

Roland

INTELLIGENT MIDI PROCESSING UNIT

S-MPU/AT

OWNER'S MANUAL

The S-MPU/AT is an intelligent MIDI processing system that is compatible with personal computers that feature an IBM AT bus. Using this system (expansion card and connector box) in combination with specific software, two sets of MIDI INs and MIDI OUTs become available. Since it can also handle SMPTE timecode, synchronization to timecode compatible multi-track tape recorders and VTRs is also possible.

* IBM and IBM AT are registered trademark of the International Business Machines Corporation.

■ Important Notes

[Power Supply]

- When making any connections with other devices, always turn off the power to all equipment first; this will help prevent damage or malfunction.

[Placement]

- Do not subject the unit to temperature extremes (eg. direct sunlight in an enclosed vehicle). Avoid using or storing the unit in dusty or humid areas or areas that are subject to high vibration levels.

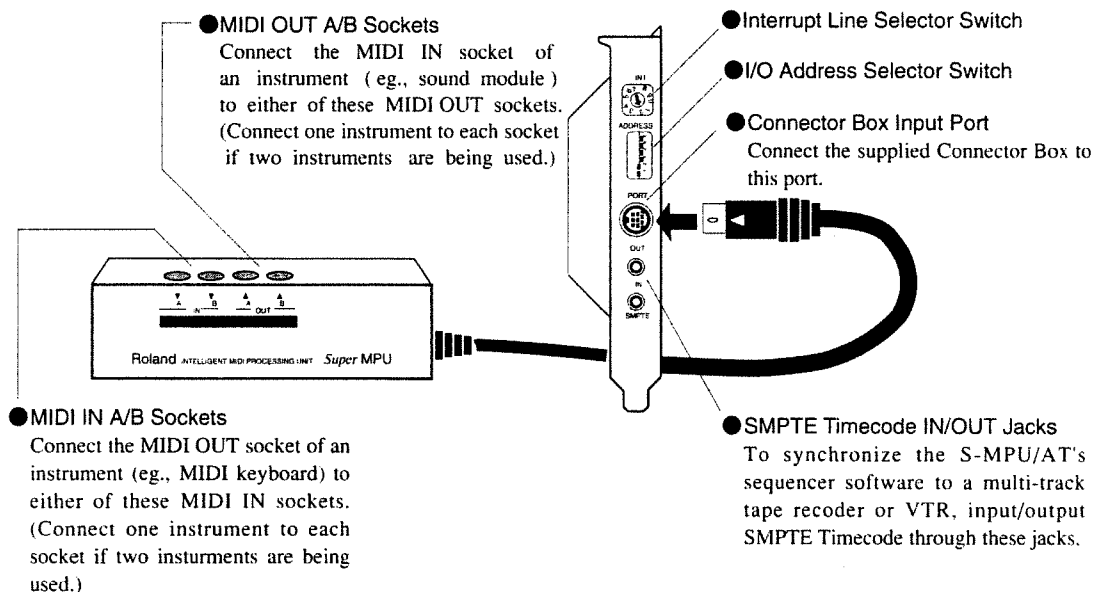
[Maintenance]

- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the risk of discoloration and/or deformation.

[Additional Precautions]

- Protect the unit from strong impact.
- Do not allow objects or liquids of any kind to penetrate the unit. In the event of such an occurrence, discontinue use immediately. Contact qualified service personnel as soon as possible.
- Should a malfunction occur (or if you suspect there is a problem) discontinue use immediately. Contact qualified service personnel as soon as possible.

■ Panel Description



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■ Using MPU-IPC(-T) compatible software

You can also use software that is compatible with the MPU-IPC(-T) on the S-MPU/AT. When the software is booted up, the S-MPU/AT will automatically select the compatible mode. However, many of the functions of the S-MPU/AT will be disabled.

· Functions expanded with the S-MPU/AT

- MIDI IN : Use MIDI IN A. No MIDI messages will be received through MIDI IN B.
- MIDI OUT : The same MIDI messages are transmitted through both the MIDI OUT A and B sockets.
- SMPTE Timecode : Cannot be used.

· Functions of the MPU-IPC(-T)

- FSK Sync : Cannot be used. (The S-MPU/AT does not feature TAPE IN/OUT jacks.)
- The Metronome Function : Cannot be used. (The S-MPU/AT does not have this function.)

