

INTERFACE BOX FOR R-BUS/ADAT

DIF-AT24

Owner's Manual



Congratulations on your purchase of the Roland DIF-AT24.

Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" (p. 2, 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, Owner's Manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

Main Features

The DIF-AT24 lets you transfer up to 8 channels of 24-bit digital audio data between an R-BUS device and a device equipped with an ADAT interface.

- * ADAT is a registered trademark of Alesis Corporation.
- * All product names mentioned in this document are trademarks or registered trademarks of their respective owners.

Copyright © 2003 ROLAND CORPORATION

All rights reserved. No part of this publication may be reproduced in any form without the written permission of ROLAND CORPORATION.

Roland Web Site: http://www.roland.co.jp

USING THE UNIT SAFELY

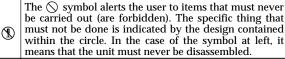
INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

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

Ŷ	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.



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:

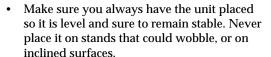


 Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are

.....



- 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.



.....



♠ WARNING

 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 the power off, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:



- · If smoke or unusual odor occurs
- 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.



For EU Countries



This product complies with the requirements of European Directive 89/336/EEC.

-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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

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

NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

AVIS

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

IMPORTANT NOTES

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

Power Supply

 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

- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- When moved from one location to another where
 the temperature and/or humidity is very different,
 water droplets (condensation) may form inside the
 unit. Damage or malfunction may result if you
 attempt to use the unit in this condition. Therefore,
 before using the unit, you must allow it to stand for
 several hours, until the condensation has completely
 evaporated.

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.

Additional Precautions

- Use a reasonable amount of care when using the unit's switches 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.

- 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.

Copyright

- When exchanging audio signals through a digital connection with an external instrument, this unit can perform recording without being subject to the restrictions of the Serial Copy Management System (SCMS). This is because the unit is intended solely for musical production, and is designed not to be subject to restrictions as long as it is used to record works (such as your own compositions) that do not infringe on the copyrights of others. (SCMS is a feature that prohibits second-generation and later copying through a digital connection. It is built into MD recorders and other consumer digital-audio equipment as a copyright-protection feature.)
- Do not use this unit for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this unit.

When connecting to the VM-7100/7200

• The DIF-AT24 will not operate correctly if the VM-7100/7200 system version is earlier than 1.7.

Use the following procedure to check the system version, and be sure to update to system version 1.7 or later.

For details on updating, please contact the nearest Roland office or service center.

- To check the version -

- 1. Connect the VM-7100/7200 to the VM-C7100/C7200.
- 2. Turn on the power to start up the system.
- **3.** Hold down [On Display] and press numeric key [0]. The version display screen will appear, with an indication like the following:

"Unit X Version: 1.XXX"

4. Note the version number shown in "1.XXX"

Contents

Main Features	, 1
USING THE UNIT SAFELY	2
IMPORTANT NOTES	
Panel descriptions	6
Front Panel	6
Rear Panel	
Turning the power on/off	7
Turning the power on	7
Turning the power off	
Connections and settings	8
Connection example 1 Connecting the VS-2400CD and a computer	8
Connection example 2 Connecting the VS-2400CD and a computer	10
Connection example 3	
Connecting the VS-2400CD and an ADAT device	12
Connection example 4 Connecting the VS-2400CD with an ADAT device and BRC	13
Connection example 5 Using the DIF-AT24 as an additional MIDI OUT for the MV-8000	15
Specifications	
DIF-AT24: Interface Box for R-BUS/ADAT	
Compling Fraguency 44.1/40l-IJ-	

DIF-A124: Interface Box for K-BUS/ADA1	
Sampling Frequency	44.1/48kHz
Audio Data Format	16/20/24 bit
Indicators	Power indicator ADAT indicator
Connectors	R-BUS connector ADAT optical connectors in, out MIDI connectors in, out
Power Supply	Supplied from connected R-BUS device
Dimensions	138 (W) x 197 (D) x 43 (H) mm 5-7/16 (W) x 7-13/16 (D) x 1-3/4 (H) inches
Weight	0.5 kg 1 lb 2 oz
Accessories	R-BUS cable (1 m) Owner's manual

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

Panel descriptions

Front Panel



ADAT indicator

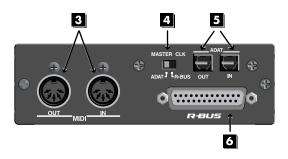
This indicator will light green if an ADAT interface signal is being input to the ADAT digital IN connector.

