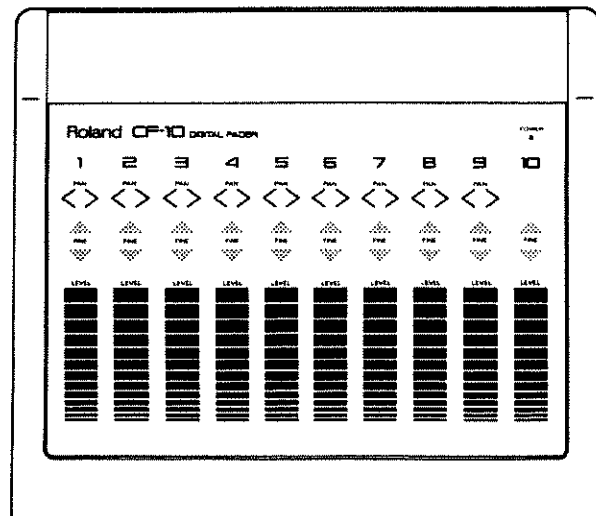


Roland

DIGITAL FADER

CF-10

OWNER'S MANUAL



For the U.K.

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

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 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.

For West Germany

Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt, daß der/die/das

DIGITAL FADER CF-10

(Gerät. Typ. Bezeichnung)

in Übereinstimmung mit den Bestimmungen der

Amtsbl. Vfg 1046/1984

(Amtsblattverfugung)

funk-entstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

Roland Corporation Osaka/Japan

Name des Herstellers/Importeurs

For the USA

RADIO AND TELEVISION INTERFERENCE

WARNING — This equipment has been verified to comply with the limits for a Class B computing device, pursuant to Subpart J of Part 15, of FCC rules. Operation with non-certified or non-vented equipment is likely to result in interference to radio and TV reception.

The equipment described in this manual generates and uses radio frequency energy. If it is not installed and used properly, that is, in strict accordance with our instructions, it may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J, of Part 15, of FCC Rules. These rules are designed to provide reasonable protection against such a interference in a residential installation. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by the following measure:

- Disconnect other devices and their input/output cables one at a time. If the interference stops, it is caused by either the other device or its I/O cable. These devices usually require Roland designated shielded I/O cables. For Roland devices, you can obtain the proper shielded cable from your dealer. For non Roland devices, contact the manufacturer or dealer for assistance.
- If your equipment does cause interference to radio or television reception, you can try to correct the interference by using one or more of the following measures:
 - Turn the TV or radio antenna until the interference stops.
 - Move the equipment to one side or the other of the TV or radio.
 - Move the equipment farther away from the TV or radio.
 - Plug the equipment into an outlet that is on a different circuit than the TV or radio. (That is, make certain the equipment and the radio or television set are on circuits controlled by different circuit breakers or fuses.)
 - Consider installing a rooftop television antenna with coaxial cable lead-in between the antenna and TV. If necessary, you should consult your dealer or an experienced radio/television technician for additional suggestions. You may find helpful the following booklet prepared by the Federal Communications Commission: "How to Identify and Resolve Radio — TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.

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.

Thank you, and congratulations on your purchase of the CF-10 Digital Fader.

In order that you may get a good understanding of all the superior functions available, and thus be assured continuing satisfaction, please read this manual in its entirety.

■ CONTENTS

- Features of the CF-102
- Important Notes3
- 1. Panel Description4
 - (1) Front Panel4
 - (2) Rear Panel4
- 2. Before Starting Out5
 - (1) Making the connections5
 - For use in combination with computer music system5
 - When combined with a sequencer and MIDI sound module5
 - When combined with a keyboard controller5
 - (2) Turning on power6
 - (3) MIDI Channels6
- 3. Using the CF-107
 - (1) Adjusting the Volume7
 - (2) Adjusting Pan7
 - How the Pan Switch works8
 - (3) Values stored in CF-10 memory8
- MIDI Implementation10
- Specifications12

Please read the separate "Guidebook for MIDI" before reading this owner's manual.

