

Roland®

STUDIO MONITOR **RSM-90**

Owner's Manual

Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (Owner's Manual p. 2, p. 3). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's Manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

Features

The Roland Studio Monitor RSM-90 speaker system was designed, developed, and manufactured in the United States. The high-quality sound these studio monitors deliver make them perfect for mixing duties in digital recording studios.

2-Way Speakers with Superior Sound Quality

To achieve such high-quality sound, the low-frequency driver uses a 160-mm polypropylene foam cone, and the high-frequency driver features a dome tweeter with a high-precision face plate.

3/4" MDF Cabinets with 1" MDF Baffles

Cabinet construction prevents excess vibration, which greatly improves sound quality.

* MDF = Middle Density Fiberboard

Bi-Wiring Connections

Bi-wiring reduces problems (intermodulation distortion) caused by the effect the high-frequency and low-frequency drivers have on each other.

Gold-Plated Post Connectors

Gold plating provides long-lasting protection for the connectors, preventing degradation of sound quality over time. Additionally, the binding post connectors are compatible with heavy-gauge speaker cables.

Magnetically Shielded Low- and High-Frequency Drivers

This allows you to use the speakers next to CRT displays.

Front-Facing Bass Reflex Ports

These ports ensure consistent low-end sound regardless of placement.



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USING THE UNIT SAFELY

INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About ⚠ WARNING and ⚠ CAUTION Notices







 WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
 CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.







About the Symbols

	The ⚠ symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The ⊘ symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The ● symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.



ALWAYS OBSERVE THE FOLLOWING



⚠ WARNING

- Before using this unit, make sure to read the instructions below, and the Owner's Manual. 
- Do not open or perform any internal modifications on the unit. 
- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page. 
- Never use or store the unit in places that are:
 - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are 
 - Damp (e.g., baths, washrooms, on wet floors); or are 
 - Humid; or are
 - Exposed to rain; or are
 - Dusty; or are
 - Subject to high levels of vibration.
- Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces. 

- This unit combined with an amplifier 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 immediately stop using the unit, and consult an audiologist. 
- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit. 

- Immediately turn off the power of the device connected to this unit, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:
 - Objects have fallen into, or liquid has been spilled onto the unit; or
 - The unit has been exposed to rain (or otherwise has become wet); or
 - The unit does not appear to operate normally or exhibits a marked change in performance.
- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit. 
- Protect the unit from strong impact. (Do not drop it!) 

CAUTION

- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children. 
- Never climb on top of, nor place heavy objects on the unit. 

- Disconnect all cords coming from external devices before moving the unit. 
- Should you remove screws of input jacks and the short bar, make sure to put them in a safe place out of children's reach, so there is no chance of them being swallowed accidentally. 

Important Notes

In addition to the items listed under "USING THE UNIT SAFELY" on page 2,3 please read and observe the following:

Placement

- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Also, do not allow lighting devices that normally are used while their light source is very close to the unit (such as a piano light), or powerful spotlights to shine upon the same area of the unit for extended periods of time. Excessive heat can deform or discolor the unit.
- To avoid possible breakdown, do not use the unit in a wet area, such as an area exposed to rain or other moisture.
- Do not allow rubber, vinyl, or similar materials to remain on the unit for long periods of time. Such objects can discolor or otherwise harmfully affect the finish.
- Do not put anything that contains water (e.g., flower vases) on the unit. Also, avoid the use of insecticides, perfumes, alcohol, nail polish, spray cans, etc., near the unit. Swiftly wipe away any liquid that spills on the unit using a dry, soft cloth.

Additional Precautions

- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.

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 cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Making the Connections

Connect the output connectors of your power amp to the RSM-90 input connectors with speaker cable.



