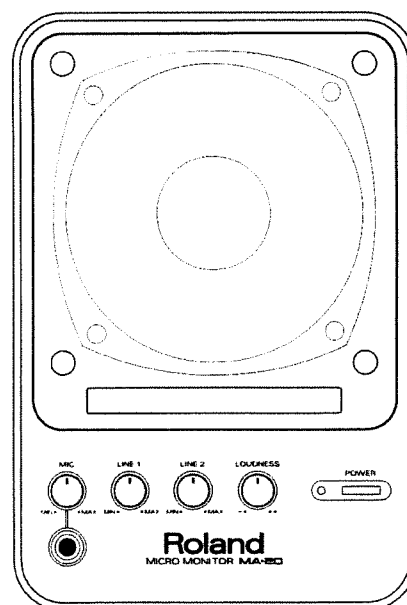




# Roland

MICRO MONITOR

# MA-20

Owner's Manual



	<b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN	
<b>ATTENTION:</b> RISQUE DE CHOC ELECTRIQUE NE PAS OUVRI		
<b>CAUTION:</b> 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

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

1. Read all the instructions before using the product.
2. 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.
3. 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.
5. The product should be located so that its location or position does not interfere with its proper ventilation.
6. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
7. The product should avoid using in where it may be effected by dust.
8. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
9. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
10. Do not tread on the power-supply cord.
11. Do not pull the cord but hold the plug when unplugging.
12. When setting up with any other instruments, the procedure should be followed in accordance with instruction manual.
13. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
14. 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 into 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.
15. 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

### GROUNDING INSTRUCTIONS

This product must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock.

This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

**DANGER:** Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product — if it will not fit the outlet, have a proper outlet installed by a qualified electrician.


## SAVE THESE INSTRUCTIONS

For the U.K.

**WARNING:** THE APPARATUS MUST BE EARTHED

**IMPORTANT:** THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.  
GREEN-AND-YELLOW: EARTH, 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 GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol  or coloured GREEN or GREEN-AND YELLOW.

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.

The product which is equipped with a THREE WIRE GROUNDING TYPE AC PLUG must be grounded.

Thank you for purchasing the Roland MA-20 Micro Monitor. To make the best use of this unit, please read the owner's manual carefully.

## FEATURES

- The MA-20 is a self-powered monitor speaker (15W output) that includes a magnetically shielded, 12cm, 2-way coaxial driver.
- The speaker is equipped with a MIC Input Jack and two Line Input Jacks.
- The system contains independent Volume Controls for three inputs; Line In 1, 2 and Mic.
- The audio signals from LINE IN 1 and 2 and the MIC input are mixed and sent to the LINE OUT jack. If the LINE OUT jack is then connected to a cassette tape deck (for example) these signals can be recorded onto tape.
- The system contains a Loudness Control that allows you to compensate for EQ at low listening levels.

## IMPORTANT NOTES

In addition to the items listed under Safety Precautions on page 2, please read and adhere to the following:

### Power Supply

- When making any connections with other devices, always turn off the power to all equipment first; 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, such as a motor or variable lighting system.

### Placement

- Using the unit near power amplifiers (or other equipment containing large transformers) may induce hum.
- This unit may interfere with radio and television reception. Do not use this unit in the vicinity of such receivers.
- Do not expose this unit to temperature extremes (eg. direct sunlight in an enclosed vehicle can deform or discolor the unit) or install it near devices that radiate heat.
- The MA-20 adopts magnetically shielded system, however, keep floppy disks or recorded tapes away from it for safety.

### 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 neutral 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 risk of discoloration and/or deformation.

### Additional Precautions

- Protect the unit from strong impact.
- A small amount of heat will radiate from the unit, and thus should be considered normal.
- Do not strike or apply strong pressure to the speaker's grille.
- Before using the unit in a foreign country, consult with qualified service personnel.
- This unit is equipped with a circuit protection device. A brief interval after power up is required before the unit will operate.

