# Roland

# Guitar Amplifier 405

## GC-405/GC-405X

## **OWNER'S MANUAL**

We'd like to take a moment to thank you for purchasing the Roland GC-405 (GC-405X) Guitar Amplifier.

The Roland GC-405 Guitar Amplifier features four 12 cm (5 inch) speakers, and dishes out heavy, tight Rock sounds in spite of its compact body. Moreover, it comes with the latest Tube Logic Technology "HOT," which relies on Roland's expertise in analog electronic technology. It is very good for drive sounds and sustained distortion. It also allows you to reproduce acoustic and dynamic bass sounds by using the four newly developed, custom speakers—enhancing to the full the GC-405 sounds.

The GC-405X allows as many as 8 speakers to be stacked and connected together, making the sounds more powerful.

\* The GC-405X is a unit that includes the GC-405 Guitar Amplifier and the speaker box.

Before using this unit, carefully read the sections entitled: "IMPORTANT SAFE-TY 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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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 @ 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 LINE PLUG must be grounded.

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

## About A WARNING and A CAUTION Notices

<b><b>△</b>WARNING</b>	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
<b>⚠</b> 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  $\triangle$  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  $\bigcirc$  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.

The lacktriangle 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

#### 

 Before using this unit, make sure to read the instructions below, and the Owner's Manual.

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• 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.



• In households with small children, an adult should lowing all the rules essential for the safe operation of



provide supervision until the child is capable of fol-



the unit.



 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.



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

## riangle CAUTION

• Always grasp only the plug on the power-supply ( cord when plugging into, or unplugging from an out-



• 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.



· 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



 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 a your area, pull the plug on the power cord out of the



• The unit is very heavy, so care should be taken not to drop it on your feet when moving it.



## **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.

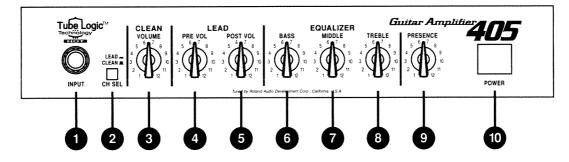
 Never use benzene, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

#### **Additional Precautions**

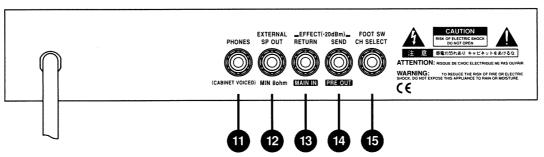
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing 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

#### **CONTROLS (FRONT PANEL)**



## JACKS (REAR PANEL)



#### 1. Input Jack

Connect a guitar to this jack.

#### 2. Channel Select Switch

This selects the Clean or Lead Channel.

#### 3. Volume

This adjusts the volume of the Clean Channel.

#### 4. Pre Volume

This adjusts the amount of distortion sound in the Lead Channel.

\* By adjusting the Pre Volume, you can express various different distortion sounds. (Refer to "SETTING EXAMPLES.")

#### 5. Post Volume

This adjusts the volume of the Lead Channel.

#### 6. Bass

This adjusts the volume of the bass.

#### 7. Middle

This adjusts the volume of the midrange.

#### 8. Treble

This adjusts the volume of the treble.

#### 9. Presence

This adjusts the presence of the sound.

#### 10. Power Switch

Press to switch on the unit—the indicator will light.

- \* 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.
- \* 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.

#### 11. Headphone Jack

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

#### 12. External Speaker Jacks

Connect external speakers to these jacks.

You can connect the Speaker Box to the GC-405X through these jacks. (Refer to the figure for "STACKING SETUP.") Sound will be output from the internal speakers even when external speakers are connected (parallel connection).

\* When you connect speakers other than the supplied Speaker Box, be sure to use ones that are over 8 ohms.

#### 13. Effect Return/Main In Jack

Connect this to the output jack on the external effect unit. This can also be used as a main-in jack.

#### 14. Effect Send/Pre Out Jack

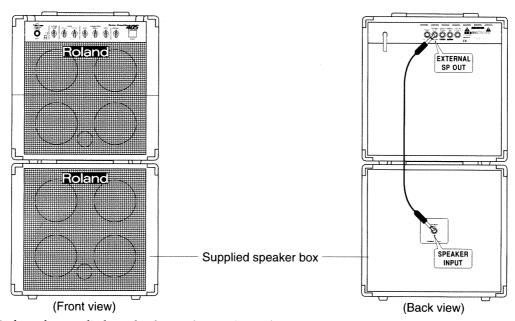
Connect from here to the input jack on an external effect unit. This can also be used as a pre-out jack.

#### 15. Footswitch Jack

By connecting an optional footswitch to this jack, you can change channels with the footswitch.