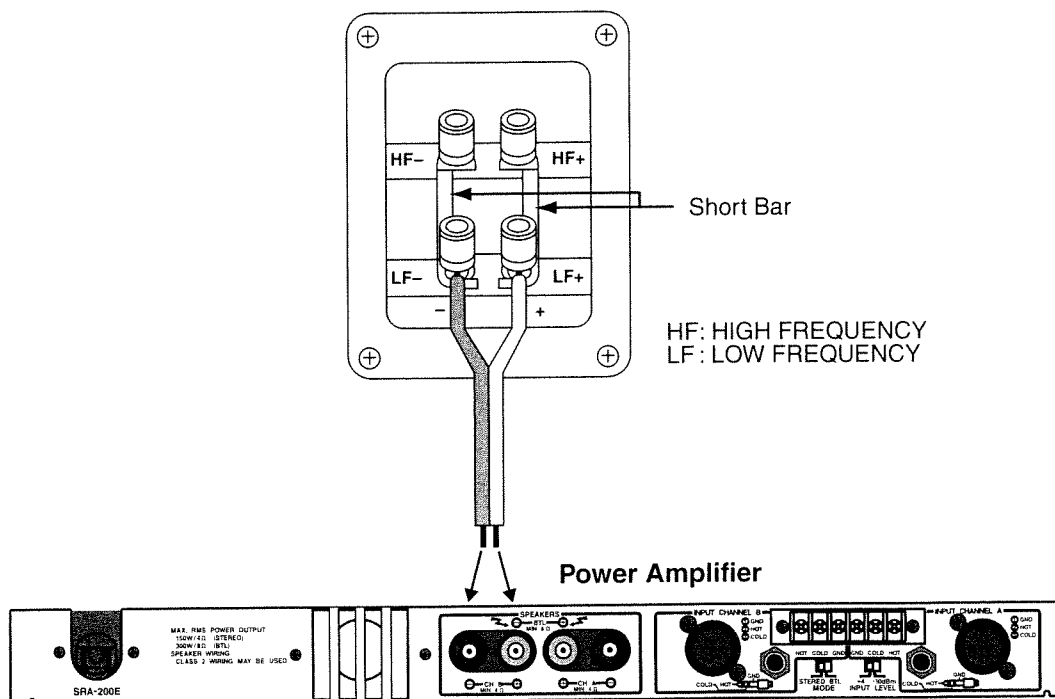
Before connecting the speakers, confirm that the power is off on all connected devices. Also check to make sure that the power amp and mixer volume levels are turned down completely.

Cautions

- Make sure to match the polarity (+, -) of the connectors.
- Avoid causing shorts when connecting the speaker cables. Also take care not to connect the cables incorrectly. Failure to follow these precautions may result in damage to your equipment.
- The screws and short bar on the input connectors are made to be removable. When you do remove these, be sure to store them in a secure place out of the reach of small children. Consult a physician or get other appropriate medical help immediately if any of these pieces is swallowed accidentally.
- With high-output power amps (100 W or above), touching the amp's input connectors may cause electric shock. Take care not to come into contact with the input connectors.
- These speakers have a rated impedance of 4 ohms. Confirm that the recommended load impedance of the power amp you are using is compatible.
- Do not connect any power amp with output higher than the maximum allowable input for these speakers. Failure to follow this precaution may result in damage to the equipment.
- Don't touch the diaphragm of the HF driver or the cone of the LF driver.

