# 2 axis Stage Controller | GSC-02

RoHS CE Catalog Code W9044

## Low cost two axis stage controller with built-in 5-phase stepping motor driver.

- Can be operated by computer control using the RS232C interface. Manual and programmed control is available using optional SJT-02 dedicated controller.



### 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)

### Attention

▶The GSC-02 requires an external power supply (24VDC, 2A output). The PAT-001-POW1 (AC adapter) can be purchased with the controller or power can be provided by the end user.

| Part Name | Part Number |
|---|---|
| 2 axis Stage Controller | **GSC-02** |
| Joystick Terminal | **SJT-02** |
| AC Adapter | **PAT-001-POW1** |

### ■Primary Functions

| | |
|---|---|
| Controller Function | ○ |
| Number of Control Axes | 2 |
| Stored Program Control | △ |
| Feedback Control | — |
| Circular Interpolation Control | — |
| Linear Interpolation Control | — |
| Driver Function | Standard |
| Micro-step (Max. Division) | 2 (half step only) |
| Driving Current (A/phase) | 0.3 – 0.8 |

△…Programs can be controlled using SJT-02.

### ■General Specifications

| | |
|---|---|
| Power Voltage | DC24V 2A |
| Power Consumption | 48VA |
| Operating Temperature | 5 – 40°C |
| Storage Temperature | –20 – 60°C |
| Ambient Humidity | 20 – 80%RH (without condensation) |
| External Dimensions (W×H×Dmm) | 180×40×125 |
| Weight (kg) | 0.7 |

### ■Interface

| | |
|---|---|
| GP-IB | — |
| RS232C | ○ |
| USB | — |
| Ethernet | — |

### ■Optional

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

### ■Performance Specifications

| | |
|---|---|
| Coordinate Indication Range | — |
| Max. Travel to Set | 16,777,214 |
| Max. Driving Speed (pps) | 20,000 |
| Min. Driving Speed (pps) | 1 |
| Acceleration/Deceleration Time (ms) | 0 – 1,000 |

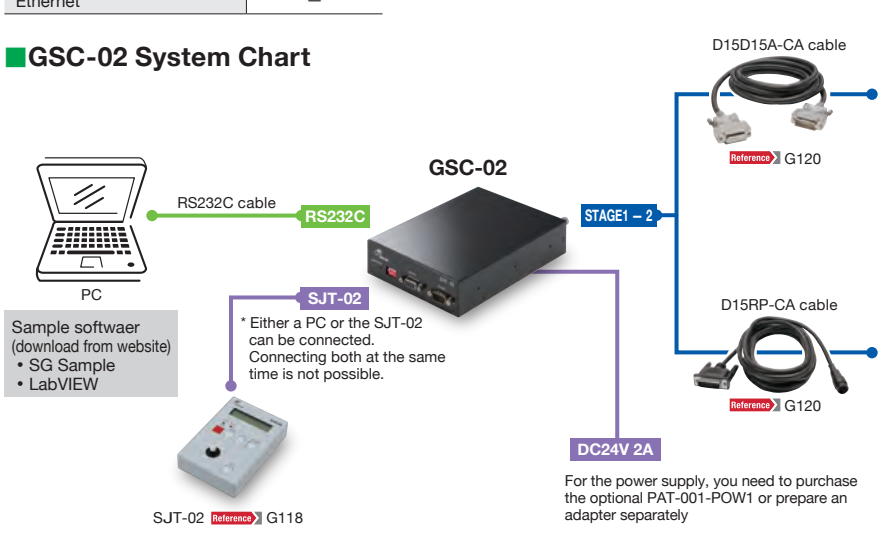
### ■I/O Specification

| | |
|---|---|
| Origin Sensor | ○ |
| Proximity Sensor | ○ |
| CW (+) Limit | ○ |
| CCW (–) Limit | ○ |
| General Purpose Input | — |
| General Purpose Output | — |
| Control Input | — |
| Control Output | — |
| 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 | — |

### ■GSC-02 System Chart




Stepping Motor Stage

