maxlogic & mavigard fire and gas detection systems

SALES SUPPORT DOCUMENT

ML-2170 / ML-1170 / ML-1170.SCI

MAXLOGIC CONVENTIONAL / INTELLIGENT ADDRESSABLE BEAM TYPE SMOKE DETECTOR / SHORT CIRCUIT ISOLATOR



Maxlogic beam type smoke detector consists of 2 parts as a receiver and transmitter. Should be mounted as facing each other between the distance of 5-100 m. The detector works on the principle of light obscuration. In normal condition light produced by the transmitter unit falls on the photosensitive element. The transmitter unit is calibrated to a preset sensitivity level based on a percentage of total obscuration. It gives fault signal If this percentage of total obscuration is less than or equal to determined alarm level in 6-8 secs. It gives fault signal or fire alarm depends on the user choice. Detector gives fault alarm if there is more than 90% sudden obscuration of the light.

PRODUCT FEATURES

- 5-100 m operating distance
- Protect against the fire around 1500 m² protection area
- Compatible with EN 54-12 / EN 54-17
- Short circuit isolator featured model option
- 3 sensitivity levels
- 2 digit numerical screen for easy commissioning
- LED indicators for operating, fault and fire conditions

TECHNICAL SPECIFICATIONS

Operating Environment	Indoor environments
Detection Principle	Light obscuration
Operating Distance	5-100 m
Alarm Levels	%25 / 1,25 db %35 / 1,87 db %45 / 2,6 db
Alarm Response Time	6-8 sec.
The Largest Angular Fault	+/- 0,5°
Operating Voltage	20V-30V DC
Quiescence Current	Reciever:50 mA Transmitter:20 mA
Alarm Current	Reciever:60 mA
Operating Temperature	(-10°C) - (+55°C)
Storage Temperature	(-30°C) - (+60°C)
Max. Humidity	%95 (non-condensing)
Dimensions	160 x 192 x 109 mm
Weight	Receiver: 830 gr, Transmitter: 800 gr.
Color	White

BUTTONS

Cover Key

Both receiver and transmitter have cover key. Cover closing information is sent by cover key in transmitter. And IR led starts to impact signal. Installation is started by cover closing in receiver.

Menu Buttons

Menu buttons are located on receiver. It provides to do menu settings. Up: It provides to pass to next feature and increase the value in feature. Down: It provides to pass to previous feature and reduce the value in feature. OK: It provides into the feature value tab and install the value.

Button Location B1 Up Sw1 Button OK Button ON / OFF Down Switch Position Button _ _ _ _ - -**Cover Key Menu Buttons**

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INDICATORS

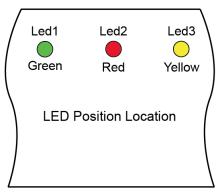
External Indicators

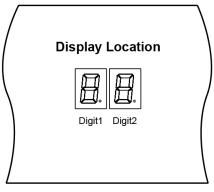
Green LED: Both receiver and transmitter have this LED. It shows that detector is energized. **Red LED:** Only receiver has this. It shows fire alarm signal.

Yellow LED: Both receiver and transmitter have this LED. It shows fault condition. In addition it shows that calibration is done.

Internal Indicator

2x7 Segment Display





Indicator LEDs

Display Screen

MODELS

ML-2170	Maxlogic Conventional Beam Type Smoke Detector	
ML-1170	Maxlogic Intelligent Addressable Beam Type Smoke Detector	
ML-1170.SCI	Maxlogic Intelligent Addressable Beam Type Smoke Detector with Short	
	Circuit Isolator	

ACCESSORIES AND OPTIONS

ML-2171	Maxlogic Conv. Beam Type Smoke Detector Receiver
ML-2172	Maxlogic Conv. Beam Type Smoke Detector Transmitter
ML-1171	Maxlogic Intelligent Addressable Beam Type Smoke Det. Receiver
ML-1171.SCI	Maxlogic Intelligent Addressable Beam Type Smoke Det. Receiver with short
	circuit isolator
ML-1172	Maxlogic Intelligent Addressable Beam Type Smoke Det. Transmitter

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SALES SUPPORT DOCUMENT

ML-2173 / ML-1173 / ML-1173.SCI

MAXLOGIC CONVENTIONAL / INTELLIGENT ADDRESSABLE REFLECTIVE BEAM TYPE SMOKE DETECTOR / SHORT CIRCUIT ISOLATOR





Maxlogic beam type smoke detector consists of 2 parts as receiver and transmitter unit and reflector. Transmitter radiates IR with certain frequency and radiated IR is reflected by reflector, reflected IR is collected by receiver, this beam is filtered from other reflected beams. After that beam value is increased until the reference value that is determined in installation process. Measured beam in quiescence condition is compared with reference value. In case of fire, smoke value is increased in beam signal and beam intensity is reduced, receiver detects this intensity reduction. Fire alarm signal is sent and it gives fault signal. If this percentage of total obscuration is less than or equal to determined alarm level in 6-8 secs. It gives fault signal or fire alarm depends on the user choice. Detector gives fault alarm if there is more than 90% sudden obscuration of the light.

