# Fiber Alignment System

Application Systems

Machine Vision

### Manual **Positions**

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Optical & Mirror Holder

FA Parts

Measurement &Control

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X Axis

XY Axis

Z Axis **XZ** Axis

XYZ Axis

Rotation

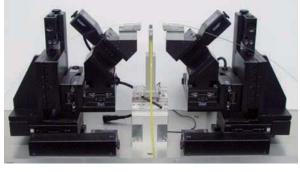
Goniomenters

Multiaxis

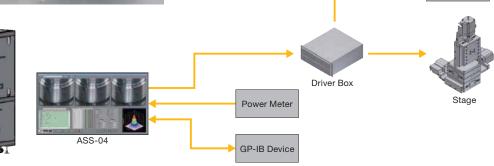
Linear Guide

Combining a large selection of standard hardware components with a customizable software platform, custom alignment systems can be created quickly and cost effectively for a large variety of applications.

### **Automated Optical Fiber Alignment System**



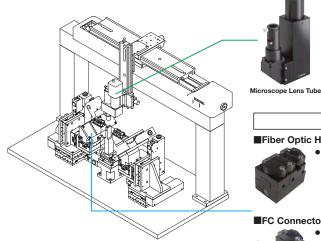
- Using various standard commands easily enables the creation and change of control programs optimally for the user's alignment process.
- Changes to pieces can be flexibly supported.
- A system can be easily constructed by combining GP-IB and I/O devices.
- Data from GP-IB devices can be used for controlling the alignment process.





Software							
Part Number	FASA-04						
Number of Axis	Extensible up to 32 axis						
Program Position Resolution	25nm						
Adaptable Motor Type	Stepping motor / Servo motor						
Operationg Commands	More than 91 different commands available						
Programmable Step Sequence	1000 steps per 1 program.						
Linear Interpolation	Available in arbitrary 2 or 3 axis						
Circular Interpolation	Available in arbitrary 2 axis						
Interface	GP-IB						
A/D Data Input	16CH						

### 12-axis fiber alignment stage unit









SK-N63SCJ-C Color CCD camera

SK-TC202USB-AT

2.0 Mega-pixels USB2.0 camera

I/O Device

#### **Device Holders**

# ■Fiber Optic Holder



 Holds a bare fiber. Three different standard holders are available for different cladding and jacket diameter. An outer jacket or sheath holder can be also attached if required.

#### ■FC Connector Holder



- Holds an FC type connectorattached optical fiber.
- An outer jacket or sheath holder can be also attached if required

#### Ferrule Holder



 Holds a bare fiber. Three different standard holders are available for different cladding and jacket diameter. An outer jacket or sheath holder can be also attached if required.

#### Rotation Fiber Holder



- Holds and rotates a bare polarization preserving fiber.
- Standard configurations are for jacket diameters of 250µm and 900um.

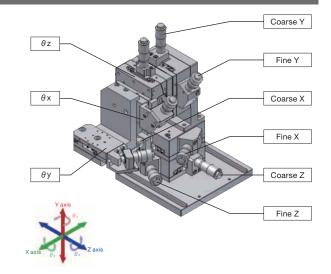
# Fiber Alignment System

### **Manual Optical Fiber Alignment Systems**





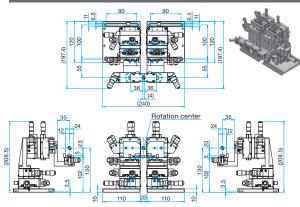
- Manual Coupling unit for Fiber Alignment
- Assembly of high resolution tilt stage and new feature XYZ stage
- Performance-proven TSD series guide is adopted
- Device holders adopted magnetic feature are assured of simple and firm attachment/detachment
- Expansion in application can be made by switching holder when device has been changed.



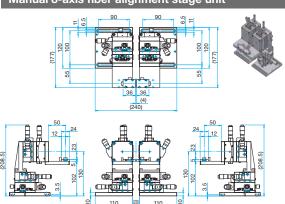
## Manual Fiber Alignment Stage Unit

	Part Number			Х	Υ	Z	θх	θу	θz
12-axis (6-axis)	FASM-080M-L FASM-080M-R	Travel		±6.5mm	±6.5mm	±6.5mm	±2.5°	±2.5°	±5°
		Resolution	Coarse	0.01mm	0.01mm	0.01mm	about 27.8	about 27.8	about 26.8
			Fine	0.0005mm	0.0005mm	0.0005mm			
		Travel		±6.5mm	±6.5mm	±6.5mm	±2.5°	±2.5°	_
	FASM-070M-L FASM-070M-R	Resolution	Coarse	0.01mm	0.01mm	0.01mm	about 27.8	about 27.8	-
			Fine	0.0005mm	0.0005mm	0.0005mm			
8-axis (4-axis)	FASM-060M-L FASM-060M-R	Travel		±6.5mm	±6.5mm	±6.5mm	_	_	±5°
			Coarse	0.01mm	0.01mm	0.01mm	_	-	about 26.8
			Fine	0.0005mm	0.0005mm	0.0005mm			
6-axis (3-axis)	FASM-050M-L FASM-050M-R	Travel		±6.5mm	±6.5mm	±6.5mm	_	_	_
			Coarse	0.01mm	0.01mm	0.01mm	_	-	-
			Fine	0.0005mm	0.0005mm	0.0005mm			

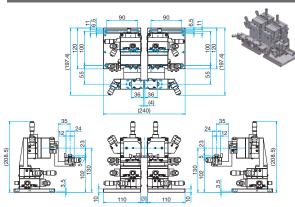
## Manual 12-axis fiber alignment stage unit



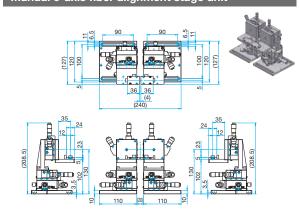
### Manual 8-axis fiber alignment stage unit



## Manual 10-axis fiber alignment stage unit



### Manual 6-axis fiber alignment stage unit



Application Systems

HOURS

Machine Vision

# Manual Positions

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X Axis

XY Axis Z Axis

XZAxis

XYZ Axis

Rotation

Goniomenters /Tilt

Multiaxis

Linear Guide