Copyright © 1989 by ROLAND CORPORATION

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

■ *Features of the CF-10*

The CF-10 Digital Fader is characterized by the following features:

● **A MIDI controller providing mixing within a MIDI system**

Through simple panel operations, you are given control over the volume and pan setting (orientation of sound image when output in stereo) for multiple MIDI channels. When used with multi-timbral sound modules such as those of the D-series, or the MT-32, you can easily make adjustments in the volume and panning for each part.

In addition, when used in a system comprised of a number of MIDI sound modules, it serves as a MIDI mixing console.

■ *Important Notes*

When employing an AC adaptor, make certain you use only one that has been supplied by the manufacturer. Use of any other power adaptor could result in malfunction or damage.

[Concerning the power supply]

- Whenever you make any connections with other devices, always turn off the power to all equipment first. This will help in preventing malfunction, and damage to speakers.
- Do not force the unit to share the same power outlet as one used for distortion producing devices (such as motors, variable lighting devices). Be sure to use a separate power outlet.
- Before using the AC adaptor, always make certain the voltage of the available power supply conforms to its rating.
- Do not place heavy objects onto, step on, or otherwise risk causing damage to the power cord.
- Whenever you disconnect the AC adaptor from the outlet, always grasp it by the plug, to prevent internal damage to the cord and the hazard of possible short circuits.
- If the unit is not to be used for a long period of time, unplug the cord from the socket.

[Concerning placement]

- Avoid using or storing the unit in the following places, as damage could result.
 - Places subject to extremes in temperature. (Such as under direct sunlight, near heating units, above equipment generating heat, etc.)
 - Places near water and moisture. (Baths, washrooms, wet floors, etc.) Places otherwise subject to high humidity.
 - Dusty environments.
 - Places where high levels of vibration are produced.

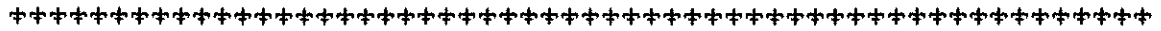
- Should the unit be operated nearby television or radio receivers, TV pictures may show signs of interference, and static might be heard on radios. In such cases, move the unit out of proximity with such devices.

[Maintenance]

- For everyday cleaning, wipe the unit with a soft dry cloth, or one that is dampened slightly. To remove dirt that is more stubborn, wipe using a mild, neutral detergent. Afterwards, make sure to wipe thoroughly with a soft cloth.
- Never apply benzene, thinners, alcohol or any like agents, to avoid the risk of discoloration and deformation.

[Other Precautions]

- Protect the unit from strong impact.
- Avoid getting any foreign objects (coins, wire, etc.), or liquids (water, drinks, etc.) into the unit.
- Before using the unit in a foreign country, check first with your local Roland Service Station.
- At any time that you notice a malfunction, or otherwise suspect there is damage, immediately refrain from using the unit. Then contact the store where bought, or the nearest Roland Service Station.



