TABLE OF CONTENTS

SPECIFICATIONS / 主な仕様
S-MPU64(Super MPU64) : 64 Channel MIDI Processing Unit

- Connectors: MIDI Connectors (IN x 4, OUT x 4) USB Connector
- Power Supply: Bus-powered (Supplied from Computer or USB Hub)
- Current Draw: 150 mA (during operation) under 0.5 mA (Suspend mode)
- Dimensions: 9.8 (W) x 3.15/16 (D) (1/4 (H)) inches 218 (W) x 99 (D) x 43 (H) mm
- Weight: 1 lbs 9 oz 0.7 Kg
- Accessories: Super MPU64 Driver Disk

SYSTEM REQUIREMENTS / 動作環境

The minimum system requirements for Super MPU64 and Super MPU64 driver are as follows. Please make sure that each requirement is met.

- Compatible OS: Microsoft Windows98
- Operation on MS-DOS/stand in an MS-DOS environment, including differences in motherboard design and the particular combination of other devices involved.
- Compatible PC: IBM PC/AT and compatibles equipped with USB connectors
- CPU/Clock: PentiumMicroProcessor / 166 MHz or higher
- Display Resolution: 640 x 480 pixels / 256 color or more
- Memory(RAM): 32 MB or more
- Hard Disk: 1 MB or more

Although Roland has tested numerous configurations, and has determined that on average, a computer system similar to that described above will permit normal operation of the Super MPU64, Roland cannot guarantee that a given computer can be used satisfactorily with the Super MPU64 based solely on the fact that it meets the above requirements. This is because there are too many other variables that may influence the processing environment, including differences in motherboard design and the particular combination of other devices involved.

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

*Operation on MS-DOS and Super MPU64 driver are as follows. Please make sure that each requirement is met.

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

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

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

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

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

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

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

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

*In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.
### EXPLODED VIEW / 分解図

#### [PARTS]

<table>
<thead>
<tr>
<th>No.</th>
<th>PART No.</th>
<th>Part Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>①</td>
<td>01565356</td>
<td>TOP COVER</td>
<td></td>
</tr>
<tr>
<td>②</td>
<td>71126334</td>
<td>MAIN BOARD ASSY</td>
<td>(EX0)</td>
</tr>
<tr>
<td>③</td>
<td>01565345</td>
<td>FRONT PANEL</td>
<td></td>
</tr>
<tr>
<td>④</td>
<td>01565367</td>
<td>BOTTOM CHASSIS</td>
<td></td>
</tr>
<tr>
<td>⑤</td>
<td>01676412</td>
<td>FOOT SET</td>
<td>RUBBER FOOT x4 PCS</td>
</tr>
</tbody>
</table>

#### [SCREW]

<table>
<thead>
<tr>
<th>No.</th>
<th>PART No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>40011056</td>
<td>SCREW 3x6 BINDING B-TIGHT ZC</td>
</tr>
<tr>
<td>B</td>
<td>40011090</td>
<td>SCREW 3x6 BINDING B-TIGHT BZC</td>
</tr>
<tr>
<td>C</td>
<td>40011312</td>
<td>SCREW M3x8 BINDING P-TITE FE BZC</td>
</tr>
<tr>
<td>D</td>
<td>40342234</td>
<td>NYLON RIVET S-3055 BLACK</td>
</tr>
</tbody>
</table>
### SAFETY PRECAUTIONS

The parts marked # have safety-related characteristics. Use only listed parts for replacement. Warning! There is the possibility that you will burn your hands when you touch Power Supply parts soon after the power supply is turned off. Warning! There is the possibility that you will burn your hands when you touch Power Supply parts soon after the power supply is turned off. 

**CONSIDERATIONS ON PARTS ORDERING**

When ordering any parts listed in the parts list, please specify the following items in your order: 

- **PART NUMBER**
- **DESCRIPTION**
- **QTY**
- **MODEL NUMBER**
- **PART CODE**

Failure to completely fill the above items with correct number and description will result in delayed or even undelivered replacement.

**WARNING**

*Consider about the natural environment carefully before through the old lithium battery away when you exchange to the new one.*

