

# Digital Fiber Sensor FX-410 SERIES

Related Information

- General terms and conditions..... F-7
- Sensor selection guide ..... P.3~
- Glossary of terms / General precautions..... P.1455~ / P.1458~
- Korea's S-mark..... P.1506



[panasonic.net/id/pidsx/global](http://panasonic.net/id/pidsx/global)



## Just “Look” and “Turn”, Simple, easy-to-use fiber sensor

### Incident light intensity and threshold value are displayed simultaneously

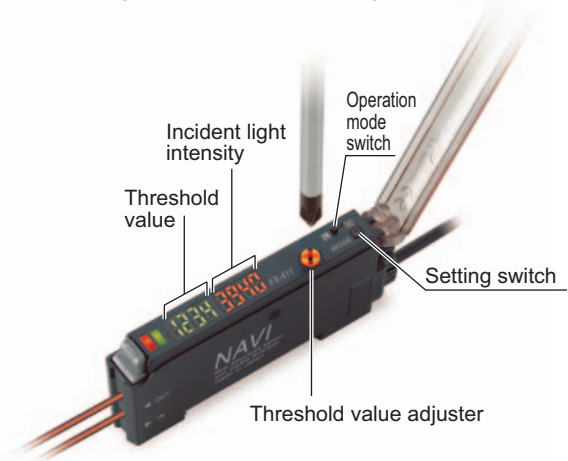
The incident light intensity and threshold value can be checked at the same time with no operations needed. In addition, no complex mode settings are needed when the values are adjusted.

### Easy-to-understand operating panel layout

The threshold value adjuster and operation mode switch are large and easy to see, and they can be operated with the same sensitivity as general-purpose photoelectric sensors. Functions which are not commonly used can be operated using a non-obtrusive setting switch.

### Adjustment variations according to the individual have been eliminated

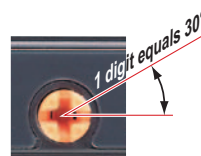
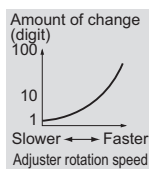
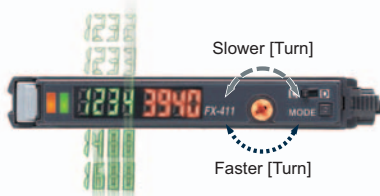
Accurate control of the adjuster threshold values by using numerical values is possible due to the digital display. This allows anybody to perform the same settings.



### Threshold values can be changed smoothly

This sensor uses the R.S.S.\* adjuster with a compact encoder inside. The sensitivity amount changes depending on the rotation speed of the adjuster, so that adjustment can be carried out speedily.

\* Rotation Speed Sensitivity



Adjustment in units of 1 digit is also easy  
No need for the fine changes in force required for photoelectric sensors.

- FIBER SENSORS
- LASER SENSORS
- PHOTOELECTRIC SENSORS
- MICRO PHOTOELECTRIC SENSORS
- AREA SENSORS
- LIGHT CURTAINS / SAFETY COMPONENTS
- PRESSURE / FLOW SENSORS
- INDUCTIVE PROXIMITY SENSORS
- PARTICULAR USE SENSORS
- SENSOR OPTIONS
- SIMPLE WIRE-SAVING UNITS
- WIRE-SAVING SYSTEMS
- MEASUREMENT SENSORS
- STATIC ELECTRICITY PREVENTION DEVICES
- LASER MARKERS
- PLC
- HUMAN MACHINE INTERFACES
- ENERGY CONSUMPTION VISUALIZATION COMPONENTS
- FA COMPONENTS
- MACHINE VISION SYSTEMS
- UV CURING SYSTEMS

- Selection Guide
- Fibers
- Fiber Amplifiers
- FX-500
- FX-100
- FX-300
- FX-410
- FX-311
- FX-301-F7/ FX-301-F

### Large endless adjuster

**New concept**

Standard screwdrivers can be used to turn the adjuster as well as precision screwdrivers. In addition, an “endless” mechanism is used which eliminates the possibility of any damage being caused by turning the adjuster too far.