2 POWER indicator

When the R-BUS device connected to the R-BUS connector is powered up, this indicator will light red to indicate that power is being supplied to the DIF-AT24.

* Power is supplied to the DIF-AT24 via the R-BUS connector.

Rear Panel



3 MIDI IN/OUT connectors

These are used mainly for MTC synchronization.

MEMO

The data that is transmitted from the MIDI OUT connector will depend on the settings of the R-BUS device connected to the R-BUS connector.

4 MASTER CLK (Master clock) switch
This switches the master clock (sampling clock)
synchronization.

MASTER CLK switch	Master clock device	
Set to [R-BUS]	When using the R-BUS device connected to the R-BUS connector as the master clock.	
Set to [ADAT]	When using the digital device connected to the ADAT OUT/IN connector as the master clock	

5 ADAT OUT/IN (ADAT digital out/in) connector

This is the ADAT digital interface.

It allows eight channels of digital audio data to be transferred between the DIF-AT24 and an ADAT-compatible digital device.

6 R-BUS connector

Provides for the input/output of eight channels of digital audio data, thus allowing the exchange of data between the DIF-AT24 and an R-BUS device to take place. Also transmits/receives synchronization signals.

* Power is supplied to the DIF-AT24 via the R-BUS connector.

NOTE

- Connect only an R-BUS device to the R-BUS connector. You must never connect a device with a SCSI, RS-232C, or parallel interface. Even though the connectors on such devices may look similar, they are incompatible, and damage and/or malfunction could result if you attempt their connection. Also, you must use only a special R-BUS cable to make connections.
- You must turn off the power of the R-BUS device before connecting or disconnecting the R-BUS cable. If you connect or disconnect the cable while power is being supplied, the external R-BUS device will stop working correctly, and the DIF-AT24 or the external R-BUS device may also be damaged.
- The specifications for "R-BUS" are identical to those of RMDB2 and RMDB II. You can use it with any device that is marked "RMDB2" or "RMDB II."
- R-BUS (RMDB2) is not compatible with the older RMDB specification.

Turning the power on/off

Turning the power on

Before you turn each device on, make sure that all devices are connected correctly.

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.

- Turn on the power of your R-BUS device.
 - When power is supplied to the DIF-AT24, its power indicator will light.
- Turn on the power of your computer, ADAT device, etc.
- Turn on the power of your audio device like audio mixers etc.

Turning the power off

- Turn off the power of your audio device like audio mixers etc.
- Turn off the power of your computer, ADAT device, etc.
- Turn off the power of your R-BUS device.

 Power will no longer be supplied, and the DIF-AT24's power indicator will go out.

Connections and settings

Connection example 1

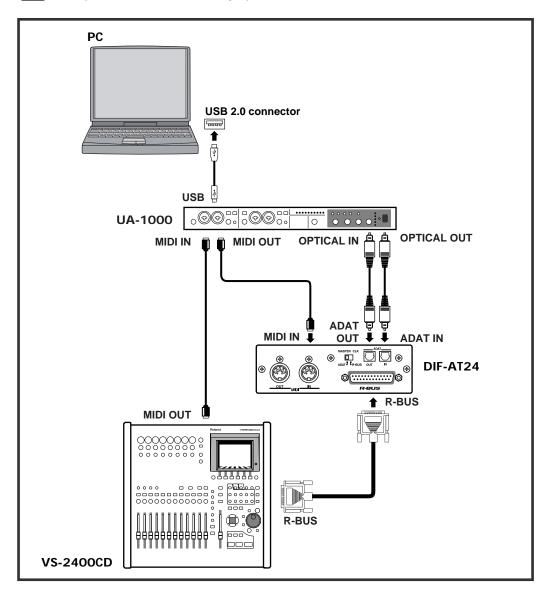
Connecting the VS-2400CD and a computer

Here's an example of synchronization with computer-based sequencer software or the VS-2400CD functioning as the master.

Make connections as shown in the diagram. This example uses the UA-1000 to perform input/output with the computer via USB 2.0.



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.



Settings

Sampling Frequency settings

Set the sampling frequency of your sequencer software, the VS-2400CD, and the UA-1000 to the same setting (44.1 kHz or 48 kHz).

