

2 axis and 4 axis stage controllers with built-in display and micro-step driver.

Multiple operation modes:

- Computer control using RS232C/GP-IB/USB interfaces
- Manually operated using the optional control pad (CJ-200A) or dedicated controllers (JS-300, JB-400)
- Internally programmed using two banks of stored programs.
- Remotely operated by other devices using TTL I/O.
- Full closed loop control is possible when used in combination with stages equipped with built in glass-scales.



Guide

- Sample programs are available for download from our website.
- SG Sample 32/64-bit version for Windows® (only for RS232C)
 - LabVIEW for RS232C (for v.5.1/v.6i/v7.1/v.8.6/v.2010/v.2012/v.2013/v.2014/v.2015)
 - LabVIEW for GP-IB (for v.5.1/v.6i/v7.1/v.8.6/v.2010/v.2012/v.2013/v.2014/v.2015)

Part Name	Part Number
2 axis Stage Controller	SHOT-302GS
4 axis Stage Controller	SHOT-304GS
Control Pad	CJ-200A
Joy Stick	JS-300
Jog Operation Box	JB-400
Jog Dial	JD-100
MDR Cable	MDR14-CA-2.5

Primary Functions

Part Number	SHOT-302GS	SHOT-304GS
Controller Function		○
Number of Control Axes	2	4
Stored Program Control		○
Feedback Control		GS
Circular Interpolation Control		○
Linear Interpolation Control		2 axes
Driver Function		Micro-step
Micro-step (Max. Division)		250
Driving Current (A/phase)		0.25 – 1.4
CJ-200A		Required

General Specifications

Power Voltage	AC100 – 240V 50/60Hz
Power Consumption	160VA 300VA
Operating Temperature	5 – 40°C
Storage Temperature	–20 – 60°C
Ambient Humidity	20 – 80%RH (without condensation)
External Dimensions (W×H×Dmm)	270×302×118
Weight (kg)	5.5 6.5

Interface

GP-IB	○
RS232C	○
USB	○
Ethernet	—

Optional

CJ-200A	○
JS-300	○
JB-400	○
JD-100	○
SJT-02	—

Performance Specifications

Coordinate Indication Range	±999,999,999
Max. Travel to Set	268,435,455
Max. Driving Speed (pps)	500,000
Min. Driving Speed (pps)	1
Acceleration/Deceleration Time (ms)	0 – 1,000

I/O Specification

Origin Sensor	○
Proximity Sensor	○
CW (+) Limit	○
CCW (–) Limit	○
General Purpose Input	4 points
General Purpose Output	4 points
Control Input	15 points
Control Output	5 points
Trigger Output	○

Control Command

Machine Origin Return	○
Theoretical Origin Setting	○
Relative Position Drive	○
Absolute Position Drive	○
Jog Operation	○
Position Appointment	—
Circular Interpolation Control	○
Linear Interpolation Control	○
Drive	○
Deceleration Stop	○
Emergency Stop	○
Speed Setting	○
Motor Free/Hold	○
Port Input	○
Port Output	○

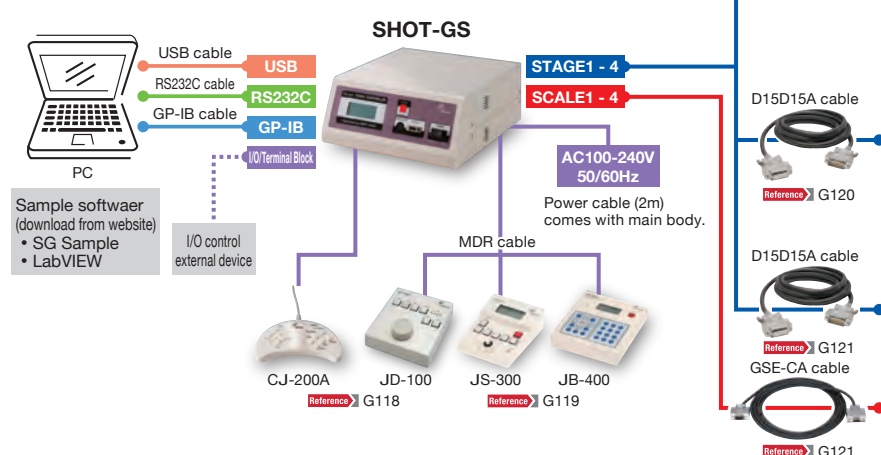
Stepping Motor Stage



Stages with built in Glass-scale Encoder



SHOT-302GS/304GS System Chart



Application Systems

Optics & Optical Coatings

Opto-Mechanics

Bases

Manual Stages

Actuators & Adjusters

Motorized Stages

Light Sources & Laser Safety

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Controllers/Drivers

Softwares

Stepping Motor

AC Servo Motor

Cables

Piezo

X Translation

Theta Rotation

Goniometer

Vacuum

Options

40 × 40 mm

60 × 60 mm

80 × 80 mm

85 × 85 mm

100 × 100 mm

120 × 120 mm

Others