## SPECIFICATIONS

### • Rated Power

15 W

### • Speaker (Magnetically-shielded)

12 cm 2-way coaxial

### • Nominal Input level

-Line In 1,2 : -10 dBm  
-Mic In : -50 dBm

### • Input Impedance

-Line In 1, 2 : 30 k $\Omega$   
-Mic In : 5 k $\Omega$

### • Input Sensitivity

-Line In 1, 2 : -26 dBm  
-Mic In : -50 dBm

### • Nominal Output level

-Line Out : -10 dBm

### • Output Impedance

-Line Out : 1 k $\Omega$

### • Controls

Line 1 Level Knob  
Line 2 Level Knob  
Mic Level Knob  
Loudness Control Knob  
Power Switch

### • Indicators

Power Indicator

### • Connectors

-Front : Mic Input Jack (1/4 inch phone type)  
-Rear : Line 1 Input Jack (1/4 inch phone type)  
Line 2 Input Jack (RCA phono type)  
Line Output Jack (RCA phono type)

### • Enclosure

Bass-reflex type

### • Material and Finish

-Body : ABS resin (Gray-White)  
-Speaker grille : Mesh type (Gray)

### • Power Supply

AC 117V, AC 230V or AC 240V

### • Power Consumption

24W / 23VA (AC 117V), 28W (AC 230V), 29W (AC 240V)

### • Dimensions

160(W) X 185(D) X 235(H) mm  
6-5/16 X 7-5/16 X 9-1/4 inches

### • Weight

3.2 kg / 7 lbs 1 oz

### • Accessories

Owner's Manual  
Foot Rubber X 4

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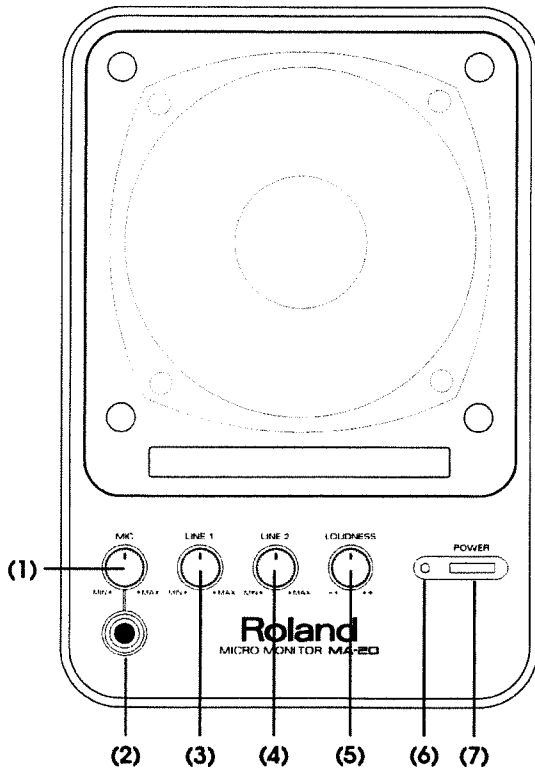
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\* 0dBm = 0.775Vrms

\* Specifications for this product are subject to change without prior notice.

# PANEL DESCRIPTIONS

## <<Front Panel>>



### (1) MIC Level Control Knob

This knob adjusts the input volume of a microphone connected to the MIC Input Jack (2). Clockwise rotation increases the volume.

\* When the knob is rotated completely counterclockwise, no sound will be heard.

### (2) MIC Input Jack

Connect a microphone to this jack.

### (3) LINE 1 Level Control Knob

This knob adjusts the input volume of the device connected to the LINE IN 1 Jack (8). Clockwise rotation increases the volume.

\* When the knob is rotated completely counterclockwise, no sound will be heard.

### (4) LINE 2 Level Control Knob

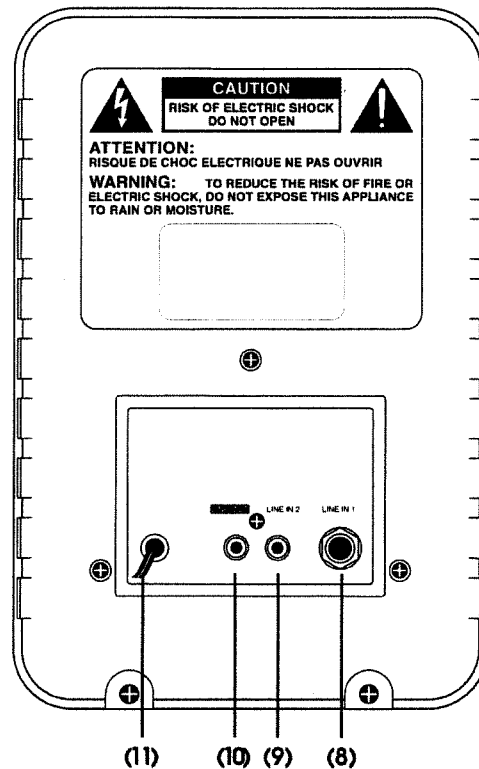
This knob adjusts the input volume of the device connected to the LINE IN 2 Jack (9). Clockwise rotation increases the volume.

