

# PROJECTED BEAM TYPE SMOKE DETECTOR

# FDGJ SERIES

**FEATURES**

- 50% size reduction from previous model
- Wide and high coverage within 100 m distance
- Sensitivity drift compensation for contamination or a slight shift in the optical system
- Light synchronized system to prevent false alarms
- Simple optical axis setting
- Optional remote test switch for easy maintenance
- No special means is required for installation

**DESCRIPTION**

The NOHMI projected beam type smoke detector consists of a Light Transmitter and a Light Receiver, which are installed face to face with a distance of 5 to 100m between them, and initiates a fire alarm upon detecting a predetermined obscuration rate in the beam path along its entire length between them.

The NOHMI projected beam type smoke detector is suitable for protecting buildings with high ceilings (lower than 20m), such as halls, atriums, gymnasiums, warehouses and factories.

Model FDGJ103-D-X has a higher sensitivity than model FDGJ203-D-X and is suited to areas where ceiling height is more than 15m.

**SPECIFICATIONS**

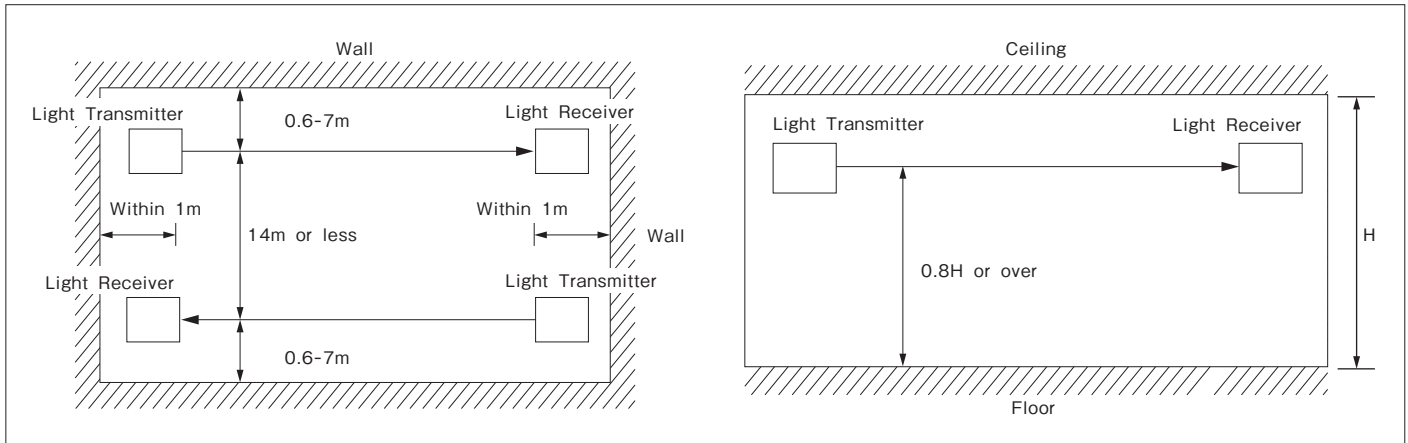
MODEL NO.	FDGJ103-D-X	FDGJ203-D-X	FDGJ002-D-X
TYPE	Conventional		Analog addressable
SENSITIVITY	See the table for monitoring distance v.s. sensitivity		
MONITORING DISTANCE	5 to 100m		
DISTANCE BETWEEN PAIRS OF DETECTORS	14m or less		
MAXIMUM APPLICABLE CEILING HEIGHT	20 m		
VERTICAL POSITION OF BEAM PATH	Higher than 80% of ceiling height		
HORIZONTAL POSITION OF BEAM PATH	Between 0.6m and 7.0m from any portion of the area		
RATED VOLTAGE & CURRENT	Fire alarm signal circuit (L-C) : 24VDC, 75mA Trouble signal circuit (KT1-KT2) : 24VDC, 75mA Remote test circuit (SH1-SH2) : 24VDC, 5mA		S+, -: 24VDC, 200mA
POWER CONSUMPTION	Fire alarm signal circuit (L-C) : 600 $\mu$ A Trouble signal circuit (KT1-KT2) : 1 $\mu$ A		S+, -: Stand by current 2.5mA Alarm current 4.1mA
STATUS INDICATOR	Light Transmitter: Green LED (Power-on) Red LED (Testing) Light Receiver: Red LED (Fire alarm) Yellow LED (Trouble)		
AMBIENT TEMPERATURE	-10 to 50°C		
LIGHT BEAM PATH ANGLE ADJUSTMENT RANGE	Vertical: 20° Horizontal: 20°		
MATERIALS	Cover and front plate: Polycarbonate resin; Base: Steel plate		
MAXIMUM NUMBER OF DEVICES SUPPORTED	2 sets/detector circuit		12 sets/loop(127AD), 25 sets/loop(255AD) ※
WEIGHT	Light Transmitter: approx. 0.75kg Light Receiver: approx. 0.75kg		
DIMENSION	142mm×107mm×95mm		

