

## DD502 Addressable Heat Detector

### SPECIFICATIONS

Operating Voltage Range:	16 to 30 VDC
Standby Current:	<600µA @ 24 VDC (every 8 seconds with LED blink)
Maximum Alarm Current :	<7 mA @ 24 VDC (Led on)
Operating Humidity Range:	10% to 93% Relative Humidity, Non-condensing
Class:	Class A1
Operating Temperature Range:	-10°C to 50°C
Height:	44 mm (installed with base)
Diameter:	100 mm
Weight:	105 grams



### GENERAL DESCRIPTION

The detector is intelligent sensors that utilize a state-of-the-art thermistor sensing circuit for fast response. These sensors are designed to provide open area protection with 50 foot spacing capability. DD502 heat detector is Class A1 (EN54-5) heat detector. Inside MCU's EEPROM keep the sensor's address that can be set by a portable Address setting device PP201 Device Programmer. The detector can be given 1-250 address id. DD502 Heat Detector can work as Conventional Heat Detector when the address has programmed 255 by PP201 programmer. When preprogrammed as Conventional at factory default the model number is DK231.

### INSTALLATION



The fire detector consists of two main parts: a base and a detector head. The latter consists of a circuit board and heat sensor element. The detector head is fixed on the base by the means of bayonet joints. When the detector head is placed on the base, make sure that the bench mark stands about 10mm before the respective bench mark on the base; then rotate clockwise to fix. The bench marks should fully coincide. The contacting plates are fixed to the base. The connection between the incoming wires and the contact plates is made by the provided screw terminals.

### WIRING

The wiring should be done as shown in figure 1. Proper wire gauges should be used. The installation wires should be color-coded to limit wiring mistakes and ease system troubleshooting. Improper connections will prevent a system from responding properly in the event of a fire.

Remove power from the communication line before installing sensors.

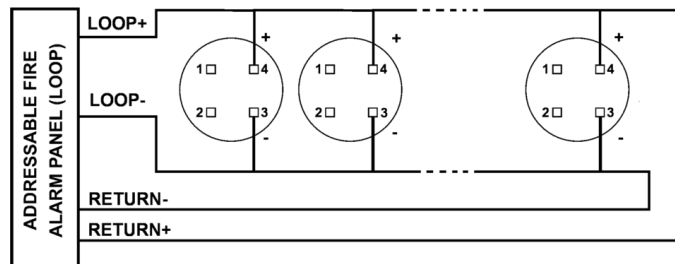


Figure 1- Wiring Connection

1. Wire the sensor base per the wiring diagram
2. Set the desired address by PP201 Device Programmer portable address setting device.
3. Install the sensor into the sensor base. Push the sensor into the base while turning it clockwise to secure it in place.
4. After all sensors have been installed, apply power to the control unit and activate the communication line.
5. Test the sensor(s) as described in the TESTING section of this manual.
6. The Indicator connection has shown in figure 2.

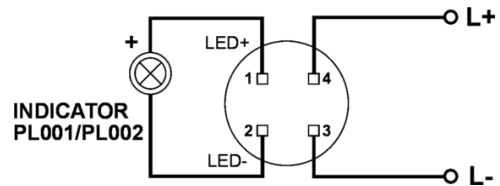


Figure-2 Led Indicator Connection

## TESTING

Before testing, notify the proper authorities that the system is undergoing maintenance, and will temporarily be out of service. Disable the system to prevent unwanted alarms.

All sensors must be tested after installation and periodically thereafter.

The sensor can be tested in the following ways:

Direct Heat Method (Hair dryer of 1000 – 1500 watts)

1. From the side of the detector, direct the heat toward the sensor. Hold the heat source about 15cm away to prevent damage to the cover during testing.
2. The LEDs on the detector should light when the temperature at the detector reaches the alarm set point. If the LEDs fail to light, check the power to the detector and the wiring in the detector base.
3. Reset the detector at the system control panel.

Detectors that fail these tests should be cleaned as described under Maintenance and retested. If the detectors still fail these tests they should be returned for repair.

## MAINTENANCE

**NOTE:** Before cleaning notify the proper authorities that the system is undergoing maintenance, and therefore the system will temporarily be out of service. Disable the loop or system undergoing maintenance to prevent unwanted alarms.

It is recommended that the sensor be removed from its mounting base for easier cleaning and that sensors be cleaned at least once a year. Use a vacuum cleaner to remove dust from the sensing chamber.

## TWO-YEAR LIMITED WARRANTY

We warrant its enclosed heat detector to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. We make no other express warranty for this heat detector. No agent, representative, dealer, or employee of the Company has the authority to increase or alter the obligations or limitations of this Warranty. The Company's obligation of this Warranty shall be limited to the repair or replacement of any part of the smoke detector which is found to be defective in materials or workmanship under normal use and service during the two year period commencing with the date of manufacture. After calling Code Security's technical support number for a Return Authorization number, send defective units postage prepaid to Code Security local representative office. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to repair or replace units which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the Company be liable for any consequential or incidental damages for breach of this or any other Warranty, expressed or implied whatsoever, even if the loss or damage is caused by the Company's negligence or fault. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.