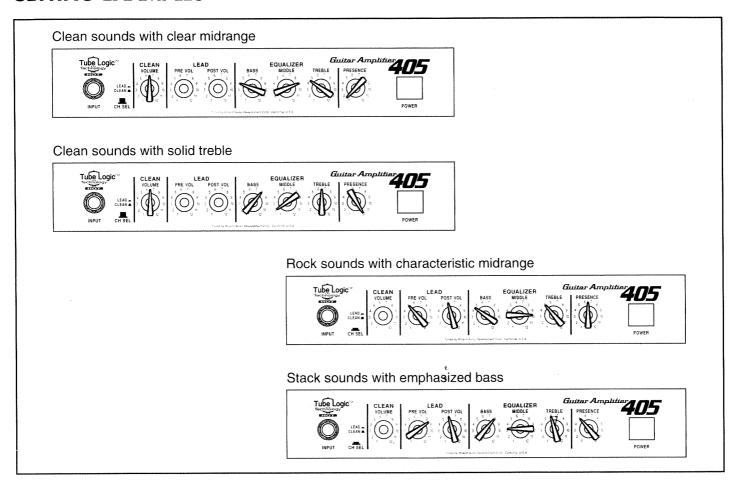
## **STACKING SETUP (GC-405X)**

Make connections using the supplied connection cable, as shown in the picture.



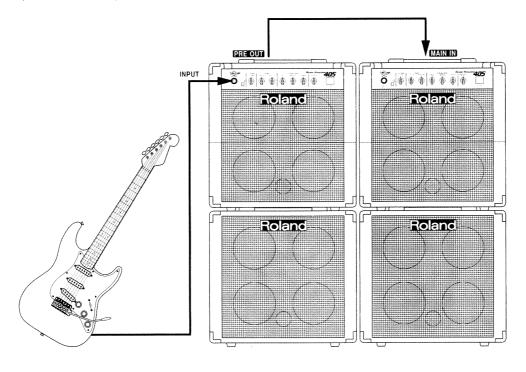
- \* The connection jack on the supplied speaker box is designed specifically for connecting to the GC-405 Guitar Amplifier.
- \* When stacking the units, always choose a level surface in a location that is sure to remain stable.

## **SETTING EXAMPLES**

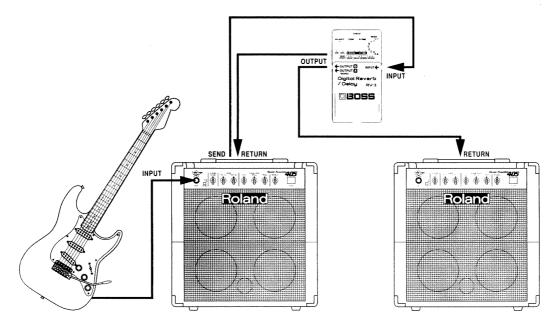


## **EXAMPLE SETUP WITH TWO GC-405'S**

By using the Pre Out jack and Main In jack, two sets of GC-405Xs (GC-405s) can be used, as shown in the picture.



Also, by connecting a stereo effects processor as shown in the picture, dimensional effects can be obtained.



<sup>\*</sup> If you wish to control the volume or other things, do so on the GS-405 that is connecting a guitar.

## **SPECIFICATIONS**

### **Rated Power Output**

GC-405 20 W / 8 ohm GC-405X 25 W / 4 ohm

(When the speaker box is connected.)

#### **Nominal Input Level**

Clean Channel -35 dBm / 680 k ohm Lead Channel -72 dBm / 680 k ohm

0 dBm = 0.775 Vrms

#### **Speakers**

12 cm (5 inches) x 4

#### Controls

Channel Select Switch

Clean Channel Volume Lead Channel Pre Volume

Post Volume

Equalizer Bass

Middle Treble

Master Presence

Power Switch (w/Indicator)

#### **Connectors**

Input lack

Foot Switch Jack (Channnel Select) Effect Send Jack / Pre Out Jack Effect Return Jack / Main In Jack

External Speaker Jack

Phones Jack

#### **Power Supply**

AC 117 V, 230 V or 240 V

#### **Power Consumption**

22 W

#### **Dimensions**

390 (W) x 260 (D) x 405 (H) mm 15-3/8 (W) x 10-1/4 (D) x 16 (H) inches

#### Weight

12.5 kg / 27 lbs 9 oz

#### Accessories

Owner's Manual

Connection Cable (GC-405X only)

#### **Options**

Foot Switch FS-5L (BOSS)

#### Speaker Box

Speakers 12 cm (5 inches) x 4

Impedance 8 ohm Connectors Input Jack

**Dimensions** 390 (W) x 260 (D) x 360 (H) mm

15-3/8 (W) x 10-1/4 (D) x 14-1/8 (H) inches

Weight 8.3 kg / 18 lbs 5 oz

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



For Europe

#### **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

#### RRA7I

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.

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

#### **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

335, Joo Chiat Road SINGAPORE 1542 TEL: 3450435

#### TAIWAN

Siruba Enterprise (Taiwan) Co., LTD. Room 5, 9ft No. 112 Chung Shai

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

#### **QATAR**

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

#### SAUDI ARABIA

SAF Music Center AL-Khobar 31952, P. O. Box 1366 SAUDIARABIA TEL: (03) 898 3311

#### Abdul Latif S. Al-Ghamdi Trading Establishment Middle East Commercial Center

Middle East Commercial Cer 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

#### **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. Mogilovskaja 4/4/145 220001 MINSK

220001 MINSK TEL: (0172) 252-059

#### **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

Guillard Musiques Roland ZAC de Rosarge Les Echets 01700 MIRIBEL FRANCE TEL: 7226 5060

## Guillard Musiques Roland (Paris Office)

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

#### **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: 095 901 0892

#### 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

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