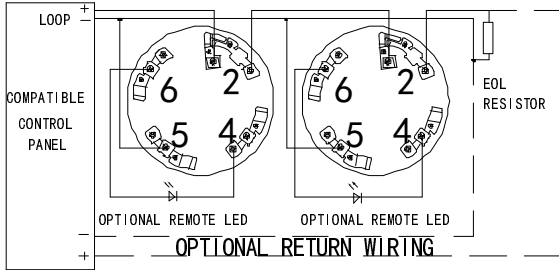


## TYPICAL WIRING DIAGRAM



RE316 2 WIRE DETECTORS WIRING DIAGRAM

**Note:** Don't install terminal 4 and 6 for the models without remote LED output.

**THE RE317 SERIES REQUIRE COMPATIBLE ADDRESSABLE COMMUNICATIONS TO FUNCTION PROPERLY MOREOVER.**

**THE INSTALLATION MUST BE IN COMPLIANCE WITH THE CONTROL PANEL SYSTEM INSTALLATION MANUAL.**

**Panel Compatibility:** AVANI by Ravel.

### WARNING

**TO PREVENT DETECTOR CONTAMINATION AND SUBSEQUENT WARRANTY CANCELLATION, THE SMOKE DETECTOR MUST REMAIN COVERED UNTIL THE AREA IS CLEAN AND DUST FREE.**

### GENERAL DESCRIPTION

RE317 series are the photo electronic smoke detectors and/or ROR & Fixed temperature detectors combined with advanced addressable-analog communications. The DIP switches are provided for setting the detector's address that is RE317D series; To models without dip-switch, the detector is addressed by RE317A programmer. Please refer to RE317A PROGRAMMER USE'S MANUAL.

Model	Dip-switch	Smoke sense	Heat sense	Remote LED
RE317D-SHL	✓	✓	✓	✓
RE317D-SL	✓	✓		✓
RE317D-HL	✓		✓	✓
RE317D-SH	✓	✓	✓	
RE317D-S	✓	✓		
RE317D-H	✓		✓	
RE317A-SHL		✓	✓	✓
RE317A-SL		✓		✓
RE317A-HL			✓	✓
RE317A-SH		✓	✓	
RE317A-S		✓		
RE317A-H			✓	

Note: 1. The base model No. for RE317D(A)-S, RE317D(A)-SH and RE317D(A)-H is P/N RE-312.

The base model No. for RE317D(A)-SL, RE317D(A)-SHL and RE317D(A)-HL is P/N RE-314.

### INSTALLING THE BASE

- To insure proper installation of the detector head to the base, all the wires should be properly addressed at installation:
  - Position all the wires flat against terminals.
  - Fasten the wires away from connector terminals.
- The detectors are intended for mounting on a ceiling or a wall at open area must be in accordance with the fire standard in your country.
- The base of the smoke detector can be mounted directly onto an electrical junction box such as an octagonal (75mm, 90mm or 100mm), a round (75mm), or a square (100mm) box without using any type of mechanical adapter.

### INSTALLING THE HEAD

- Set the desired address via DIP switch on the back of the detector, see ADDRESS SETTING section. (RE317A Series have no window on the back of the detector)
- Align the components as shown in Figure 2.
- Mate the detector head onto the base and twist clockwise to secure it.

- After all detectors have been installed, apply power to the control unit and activate the communication line.
- Test the detector(s) as described in the TESTING section of this manual. **Note: Do not install the detector head until the area is thoroughly cleaned of construction debris, dusts, etc. Please refer to control panel technical information to decide the maximum number of detector installed in the same loop.**

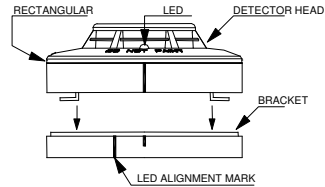


Fig. 2 Mating detector head onto base.

### TESTING

All the alarm signal services, releasing device and extinguisher system should be disengaged during the test period and must be re-engaged immediately at the conclusion of testing.

#### SMOKE SENSOR TESTING

Allow smoke from a cotton wick or a test smoke aerosol to enter the detector-sensing chamber for at least 10 seconds. When sufficient smoke has entered the chamber, the detector will signal an alarm, this being visible by a continuous illumination of the red LED. Make sure to drive smoke out of the chamber before reset LED in order to keep the detector a current sensitivity. If the alarm fails in this step, it indicates a defective unit, which require to be returned to the distributor for servicing.

#### HEAT SENSOR TESTING

The detector to be tested should be subject to a flow of warm air at a temperature of between 65°C and 80°C. (This requirement can be met by some domestic hair dryers).

Proceed as follows:

- Switch on the warm airflow and check that temperature is correct and stable.
- From a distance of several inches, direct the airflow at the guard protecting the thermistor. The detector should alarm within 30 seconds.
- Upon alarm immediately remove the heat source and check that the red LED of the detector is illuminated.
- If detector fails to go into alarm mode within 30 seconds it is too insensitive and needs to be returned to the distributor for servicing.