1. Panel Description

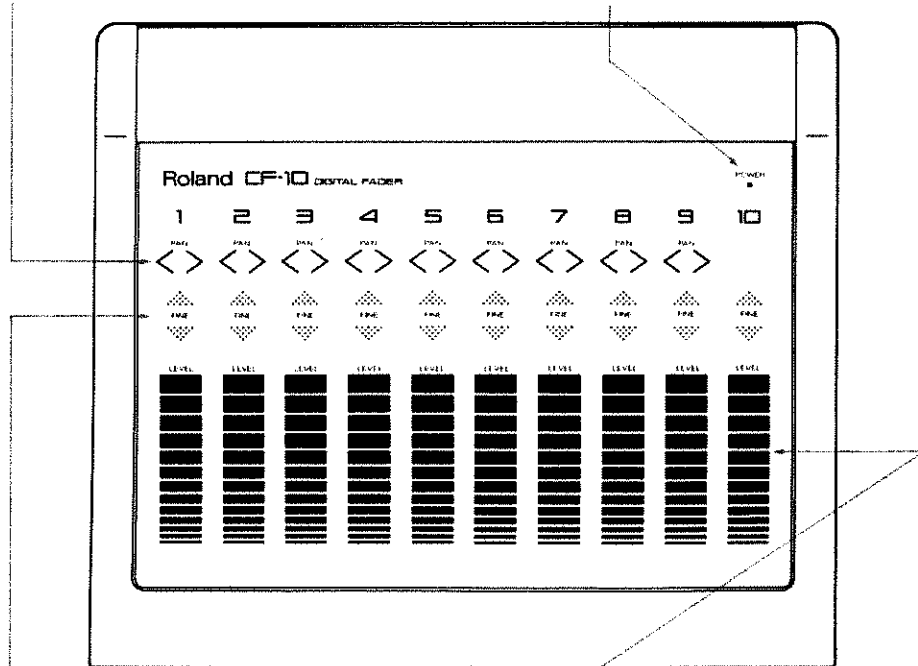
(1) Front Panel

Pan Buttons

Adjust panning for each channel.

Power Indicator

Lights up when power is turned on.



Fine Buttons

Provides for more precise adjustment of the volume for each channel.

Volume Fader

Provides adjustment of the volume for each channel. (number appearing at the top of the panel.)

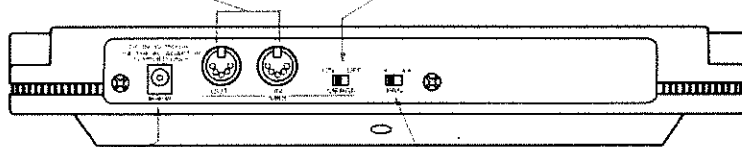
(2) Rear Panel

MIDI Connectors

These connectors provide for the transmission and reception of MIDI messages.

Merge Switch

Provides for selection of whether or not the messages received at MIDI IN are to be output from MIDI OUT.



DC IN

Accepts connection of the supplied AC adaptor.

Pan Switch

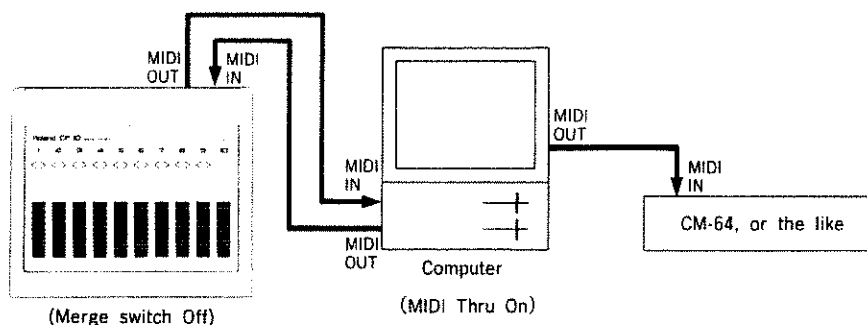
Allows for reversal, right versus left, of the sound orientation obtained by the Pan Buttons. Set to correspond to the particular MIDI sound generating device used.

2. Before Starting Out

(1) Making the connections

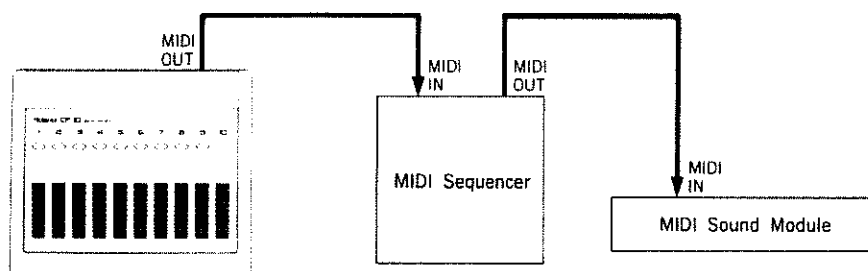
Connections with the CF-10 should be made as follows, depending on the way it is to be used.

