# JOG DIAL

# JD-100

# User's Manual

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# For Your Safety

- Before using this product, read this manual and all warnings or cautions in the documentation provided.
- Only Factory Authorized Personnel should be changes and/or adjust the parts of controller.

## The Symbols Used in This Manual

✓ WARNING	CAUTION
This symbol marks warnings that should be read	This symbol indicates where caution should be
and used to prevent serious injury or death.	used to avoid possible injury to yourself or others,
	or damage to property.

The above indications are used together with the following symbols to indicate the exact nature of the warning or caution.

Examples of Symbols Accompanying Warnings and Cautions		
$\triangle$	$\triangle$ Symbols enclosed in a triangle indicate warnings and cautions. The	
/4\	exact nature of the warning or caution is indicated by the symbol	
	inside (the symbol at left indicates risk of electrocution).	
<b>€</b>	OSymbols enclosed in a circle mark indicate prohibitions(actions that	
	must not be performed). The exact nature of the prohibition is	
	indicates by the symbol inside or next to the circle mark (the symbol	
	at left indicates that the product must not be disassembled).	
	•Symbols inside a black circle mark actions that must be performed	
	to ensure safety. The exact nature of the action that must be	
8-5	performed is indicated by the symbol inside (the symbol at left is used	
	in cases in which the AC adapter must be unplugged to ensure safety).	

# Symbols on the product

The symbol mark on the product calls your attention. Please refer to the manual, in the case that you operate the part of the symbol mark on the product.

<u></u>	This symbol labeled on the portion calls your attention.

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- ② SIGMAKOKI CO., LTD. does not accept liability for damages resulting from the use of this product that deviates from that described in the manual.
- ③ SIGMAKOKI CO., LTD. does not accept liability for damages resulting from the use of this product in extraordinary conditions, including fire, earthquakes, and other acts of God, action by any third party, other accidents, and deliberate or accidental misuse.
- ④ If the equipment is used in a manner not specified by the SIGMAKOKI CO., LTD., the protection provided by the equipment may be impaired.

# <u>^</u>! WARNING

- Do not use this product in the presence of flammable gas, explosives, or corrosive substances, in areas exposed to high levels of moisture or humidity, in poorly ventilated areas, or near flammable materials.
- Do not connect or check the product while the power is on.
- Installation and connection should be performed only by a qualified technician.
- Do not bend, pull, damage, or modify the power or connecting cables.
- Do not touch the products internal parts.
- Connect the earth terminal to ground.
- Should the product overheat, or should you notice an unusual smell, heat, or unusual noises coming
  from the product, turn off the power immediately.
- Do not turn on the power in the event that it has received a strong physical shock as the result of a fall or other accident.
- Do not touch the stage while operation.
- Use dry clothes only for cleaning the equipment.

### **Chapter 1: Before You Begin**

#### 1-1. Overview

The JD-100 is a JOG-Dial controller.

It can be connected to our stage controller, SHOT-30\* series and SHOT-702 and PGC-04 and HSC-103.

The JOG-Dial, connected to the controller via a cable, provides remote operation. This means that the JOG-Dial allows you to work near the motorized stage while checking its behavior even if the controller and the motorized stage are away from each other.

#### 1-2. Connecting method

The JOG-Dial (JD-100) is connected to the controller with MDR14-CA cable.

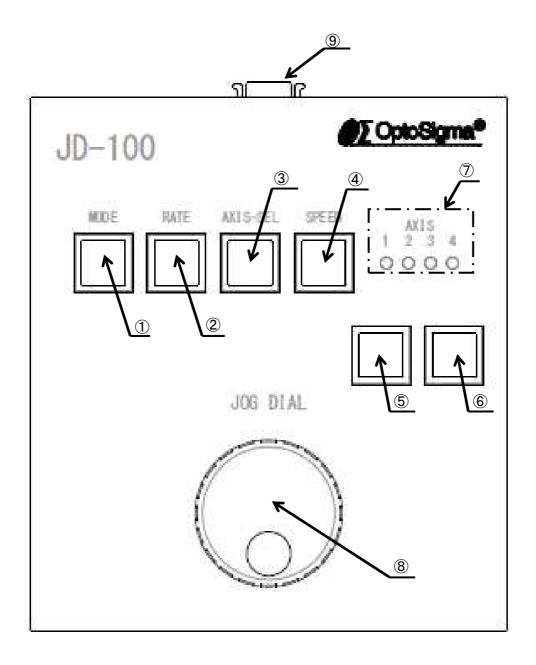
- ① Connect a standard cable (MDR14-CA-\*) to the connector on the rear panel of the JD-100.
- ② Connect the cable from the JD-100 to the "JOYSTICK" connector on the front panel of the SHOT-30X series and SHOT-702 and PGC-04 and HSC-103 controller. (In the case of SHOT-702 and HSC-103, it becomes the rear panel part.)
- ③ Turn power switch of the controller on.
  Among the LED of "AXIS", the LED of "1" will light green.



