Roland

GUITAR AMPLIFIER JAZZ CHORUS JC-120

Owner's Manual

Thank you for purchasing the Roland JC-120 JAZZ CHORUS Guitar Amplifier. To take full advantage of this amplifier, and to ensure years of trouble-free service, please read this Owner's Manual in its entirety.

Features

- 120 watts (rms) of output power; 2 channels of 60 watts each. Channel 2 is equipped with Roland's renowned chorus effect.
- Two input jacks (high-gain and low-gain) accommodate virtually any guitar.
- Both channels contain a Bright switch for greater tonal control.
- 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/Vibrato, Reverb and Distortion can all be controlled by footswitches leaving your hands free for playing.
- Channel 2 contains an effects loop circuit that allows you to select either a series or parallel connection. Further, it provides selection of a +4dBm or -20dBm input level to match the level of your effects device.

Before using this unit, carefully read the sections entitled: "IMPORTANT SAFETY INSTRUCTIONS" (p. 2), "USING THE UNIT SAFELY" (p. 3), and "IMPORTANT NOTES" (p. 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.

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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.
- 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.
- 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.

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.-

For the USA -



USING THE UNIT SAFE

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

About A WARNING and A CAUTION Notices

Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.				
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 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.			
	Ð	The \bigcirc 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.			
	6	The \bullet 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.			
	• A whe	lways grasp only the plug on the power-supply cord en plugging into, or unplugging from an outlet.			

ALWAYS OBSERVE

• Try to prevent cords and cables from becoming entan- gled. Also, all cords and cables should be placed so they
gled. Also, all cords and cables should be 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 $\overset{ullet}{\bullet}$
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 outlet.

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

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· Before cleaning the unit, turn off the power and unplug the power cord from the outlet (p. 4).

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

• Be	fore	using	this	unit,	make	sure	to	read	the	instruc-	1	ì
tions	s belo	ow, an	d the	Owr	ner's M	lanua	l.					:

 Do not open or perform any internal modifications or 	1 /
the unit.	C

• Make sure you always have the unit placed so it is	ſ
level and sure to remain stable. Never place it on stands	
that could wobble, or on inclined surfaces.	

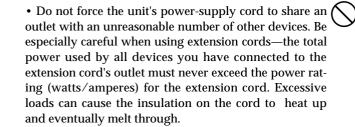
• Avoid damaging the power cord. Do not bend it excessively, step on it, place heavy objects on it, etc. A damaged cord can easily become a shock or fire hazard. Never use a power cord after it has been damaged.

• In households with small children, an adult should for a supervision until the child is capable of follow-
provide supervision until the child is capable of follow-
ing all the rules essential for the safe operation of the
unit.

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

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• Before using the unit in a foreign country, consult with your dealer, or qualified Roland service personnel.

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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.
- This unit contains powerful magnets. If placed in the vicinity of TVs, it may cause interference (irregularites in color). Should this occur, reposition this unit so it is located at a greater distance from such devices.

Maintenance

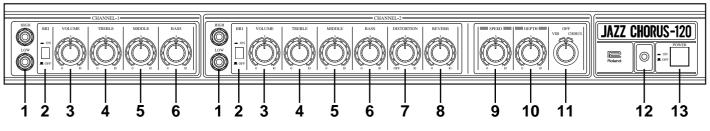
- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzene, thinners, 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 (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 Description

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. BRI (Bright) Switch

When this switch is set to ON, a bright, clear sound can be obtained.

3. VOLUME Knob

Clockwise rotation will increase the amplifier's overall volume.

4. TREBLE Control Knob

Clockwise rotation will boost the higher frequencies.

5. MIDDLE Control Knob

Clockwise rotation will boost the all-important middle frequencies.

6. BASS Control Knob

Clockwise rotation will boost the lower frequencies.

7. DISTORTION Knob

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

8. REVERB Knob

Clockwise rotation will intensify the reverb effect.

9. Vibrato SPEED Knob

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

10. Vibrato DEPTH Knob

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

11. VIB/OFF/CHORUS Switch

This knob selects the Chorus or Vibrato effect. When it is set to the "OFF" position neither effect will be obtained.

* Neither the speed nor depth of the Chorus effect can be changed.

12. Pilot Lamp

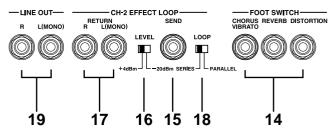
This will light when the amplifier is switched on.

13. POWER Switch

This switch turns the amplifier on and off.