● For use in combination with computer music system



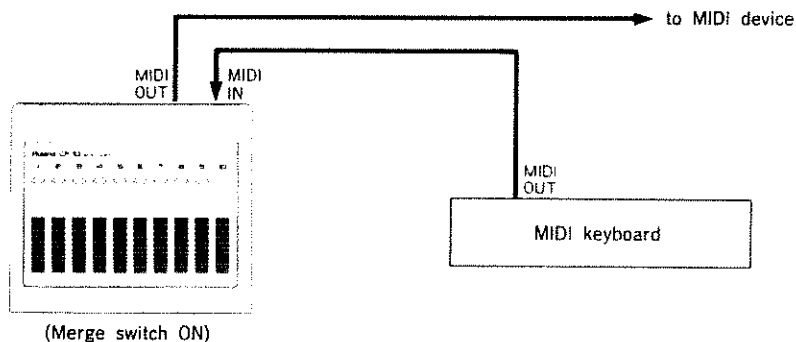
* In such applications, the CF-10's Merge switch should be off, and the software being run on the computer should be set to MIDI Thru.

● When combined with a sequencer and MIDI sound module



The CF-10 can thus be used to adjust the volume and pan for the connected MIDI sound module. Moreover, any adjustments in volume and panning made on the CF-10 can be recorded into the sequencer.

● When combined with a keyboard controller



+++++

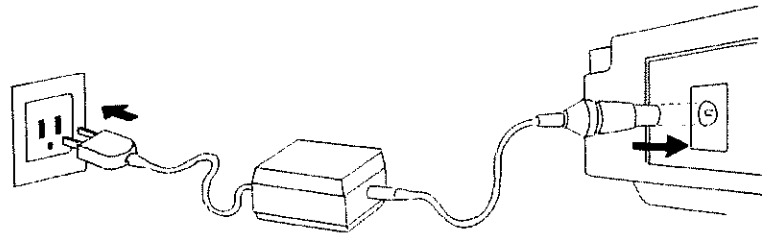
During play on the keyboard, adjustment of volume and pan settings can be carried out on the CF-10. Simultaneous transmission of both information from the keyboard and from the CF-10 can be carried out without the need for changing around any MIDI cable connections.

* Always make sure that the Merge switch on the CF-10 is at "On" whenever a MIDI device is connected to its MIDI IN terminal.

(2) Turning on power

First make sure that all MIDI cables are connected up properly. Then turn on power for the connected MIDI device, and after that turn on power to the CF-10.

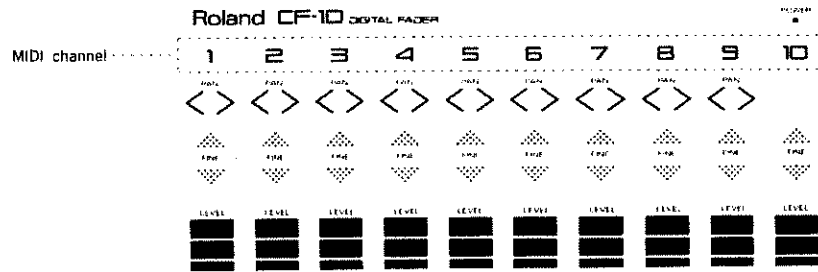
- ① Insert the power plug into the outlet.
- ② Insert the adapter's other plug into the DC IN jack. The power indicator will light.



* Since the unit is equipped with a circuit protection device, it requires a brief interval after power is turned on before it can be operated.

(3) MIDI Channels

The MIDI Channels employed by the CF-10 correspond to the numbers appearing at the upper part of the panel.



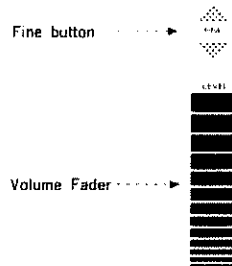
* Since channel 10 provides control over volume alone, it is convenient for use with rhythm modules.

+++++

3. Using the CF-10

(1) Adjusting the Volume

Volume (Control Number: 7) can be adjusted using the Volume Fader and Fine buttons.



Adjust volume by pressing the Volume Fader with your fingers and moving it, either toward or away from you. The further it is moved away from you, the higher the volume becomes.

To make fine adjustments in the volume, press the relevant Fine button.

With each press of the Fine button's Δ (or ▽), the volume will increase (or decrease) gradually. Also, when a Fine button is held down, you can obtain a faster paced, continuing change in volume.