Master Clock settings

Master clock device	VS-2400CD setting	DIF-AT24 MASTER CLK switch
VS-2400CD	PROJECT PARAMETER screen O MASTER CLOCLINT	R-BUS
Sequencer software	PROJECT PARAMETER screen O MASTER CLOCLR-BUS	ADAT

MEMO

You'll also need to set the Master Clock for your sequencer software. For details on this setting, refer to the owner's manual for your sequencer software.

Synchronization settings

Set the VS-2400CD's parameters as follows.

☐ MMC settings

If using the sequencer software as the MMC master	If using the VS-2400CD as the MMC master	
MIDI PARAMETER screen	MIDI PARAMETER screen	
O SysEx. Rx. SwOn	O MIDI OUT/THRUOut	
O MMC MODESLAVE	○ SysEx. Tx. SwOn	
O MMC SOURCER-BUS	O MMC MODEMASTER	

■ MTC settings

If using the sequencer software as the MMC master	If using the VS-2400CD as the MMC master
SYNC PARAMETER screen	SYNC PARAMETER screen
O SYNC MODE EXT	O SYNC MODEINT
O EXT SYNC SOURCE R-BUS	O FRAME RATE Select the MTC
O FRAME RATE Same setting as the	type.*
software.*	O MIDI OUT SYNC Gen MTC

^{*} Check the specifications of your sequencer software, and set your software and the VS-2400CD to the same frame rate.



In order to synchronize operation with your sequencer software, you'll also need to make settings in the sequencer software. For details on these settings, refer to the owner's manual for your sequencer software.

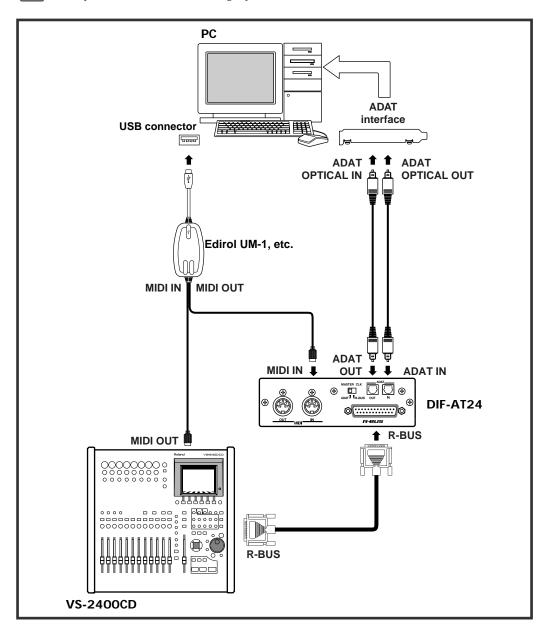
Connecting the VS-2400CD and a computer

Here's an example of synchronization with computer-based sequencer software or the VS-2400CD functioning as the master.

Make connections as shown in the diagram. This example uses an ADAT interface and MIDI interface connected to your computer.



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.



Settings

Sampling Frequency settings

Set the sampling frequency of your sequencer software and the VS-2400CD to the same setting $(44.1\ kHz\ or\ 48\ kHz)$.

Master Clock settings

Master clock device	VS-2400CD setting	DIF-AT24 MASTER CLK switch
VS-2400CD	PROJECT PARAMETER screen O MASTER CLOCLINT	R-BUS
Sequencer software	PROJECT PARAMETER screen O MASTER CLOCLR-BUS	ADAT

MEMO

You'll also need to set the Master Clock for your sequencer software. For details on this setting, refer to the owner's manual for your sequencer software.

Synchronization settings

Set the VS-2400CD's parameters as follows.

☐ MMC settings

If using the sequencer software as the MMC master	If using the VS-2400CD as the MMC master	
MIDI PARAMETER screen	MIDI PARAMETER screen	
O SysEx. Rx. SwOn	O MIDI OUT/THRUOut	
O MMC MODESLAVE	○ SysEx. Tx. SwOn	
O MMC SOURCER-BUS	O MMC MODEMASTER	

☐ MTC settings

If using the sequencer software as the MMC master	If using the VS-2400CD as the MMC master
SYNC PARAMETER screen	YNC PARAMETER screen
O SYNC MODE EXT	O SYNC MODEINT
O EXT SYNC SOURCE R-BUS	O FRAME RATE Select the MTC
O FRAME RATE Same setting as the	type.*
software.*	O MIDI OUT SYNC Gen MTC

^{*} Check the specifications of your sequencer software, and set your software and the VS-2400CD to the same frame rate.



