ●Power Supply

AC 117 V, AC 230 V or AC 240 V

#### ●Power Consumption

35W: AC 117 V, AC 230 V or AC 240 V

#### Dimensions

318 (W) x 295 (D) x 518 (H) mm 12 - 9/16 (W) x 11 - 5/8 (D) x 20 - 7/16 (H) inches ( with casters attached )

#### ●Weight

8.1 kg / 17 lbs 14 oz

#### •Accessories

Owner's Manual
Power Cord
Caster ( with stopper ) x 2
Caster ( without stopper ) x 2
DC-DC Cord
Audio Cable
Hook x 3
Velcro-type Fastener x 2 pairs

- \*0 dBm = 0.775 Vrms
- \* In the interest of product development, the specifications and/or appearance of this unit are subject to change without prior notice.

-For Germany -

#### Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt, daß der/die/das

Powered Speaker MA-100

(Gerät, Typ, Bezeichnung)

in Übereinstimmung mit den Bestimmungen der BMPT-AmtsblVfg 243/1991, 46/1992 funk-entstört ist.

Der vorschriftsmäßige Betrieb mancher Geräte (z. B. Meßsender) kann allerdings gewissen Einschränkungen unterliegen. Beachten Sie deshalb die Hinweise in der Bedienungsanleitung.

Dem Zentralamt für Zulassungen im Fernmeldewesen wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf die Einhaltung der Bestimmungen eingeräumt.

**Roland Corporation** 

4-16 Dojimahama 1-Chome Kita-ku Osaka 530 Japan

(Name und Anschrift des Herstellers/importeurs)

For the USA

## FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Unauthorized changes or modification to this system can void the users authority to operate this equipment. This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

#### **CLASS B**

#### NOTICE

This digital apparatus does not exceed the Class B limits for radio noise emissions set out in the Radio Interference Regulations of the Canadian Department of Communications.

#### CLASSE B

#### **AVIS**

Cet appareil numérique ne dépasse pas les limites de la classe B au niveau des émissions de bruits radioélectriques fixés dans le Règlement des signaux parasites par le ministère canadien des Communications.

#### Information

When you need repair service, call your local Roland Service Station or the authorized Roland distributor in your country as shown below.

#### U. S. A.

Roland Corporation U.S. 7200 Dominion Circle Los Angeles, CA. 90040-3696, U. S. A. TEL: (213) 685 5141

#### CANADA

Roland Canada Music Ltd. (Head Office) 5480 Parkwood Way Richmond B. C., V6V 2M4 CANADA TEL: (604) 270 6626

#### Roland Canada Music Ltd. (Montreal Office) 9425 Transcanadienne

9425 Transcanadienne Service Rd. N., St Laurent, Quebec H4S 1V3, CANADA TEL: (514) 335 2009

## Roland Canada Music Ltd. (Toronto Office)

346 Watline Avenue, Mississauga, Ontario L4Z 1X2, CANADA TEL: (416) 890 6488

#### **AUSTRALIA**

Roland Corporation Australia Pty. Ltd. 38 Campbell Avenue Dee Why West. NSW 2099 AUSTRALIA TEL: (02) 982 8266

#### **NEW ZEALAND**

Roland Corporation (NZ) Ltd. 97 Mt. Eden Road, Mt. Eden, Auckland 3, NEW ZEALAND TEL:: (09) 3098 715

#### UNITED KINGDOM

Roland (U.K.) Ltd. Rye Close Ancells Business Park Fleet, Hampshire GU13 8UY, UNITED KINGDOM TEL: (0252) 816181

#### Roland (U.K.) Ltd., Swansea Office

Atlantic Close, Swansea Enterprise Park, Swansea, West Glamorgan SA79FJ, UNITED KINGDOM TEL: (0792) 700 139

#### **IRELAND**

The Dublin Service Centre Audio Maintenance Limited 11 Brunswick Place Dublin 2 Republic of Ireland TEL: (01) 677322

#### ITALY

Roland Italy S. p. A. Viale delle Industrie 8 20020 ARESE MILANO ITALY TEL: (02) 93581311

#### **SPAIN**

Roland Electronics de España, S. A. Calle Bolivia 239 08020 Barcelona, SPAIN TEL: (93) 308 1000

#### **GERMANY**

Roland Elektronische Musikinstrumente Handelsgesellschaft mbH. Oststrasse 96, 22844 Norderstedt, GERMANY TEL: (040) 52 60090

#### FRANCE

Guillard Musiques Roland ZAC de Rosarge Les Echets 01700 MIRIBEL FRANCE TEL: (72) 26 5060

## Guillard Musiques Roland (Paris Office)

1923 rue Léon Geoffroy 94400 VITRY-SUR-SEINE FRANCE TEL: (1) 4680 86 62

#### BELGIUM/HO!LAND/ LUXEMBOURG

Roland Benelux N. V. Houtstraat 1 B-2260 Oevel-Westerlo BELGIUM TEL: (014) 575811

#### **DENMARK**

Roland Scandinavia A/S Langebrogade 6 Box 1937 DK-1023 Copenhagen K. DENMARK TEL: 31 95 31 11