* The volume for multiple MIDI channels can be adjusted at the same time.

* No change in volume will be obtained with respect to MIDI sound generating devices incapable of receiving volume messages.

(2) Adjusting Pan

Pan settings (Control Number : 10) are adjusted using the Pan button. Change in the panning can be obtained in accord with the 15 levels available.



The orientation of the sound image will move to the left when " < " is pressed and to the right when " > " is pressed. While a Pan button is held down you can obtain more rapid, consecutive changes in the orientation. Also, the orientation can be set at the center by pressing both " < " and " > " at the same time.

* If the change in orientation appears to be in reverse with respect to right and left, check the Pan Switch.

* The actual value contained in the panning messages will change as follows. However, if the resolution (with respect to sound orientation) of the sound module you have connected does not support 15 levels, the changes obtained may not always be as expected.

Center														
0	9	18	27	36	45	54	64	73	82	91	100	109	118	127

* No change in orientation will be obtained with respect to MIDI sound generating devices incapable of receiving pan messages.

● **How the Pan Switch works**

The Pan Switch on the unit's rear panel is employed to reverse, left versus right, the orientation that would otherwise be obtained by the Pan button. When being used with the following MIDI sound modules, it needs to be set at the "·" position:

MT-32, CM-32L, CM-32P, CM-64, E-10, E-20, PRO-E, MT-100, RA-50.

Pan Switch : ·

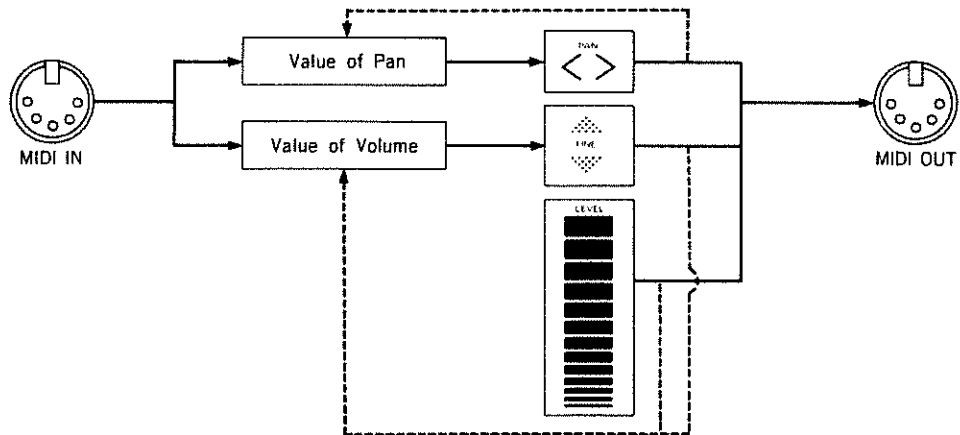
Left			<	Center										>	Right	
127	118	109	100	91	82	73	64	54	45	36	27	18	9	0		

Pan Switch : · ·

Left			<	Center										>	Right	
0	9	18	27	36	45	54	64	73	82	91	100	109	118	127		

(3) Values stored in CF-10 memory

On the CF-10, values for the volume and pan settings for each channel are stored temporarily in memory. (Previous settings are not stored in memory.)



When the Pan and Fine buttons are used, change is effected based on the values currently stored in memory. Whenever volume or pan messages are received at the CF-10's MIDI IN, the values stored in its memory will change to reflect these value changes. Note, however, that pan messages will be translated as values corresponding to the nearest equivalent from among the 15 levels available from the panel.

● The CF-10, regardless of any settings existing on the MIDI sound module, transmits volume and pan messages. For that reason, should volume or pan values be changed for a MIDI sound generating device, by means other than the CF-10 (or a MIDI device connected to its MIDI IN), such values will not match those stored in the CF-10.

In such cases, perform the following steps so that the values will match:

- ① Move the Volume Fader to momentarily produce a change in volume.
- ② Simultaneously press both " < " and " > " for the Pan button so that the orientation is set to the center position.

● Each time power to the CF-10 is turned on, the values for volume and panning will be as below. (Previous settings are not stored in memory.)

Volume = 0
Pan - Center (64)

1. RECOGNIZED RECEIVE DATA

■ Control change

● Main Volume

<u>Status</u>	<u>Second</u>	<u>Third</u>
0nH	07H	vvH
n = MIDI Channel		0H - 9H (1 - 10)
vv = Volume value		0H - 7FH (0 - 127)

Notes: Value for main volume in the received information is stored in the temporary register.

● Panpot

<u>Status</u>	<u>Second</u>	<u>Third</u>
0nH	0AH	vvH
n = MIDI Channel		0H - 9H (1 - 10)
vv = Panpot value		0H - 7FH (0 - 127)

Notes: When the Panpot button receives a value other than the following value, the CF - 10 automatically raises or reduces it to the closest value, and stores it in the temporary register.

0 9 18 27 36 45 54 64 73 82 91 100 109 118 127

2. TRANSMITTED DATA

■ Bypassed message

When the Merge switch is set to ON, the CF - 10 will normally perform a bypass function which allows it accept part or all of a complete message sequence through MIDI IN and transmit it through MIDI OUT.

■ Control change

● Main Volume

<u>Status</u>	<u>Second</u>	<u>Third</u>
0nH	07H	vvH
n = MIDI Channel		0H - 9H (1 - 10)
vv = Volume value		0H - 7FH (0 - 127)

The MIDI data to be transmitted by the fine button ▲▼ will be increased or decreased based on the value stored in the temporary register.

● Panpot

<u>Status</u>	<u>Second</u>	<u>Third</u>
0nH	0AH	vvH
n = MIDI Channel		0H - 9H (1 - 10)
vv = Panpot value		0H - 7FH (0 - 127)

Notes: When the panpot button () is pressed repeatedly, the panpot value to be transmitted changes as described below, depending on the PAN switch status.

When the PAN switch is set at "C"
(CENTER))
127 118 109 100 91 82 73 64 54 45 36 27 18 9 0

When the PAN switch is set at "L"
(CENTER))
0 9 18 27 36 45 54 64 73 82 91 100 109 118 127

MIDI Implementation Chart

Function ...		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1 - 10 x	1 - 10 x	
Mode	Default Messages Altered	3 x *****	3 x	
Note Number	True Voice	x *****	x *****	
Velocity	Note ON Note OFF	x x	x x	
After Touch	Key's Ch's	x x	x x	
Pitch Bender		x	x	
Control Change		7 ○ 10 ○	○ ○	Main Volume Panpot
Prog Change	True #	x *****	x	
System Exclusive		x	x	
System Common	Song Pos Song Sel Tune	x x x	x x x	
System Real Time	Clock Commands	x x	x x	
Aux Messages	Local ON/OFF All Notes OFF Active Sense Reset	x x x x	x x x x	
Notes		When the Merge switch is set to ON, the CF - 10 will normally perform a bypass function which allows it accept part or all of a complete message sequence through MIDI IN and transmit it through MIDI OUT.		

Mode 1 : OMNI ON, POLY
Mode 3 : OMNI OFF, POLY

Mode 2 : OMNI ON, MONO
Mode 4 : OMNI OFF, MONO

○ : Yes
x : No

■ *Specifications*

● **Front Panel**

Pan Buttons < > : 9
Fine Buttons ▽△ : 10
Volume Fader
Power Indicator

● **Rear Panel**

Merge Switch
MIDI Connectors (IN, OUT)
Pan Switch
DC IN Jack

● **Power Supply**

9 V DC (AC adaptor supplied)

● **Current Consumption**

40 mA

● **Dimensions**

284 (W) × 239 (D) × 50 (H) mm
11-3/16" × 9-7/16" × 2"

● **Weight**

1 kg
2 lb 3 oz

● **Supplied Accessories**

AC Adaptor
MIDI Cable (1 pc.)
Owner's Manual
MIDI GUIDEBOOK

* The specifications for this product are subject to change without prior notice, in the interest of improvement.