### FX-412 can be turned by finger!

**New concept**

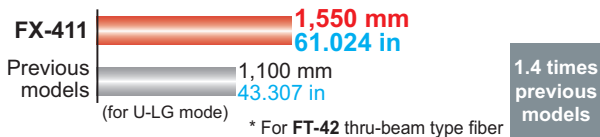
The adjuster can be turned directly by finger, without the need for a screwdriver.



### Beam power greatly increased to give strong performance under adverse environments

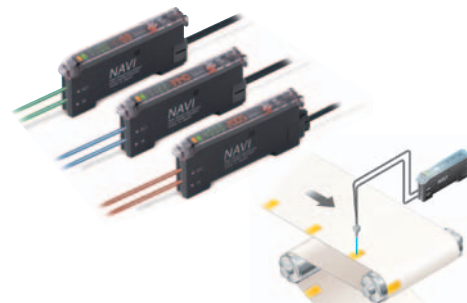
**Red LED type**

The beam power has been greatly increased. This means a longer sensing distance and less trouble from problems such as dust. These sensors have ample performance for workplace needs.



### Three types are available, with red, blue and green light

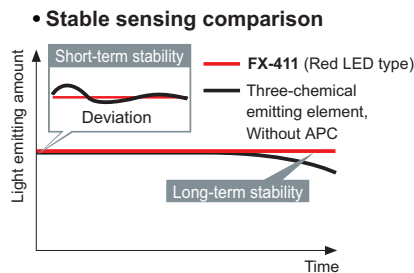
Different sensors can be selected to suit the application.



### Improved stability over both long and short terms

**Red LED type**

The red LED type sensors have a “four-chemical emitting element” which maintains stability of light emissions for long-term operation. Furthermore, all models have an “APC (Auto Power Control) circuit” which improves stability at times such as when the power is turned on. These features improve overall stability compared to previous models.



Color combinations that can be discerned during mark sensing

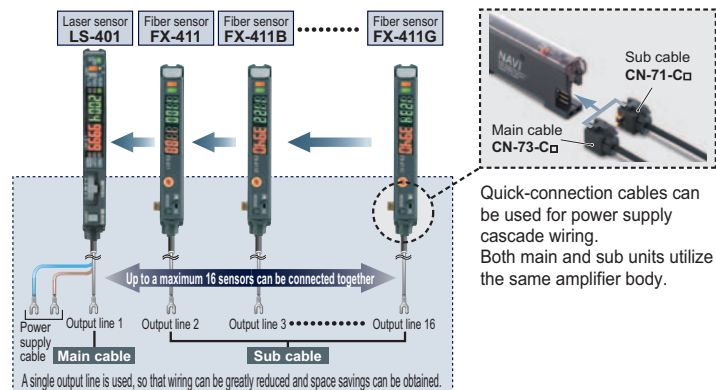
Mark color / Back-ground color	White	Yellow	Orange	Red	Green	Blue	Black
White		●	●	●●	●●●	●●●	●●●
Yellow	●		●	●●	●●●	●●●	●●●
Orange	●	●		●●	●●●	●●●	●●●
Red	●●	●	●●		●	●●	●●
Green	●●●	●●●	●●●	●		●	●
Blue	●●●	●●●	●●●	●●	●		●
Black	●●●	●●●	●●●	●●	●	●	

●:Red LED type ●:Blue LED type ●:Green LED type

### Excellent workability and ease of maintenance

**Connector type**

The same quick-connection cable that is used for sensors such as the FX-300 series of digital fiber sensors is used. This means that they can be used together with other types of sensors such as laser sensors, and the number of power supply cables can be reduced.



Quick-connection cables can be used for power supply cascade wiring. Both main and sub units utilize the same amplifier body.

The sensors can be connected together with other sensors such as the FX-300 series of digital fiber sensors and the GA-311 of inductive proximity sensors. In addition, the SC series of sensor PLC connection units with MIL connector compatibility can also be used to further reduce the amount of wiring.

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Selection Guide

Fibers

Fiber Amplifiers

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FX-100

FX-300

FX-410

FX-311

FX-301-F7/  
FX-301-F