\* When the knob is rotated completely counterclockwise, no sound will be heard.

### (5) LOUDNESS Control Knob

This knob simultaneously controls bass and treble EQ. Rotating it clockwise boosts the bass and treble, while rotating it counterclockwise cuts the bass and treble. When the knob is set to the center position, a flat characteristic is created.

## <<Rear Panel>>



\* The LOUDNESS control actually compensates for the ear's reduced ability to hear low and high frequencies at low volumes.

### (6) POWER Indicator

This indicator lights when the unit is switched on.

### (7) Power Switch

This switch turns the system on and off.

### (8) LINE IN 1 Jack

Connect an electronic musical instrument (such as a keyboard, rhythm machine or sound module) to this jack. This is a 1/4" phone jack.

### (9) LINE IN 2 Jack

Connect any audio equipment (such as a tape deck, CD player etc.) to this jack. (An electronic musical instrument can also be connected.)

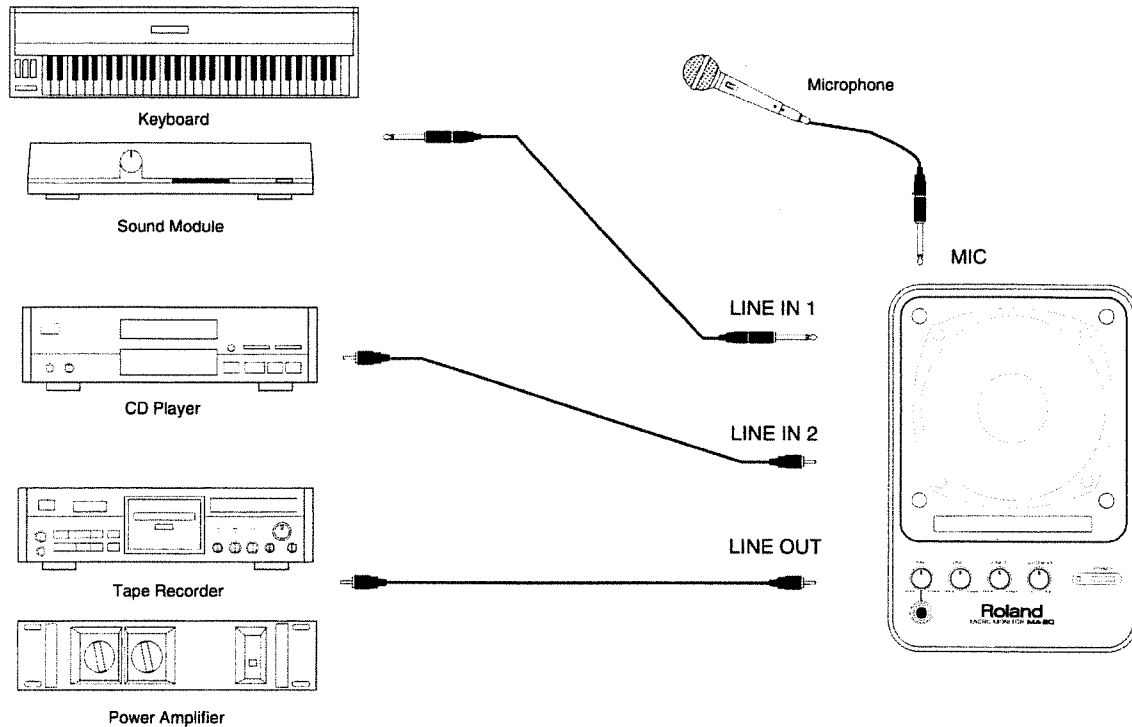
This jack is of the RCA phono type.

