



Photoelectric Sensor D SERIES

DM-18T□□

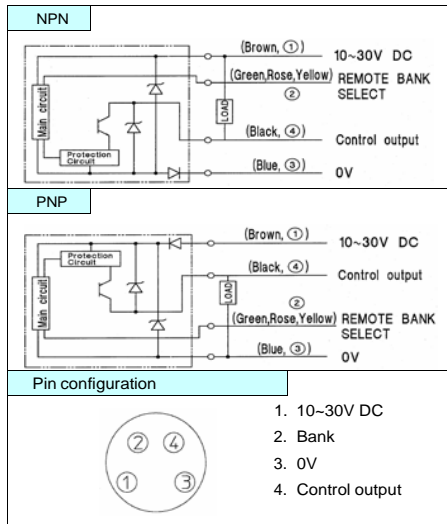
INSTRUCTION MANUAL

- Confirm if the item meets your needs.
- Before the use, you should first thoroughly read this manual and operate correctly as mentioned.
- You should keep this manual at hand for proper use.

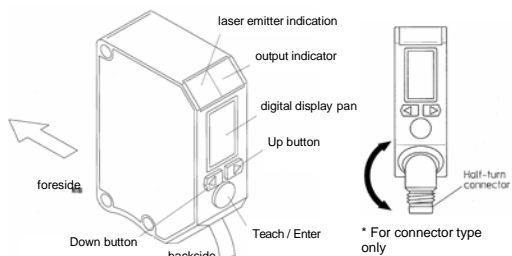
Specification

Type	Cable type DM-18T (N,P)	M8 Connector type DM-18TC (N,P)
Scanning range	18mm ± 2mm	
Supply voltage	DC10 ~ 30V including 10% ripple (P-P)	
Current consumption	40mA max.	
Response time	Mark mode: 0.25/0.5/1.2ms selectable	Color mode: 0.8/1.6/4ms selectable
Timer	Off delay / On delay / One shot delay (10msec increment : 0-1,000msec, 1sec increment for 1-10sec)	
Light source	R (634nm) / G (517nm) / B (469nm)	
Indicator	Mark mode: 1 color (selected by teaching) Color mode: RGB automatic selection	
Digital indicator	7 segment, 3 digit LED Green: Bank No. Red: Function, Status	
Control output	NPN/PNP Open collector 100mA max./ DC30V	
Operation mode	Light ON / Dark ON selectable	
Teaching	Mark mode: 2 point teach / Auto teach Color mode: 1 point teach	
Bank	8 bank	
Protection category/ material	IEC IP67 / Housing : heat-resistant ABS (antibacterial) Front cover : PMMA Button : TEEE	
Weight	Cable type: about 75g / Connector type: about 20g	

Input/Output Circuit Design



Parts Name



Turn the connector as Black Arrow indicates, otherwise you will damage the connector. The damage will be unreparable.

Status Indicator

	Color mode	Mark mode
RUN mode	Indicates matching level compare to teaching color.	Indicates amount of incoming light
Thresh level adjust mode	Indicate thresh level. After teaching, thresh level is 80.	Indicate thresh level. After teaching, thresh level is 50.
Function select mode	Indicate selectable function.	