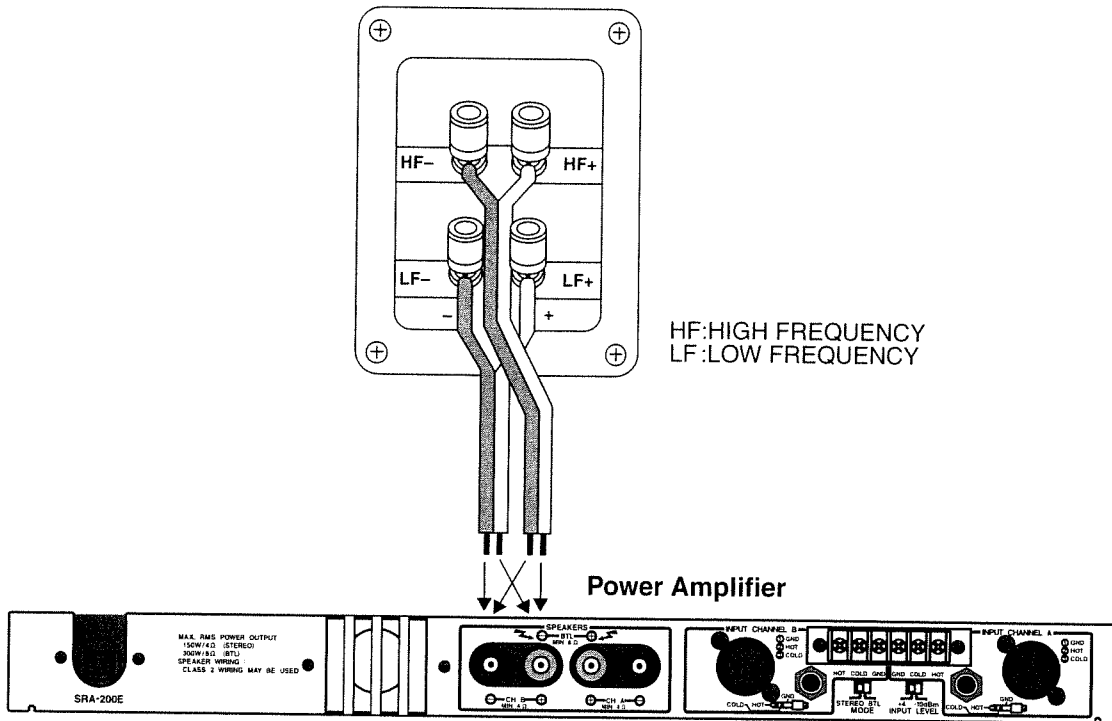
Connections on the Speakers

Use the short bar on each speaker to bridge the speaker's high- and low-frequency "+" connectors (or "-" connectors), then connect the speakers to the power amp with speaker cable.

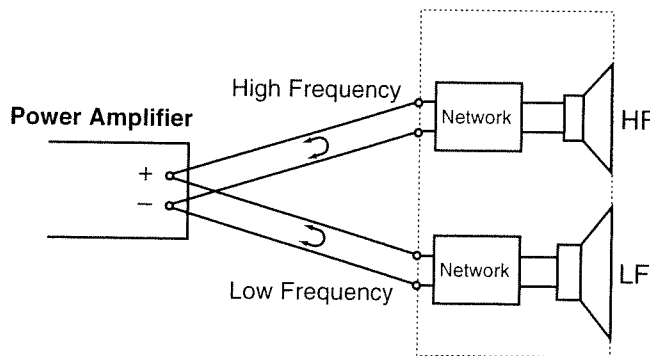


Bi-Wiring Connections

Remove the short bar horizontally, then connect the power amp to each speaker using two sets of cables.



Bi-wiring is a method of connecting the power amp to the speakers using separate sets of speaker cables for the low- and high-frequency portions. Using separate cables for the low- and high-frequencies reduces intermodulation distortion, thus improving the high-end sonic quality.



Tips for High Quality Playback

- Think carefully beforehand to determine the optimum location for the speakers. To fully realize the speakers' excellent low-end reproduction capabilities, place the speakers on stands that will provide firm, stable support.
- Use bi-wiring connections to bring out the speakers' superior high-end response.
- To help ensure great sound, use high-quality, heavy-gauge speaker cables.

Appendices

Specification

System

2 Way Monitor Speaker

Enclosure

Bass-reflex type

Cabinet

3/4" MDF, Baffle: 1" MDF

LF Driver

160 mm (6-1/2") Foamed polypropylene cone type, magnetically shielded

HF Driver

25 mm (1") Soft dome type, magnetically shielded

Power Handling

rated: 90 W *1

max: 270 W

*1 EIA RS426A

Frequency Response

62 Hz to 20 kHz (+/-3dB)

Nominal Impedance

4 ohms

Sensitivity(1W/1m)

88 dB

Crossover Frequency

2.6 kHz

Crossover Network

Advanced second order filter

Connectors

Binding posts x 4 (LF input, HF input)

