

# QA Series

## Addressable Fire Alarm Systems

QA series can be in single or 32 loops network configurations. This system is designed for all applications with advantages of easy installation, fast and precise detection and simple maintenance. Friendly HL Fire Tool software saves your time from programming. Reliable QA series definitely meets your demands for safety.



QA16  
Addressable Fire  
Alarm Control Panel



QA01  
Addressable Photoelectric  
Smoke Detector



QA05  
Addressable Combination  
Smoke & Heat Detector



QA06  
Addressable Heat Detector

## Addressable Fire Alarm Control Panel

### Characteristics

- Each loop can connect up to 250 addressable devices. Maximum networking are 32 loops and total addressable points are 8000.
- Large LCD screen (40 x 15 lines) allows more events to be displayed on the same screen.
- Loop device can be set up to be temporarily isolated.
- Individual loop module test feature to save time on panel test.
- On-board Self-test feature for simulating alarm output.
- Easy system programming through PC to panel.
- Events log can store up to 2030 events.
- Specification Optional thermal printer that can print out complete panel status.

### Specifications

| Model                     | QA16   |
|---------------------------|--|
| Power                     | 220V AC 50/60Hz *Others also available                 |
| Battery Capacity          | 24V DC 4Ah   |
| Charging Voltage, Current | 26V DC 100~1000 mA *With auto adjustment function      |
| Zone Voltage, Current     | 26.5V DC 340mA   |
| System Capacity           | 250 devices/1 loop *Expandable for site requirement    |
| Exterior Resistance       | Round-trip under 40Ω                                   |
| Transmitting Method       | Digital series transmitting                            |
| