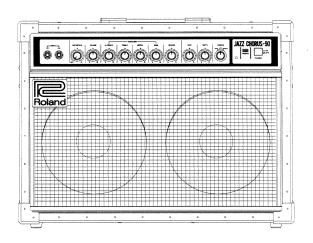
Roland®

GUITAR AMPLIFIER

JAZZ CHORUS JC-90

Owner's Manual



Thank you for purchasing the Roland JC-90 JAZZ CHORUS Guitar Amplifier.

Before using this unit, carefully read the sections entitled: "IMPORTANT SAFETY INSTRUCTIONS" (page 2), "USING THE UNIT SAFELY" (page 3), and "IMPORTANT NOTES" (page 4). 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, this manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

Features

- 80 watts (rms) of output power; 2 channels of 40 watts each; equipped with Roland's renowned chorus effect.
- Two input jacks (high-gain and low-gain) accommodate virtually any guitar.
- A three-spring reverb unit produces a warm, distinctive sound.
- The reinforced cabinet is designed to withstand the rigors of the road while providing characteristic styling.
- Chorus, Reverb and Distortion can all be controlled by foot switches leaving your hands free for playing.
- A Phones jack is provided for practice with "cabinet voiced" sound.

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ATTENTION: RISQUE DE CHOC ELECTRIQUE NE PAS QUVRIR

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.
- 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 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.
- 9. 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 -

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.

For the U.K.-

WARNING: THIS 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 nor 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.

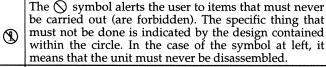
INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About **AWARNING** and **ACAUTION** 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

\triangle	The Δ 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.
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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 powercord 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.



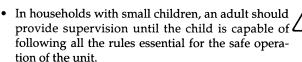
Do not open or perform any internal modifications on the unit.



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.
- Avoid damaging the power cord. Do not bend it excessively, step on it, place heavy objects on it, etc. A damaged cord can easily become a shock or fire hazard. Never use a power cord after it has been damaged.

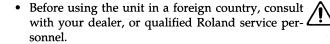




Protect the unit from strong impact. (Do not drop it!)



Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/ amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.



⚠ CAUTION

 Always grasp only the plug on the power-supply cord when plugging into, or unplugging from an outlet.



Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be 4 placed so they are out of the reach of children.



If the unit could become a hazard if it moves, all caster wheels should be removed once the unit has been placed at the place of installation, or has been loaded onto a vehicle.



Never climb on top of, nor place heavy objects on the unit.



Never handle the power cord or its plug with wet hands when plugging into, or unplugging from, an



Before moving the unit, disconnect the power plug from the outlet, and pull out all cords from external devices.



Before cleaning the unit, turn off the power and unplug the power cord from the outlet (page 6).

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 Whenever you suspect the possibility of lightning in your area, pull the plug on the power cord out of the outlet.



IMPORTANT NOTES

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

Power Supply

- Do not use this unit on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- 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. Excessive heat can deform or discolor the unit.

Maintenance

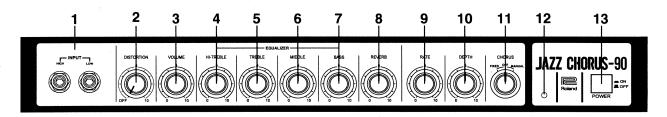
- For everyday cleaning wipe the unit with a soft, dry cloth or one
 that has been slightly dampened with water. To remove stubborn
 dirt, use a cloth impregnated with a mild, non-abrasive detergent.
 Afterwards, be sure to wipe the unit thoroughly with a soft, dry
 cloth.
- Never use benzene, thinners,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

Additional Precautions

- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- A small amount of heat will radiate from the unit during normal operation.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (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.

Panel Descriptions

< Front Panel >



1. INPUT Jacks

Two input jacks are provided. For a guitar with a standard output, use the "HIGH" input. For very high output instruments, use the "LOW" input.

2. DISTORTION Knob

Clockwise rotation will intensify the distortion effect. "OFF" turns the effect off.

3. VOLUME Knob

Clockwise rotation will increase the amplifier's overall volume.

4. HI-TREBLE Control Knob

Clockwise rotation will boost the high frequencies.

5. TREBLE Control Knob

Clockwise rotation will boost the higher frequencies.

6. MIDDLE Control Knob

Clockwise rotation will boost the all-important middle frequencies.

7. BASS Control Knob

Clockwise rotation will boost the lower frequencies.

8. REVERB Knob

Clockwise rotation will intensify the reverb effect.

9. RATE Knob

This knob adjusts the rate (frequency of the sound vibrations) of the chorus effect. Clockwise rotation increases the chorus speed.

10. DEPTH Knob

This knob adjusts the depth of the chorus effect. Clockwise rotation deepens the chorus effect.

11. CHORUS Switch

This knob selects the Chorus effect mode (FIXED/OFF/MANUAL). When it is set to the "OFF" position neither effect will be obtained.

* Neither the speed nor depth of the FIXED mode can be changed.

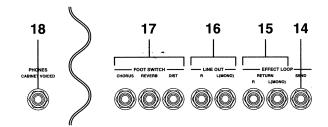
12. Pilot Lamp

This will light when the amplifier is switched on.

13. POWER Switch

This switch turns the amplifier on and off.

< Rear Panel >



14. EFFECT LOOP SEND Jack

This is the jack from which the dry (unprocessed) signal is sent to the effects device.

15. EFFECT LOOP RETURN Jacks

These are input jacks for the return signal from your effects device. Stereo connections (L/R) are possible. To use the unit in mono, use the L (MONO) jack only.

* Before you make connections to the RETURN jack(s), be sure to switch the units off.

16. LINE OUT Jacks

Use these jacks to connect the JC-90 to another guitar amplifier or mixer, or to a tape deck for recording. A stereo pair (L/R) is provided, but mono connections are also possible (use the L (MONO) jack).

17. FOOT SWITCH Jacks

With the proper foot switch connected to the appropriate jack, you can obtain on/off control of Chorus, Reverb and/or Distortion.

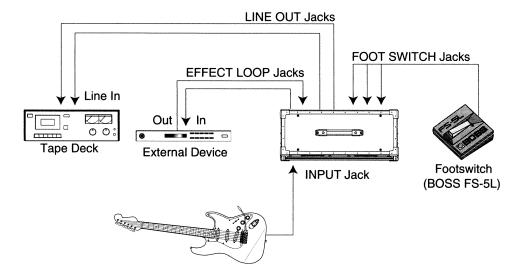
* Even when a foot switch is turned on, no effect will be obtained if knobs 2 and 11 are "OFF" positions.

18. PHONES Jack

Connect headphones to this jack. When headphones are connected, no sound will be output through the internal speakers.

Connections

* To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.

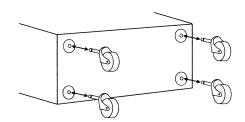


Switching On Power

- * Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.
- * Always make sure to have the volume level turned down before switching on power. Even with the volume all the way down, you may still hear some sound when the power is switched on, but this is normal, and does not indicate a malfunction.
- **1.** Switch on the power on all devices EXCEPT the device(s) connected to the LINE OUT jacks (16).
- **2.** Turn on the JC-90's power.
- **3.** Finally, switch on the power on any devices connected to the LINE OUT jacks.

Attaching/RemovingCaster Wheels

The caster wheels were not attached at the factory. To attach or remove them, do as shown in the illustration.



Specifications

JC-90: JAZZ CHORUS

Rated Power output

 $80 \text{ W} (40 \text{ W}/8 \Omega + 40 \text{ W}/8 \Omega)$

Nominal Input Level

INPUT HIGH -31 dBm INPUT LOW -19 dBm EFFECT RETURN -10 dBm

Nominal Output Level

EFFECT SEND -10 dBm LINE OUT 0 dBm * 0 dBm = 0.775 Vrms

Speakers

25 cm (10 inches) x 2

Controls

DISTORTION Knob
VOLUME Knob
HI-TREBLE Control Knob
TREBLE Control Knob
MIDDLE Control Knob
BASS Control Knob
REVERB Knob
RATE Knob
DEPTH Knob
CHORUS Switch (FIXED/OFF/MANUAL)
POWER Switch

Connectors

INPUT Jacks (HIGH, LOW)
FOOT SWITCH Jacks (CHORUS, REVERB, DISTORTION)
EFFECT SEND Jack
EFFECT RETURN Jacks (L(MONO), R)
LINE OUT Jacks (L(MONO), R)
PHONES Jack

Power Supply

AC 117 V, 230 V, 240 V

Power Consumption

80 W (AC 117 V, 230 V, 240 V)

Dimensions

595 (W) x 274 (D) x 508 (H) mm 23-7/16 (W) x 10-13/16 (D) x 20 (H) inches (includes caster wheels)

Weight

22 kg / 48 lbs 9 oz

Accessories

Owner's Manual Caster Wheel x 4

Option

Footswitch: FS-5L (BOSS)

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



This product complies with the requirements of European Directives EMC 89/336/EEC and LVD 73/23/EEC.

For the USA

- For EU Countries

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.

ARGENTINA

Instrumentos Musicales S.A. Florida 638 (1005) Buenos Aires ARGENTINA TEL: (01) 394 4029

BRAZIL

Roland Brasil Ltda. R. Coronel Octaviano da Silveira 203 05522-010 Sao Paulo BRAZIL TEL: (011) 843 9377

CANADA

Roland Canada Music Ltd. (Head Office) 5480 Parkwood Way Richmond B. C., V6V 2M4 CANADA TEL: (0604) 270 6626

Roland Canada Music Ltd. (Toronto Office) Unit 2, 109 Woodbine Downs Blvd, Etobicoke, ON M9W 6Y1 CANADA TEL: (0416) 213 9707

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

122. (023) 000 01 00

La Casa Wagner de Guadalajara s.a. de c.v. Av. Corona No. 202 S.J. Guadalajara, Jalisco Mexico C.P.44100 MEXICO TEL: (03) 613 1414

PANAMA

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

U. S. A.

Roland Corporation U.S. 7200 Dominion Circle Los Angeles, CA. 90040-3696, U. S. A. TEL: (0213) 685 5141

VENEZUELA

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

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

CHINA

Beijing Xinghai Musical Instruments Co., Ltd. 2 Huangmuchang Chao Yang District, Beijing, CHINA TEL: (010) 6774 7491

HONG KONG

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

INDONESIA

PT Galestra Inti Kompleks Perkantoran Duta Merlin Blok E No.6—7 JI. Gajah Mada No.3—5, Jakarta 10130, INDONESIA TEL: (021) 6335416

KOREA

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

MALAYSIA

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

PHILIPPINES

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

SINGAPORE

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

CRISTOFORI MUSIC PTE

335, Joo Chiat Road SINGAPORE 1542 TEL: 3450435

TAIWAN

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

TEL: (02) 561 3339

THAILAND

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

BAHRAIN

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

IRAN

TARADIS Mir Emad Ave. No. 15, 10th street P. O. Box 15875/4171 Teheran, IRAN TEL: (021) 875 6524

ISRAEL

Halilit P. Greenspoon & Sons Ltd. 8 Retzif Ha'aliya Hashnya St. Tel-Aviv-Yafo ISRAEL TEL: (03) 6823666

JORDAN

AMMAN Trading Agency Prince Mohammed St. P. O. Box 825 Amman 11118 JORDAN TEL: (06) 641200