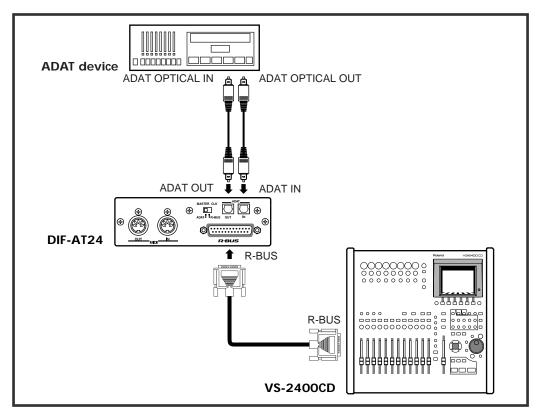
In order to synchronize operation with your sequencer software, you'll also need to make settings in the sequencer software. For details on these settings, refer to the owner's manual for your sequencer software.

Connecting the VS-2400CD and an ADAT device

This example allows digital audio signals to be transferred. Make connections as shown in the diagram.



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.



Settings

Sampling Frequency settings

Set the sampling frequency of the VS-2400CD and ADAT device to the same setting (44.1 kHz or 48 kHz).

Master Clock settings

Master clock device	VS-2400CD setting	DIF-AT24 MASTER CLK switch
VS-2400CD	PROJECT PARAMETER screen O MASTER CLOCLINT	R-BUS
ADAT device	PROJECT PARAMETER screen O MASTER CLOCLR-BUS	ADAT

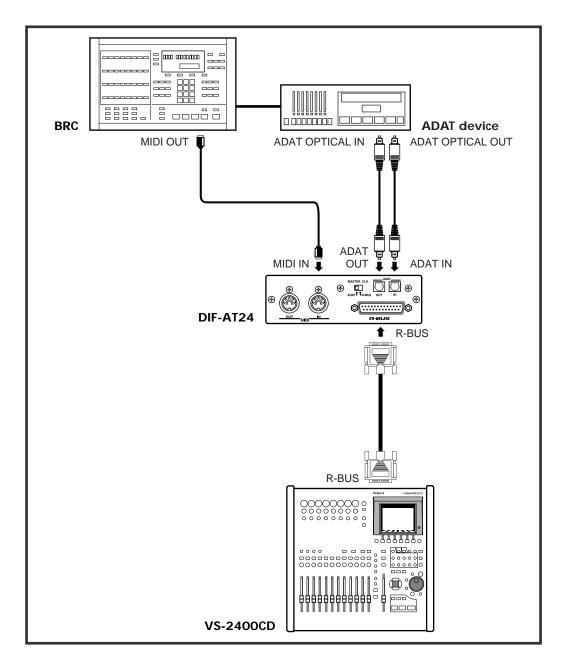
You'll also need to set the Master Clock for the ADAT device. For details on this setting, refer to the owner's manual for the ADAT device.

Connecting the VS-2400CD with an ADAT device and BRC

The BRC is used to operate the VS-2400CD and ADAT device in synchronization. Make connections as shown in the diagram.



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.



Settings

Sampling Frequency settings

Set the sampling frequency of the VS-2400CD and ADAT device to the same setting (48 kHz).

Master Clock settings

Master clock device	VS-2400CD setting	DIF-AT24 MASTER CLK switch
VS-2400CD	PROJECT PARAMETER screen O MASTER CLOCLINT	R-BUS
ADAT device	PROJECT PARAMETER screen O MASTER CLOCLR-BUS	ADAT



You'll also need to set the Master Clock for the ADAT device. For details on this setting, refer to the owner's manual for the ADAT device.

Synchronization settings

Set the VS-2400CD's parameters as follows.

MIDI PARAMETER screen

- O SysEx. Rx. Sw. On
- O MMC MODE.. SLAVE
- O MMC SOURCER-BUS

SYNC PARAMETER screen

- O SYNC MODE. EXT
- O EXT SYNC SOURCER-BUS
- O FRAME RATE...... Same setting as the software.*

BRC settings

Press [EDIT] → [GEN SYNC] → [GEN SYNC].