Dimensions

228.6(W) x 322.3(D) x 371.5(H) mm

9(W) x 12-11/16(D) x 14-5/8(H) inches

Weight

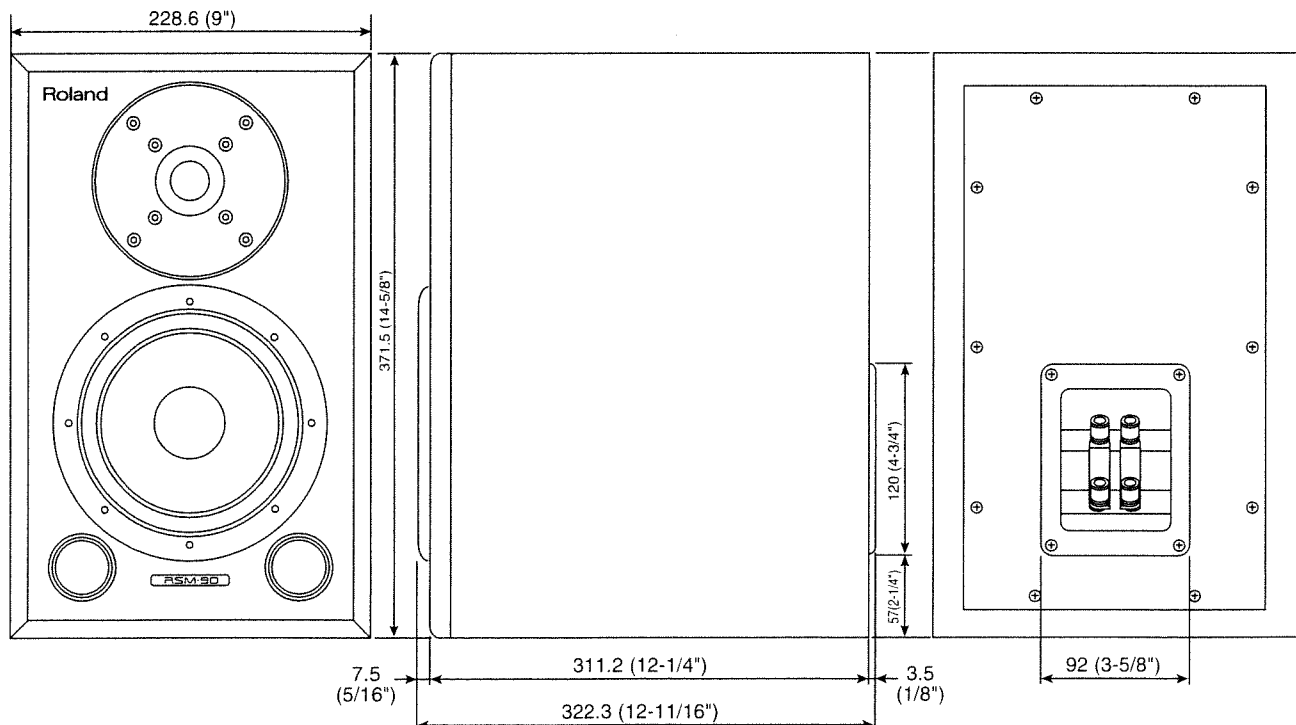
11 kg/24 lbs. 5 oz.