■ Interrupt Line and I/O Address

● Pre-programmed Settings

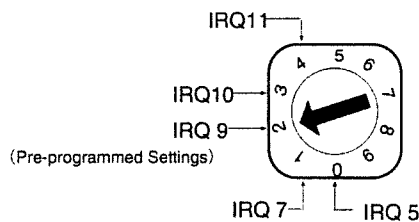
Interrupt Line : IRQ2

I/O Address

Mode	Address	Read	Write	Bus
401	0330h	Data	Data	8 bit
	0331h	Status	Command	
Native	0332h	Immediate Message/Function	Immediate Message/Function	16 bit
	0334h	Sequence Message/Function	Sequence Message/Function	
	0336h	Monitor	Interrupt to Super MPU	
	0338h	Status	Interrupt Mask	

● To change the Interrupt Line and I/O Address

To change the Interrupt Line or I/O Address, be sure to switch the computer off.



The Interrupt Line can be changed using the Interrupt Line Selector Switch on the panel of the expansion card.

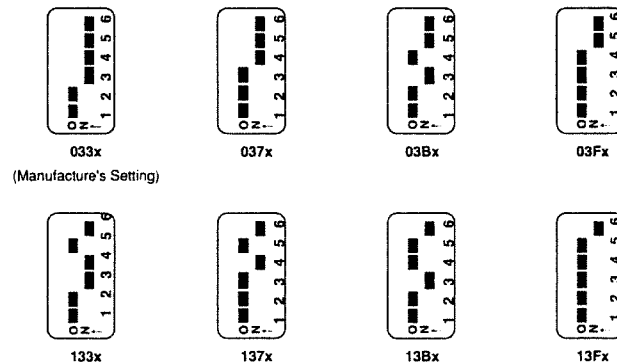
* When set to INT 5-9, no interrupt request will occur.

The I/O Address can be changed using the I/O Address Selector Switch on the panel of the expansion card.

* To change the switch positions, carefully use a rigid, pointed object (a pen, for example).

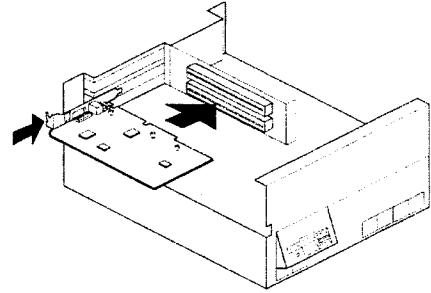
* The 6th switch can be set to either On or Off.

Note : Never put anything on the printed circuit board or touch the components with your bare hands.



■ Installing the S-MPU/AT Expansion Card

1. Switch the computer off and unplug it from the AC source.
2. Remove the cover from the computer.
3. Carefully insert the S-MPU/AT card (components facing upward) into an available card slot. Insert it using the card guide of the expansion slot. Secure the S-MPU/AT's panel to the computer with the supplied screws.



* You can install the S-MPU/AT card in any available slot.

Note : Never put anything on the printed circuit board or touch the components with your bare hands.

■ Specifications

● Connectors

SMPTE Jacks (IN, OUT)
Connector Box Socket
MIDI Sockets (IN × 2, OUT × 2)

● Interrupt Line Switch

● I/O Address Switch

● Current Draw

150 mA (DC +5V)

● Dimensions

Expansion Card : 23 (W) × 198 (D) × 126 (H) mm
15/16 (W) × 7-13/16 (D) × 5 (H) inches
Connector Box : 165 (W) × 50 (D) × 34 (H) mm
6-1/2 (W) × 2 (D) × 1-3/8 (H) inches

● Weight

Expansion Card : 160 g / .3 lbs
Connector Box : 340 g / .75 lbs

● Accessories

Owner's Manual

* For a detailed technical explanation of the S-MPU/AT, refer to the optional "Super MPU Technical Reference Manual."

* The specifications for this product are subject to change without prior notice.

For Germany

Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt, daß der/die/das
INTELLIGENT MIDI PROCESSING UNIT S-MPU/AT
(Gerat. Typ. Bezeichnung)

in Übereinstimmung mit den Bestimmungen der
Amtsbl. Vfg 1046/1984
(Amtsblattverfügung)

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-verified 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 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 fixes dans le Règlement des signaux parasites par le ministère canadien des Communications.

Information

When you need repair service, call your local Roland Service Station or the authorized Roland distributor in your country as shown below.

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Los Angeles, CA.
90040-3647, U. S. A.
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Richmond B. C., V6V 2M4
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☎ (604)270 - 6626

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Service Rd. N., St Laurent,
Quebec H4S 1V3,
CANADA
☎ (514)335 - 2009

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Mississauga, Ontario L4Z
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☎ (02)982 - 8266

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SPAIN

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Calle Bolivia 239
08020 Barcelona, SPAIN
☎ 93 - 308 - 1000

GERMANY

Roland Elektronische
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Norderstedt, GERMANY
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FRANCE

Musikengro
102 Avenue Jean-Jaures
69007 Lyon Cedex 07
FRANCE
☎ (7)858 - 54 60

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

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