

MIERUZZO SERIES MANUAL

MIERUZZO ANDON SENSOR Instruction Manual M13-215

Thank you for purchasing our product, M13-215.

Please confirm that you have the correct device by checking the product label.

Please read this instruction manual carefully before using this device to ensure correct usage.

Please keep this instruction manual for future reference.

⚠ ATTENTION

- Do not use this device near machines that emit strong electromagnetic fields or object that store static electricity.
- Do not drop or subject this device to strong impact.
- Do not use or store this device where it will be exposed to water or in places with wet conditions.
- Do not use or store this device where it can be exposed to direct sunlight, dust, high temperature and humidity.
- Do not attempt to disassemble or modify this device.
- Do not use organic solvents such as thinners, etc., for they will damage the external finish.
- Internal circuit may be destroyed if a voltage outside the rated voltage is applied.



Please note that misuse of this device may lead to injury to the user or damage to the device. Please observe all safety precautions and warnings in this instruction manual.

● Customer Service

LINE SEIKI CO., LTD.

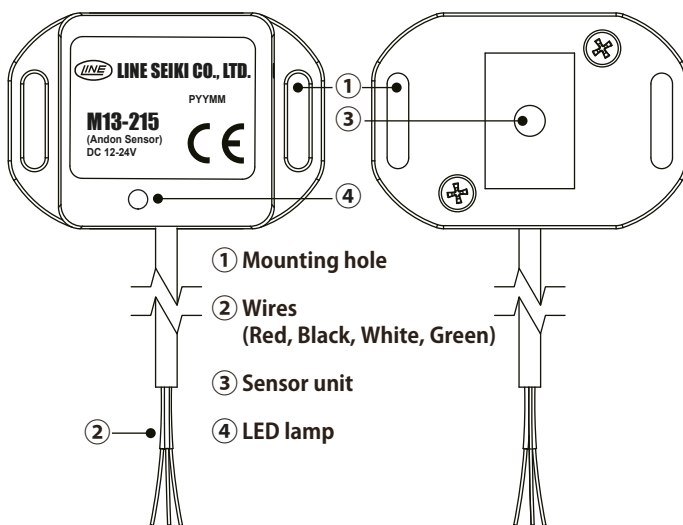
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■ INTRODUCTION

Mieruzzo Andon Sensor (M13-215) is an industrial sensor accessory to Mieruzzo Event Logger (M13-101) and other devices accepting open-collector input with switching function. The sensor detects the status of tower lights.

LED indicator lights up when the tower light is ON.

■ LABELS



- ① Mounting hole
- ② Wires (Red, Black, White, Green)
- ③ Sensor unit
- ④ LED lamp

■ POWER SUPPLY

The unit is designed to operate at 12-24VDC.

Please connect the red wire of the sensor to 12-24VDC and the black wire to GND.

- Wire (RED) : 12-24VDC
- Wire (BLACK) : GND
- Wire (WHITE) : OUT (Open-collector output)
- Wire (GREEN) : BLINK (Open-collector output)

■ OPERATION

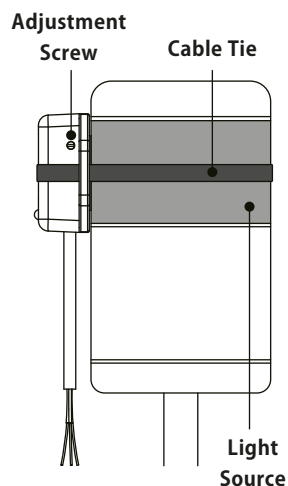
● Installation

The four wires (Red: 12-24VDC, Black: GND, White: OUT, Green: BLINK) should be connected respectively.

The Mieruzzo Andon Sensor should be mounted directly on the tower light using a cable tie on the mounting holes. The sensor hole should be facing the light source.

Ensure that the sensor hole is aligned with the light source.

(After sensor sensitivity is set, the LED indicator should light up whenever the tower light is ON. Refer to **Sensitivity Adjustment** section for instructions on setting the sensor sensitivity.)



● Behavior

OUT goes ON at 1000ms after the TOWER LIGHT turns ON.

OUT goes OFF when TOWER LIGHT turns OFF.

t_{D1} = Turn ON delay time, approx. 1000ms

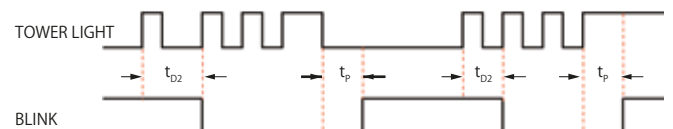


BLINK goes ON a period after the TOWER LIGHT starts blinking.

BLINK goes OFF when the TOWER LIGHT ON or OFF duration is longer than 1000ms.

t_{D2} = Turn ON delay time, 1/(frequency in Hz)

t_p = Turn OFF delay time, approx. 1000ms



*LED indicator lights up when the tower light is ON.

● Sensitivity Adjustment

The sensor sensitivity can be adjusted by turning the adjustment screw on the side using a flathead screwdriver.

- ① If the output is ON when the signal light of the target is OFF, turn the adjustment screw *clockwise* until the output becomes OFF.
- ② If the output is OFF when the signal light of the target is ON, turn the adjustment screw *counterclockwise* until the output becomes ON.

■ SPECIFICATIONS

Power Supply	12-24VDC
Power Consumption	230mW Max.
Output Mode	Out, Blink
Output Voltage	NPN Open-collector (25VDC, 100mA)
Blinking Rate (tower light)	0.5Hz - 4Hz
Minimum Detection	100ms
Connection	4-core wire(1500mm, AWG24)
Sensor Sensitivity(Angle)	14° Max.
Sensor Sensitivity(Wavelength)	350nm ~ 970nm
Operating Humidity	35~85%RH (Non-condensing)
Operating Temperature	0~50°C (Non-freezing)
Storage Temperature	-10~50°C (Non-freezing)
Weight	Approx. 50g
Accessories	Instruction Manual x 1, Cable-tie x 1
Compliance	CE, RoHS