Command Class
C++

SKSampleClass Class is C++ (.H and .Cpp) command class of the main common commands of Sigma Koki Controller. It supports 1 to 4Axis stages. Controllers: GSC01, GSC02, GIP-101, SHOT 302-304GS … .etc.By including SKSampleClass Class in any C++ projects Microsoft VS2015, allows you using simple commands operation in case of Sigma Koki Stages and controllers. Use this SKSampleClass class and customize your program on your own, Sigma Koki are not responsible in case of edit, add and delete. A source program (Form type) is provided with that class to simplify the usability of functions and commands C++ class. Source program provides simple Terminal commands in order to send Strings Command through Serial Port.

Class description:

SKSamplClass (.h and .cpp) Class contains SIGMA KOKI Commands used for almost all controllers but tested for 4 controllers mentioned in description, the class containing serial port resource in order to use it in the other programs.

Note that the class has the most relevant commands as SGWrite, SGread, SGOpen, SGClose related to serial port resource.

The class contains WaitReady() function in order to work with real time response of Stage status.

Commands description:

//Home Return Origin

Content	Function
Home	ReturnOrigin(Axis) Axis: 1～4, Axis = 0 (All axis)

Example:

ReturnOrigin(1)

_Home Origin operation for axis 1.

//Move relativity   (Add Go command to this).

Content	Function
Move (Relativity)	MoveRelativity (Axis, Pulses) Pulses: Positive or Negative

Example:

MoveRelativity (2, -5000)

Correspondent functions are:

_Relative Move of second axis with pulses 5000

Content	Function
Move (Absolute)	MoveAbsolutely (Axis, Pulses) Pulses: could be Positive or Negative Value

Example:

MoveAbsolutly (1, 3000)

Correspondent functions are:

_Relative Move of first axis with pulses 3000

Content	Function
Set Position 0	ResetPosition(Axis)

Content	Function
Return Logi	ReturnLogicalOrigin(Axis, cPos)

Content	Function
Emergency Stop	StopStageEmergency() All Axis

Content	Function
Stop	StopStage(Axis) Axis: 1～4,

```
// Set Speed
```

Content	Function
Speed Set	`Speed(Axis, Slow, Fast, Rate_Renamed)` Axis: 1～4 Slow : 1～500000 Fast : 1～500000 RateA: 1～1000

Example:

```
Speed(1, 2000, 5000, 2000)
```

_Set speed for 1 Axis with related (F:2000,S5000,R200)

```
//Get the status "?"
```

Content	Function
Status ?	`Status3()`

Refer to the class in order to use the other commands

Note that some commands are designated for Controller GIP-101B and cannot be used in the other controllers.

In Source program provided, Load form, select the controller you use (Ex GIP 101B) set as follow:

```
SK_Controller->setControllerType(SKSampleClass::Controller_Type::GIP_101B);
```