※Maximum number varies depending on number of total addressable devices

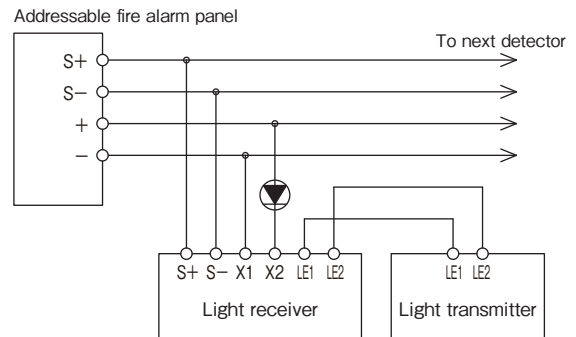
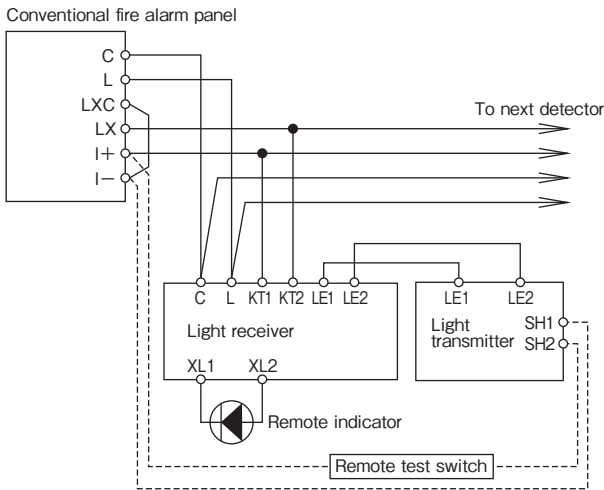
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## ARRANGEMENT PLAN FOR DETECTOR INSTALLATION



## TYPICAL WIRING DIAGRAM(Refer to specification drawing for details.)



## MONITORING DISTANCE V.S. SENSITIVITY

Monitoring distance (m)	Monitoring distance switch setting position	Sensitivity		
		FDGJ103-D-X	FDGJ203-D-X	FDGJ002-D-X
5 to 20	Short	20%	30%	5~45%
20 to 40	Medium	30%	50%	10~60%
40 to 100	Long	50%	70%	20~80%

## SUPPLEMENTARY PRODUCT

Description	Model No.	Note
Tool box	FXG012C	Tools for testing and adjustment
Ceiling mounting fixture	ZBD-TS	
Blind cover	ZBDJ001-C	For ZBD-TS
Protection guard	FZP014	For wall mounting
Remote test switch	Surface mtg.	FTC012-1
	Recess mtg.	FTC052-1

## NOTE

- The information contained herein does not purport to cover all the details or variations of the equipment described, nor to provide for every possible contingency that may be met in connection with its installation, operation or maintenance.
- Specifications are subject to change without notice. Contact Nohmi before relying on the information.
- Actual performance is based on proper application of the product by a qualified professional.
- Should further information be required or should particular concerns arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to Nohmi or your nearest distributor.

**NOHMI**  
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