The screen will indicate "Generate Sync."

Use [▲][▼] to select "MIDI: MTC," and press [EDIT].

[EDIT] will go dark.

Press [GEN SYNC].

[GEN SYNC] will light, and the BRC will output MTC.

Using the DIF-AT24 as an additional MIDI OUT for the MV-8000

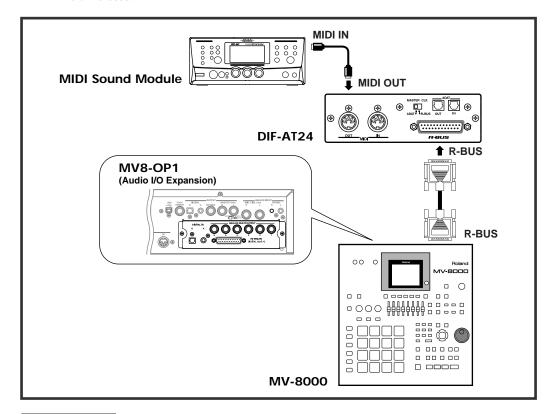
Make connections as shown in the diagram.



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.



In order to make these connections, the MV8-OP1 (audio I/O expansion; sold separately) must be installed in the MV-8000.



Settings

MV-8000 settings

Press the [SEQUENCE] button.

The SEQUENCE screen will appear.

Move the cursor to the track whose MIDI settings you want to make.

Press function button [F1 (Track Param)].

The TRACK PARAMETER screen will appear.

In the TRACK PARAMETER screen, move the cursor to "MIDI," and select "R-1"-"R-16" as the MIDI channel on which the track will be transmitted via R-BUS.

Information

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



EGYPT

Al Fanny Trading Office 9, EBN Hagar A1 Askalany Street, ARD E1 Golf, Heliopolis, Cairo 11341, EGYPT TEL: 20-2-417-1828

RELINION Maison FO - YAM Marcel

25 Rue Jules Hermann, Chaudron - BP79 97 491 Ste Clotilde Cedex, REUNION ISLAND TEL: (0262) 218-429

SOUTH AFRICA That Other Music Shop

(PTY) Ltd.
11 Melle St., Braamfontein,
Johannesbourg, SOUTH AFRICA

P.O.Box 32918. Braamfontein 2017 Johannesbourg, SOUTH AFRICA TEL: (011) 403 4105

Paul Bothner (PTY) Ltd. 17 Werdmuller Centre Main Road, Claremont 7708

SOUTH AFRICA P.O.BOX 23032, Claremont 7735, SOUTH AFRICA TEL: (021) 674 4030



CHINA

Roland Shanghai Electronics

5F. No.1500 Pingliang Road Shanghai 200090, CHINA TEL: (021) 5580-0800

Roland Shanghai Electronics Co Ltd (BEIJING OFFICE)

10F. No.18 Anhuaxili Chaoyang District, Beijing 100011 TEL: (010) 6426-5050

Roland Shanghai Electronics

(GUANGZHOU OFFICE) 2/F., No.30 Si You Nan Er Jie Yi Xiang, Wu Yang Xin Cheng, Guangzhou 510600, CHINA Tel: (020) 8736-0428

HONG KONG Tom Lee Music Co., Ltd.

Service Division 22-32 Pun Shan Street, Tsuen Wan, New Territories, HONG KONG TEL: 2415 0911

Parsons Music Ltd. 8th Floor, Railway Plaza, 39 Chatham Road South, T.S.T, Kowloon, HONG KONG

INDIA

Rivera Digitec (India) Pvt. Ltd. 409, Nirman Kendra Mahalaxmi Flats Compound Off. Dr. Edwin Moses Road, Mumbai-400011, INDIA TEL: (022) 2493 9051

INDONESIA

PT Citra IntiRama

J1. Cideng Timur No. 15J-150 Jakarta Pusat INDONESIA TEL: (021) 6324170

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) 2144-3333

PHILIPPINES

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

SINGAPORE

Swee Lee Company 150 Sims Drive, SINGAPORE 387381 TEL: 6846-3676

CRISTOFORI MUSIC PTE

LTD Blk 3014, Bedok Industrial Park E, #02-2148, SINGAPORE 489980 TEL: 6243-9555

TAIWAN ROLAND TAIWAN ENTERPRISE CO., LTD. Room 5, 9fl. No. 112 Chung Shan

N.Road Sec.2, Taipei, TAIWAN, TEL: (02) 2561 3339

THAII AND

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

VIETNAM

Saigon Music Suite DP-8 30He DF-8 40 Ba Huyen Thanh Quan Street Hochiminh City, VIETNAM Tel: (08) 930-1969

