

# INSTRUCTION MANUAL

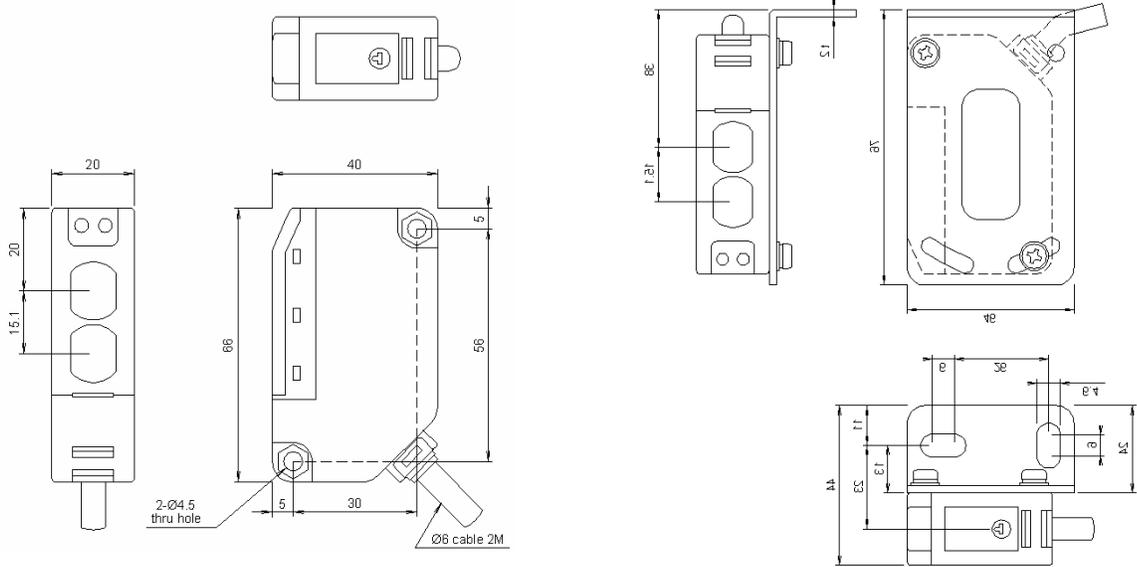
## Multiple Voltage Photoelectric Beam Sensor NIR



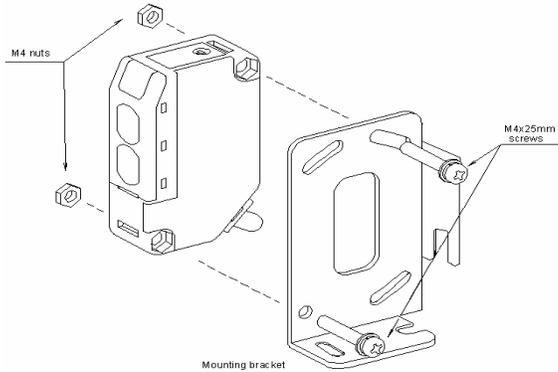
### 1. SPECIFICATIONS

Detection type	Retro-reflective		
	Long-range		
Model No.	Light-on	<b>NIRs2x-1FRLM-73</b>	<b>Fail Safe</b>
Sensing range	0.1~10m ( 0.3 ~ 31ft)		
Supply voltage	DC 12~240V +/- 10% or AC 24 ~240V +/- 10%		
Response time	10ms max.		
Emitting element	IR LED		
Operation indicator	Red LED (turn on when output is in the ON state)		
Stable operation indicator	Yellow LED		
Control output	Relay Contact 1c Switching capacity :AC 125V 0.6A, DC 110V 0.6A DC 30V 2A (Resistive load)		
Environmental protection	IP66 (IEC)		
Ambient temperature	-20 to +55°C		

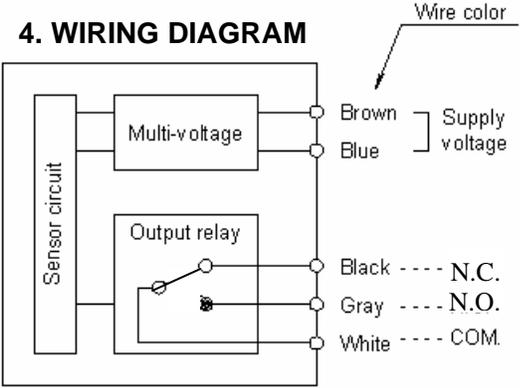
### 2. DIMENSIONS (Unit: mm)



### 3. INSTALLATION



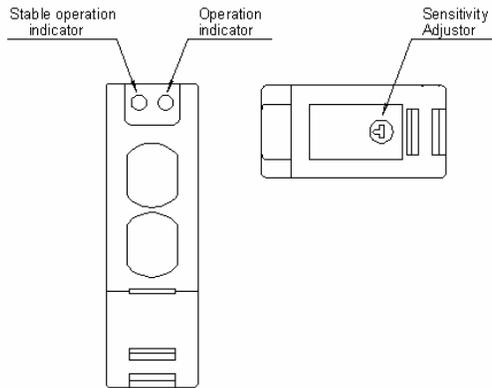
### 4. WIRING DIAGRAM



**This configuration shows the output when unit is aligned and powered.**

## 5. ADJUSTMENT

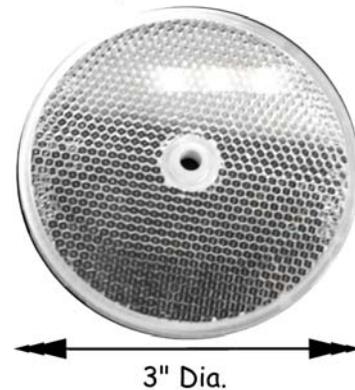
### 5.1 Adjustment panel



### 5.2 Sensitivity adjustment

①	 Min. Max.	Turn the adjustor to extreme "Min".
②	 Min. Max.	Turn the sensitivity adjustor clockwise slowly and confirm the position "A" where stable indicator glows.
③	 Min. Max.	Set the detectable object and turn the sensitivity adjustor clockwise slowly until position B where stable indicator glows.
④	 Optimum position Min. Max.	Position C midway between A and B is the optimum sensing position.

## Reflector-O



## 6. CAUTIONS

- Check voltage fluctuation so that it does not exceed the rated value.
- Be careful not to exceed the rated output load capacity.
- When a switching regulator is to be used with a power source of the sensor, be sure to ground the frame ground terminal to an actual ground.
- Do not use the sensor in the transient state of 50ms at power on.
- Avoid wiring together with high voltage or power line in order to prevent sensor from inductive interference.
- Avoid placement where the sensor will be directly exposed to direct fluorescent lamps with rapid-starters or high frequency starters.
- Avoid installing the sensor at the location where dust, dirt, water, and oil is present. Also put the sensor far away from vibration or shock to prevent malfunction.

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