---

### PARTS LIST / パーツリスト

<table>
<thead>
<tr>
<th>PARTS</th>
<th>MODEL</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
<th>ORDER CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIODE</strong></td>
<td>GUG1X</td>
<td><strong>DIODE</strong></td>
<td><strong>ARRAY Diode</strong></td>
<td><strong>DA1,2,3,4</strong></td>
</tr>
<tr>
<td><strong>LED</strong></td>
<td>GUG1X</td>
<td><strong>LED</strong></td>
<td><strong>L-1384A31</strong></td>
<td><strong>D1,2,3,4,9</strong></td>
</tr>
<tr>
<td><strong>CRYSTAL</strong></td>
<td>GUG1X</td>
<td><strong>CRYSTAL</strong></td>
<td><strong>MA-406 12MHz</strong></td>
<td><strong>C3</strong></td>
</tr>
<tr>
<td><strong>RESISTOR</strong></td>
<td>GUG1X</td>
<td><strong>RESISTOR</strong></td>
<td><strong>RPC10T 101 J</strong></td>
<td><strong>R31</strong></td>
</tr>
<tr>
<td><strong>INDUCTOR,COIL,FILTER</strong></td>
<td>GUG1X</td>
<td><strong>INDUCTOR,COIL,FILTER</strong></td>
<td><strong>EXCML20A390</strong></td>
<td><strong>F31</strong></td>
</tr>
<tr>
<td><strong>SCREWS</strong></td>
<td>GUG1X</td>
<td><strong>SCREWS</strong></td>
<td><strong>BINDING TAPTITE B 3x6 ZC SCREW</strong></td>
<td><strong>B1</strong></td>
</tr>
<tr>
<td><strong>PACKING CASE</strong></td>
<td>GUG1X</td>
<td><strong>PACKING CASE</strong></td>
<td><strong>PACKING CASE (JAPANESE/ENGLISH)</strong></td>
<td><strong>C1</strong></td>
</tr>
<tr>
<td><strong>ACCESSORIES</strong></td>
<td>GUG1X</td>
<td><strong>ACCESSORIES</strong></td>
<td><strong>OWNER'S MANUAL (ENGLISH/JAPANESE)</strong></td>
<td><strong>C1</strong></td>
</tr>
<tr>
<td><strong>SWITCH</strong></td>
<td>GUG1X</td>
<td><strong>SWITCH</strong></td>
<td><strong>TACT SWITCH SKQNAE</strong></td>
<td><strong>C41</strong></td>
</tr>
<tr>
<td><strong>PCB ASSY</strong></td>
<td>GUG1X</td>
<td><strong>PCB ASSY</strong></td>
<td><strong>MAIN BOARD ASSY</strong></td>
<td><strong>C1</strong></td>
</tr>
<tr>
<td><strong>TRANSISTOR</strong></td>
<td>GUG1X</td>
<td><strong>TRANSISTOR</strong></td>
<td><strong>2SA1037KR</strong></td>
<td><strong>C2</strong></td>
</tr>
</tbody>
</table>

---

**NOTE:** The parts marked # are new (initial parts)
**Tools required**
- A personal computer having environment in which S-MPU64 can operate (for further information, refer to the Specification)
- USB cable
- A pair of tweezers (for grounding)
- MIDI cable

1. Entering test mode

1.1 Using tweezers, connect the pin 5 of IC1 to ground path (hold the tweezers in this way until test 5).
1.2 Connect S-MPU64 to the PC via USB. 
1.3 The unit is now in the test mode and turns on all 9 LEDs for a moment.

2. Identifying version

The LEDs MID IN (red) and MIDI OUT (green) light for 1-2 seconds to identify the version as described in the Version Indication table shown below.

3. Testing ICs

3.1 When all ICs are operating correctly

All LEDs are lit.

3.2 Indicating failure IC(s)

A blinking LED indicates that the device shown in the table below is defective and that the test mode is interrupted. The LED remains blinking until power is turned off. Replace the IC. Re-enter the test mode by repeating step 1.

4. Testing LEDs

4.1 All LEDs turn on and off, from USB to MIDI IN 1, one by one at a time. 
4.2 All LEDs light.

5. Testing MIDI ports

5.1 Remove the tweezers to disconnect pin 5 of IC1 from ground reference.
5.2 Connect MIDI IN 1-4 to MIDI OUTs 1-4 in this order, one connection at a time, through a MIDI cable. Corresponding MIDI IN LED should light.

---

**VERSION TABLE / バージョン表示**

MIDI IN and MIDI OUT LEDs (lighting) express the version in a binary number:

| Defective device | Version Table
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU (IC2)</td>
<td>Ver. 1.00</td>
</tr>
<tr>
<td>SRAM (IC3): erase, write, read</td>
<td>Ver. 1.10</td>
</tr>
<tr>
<td>Program transfer from flash memory (IC4) to SRAM (IC3)</td>
<td>Ver. 1.20</td>
</tr>
</tbody>
</table>

---

**Blinking LED Defective device**

MIDI IN1 (red) CPU (IC2)
MIDI IN2 (red) SRAM (IC3): erase, write, read
MIDI IN3 (red) MIDI IN3 (red) Program transfer from flash memory (IC4) to SRAM (IC3)
MIDI IN4 (red) Program transfer from flash memory (IC4) to SRAM (IC3)

---

**Note**

* For more information on how to identify and troubleshoot issues with S-MPU64, refer to the Specifications.