KUWAIT

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

LEBANON

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

OMAN

OHI Electronics & Trading Co. LLC P. O. Box 889 Muscat Sultanate of OMAN TEL 706 010

QATAR

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

SAUDI ARABIA

Abdul Latif S. Al-Ghamdi Trading Establishment Middle East Commercial Center Al-Khobar Dharan Highway W/hamood st. P. O. Box 3631 Al-Khober 31952 SAUDJARABIA TEL: (03) 898 2332

SYRIA

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

TURKEY

Barkat Sanayi ve Ticaret Siraselvier Cad. Guney Ishani No. 86/6 Taksim, Istanbul TURKEY TEL: (0212) 2499324

U.A.E

Zak Electronics & Musical Instruments Co. Zabeel Road, Al Sherooq Bldg., No. 14, Grand Floor DUBAI U.A.E. P.O. Box 8050DUBAI, U.A.E TEL: (04) 360715

EGYPT

Al Fanny Trading Office 9, Ebn Hagar Ai Askalany Street, Ard El Golf, Heliopolis, Cairo, 11341 EGYPT TEL: (02) 4171828 (02) 4185531

KENYA

Musik Land Limited P.O Box 12183 Moi Avenue Nairobi Republic of KENYA TEL: (2) 338 346

MAURITIOUS

Philanne Music Center 4th, Floor Noll, Happy World House Sir William Newton Street Port Luis MAURITIOUS TEL: 242 2986

REUNION

FO - YAM Marcel 25 Rue Jules MermanZL 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 Werdmuller Centre Claremont

7700 Republic of SOUTH AFRICA TEL: (021) 64 4030

AUSTRIA

E. Dematte &Co. Neu-Rum Siemens-Strasse 4 A-6040 Innsbruck P.O.Box 83 AUSTRIA TEL: (0512) 26 44 260

BELGIUM/HOLLAND/ LUXEMBOURG

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

BELORUSSIA

TUSHE UL. Rabkorovskaya 17 220001 MINSK TEL: (0172) 764-911

CYPRUS

Radex Sound Equipment Ltd. 17 Diagorou St., P.O.Box 2046, Nicosia CYPRUS TEL: (02) 453 426 (02) 466 423

DENMARK

Roland Scandinavia A/S Langebrogade 6 Post Box 1937 DK-1023 Copenhagen K. DENMARK TEL: 32 95 3111

FRANCE

MUSIKENGRO
Zac de Folliouses 01706
Les Echets Miribel FRANCE
TEL: 472 26 2700

FINLAND

Roland Scandinavia As, Filial Finland Lauttasaarentie 54 B Fin-00201 Helsinki, FINLAND P. O. Box No. 109 TEL: (0) 682 4020

GERMANY

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

GREECE

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

HUNGARY

Intermusica Ltd. Warehouse Area 'DEPO' Pf.83 H-2046 Torokbalint, HUNGARY TEL: (23) 338 041

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

NORWAY

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

POLAND

P. P. H. Brzostowicz Marian UL. Blokowa 32, 03624 Warszawa POLAND TEL: (022) 679 44 19

PORTUGAL

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

.

RUSSIA PETROSHOP Ltd. 11 Sayanskaya Street Moscow 11531, RUSSIA TEL: 095 307 4892

Slami Music Company Sadojava-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 Danvik Center 28 A, 2 tr. S-131 30 Nacka SWEDEN TEL: (08) 702 0020

SWITZERLAND

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

UKRAINE

TIC-TAC Mira Str. 19/108 P.O.Box 180 295400 Munkachevo, UKRAINE TEL: (03131) 414-40

UNITED KINGDOM

Roland (U.K.) Ltd., Swansea Office Atlantic Close, Swansea Enterprise Park SWANSEA West Glamorgan SA7 9FJ, UNITED KINGDOM

TEL: (01792) 702701

As of October, 28, 1996

Roland® 17055089



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