**NOTE:** After testing, check that the system is set for normal operation and notify the appropriate authorities that the testing operation is complete and the system is active again.

**Smoke detectors are not to be used with detector guards unless the combination has been evaluated and found suitable for that purpose.**

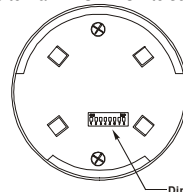
### MAINTENANCE

The recommended minimum requirement for detector maintenance consists of an annual cleaning of dust from the detector head by using a vacuum cleaner cleaning program should be agreed to the individual environment in conformance with the fire standard in your country.

**CAUTION: DO NOT ATTEMPT TO DISASSEMBLY OF THE FACTORY SEALED SMOKE DETECTOR. THIS ASSEMBLY IS SEALED FOR YOUR PROTECTION AND IS NOT INTENDED TO BE OPENED FOR SERVICING BY USERS. OPENING THE DETECTOR HEAD WILL VOID THE WARRANTY.**

### ADDRESS SETTING.

- Please refer to fig.3 to via DIP SWITCH to set detector address.



- The definition of address is depicted as follows.

1.		38.		75.		112.		149.		186.		223.	
2.		39.		76.		113.		150.		187.		224.	
3.		40.		77.		114.		151.		188.		225.	
4.		41.		78.		115.		152.		189.		226.	
5.		42.		79.		116.		153.		190.		227.	
6.		43.		80.		117.		154.		191.		228.	
7.		44.		81.		118.		155.		192.		229.	
8.		45.		82.		119.		156.		193.		230.	
9.		46.		83.		120.		157.		194.		231.	
10.		47.		84.		121.		158.		195.		232.	
11.		48.		85.		122.		159.		196.		233.	
12.		49.		86.		123.		160.		197.		234.	
13.		50.		87.		124.		161.		198.		235.	
14.		51.		88.		125.		162.		199.		236.	
15.		52.		89.		126.		163.		200.		237.	
16.		53.		90.		127.		164.		201.		238.	
17.		54.		91.		128.		165.		202.		239.	
18.		55.		92.		129.		166.		203.		240.	
19.		56.		93.		130.		167.		204.		241.	
20.		57.		94.		131.		168.		205.		242.	
21.		58.		95.		132.		169.		206.		243.	
22.		59.		96.		133.		170.		207.		244.	
23.		60.		97.		134.		171.		208.		245.	
24.		61.		98.		135.		172.		209.		246.	
25.		62.		99.		136.		173.		210.		247.	
26.		63.		100.		137.		174.		211.		248.	
27.		64.		101.		138.		175.		212.		249.	
28.		65.		102.		139.		176.		213.		250.	
29.		66.		103.		140.		177.		214.		251.	
30.		67.		104.		141.		178.		215.		252.	
31.		68.		105.		142.		179.		216.		253.	
32.		69.		106.		143.		180.		217.		254.	
33.		70.		107.		144.		181.		218.		255.	
34.		71.		108.		145.		182.		219.			
35.		72.		109.		146.		183.		220.			
36.		73.		110.		147.		184.		221.			
37.		74.		111.		148.		185.		222.			

**Specifications**

Operating Voltage	17 to 28 VDC	Operating Humidity	10% to 93% Relative, non condensing
Standby Current	500µA @ 24 VDC	Operating Temperature	-10°C to 37.8°C
Max. Alarm Current	5 mA @ 24 VDC (LED ON)	Height	1.8 inches (46 mm) with base
Max. Remote LED output current	2mA@1.5V	Diameter	3.93 inches (100 mm)
Detector Compatibility Identification	WR37	Maximum detectors on one loop	255
Base Compatibility Identification	RB02, RB04		

REFERENCE TO THE TECHNICAL BULLETIN ISSUE NO. NBTB20081017, REV.F

**LIMITED WARRANTY STATEMENT**

**RAVEL ELECTRONICS, Inc.** represents that this product is free from defects in material and workmanship. And it will repair or replace any product or part thereof which proves to be defective in workmanship or material for a period of twelve (12) months from the date of purchase but not to exceed eighteen (18) months after shipment by the manufacturer. For a full description of RAVEL ELECTRONICS PRIVATE LIMITED WARRANTY, which, among other things, limits the duration of warranties of merchantability and fitness for a particular purpose and excludes liability for consequential damages. Please read the entire LIMITED WARRANTY on the RAVEL quotation. Acceptance of order and/or original invoice which will become part of your sales agreement. Please contact RAVEL ELECTRONICS directly for a return merchandise authorization (RMA) number before returning goods to the factory. Shipment must be prepaid and RAVEL will repair or replace your returned detector.