PRODUCT FEATURES

- With one reflector 5-35 m. Or with 4 reflector 35-50 m. operating distance
- Protect against the fire around 525 m2 with one reflector
- ML 1173.SCI ML1174.SCI models are included the short circuit isolator features
- Compatible with EN 54-12 / EN54-17
- 3 sensitivity levels
- 2 digit numerical screen for easy commissioning
- LED indicators for operating, fault and fire conditions.

TECHNICAL SPECIFICATIONS

Operating Environment	Indoor environments
Detection Principle	Light obscuration
Operating Distance	5-35 m.
Alarm Levels	%25 / 1,25 db %35 / 1,87 db %45 / 2,6 db
Alarm Response Time	6- 8 sec.
The Largest Angular Fault	Receiver-Transmitter Module: +/- 0,5° Reflector: +/- 5°
Operating Voltage	20V-30V DC
Quiescence Current	50 mA
Alarm Current	60 mA
Operating Temperature	(-10°C) - (+55°C)
Storage Temperature	(-30°C) - (+60°C)
Max. Humidity	%95 (non-condensing)
Dimensions	Receiver-Transmitter Module:160 x 192 x 109 mm Reflector:120 x 100 x 8 mm
Weight	Receiver-Transmitter Module:860 gr Reflector:70 gr
Color	White

BUTTONS

Cover Key

Both receiver and transmitter have cover key. Installation is started by closing the cover. Detector gives fault alarm if the cover is open.

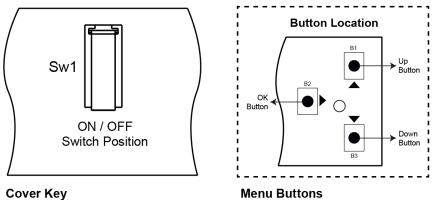
Menu Buttons

It provides to do menu settings.

Up: It provides to pass to next feature and increase the value in feature.

Down: It provides to pass to previous feature and reduce the value in feature.

Ok: It provides into the feature value tab and install the value.



Cover Key

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INDICATORS

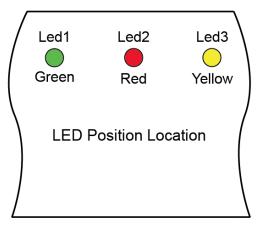
External Indicators

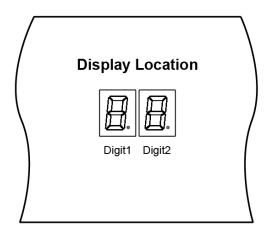
Green LED: Both receiver and transmitter have this LED. It shows that detector is energized. Red LED: It shows fire alarm signal.

Yellow LED: It shows fault condition. In addition it shows that calibration is done.

Internal Indicators

4x7 Segment Display





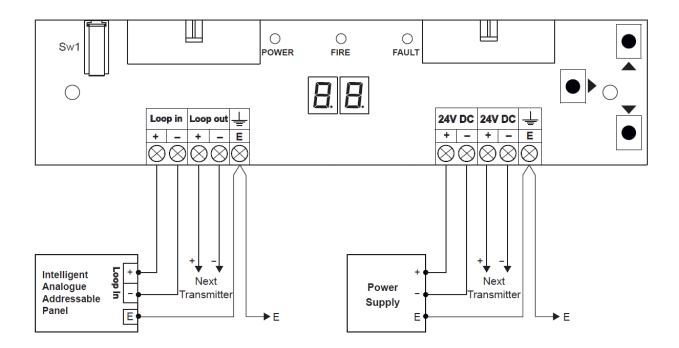
Indicator LEDs

Display Screen

MODELS

ML-2173	Maxlogic Conventional Reflective Beam Type Smoke Detector
ML-1173	Maxlogic Intelligent Addressable Reflective Beam Type Smoke Detector
ML-1173.SCI	Maxlogic Intelligent Addressable Reflective Beam Type Smoke Detector with
	Short Circuit Isolator
ML-0171	Beam Type Smoke Detector Reflector, 1pcs.
ML-0174	Beam Type Smoke Detector Reflector, 4 pcs.

ML-1173 / ML-1173.SCI Intelligent Addressable Reflective Beam Type Smoke Detector Connection Diagram



ML-2173 Conventional Reflective Beam Type Smoke Detector Connection Diagram