### (10) LINE OUT Jack

Connect a power amplifier, another speaker system (power amplifier + speaker) or tape deck for recording to this jack. This jack is of the RCA phono type.

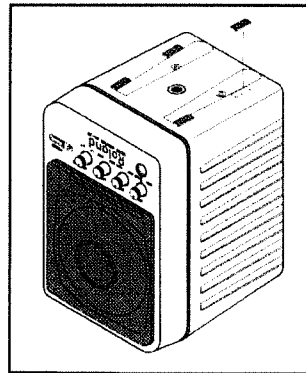
### (11) AC Power Cord

# CONNECTIONS



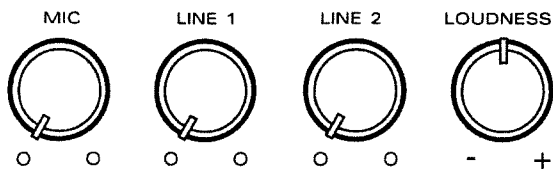
\* Be sure to turn off all the units before making connections.

\* When using the MA-20 on the table, please attach the rubber feet as shown below



# OPERATION

1. Set the Control knobs as shown below.



2. Make sure that the system is switched off and then connect the AC plug to a wall socket.

3. Switch on the unit.

4. Rotate the LINE 1, 2 and MIC Control knobs slowly to set to an appropriate volume.

\* When audio signals are fed into a microphone, feedback may occur. If this happens, rotate the MIC Control knob slightly counterclockwise, or move the microphone further from the MA-20.

5. Rotate the LOUDNESS Control knob to obtain the best sound. Normally, it should be set to the center position.

\* When you use the MA-20 for monitoring vocals, set the LOUDNESS Control knob slightly to the minus (-) position to increase the clarity.

# 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 US**  
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  
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

## 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, 2000  
Norderstedt, GERMANY  
TEL: 040/52 60 090

## FRANCE

**Musikengro**  
102 Avenue Jean-Jaures  
69007 Lyon Cedex 07  
FRANCE  
TEL: (7) 858-54 60

## Musikengro (Paris Office)

Centre Region Parisienne  
41 rue Charles-Fourier,  
94400 Vitry SUR/SEINE  
FRANCE  
TEL: (1) 4680 86 62

## BELGIUM/HOLLAND/ LUXEMBOURG

**Roland Benelux N. V.**  
Houtstraat 1 B-2260  
Oevel-Westerlo  
BELGIUM  
TEL: (0032) 14-575811

## 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 00 20

## NORWAY

**Roland Scandinavia Avd. Kontor Norge**  
Lilleakerveien 2 Postboks  
95 Lilleaker N-0216  
Oslo 2 NORWAY  
TEL: 22-73 00 74

## FINLAND

**Fazer Musik Inc.**  
Länsituulentie POB 169,  
SF-02101 Espoo  
FINLAND  
TEL: 0-43 50 11

## SWITZERLAND

**Musitronic AG**  
Gerberstrasse 5, CH-  
4410 Liestal, SWITZERLAND  
TEL: 061/921 16 15

## Roland CK (Switzerland) AG

Postfach/Hauptstrasse 21  
CH-4456 Tenniken  
SWITZERLAND  
TEL: 061/98 60 55  
Repair Service by  
Musitronic AG