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 Ltd. 32 Shaddock Street, Mount Eden, Auckland, NEW ZEALAND

CENTRAL/LATIN **AMERICA**

ARGENTINA

Instrumentos Musicales S.A. Av.Santa Fe 2055 (1123) Buenos Aires ARGENTINA TEL: (011) 4508-2700

BRAZIL

Roland Brasil Ltda ROIAIG BRASII LIGA Rua San Jose, 780 Sala B Parque Industrial San Jose Cotia - Sao Paulo - SP, BRAZIL TEL: (011) 4615 5666

COSTA RICA

JUAN Bansbach Instrumentos Musicales Ave.1. Calle 11, Apartado 10237, San Jose, COSTA RICA TEL: 258-0211

CHILE

Comercial Fancy II S.A. Rut.: 96.919.420-1 Nataniel Cox #739, 4th Floor Santiago - Centro, CHILE TEL: (02) 688-9540

EL SALVADOR

OMNI MUSIC 75 Avenida Norte y Final Alameda Juan Pablo II , Edificio No.4010 San Salvador, EL SALVADOR TFI : 262-0788

MEXICO

Casa Veerkamp, s.a. de c.v. Av. Toluca No. 323, Col. Olivar de los Padres 01780 Mexico D.F. TEL: (55) 5668-6699

PANAMA SUPRO MUNDIAL, S.A. Boulevard Andrews, Albrook, Panama City, REP. DE PANAMA TEL: 315-0101

PARAGUAY Distribuidora De

Instrumentos Musicales J.E. Olear y ESQ. Manduvira Asuncion PARAGUAY

URUGUAY

Todo Musica S.A. Francisco Acuna de Figueroa 1771 C.P.: 11.800 Montevideo, URUGUAY TEL: (02) 924-2335

VENEZUELA

Musicland Digital C.A. Av. Francisco de Miranda, Centro Parque de Cristal, Nivel C2 Local 20 Caracas VENEZUELA TEL: (212) 285-8586

(EUROPE)

AUSTRIA

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: (014) 575811

CZECH REP.

K-AUDIO Kardasovska 626. CZ-198 00 Praha 9, CZECH REP TEL: (2) 666 10529

DENIMARK Roland Scandinavia A/S

Nordhavnsvej 7, Postbox 880, DK-2100 Copenhagen

DENMARK TEL: 3916 6200 FRANCE

Roland France SA 4, Rue Paul Henri SPAAK, Parc de l'Esplanade, F 77 462 St Thibault, Lagny Cedex FRANCE TEL: 01 600 73 500

FINLAND Roland Scandinavia As.

Filial Finland Elannontie 5 FIN-01510 Vantaa, FINLAND TEL: (0)9 68 24 020

GERMANY

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

GREECE STOLLAS S.A

Music Sound Light 155, New National Road Patras 26442 GREECE TEL: 2610 435400

HUNGARY Roland East Europe Ltd.

Warehouse Area 'DEPO' Pf.83 H-2046 Torokbalint, HUNGARY TEL: (23) 511011

IRELAND

Roland Ireland G2 Calmount Park, Calmount Avenue, Dublin 12 Republic of IRELAND TEL: (01) 4294444

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: 2273 0074

POLAND

MX MUSIC SP.Z.O.O. UL. Gibraltarska 4. PL-03664 Warszawa POLAND TEL: (022) 679 44 19

PORTUGAL Tecnologias Musica e Audio, Roland Portugal, S.A. Cais Das Pedras, 8/9-1 Dto

Cais Das Pedras, 8 4050-465 PORTO PORTUGAL TEL: (022) 608 00 60

ROMANIA FBS LINES

Piata Libertatii 1. 535500 Gheorgheni, ROMANIA TEL: (266) 364 609

RUSSIA

MuTek 3-Bogatyrskaya Str. 1.k.l 107 564 Moscow, RUSSIA TEL: (095) 169 5043

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: (0)8 702 00 20

SWITZERLAND

Roland (Switzerland) AG Landstrasse 5, Postfach, CH-4452 Itingen, SWITZERLAND TEL: (061) 927-8383

UKRAINE

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

UNITED KINGDOM Roland (U.K.) Ltd.