Accessory

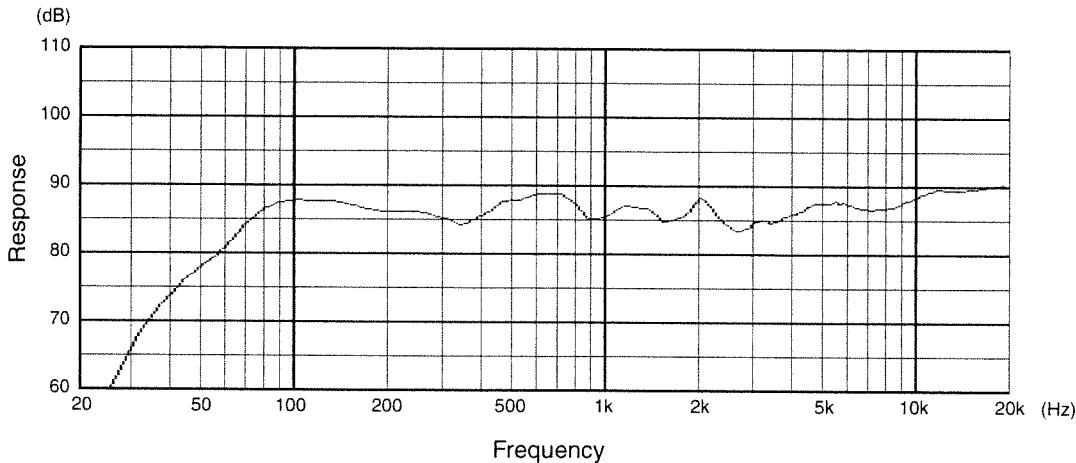
Owner's Manual

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

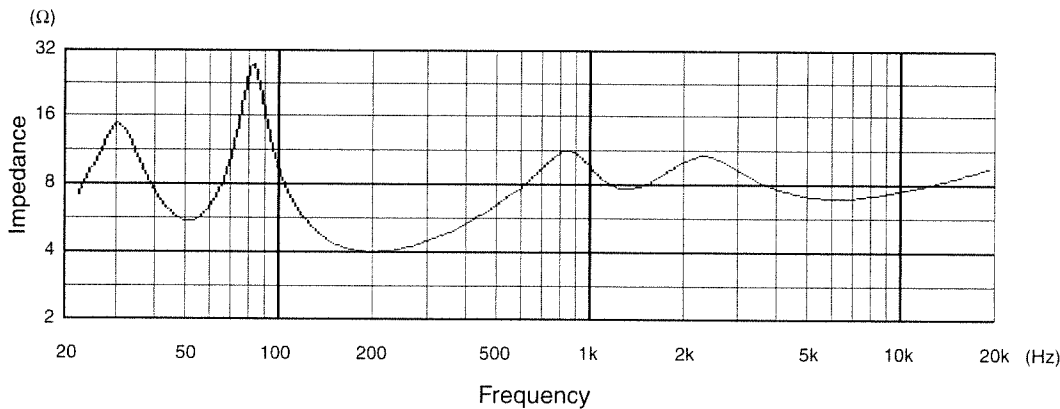
Dimensions



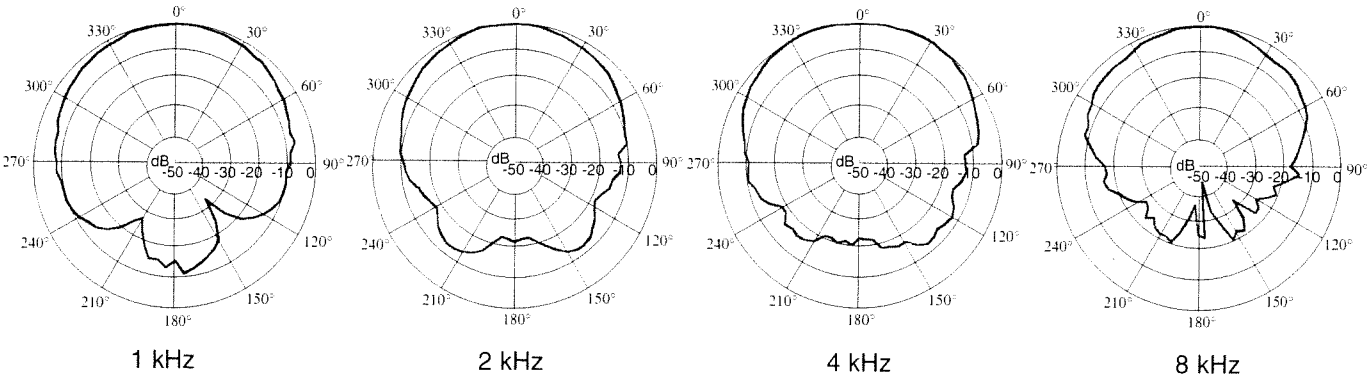
Frequency Response



Impedance



Polar Response (Horizontal)



Information

When you need repair service, call your nearest Roland Service Center or authorized Roland distributor in your country as shown below.

AFRICA

EGYPT

Al Fanny Trading Office
P.O. Box 2904,
El Horrieh Heliopolis, Cairo,
EGYPT
TEL: (02) 4185551

REUNION

Maison FO - YAM Marcel
25 Rue Jules Merman, ZL
Chaudron - BP79 97491
Ste Clotilde REUNION
TEL: 28 29 16

SOUTH AFRICA

That Other Music Shop (PTY) Ltd.
11 Melle Street (Cnr Melle and
Juta Street)
Braamfontein, 2001,
Republic of SOUTH AFRICA
TEL: (011) 403 4105

Paul Bothner (PTY) Ltd.
17 Verdmluler Centre Claremont
7700
Republic of SOUTH AFRICA

P.O. Box 23032
Claremont, Cape Town
SOUTH AFRICA, 7735
TEL: (021) 64 4030

ASIA

CHINA

**Beijing Xinghai Musical
Instruments Co., Ltd.**
6 Huangmuhuang Chao Yang
District, Beijing, CHINA
TEL: (010) 6774 7491

HONG KONG

**Tom Lee Music Co., Ltd.
Service Division**
22-32 Puan Shan Street, Tsuen
Wan, New Territories,
HONG KONG
TEL: 2415 0911