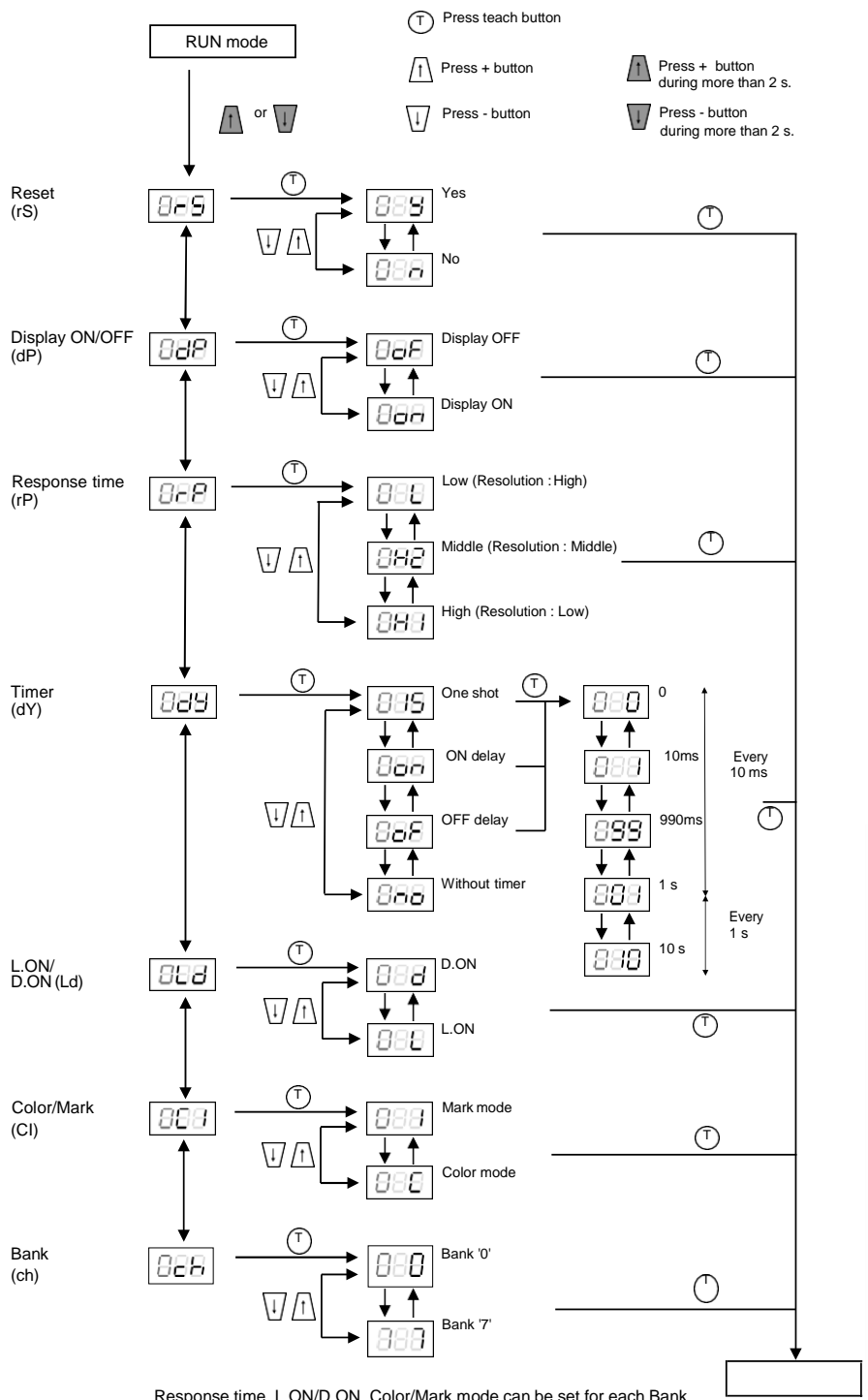
Warnings

For proper use

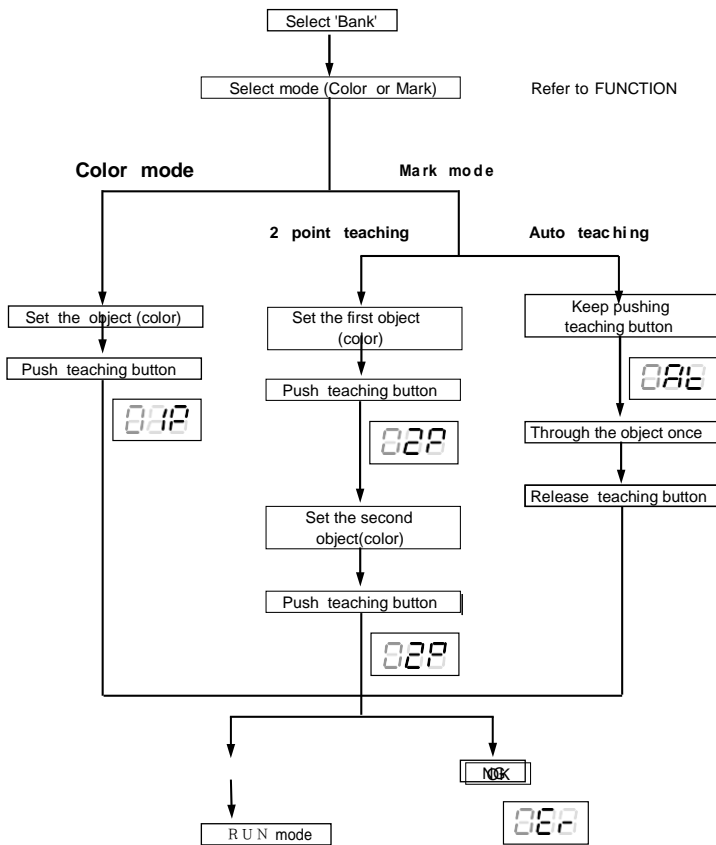
- Warm-up period (approx. 100 msec) must be secured.
- Should avoid using the sensor outside or at the place where receiver is influenced by environmental illuminance directly.
- Gaps in indicated values and detection features are possible due to dispersion.
- Use of controls or adjustments or performance of procedures other than the specified herein may result in hazardous radiation exposure.