## AUSTRIA

**E. Dematte & Co.**  
Neu-Rum Siemens-  
Strasse 4 A-6021  
Innsbruck Postfach 591  
AUSTRIA  
TEL: (0512) 26 44 260

## GREECE

**V. Dimitriadis & Co. Ltd.**  
20, Alexandras Avn., GR  
10682 Athens, GREECE  
TEL: 01-8232415

## PORTUGAL

**Casa Caius Instrumentos Musicais Lda.**  
Rua de Santa Catarina  
131 4000 Porto,  
PORTUGAL  
TEL: 02-38 44 56

## HUNGARY

**Intermusica Ltd.**  
Warehouse Area 'DEPO'  
Torokbalint, Budapest  
HUNGARY  
TEL: (1) 1868905

## ISRAEL

**D.J.A. International Ltd.**  
11 Bar Gyiora St., Tel  
Aviv ISRAEL  
TEL: 972-3-5283329

## CYPRUS

**Radex Sound Equipment Ltd.**  
17 Diagorou St., P.O.Box  
2046, Nicosia CYPRUS  
TEL: 453426, 466423

## U.A.E

**Zak Electronics & Musical Instruments Co.**  
P.O. Box 8050  
DUBAI, U.A.E  
TEL: 695774

## SAUDI ARABIA

**Omar Badoghaish Trading Corp.**  
P.O. Box 5980  
Jeddah, SAUDI ARABIA  
TEL: 966-02-6607038

## KUWAIT

**Easa Husain Al-Yousifi**  
P.O. Box 126 Safat  
13002  
KUWAIT  
TEL: 965-5719499

## LEBANON

**A. Chahine & Fils**  
P.O. Box 16-5857  
Beirut, LEBANON  
TEL: 335799

## TURKEY

**Barkat Sanayi ve Ticaret**  
Siraselviler Cad. 86/6  
Taksim Istanbul, TURKEY  
TEL: 149 93 24

## EGYPT

**Al Fanny Trading Office**  
9, Ebn Hagar Askalany  
Street, Ard El Golf,  
Heliopolis, Cairo, EGYPT  
TEL: 2917803-665918

## BRAZIL

**Roland Brasil Ltda.**  
R. Alvarenga 591 CEP-  
05509 Sao Paulo BRAZIL  
TEL: (011) 813-7967  
Repair Service for Roland  
and Rhodes products

## Oliver do Brasil S.A.

**Instrumentos Musicais**  
Rua Boturoca. 198/206  
CEP 05586-010 Vila  
Indiana Butanta Sao  
Paulo-SP BRAZIL  
TEL: (011) 814- 1344  
Repair Service for BOSS  
products

## MEXICO

**Casa Veerkamp, s.a. de c.v.**  
Mesones No. 21 Col.  
Centro MEXICO D.F.  
06080  
TEL: (5) 709-3716

## La Casa Wagner de

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

## VENEZUELA

**Musicland Digital C.A.**  
Av. Francisco De  
Miranda,  
Centro Parque Cristal,  
Nivel C2 Local 20  
Caracas  
VENEZUELA  
TEL: (2)2844497

## PANAMA

**Productos Superiores, S.A.**  
Apartado 655  
- Panama 1  
REP. DE PANAMA  
TEL: 26-3322

## ARGENTINA

**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 Pun Shan Street,  
Tsuen Wan, New  
Territories,  
HONG KONG  
TEL: 415-0911

## KOREA

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

## SINGAPORE

**Swee Lee Company**  
Bras Basah Complex  
#03-23 Singapore 0178  
SINGAPORE  
TEL: 3367886

## PHILIPPINES

**G.A. Yupangco & Co. Inc.**  
339 Gil J. Puyat Avenue  
Makati, Metro Manila  
1200, PHILIPPINES  
TEL: (632)819-7551

## THAILAND

**Theera Music Co., Ltd.**  
330 Verg Nakorn  
Kasem, Soi 2, Bangkok  
10100, THAILAND  
TEL: 2248821

## MALAYSIA

**Syarikat Bentley**  
No.142, Jalan Bukit  
Bintang 55100 Kuala  
Lumpur, MALAYSIA  
TEL: 2421288

## INDONESIA

**PT Galestra Inti**  
Kompleks Perkantoran  
Duta Merlin Blok C/59  
Jl. Gajah mada No.3-5  
Jakarta 10130  
INDONESIA  
TEL: (021) 354604,  
354606

## TAIWAN

**Siruba Enterprise (Taiwan) Co., LTD.**  
Room. 5, 9fl. No. 112  
Chung Shan N.Road  
Sec.2 Taipei, TAIWAN,  
R.O.C.  
TEL: (02) 5364546

## SOUTH AFRICA

**That Other Music Shop (PTY) Ltd.**  
256 Bree Street,  
Johannesburg 2001  
Republic of South Africa  
TEL: 337-6573

## Paul Bothner (PTY) Ltd.

17 Werdmuller Centre  
Claremont 7700  
Republic of South Africa  
TEL: 021-64-4030

# Roland

As of Feb. 4, 1993



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