INDIA

Rivera Digitec (India) Pvt. Ltd.
409, Nirman Kendra Mahalaxmi
Flats Compound Off. Dr. Edwin
Moses Road, Mumbai-400011,
INDIA
TEL: (022) 498 3079

INDONESIA

PT Citra IntiRama
Jl. Cideng Timur No. 151-150
Jakarta Pusat
INDONESIA
TEL: (021) 6324170

KOREA

Cosmos Corporation
1461-9, Seocho-Dong,
Seocho Ku, Seoul, KOREA
TEL: (02) 3486-8855

MALAYSIA

Bentley Music SDN BHD
140 & 142, Jalan Bukit Bintang
55100 Kuala Lumpur, MALAYSIA
TEL: (03) 2443333

PHILIPPINES

G.A. Yupangco & Co. Inc.
339 Gil J, Payat Avenue
Makab, Metro Manila 1200,
PHILIPPINES
TEL: (02) 899 9801

SINGAPORE

Swee Lee Company
150 Sims Drive,
SINGAPORE 387381
TEL: 748-1669

CRISTOFORI MUSIC PTE LTD

Blk 3014, Bedok Industrial Park E,
#02-2148, SINGAPORE 489980
TEL: 243 9555

TAIWAN

**ROLAND TAIWAN
ENTERPRISE CO., LTD.**
Room 5, 9fl. No. 112 Chung Shan
N.Road Sec.2, Taipei, TAIWAN,
R.O.C.
TEL: (02) 2561 3339

THAILAND

Theera Music Co., Ltd.
330 Veeng NakornKasem, Soi 2,
Bangkok 10100, THAILAND
TEL: (02) 2248821

VIETNAM

Saigon Music
138 Tran Quang Khai St.,
District 1
Ho Chi Minh City
VIETNAM
TEL: (08) 844-4068

AUSTRALIA/ NEW ZEALAND

AUSTRALIA

**Roland Corporation
Australia Pty., Ltd.**
38 Campbell Avenue
Dee Why West, NSW 2099
AUSTRALIA
TEL: (02) 9982 8266

NEW ZEALAND

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

CENTRAL/LATIN AMERICA

ARGENTINA

Instrumentos Musicales S.A.
Florida 656 2nd Floor
Office Number 206A
Buenos Aires
ARGENTINA, CP1005
TEL: (54-11) 4-393-6057

BRAZIL

Roland Brasil Ltda.
R. Coronel Octaviano da Silveira
203 05522-010
Sao Paulo BRAZIL
TEL: (011) 3743 9377

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**JUAN Bansbach
Instrumentos Musicales**
Ave.1, Calle 11, Apartado 10237,
San Jose, COSTA RICA
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Avenida Rancagua #0330
Providencia Santiago, CHILE
TEL: 56-2-373-9100

EL SALVADOR

OMNI MUSIC
75 Avenida Notre YY Alameda,
Juan Pablo 2, No. 4010
San Salvador, EL SALVADOR
TEL: (503) 262-0788

MEXICO

Casa Veerkamp, s.a. de c.v.
Av. Toluca No. 323, Col. Olivar
de los Padres 01780 Mexico D.F.
MEXICO
TEL: (525) 668 04 80

**La Casa Wagner de
Guadalajara s.a. de c.v.**
Av. Corona No. 202 S.J.
Guadalajara, Jalisco Mexico
C.P.44100 MEXICO
TEL: (3) 613 1414

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Panama City,
REP. DE PANAMA
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San Borja, Lima 41,
REP. OF PERU
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Cuareim 1844, Montevideo,
URUGUAY
TEL: 5982-924-2335

VENEZUELA

Musiclano Digital C.A.
Av. Francisco de Miranda,
Centro Parque de Cristal, Nivel
C2 Local 20 Caracas
VENEZUELA
TEL: (02) 285 9218

EUROPE

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Roland Austria GES.M.B.H.
Siemensstrasse 4, P.O. Box 74,
A-6063 RUM, AUSTRIA
TEL: (0512) 26 44 260