Atlantic Close, Swansea Enterprise Park, SWANSEA UNITED KINGDOM TEL: (01792) 702701

MIDDLE EAST

BAHRAIN

Moon Stores No.16, Bab Al Bahrain Avenue, P.O.Box 247. Manama 304. State of BAHRAIN TEL: 211 005

CYPRUS

Radex Sound Equipment Ltd. Diagorou Street, Nicosia, CYPRUS TEL: (022) 66-9426

IRAN

MOCO, INC. No.41 Nike St., Dr.Shariyati Ave., Roberoye Cerahe Mirdamad Tehran, IRAN TEL: (021) 285-4169

ISRAEL

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

JORDAN

AMMAN Trading Agency 245 Prince Mohammad St., Amman 1118, JORDAN TEL: (06) 464-1200

KUWAIT

Easa Husain Al Yousifi Est. Abdullah Salem Street. Safat, KUWAIT TEL: 243-6399

Chahine S.A.L. Gerge Zeidan St., Chahine Bldg., Achrafieh, P.O.Box: 16-5857 Beirut, LEBANON TEL: (01) 20-1441

OATAR

Al Emadi Co. (Badie Studio & Stores)
P.O. Box 62, Doha, QATAR
TEL: 4423-554

SAUDI ARABIA

aDawliah Universal Electronics APL Corniche Road, Aldossary Bldg., 1st Floor, Alkhobar, SAUDI ARABIA

P.O.Box 2154. Alkhobar 31952 SAUDI ARARIA TEL: (03) 898 2081

Technical Light & Sound **Center** Khaled Ebn Al Walid St. Rhaled Ebil Al Walid St. Bldg. No. 47, P.O.BOX 13520, Damascus, SYRIA TEL: (011) 223-5384

TURKEY

Ant Muzik Aletleri Ithalat Ve Ihracat Ltd Sti Siraselviler Caddesi Siraselviler Pasaji No:74/20 Taksim - Istanbul, TURKEY TEL: (0212) 2499324

Zak Electronics & Musical Instruments Co. L.L.C. Zabeel Road, Al Sherooq Bldg., No. 14, Grand Floor, Dubai, U.A.E. TEL: (04) 3360715

NORTH AMERICA

CANADA

Roland Canada Music Ltd. (Head Office) 5480 Parkwood Way Richmond B. C., V6V 2M4 CANADA TEL: (604) 270 6626

Roland Canada Music Ltd.

(Toronto Office) 170 Admiral Boul Mississauga On L5T 2N6 CANADA

TEL: (905) 362 9707 U. S. A.

Roland Corporation U.S. 5100 S. Eastern Avenue Los Angeles, CA 90040-2938, U. S. A. TEL: (323) 890 3700

As of November 1, 2003 (Roland)

This owner's manual is printed on recycled paper.

VM-7100/7200 と接続する場合

VM-7100/7200 **のシステム・バージョンが** 1.7 未満の場合、DIF-AT24 **は正常に動作しません。** 以下の方法で VM-7100/7200 **のバージョンを確認し、必ず** 1.7 以降にバージョンアップしてください。

バージョンアップに関しては、最寄の弊社営業所またはローランド・サービス・ステーション までお問い合わせください。

バージョンの表示方法

- **1** VM-7100/7200 を VM-C7100/C7200 と接続します。
- 2 電源を入れ、起動させます。
- 3 [On Display]を押しながらテン・キー[0]を押します。 バージョン表示画面になり、次のように表示されます。 「Unit X Version: 1.XXX」
- 4 画面の「1.XXX」でバージョンの確認をしてください。

When connecting to the VM-7100/7200

The DIF-AT24 will not operate correctly if the VM-7100/7200 system version is earlier than 1.7.

Use the following procedure to check the system version, and be sure to update to system version 1.7 or later.

For details on updating, please contact the nearest Roland office or service center.

To check the version

- 1 Connect the VM-7100/7200 to the VM-C7100/C7200.
- 2 Turn on the power to start up the system.
- Hold down [On Display] and press numeric key [0].

 The version display screen will appear, with an indication like the following:

 "Unit X Version: 1.XXX"
- 4 Note the version number shown in "1.XXX"