

Instruction manual

Thank you for purchasing. We hope you are satisfied with its performance. Please read this manual carefully and keep it for future reference.

> Indicates a possible hazard that may result in death, serious injury, WARNINGS or serious property damage if the product is used without observing the stated instructions.

Mandatory Requirements Warning

• This product is not an explosion proof construction. Do not use the product under flammable, explosive gas or liquid environment.

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Never use these products as sensing devices for personnel protection. Doing so could lead to serious injury or death. These sensors do not include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition. Please consult our distributors about safety products which meet OSHA, ANSI and IEC standards for personnel protection.

Warning Safety Precautions

It is dangerous to wire or attach/remove the connector while the power is on. Make sure to turn off the power before operation.

- Installing in the following places may result in malfunction:
- 1. A dusty or steamy place

<u>/i/</u>

- 2. A place generating corrosive gas 3. A place directly receiving scattering water or oil.
- 4. A place suffered from heavy vibration or impact.

The product is not designed for outdoor use.

- Do not use the sensor in a transient state at power on (Approx. 15min. Warm up period)
- Do not wire with the high voltage cable or the power lines. Failure to do this will cause malfunction by induction or damage.
- Do not use the product in water.

Operate within the rated range.

•Don't bend the cable when the temperature of the cable or atmosphere is below freezing.

Wipe off dirt on the emitting/receiving parts to maintain correct detection. Also, avoid direct impact on the product.

Included items

Please confirm following items are included in the package.

• CDA- 🗌 This instruction manual



Specifications

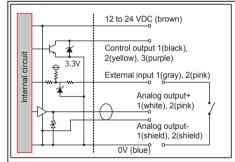
Model		Master		Slave	
		CDA-M	CDA-DM	CDA-S	
Mounting		35mm DIN rail			
Sensor head	Max. number	2 units			
	Connector	M8, 4 pin connector			
Display	X, Y Pixels	X=128, Y=96 pixels			
	Indicator	Power indicator: Red / Green, Output indicator: Orange			
Analog Output		Current type: $4 \sim 20$ mA, Max. load resistance: 300Ω Voltage type: $0 \sim 10V$			
1/0	Ext. Input	2 inputs	_	2 inputs	
	Control Output	3 NPN/PNP Open collector outputs, 30VDC 100mA Max. (Residual voltage 1.8V Max.)			
Communication I/F		RS-485 (Max. length 10m)			
Power supply		DC12~24V ± 10% (%)			
Current consumption		100mA Max./12VDC			
Protection circuit		Reverse connection protection			
Protection category		IP50			
Operating Temp/ Humid.		-20 ~ 50 $^\circ$ C / 35 ~ 85% RH without freezing or condensation			
Storage Temp/ Humid.		-20 ~ 60 $^\circ$ / 35 ~ 85% RH without freezing or condensation			
Vibration resistance		10 ~ 55Hz, Double amplitude 1.5mm, X,Y,Z for 2 hours			
Shock resistance		500mm/s ² (approx. 50G), X,Y,Z 3 times each			
Material		PC			
Weight		170g			

(※) Power supply of slave (CDA-S) is provided by master

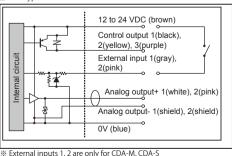
Connection diagram

You can switch between NPN and PNP for input and output interface by settings.

NPN Type

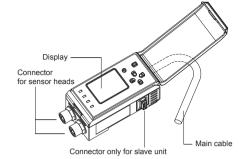






** Analog output 2 is only for CDA-DM

Names of parts

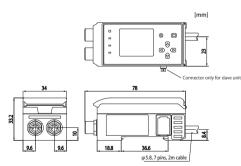






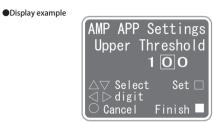
Indicator		Description
Power indicator	Green or Red	Green ON: Running in normal mode Green blinking: Display is eco-mode Red ON: It has some Errors
Out 1 indicator	Orange	Orange ON: Output 1 is ON
Out 2 indicator	Orange	Orange ON: Output 2 is ON
Out 3 indicator	Orange	Orange ON: Output 3 is ON

Dimensions



Functions of buttons

Buttons Shape Name On the display Function Mainly "Set" \square by clicking Button A Mainly "Finish" by pressing hold Mainly "Cancel" \bigcirc Button B Up/Down of parameter. $\left[\Delta \right]$ (▽) $\wedge \nabla$ Cursor selecting parameter Keys Selectina menu (d) $\overline{\square}$ $\triangleleft \triangleright$



* It will show Language selecting menu for the 1st time of power up. Select by the cursor keys $\triangle \nabla$, then set by button \Box (button A).

Other functions

Language selecting menu

To go to the Language selecting menu, power up while pressing hold the button (button B)

Key lock / Releasing lock

While the mode is Measurement mode or Measurement result display mode, by pressing the button \bigcirc (button B) for more than 2 seconds, then buttons and keys will be locked. It will show "Key lock" at the bottom of the display.

From "Key lock" status, press hold the button () (button B) for more than 2 seconds, then it will release the buttons and keys.

- Specifications and equipment are subject to change without any prior notice.
- For more information, questions and comments regarding products, please contact us below.



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