#### **SWEDEN**

Roland Scandinavia A/S Danvik Center 28 A, 2 tr. S-131 30 Nacka SWEDEN TEL: (08) 702 0020

#### **NORWAY**

Roland Scandinavia Avd. Kontor Norge

Lilleakerveien 2 Postboks 95 Lilleaker N-0216 Oslo 2 NORWAY TEL: (02) 73 0074

#### **FINLAND**

Fazer Musik Inc. Länsituulentie POB 169, SF-02101 Espoo FINLAND TEL: (00) 43 5011

#### **SWITZERLAND**

Roland (Switzerland) AG Musitronic AG Gerberstrasse 5, CH-4410 Liestal, SWITZERLAND TEL: (061) 921 1615

#### **AUSTRIA**

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#### GREECE

V. Dimitriadis & Co. Ltd. 20, Alexandras St. & Bouboulinas 54 St. 106 82 Athens, GREECE TEL: (01) 8232415

#### **PORTUGAL**

Caius - Tecnologias Audio e Musica , Lda. Rue de Catarina 131 4000 Porto, PORTUGAL TEL: (02) 38 4456

#### HUNGARY

Intermusica Ltd. Warehouse Area 'DEI

Warehouse Area 'DEPO' l'f.83 H-2046 Torokbalint, Budapest HUNGARY TEL: (1) 1868905

#### ISRAEL

D.J.A. International Ltd. Twin Towers, 33 Jabatinsy St. Room 211, Ramat Gan 52511 ISRAEL TEL: (03) 751 8585

#### **CYPRUS**

Radex Sound Equipment Ltd. 17 Diagorou St., P.O.Box 2046, Nicosia CYPRUS

2046, Nicosia CYPRUS TEL: (2) 453 426 (2) 466 423

#### U.A.E

Zak Electronics & Musical Instruments Co. P.O. Box 8050 DUBAI, U.A.E TEL: 360715

#### **KUWAIT**

Easa Husain Al-Yousifi P.O. Box 126 Safat 13002 KUWAIT TEL: 5719499

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Badie Studio & Stores P.O.Box 62, DOHA Qatar TEL: 423554

#### **SYRIA**

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La Casa Wagner de Guadalajara s.a. de c.v. Av. Corona No. 202 S.J. Guadalajara, Jalisco MEXICO C.P.44100 TEL: (36) 13 1414

#### **VENEZUELA**

Musicland Digital C.A. Av. Francisco de Miranda, Centro Parque de Cristal, Nivel C2 Local 20 Caracas VENEZUELA TEL: (2) 285 9218

#### PANAMA

Productos Superiores, S.A. Apartado 655 - Panama 1 REP. DE PANAMA

#### **ARGENTINA**

TEL: 26 3322

Instrumentos Musicales S.A.

Florida 638 (1005) Buenos Aires ARGENTINA TEL: (1) 394 4029

#### **HONG KONG**

Tom Lee Music Co., Ltd. Service Division 22-32 I'un Shan Street, Tsuen Wan, New Territories, HONG KONG TEL: 852 2737 7688

#### KOREA

Cosmos Corporation Service Station 261 2nd Floor Nak-Won Arcade Jong-Ro ku, Seoul, KOREA TEL: (02) 742 8844

#### **SINGAPORE**

Swee Lee Company BLOCK 231, Bain Street #03-23 Bras Basah Complex, Singapore 0718 TEL: 3367886

#### CRISTOFORI MUSIC PTE LTD

SINGAPORE 1542 REPUBLIC OF SINGAPORE TEL: 3450435

#### PHILIPPINES

G.A. Yupangco & Co. Inc. 339 Gil J. Puyat Avenue Makati, Metro Manila 1200, PHILIPPINES TEL: (02) 817 0013

#### THAILAND

Theera Music Co., Ltd. 330 Verng Nakorn Kasem, Soi 2, Bangkok 10100, THAILAND TEL: (02) 2248821

#### MALAYSIA

Bentley Music SDN BHD No.142, Jalan Bukit Bintang 55100 Kuala Lumpur, MALAYSIA TEL: (03) 2443333

#### INDONESIA PT CITRARAMA BELANTIKA

Kompleks Perkantoran Duta Kompleks Perkantoran Duta Merlin Blok E No.6—7 Jl. Gajah Mada No.3—5, Jakarta 10130, INDONESIA TEL: (021) 3850073

#### TAIWAN

Siruba Enterprise (Taiwan) Co., LTD. Room. 5, 9fl. No. 112 Chung Shan N.Road Sec.2 Taipei, TAIWAN, R.O.C. TEL: (02) 571 5860

## SOUTH AFRICA That Other Music Shop

(PTY) Ltd. 11 Melle Street (Cnr Melle and Juta Street) Braunfontein 2001 Republic of South Africa TEL: (011) 403 4105

Paul Bothner (PTY) Ltd. 17 Werdmuller Centre Claremont 7700 Republic of South Africa TEL: (021) 64 4030

As of Feb. 23, 1995

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