Be sure the controller is off when you connect the JOG-Dial. You may not be able to use the buttons on JOG-Dial if you connect or disconnect either device while the controller is on.

### **Chapter 2: Notes on Use**

### 2-1. Parts of the JD-100



#### 2-2. Operating method

#### ①MODE button

Change an operation mode of the controller.

 $HOST \rightarrow MANUAL \cdot \cdot \cdot$ 

Refer to a User's Manual of SHOT-302GS/SHOT-304GS for various modes.

NOTE) IN SHOT-702/ PGC-04/ HSC-103, the MODE change is invalid.

#### ②RATE button

Switch the amount of movement of the stage for the dial operation.

The LED indicator lights up: 5pulse/ 1click for JOG-dial. (High-RATE)

The LED indicator lights down: 1 pulse/ 1 click for JOG-dial. (Normal-RATE)

### 3AXIS-SEL button

Selects the axis operated by JOG-Dial.

Change the number of lightning of LED indicator by the AXIS-SEL button every time pushing the button.  $(1\rightarrow2\rightarrow3\rightarrow4\rightarrow1\cdot\cdot\cdot)$ 

NOTE) When the axis which doesn't exist in case of SHOT-302GS, SHOT-702 and HSC-103 (2 axis or 3 axis) is chosen, a controller doesn't move.

#### **4**SPEED button

Cycle through "SPEED 1/2/3/4" settings stored in controller's memory switches  $(1\rightarrow2\rightarrow3\rightarrow4\rightarrow1\cdot\cdot\cdot)$ .

NOTE) Because there is not speed indication, in the case of SHOT-702, PGC-04, HSC-103, a controller is invalid.

### 5,6JOG-/JOG+ button

Enables operation of selects-axis. Pressing of this button continuously moves the stage continuously. Releasing this button stops the stage.

#### (7)AXIS LED

Change the number of lightning of LED indicator by the AXIS-SEL button every time pushing the button.  $(1\rightarrow2\rightarrow3\rightarrow4\rightarrow1\cdot\cdot\cdot)$ 

#### **®JOG-dial**

The JOG-dial for operating the stage.

Left rotation: - direction Right rotation: + direction

#### 

It is a connector to be connected with a controller and an MDR14-CA-\* cable.

### **Chapter 3: Specifications**

### 3-1. Specifications

Power source DC5V  $\pm 10\%$  (from controller)

Operating temperature  $5\sim40^{\circ}\text{C}$ Storage temperature  $-20\sim60^{\circ}\text{C}$ 

Ambient humidity 20~80%RH (no condensation)

External dimensions  $130W \times 145D \times 36H$  (excluding projections)

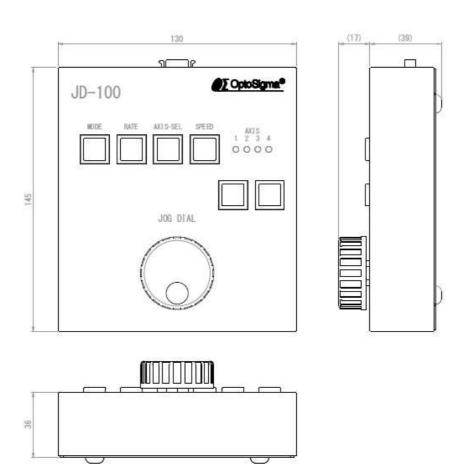
Weight 560g

Indoor use only

Altitude Up to 2000m

Installation category II Pollution degree 2

#### 3-2. Exterior Dimensions



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