- * 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. You may hear a "DC thump" when switching the amplifier on or off but this is normal.
- * This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

Rear Panel



14. FOOTSWITCH Jacks

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

* Even when a footswitch is turned on, no effect will be obtained if knobs 7 and 11 are in the "OFF" positions.

15. CH-2 EFFECT LOOP SEND Jack

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

16. CH-2 EFFECT LOOP LEVEL Switch

This switch selects the input/output level for the Channel 2 effects loop. Change the switch position to accommodate the effects device you are using. When the connected unit's input/output level is high, set the switch to "+4dBm," and when that level is low, set the switch to "-20dBm."

17. CH-2 EFFECT LOOP RETURN Jacks

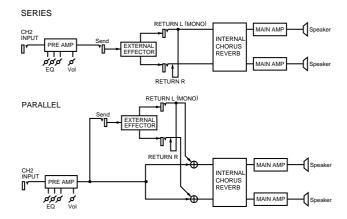
These are input jacks for the return signal from your effects device. Stereo connections (L/R) are possible. To use the unit in mono, use the L(MONO) jack.

- * When using this unit in mono, the return sound will not be output through the speakers even if you input the return sound to the RETURN R jack. That is, when the L(MONO) jack is not used, only direct sounds will be output (regardless of the LOOP switch setting).
- * Before you make connections to the RETURN jack(s), be sure to switch the units off.

18. CH-2 EFFECT LOOP Switch

This switch selects either the series or parallel connection for the Effects Loop circuit.

When PARALLEL is selected, external effects sounds and direct sounds (unprocessed sounds) will be mixed. When SERIES is selected, external effects sounds will not be mixed with direct sounds.



19. LINE OUT Jacks

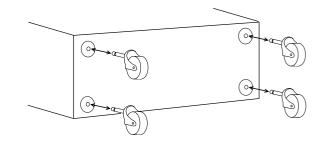
Use these jacks to connect the JC-120 to another guitar amplifier or mixer, or to a tape deck for recording. A stereo pair (L/R) is provided, but mono connections are also possible (use the L(MONO) jack).

Switching On Power

- * 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.
- **1.** Switch on the power on all devices EXCEPT the device(s) connected to the LINE OUT jacks (19).
- 2. Turn on the JC-120's power.
- **3.** Finally, switch on the power on any devices connected to the LINE OUT jacks.

Attaching/Removing Caster Wheels

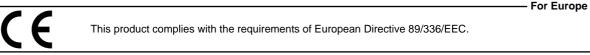
The caster wheels were not attached at the factory. To attach or remove them, do as shown in the illustration.



SPECIFICATIONS

Rated Power output	120W (60W+60W) / $8\Omega + 8\Omega$			
Speakers	30cm (12inches) + 30cm (12inches)			
Power Supply	AC 117V, AC 230V or AC 240V			
Power Consumption	110W (117V, 230V, 230VE, 240VA)			
Nominal Input Level	-30 dBm / 680 k Ω 0dBm= 0.775 V			
Connectors	CH-1 Input Jacks (HIGH, LOW)			
	CH-2 Input Jacks (HIGH, LOW), FOOTSWITCH Jacks			
	(CHORUS/VIBRATO, REVERB, and DISTORTION)			
	CH-2 EFFECT LOOP SEND Jack			
	CH-2 EFFECT LOOP RETURN Jacks (L/(MONO), R)			
	LINE OUT Jacks (L/(MONO), R)			
Controls	CH-1: BRI (Bright) Switch, VOLUME Knob, TREBLE Control Knob,			
	MIDDLE Control Knob, BASS Control Knob			
	CH-2: BRI (Bright) Switch, VOLUME Knob, TREBLE Control Knob,			
	MIDDLE Control Knob, BASS Control Knob, DISTORTION Knob,			
	REVERB Knob, Vibrato SPEED Knob, Vibrato DEPTH Knob,			
	VIB/OFF/CHORUS Switch			
	POWER Switch, CH-2 EFFECT LOOP Switch, CH-2 EFFECT LOOP LEVEL Switch			
Dimensions	760(W) x 280(D) x 622(H) mm (includes casters)			
	29-15/16 (W) x 11-1/16(D) x 24-1/2 (H) inches			
Weight	31.2 kg / 68 lbs 13 oz			
Accessories	Owner's Manual			
Options	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.



-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 nearest Roland Service Center or 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

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 Jl. 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 LTD 335, Joo Chiat Road SINGAPORE 1542 TEL: 3450435

TAIWAN ROLAND TAIWAN ENTERPRISE 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

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

RUSSIA

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 April, 18, 1997