! Must not use this item as safety equipment for the purpose of human body protection.

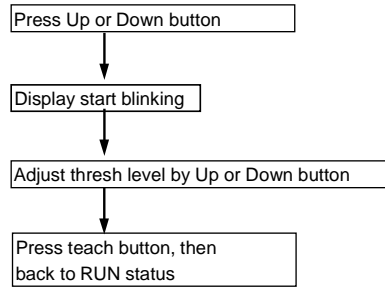
Functions



Teaching



Manual Adjustment of Threshold



If you don't press the Teach button, it will go back to RUN after 10 seconds.

Remote Bank Selection

Cable type

Bank No.	Green	Rose	Yellow
0	0	0	0
1	0	0	1
2	0	1	0
3	0	1	1
4	1	0	0
5	1	0	1
6	1	1	0
7	1	1	1

Connector type

Bank No.	No. 2 pin
0	0
1	1

Connector type can select only 1 and 2 by remote selection. (Function select by button is 8 banks.)

0	NPN	Open or connect to +V
	PNP	Open or connect to 0V
1	NPN	Connect to 0V
	PNP	Connect to +V

L.ON / D. ON

Color mode

L.ON Output is active when matched
D.ON Output is active when un-matched

Mark mode

L.ON Output is active for high reflection
D.ON Output is active for low reflection

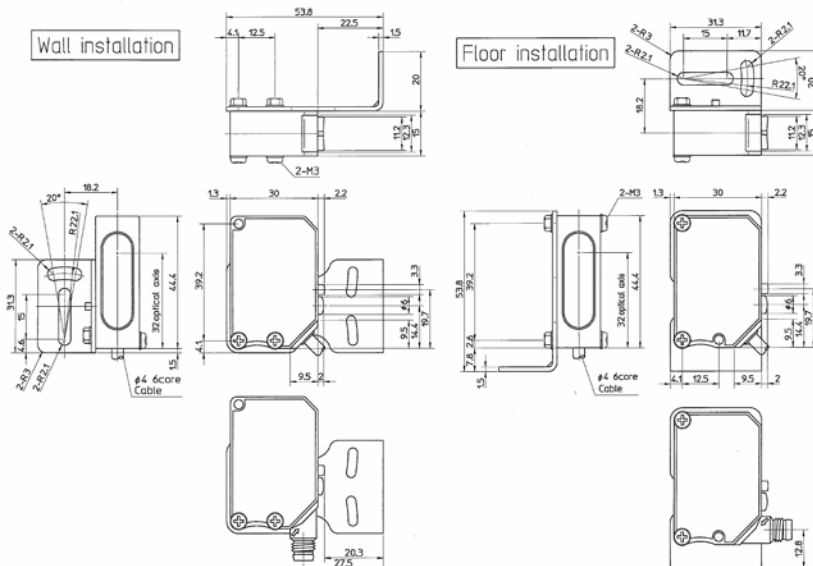
When 2 point teach, the 1st selected color will be ON.

Key lock

Press both Up and Down button simultaneously for more than 2 sec. (Same procedure for unlock.)

Dimensions

Unit: mm



● Specifications and equipment are subject to change without any obligations on the part of manufacture.

● For more information, questions and comments regarding products, please contact us below.

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