BELGIUM/HOLLAND/ LUXEMBOURG

Roland Benelux N. V.
Houtstraat 3, B-2260, Oevel
(Westerlo) BELGIUM
TEL: (034) 575811

DENMARK

Roland Scandinavia A/S
Nordhavnsvej 7, Postboks 880,
DK-2100 Copenhagen
DENMARK
TEL: (039)16 6200

FRANCE

Roland France SA
4, Rue Paul Henri SPAAK,
Parc de l'Esplanade, F 77 462 St.
Thibault, Lagny Cedex FRANCE
TEL: 01 60 73 500

FINLAND

**Roland Scandinavia As,
Filial Finland**
Lautasaarentie 54 B
Fin-00201 Helsinki, FINLAND
TEL: (9) 682 4020

GERMANY

**Roland Elektronische
Musikinstrumente HmbH.**
Oststrasse 9b, 22844 Norderstedt,
GERMANY
TEL: (040) 52 60090

GREECE

STOLLAS S.A.
Music Sound Light
155, New National Road
26422 Patras, GREECE
TEL: 061-435400

HUNGARY

Intermusic Ltd.
Warehouse Area 'DEPO' PL83
H-2046 Torokbalmt, HUNGARY
TEL: (23) 511011

IRELAND

Roland Ireland
Audio House, Belmont Court,
Donnybrook, Dublin 4,
Republic of IRELAND
TEL: (01) 2603501

ITALY

Roland Italy S. p. A.
Viale delle Industrie 8,
20020 Arese, Milano, ITALY
TEL: (02) 937-78300

NORWAY

**Roland Scandinavia Avd.
Kontor Norge**
Lilleakerveien 2 Postboks 95
Lilleaker N-0216 Oslo
NORWAY
TEL: 273 0074

POLAND

P. P. H. Brzostowicz
UL. Gibraltarska 4
PL-03664 Warszawa POLAND
TEL: (022) 679 44 19

PORTUGAL

**Tecnologias Musica e Audio,
Roland Portugal, S.A.**
RUA DE SANTA CARARINA
131 /133, 4000-450 PORTO
PORTUGAL
TEL: (022) 208 4456

ROMANIA

FBS LINES
Plata Libertatii 1,
RO-4200 Cheorgheni
TEL: (066) 164-609

RUSSIA

Slami Music Company
Sadovaya-Triumfalnaja st., 16
103006 Moscow, RUSSIA
TEL: 095 209 2193

SPAIN

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

SWEDEN

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

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

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Mira Str. 19/108
P.O. Box 180
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Atlantic Close, Swansea
Enterprise Park, SWANSEA
SA7 9FL,
UNITED KINGDOM
TEL: (01792) 700139

MIDDLE EAST

BAHRAIN

Moon Stores
Bab Al Bahrain Road,
P.O. Box 20077
State of BAHRAIN
TEL: 211 005

CYPRUS

Radex Sound Equipment Ltd.
17 Diagorou St., P.O. Box 204e,
Nicosia CYPRUS
TEL: (02) 453 426

ISRAEL

**Hatilit P. Greenspoon &
Sons Ltd.**
8 Retzil Fa'aliya Hashnva St.
Tel-Aviv-Yahv ISRAEL
TEL: (03) 6823666

JORDAN

AMMAN Trading Agency
Prince Mohammed St. P.O. Box
825 Amman 11118 JORDAN
TEL: (06) 4641200

KUWAIT

Easa Husain Al-Yousifi
Abdullah Salem Street,
Safat KUWAIT
TEL: 5719499

LEBANON

A. Chahine & Fils
P.O. Box 16-5857 Gergi Zeidan St.
Chahine Building, Achrafieh
Beirut, LEBANON
TEL: (01) 335799

QATAR

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

SAUDI ARABIA

**aDawlah Universal
Electronics APL**
P.O. Box 2154 ALKHOBAR 31952,
SAUDI ARABIA
TEL: (03) 898 2081

SYRIA

**Technical Light & Sound
Center**
Khaled Ibn Al Walid St.
P.O. Box 13520
Damascus - SYRIA
TEL: (011) 2235 384

TURKEY

**Barkat muzik aletleri ithalat
ve ihracat Ltd Sti**
Siraselviler cad.Gidire is hani 84-
86/6, Taksim, Istanbul, TURKEY
TEL: (0212) 2499324

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Instruments Co. L.L.C.**
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