Information

- Please use this AC adaptor only with the specified device.
- Please use the AC Adaptor of an appropriate voltage (120, 220 or 240) depending on the voltage system in your country.
- When the device is not used for a long period, be sure to disconnect the AC adaptor (Power Supply Unit) from the wall outlet.
- When you need repair service, call your local Roland Service Station as shown below or the authorized Roland distributor in your country.

U. S. A.

Roland Corp US
7200 Dominion Circle
Los Angeles, CA. 90040-3647
U. S. A.
☎ (213) 685-5141

CANADA

Roland Canada Music Ltd.
(Head Office)
13880 Mayfield Place
Richmond B. C., V6V 2E4
CANADA
☎ (604) 270-6626

Roland Canada Music Ltd.
3469 rue Ashby,
St Laurent,
Quebec H4R 2C1
CANADA
☎ (514) 335-2009

Roland Canada Music Ltd.
Unit B-12, 1515 Matheson Blvd
Mississauga, Ontario L4W 2P5
CANADA
☎ (416) 625-4880

AUSTRALIA

Roland Corporation
(Australia) Pty. Ltd.
(Head Office)
38 Campbell Avenue
Dee Why West, NSW 2099
AUSTRALIA
☎ (02) 982-8266

Roland Corporation
(Australia) Pty. Ltd.
(Melbourne Office)
50 Garden Street
South Yarra, Victoria 3141
AUSTRALIA
☎ (03) 241-1254

NEW ZEALAND

Roland Corporation (NZ) Ltd.
97 Mt. Eden Road, Mt. Eden,
Auckland 3
NEW ZEALAND
☎ (09) 398-715

UNITED KINGDOM

Roland (UK) Ltd.
Amalgamated Drive
West Cross Centre, Brentford,
Middlesex TW8 9EZ,
UNITED KINGDOM
☎ (01) 568-4578

WEST GERMANY

Roland Elektronische
Musikinstrumente
Handelsgesellschaft mbH.
Oststrasse 96,
2000 Norderstedt
WEST GERMANY
☎ 040/52 60 09 25

BELGIUM/HOLLAND/ LUXEMBOURG

Roland Benelux N. V.
Houtstraat 1
B-2431 Oevel-Westerlo
BELGIUM
☎ 014-58 45 39

DENMARK

Roland Scandinavia A./S
Langebrogade 6, 1937.
DK-1023 Copenhagen K.
DENMARK
☎ (01) 95 31 11

SWEDEN

Roland Scandinavia A./S
Swedish Sales Office
DanvikCenter 28A, 2tr.
S-131 30 Nacka,
SWEDEN
☎ 08-702 00 20

NORWAY

Benum Music A./S
Haakon den godes Vei 14
N-0319 Oslo 3,
NORWAY
(Box 145 Vindern, N-0319
Oslo 3 NORWAY)
☎ 02 141266

FINLAND

OY Musiikki Fazer Musik AB
Takomotie 3
00380 Helsinki 38,
FINLAND
☎ 05 56551

ITALY

Roland Italy S. P. A.
Via Gallarate 58
20151 Milano
ITALY
☎ 02-3086849

SWITZERLAND

Musitronic AG
Gerberstrasse 5, CH-4410
Liestal
SWITZERLAND
☎ 061/921 16 15

FRANCE

Musikengro
102, Avenue Jean-Jaures
69367 Lyon Cedex 07
FRANCE
☎ (7) 858-54 60

Musikengro
(Paris Office)
Centre Region Parisienne
41 rue Charles-Fourier,
94400 Vitry s/Seinc
FRANCE
☎ (1) 4680 86 62

SPAIN

Vietronic S. A.
Bolivia 239
08020 Barcelona
SPAIN
☎ 34-307 47 12

AUSTRIA

E. Dematte & Co.
Nue-Rum Siemens-Strasse 4
A-6021 Innsbruck box 591
AUSTRIA
☎ 43 (05222) 63 4510

GREECE

A. ANDREADES & Co. Ltd.
Fidiou Str., 106 78
Athens
GREECE
☎ 3620130

Roland®

7712622900

UPC 7712622900



1098:

CF-10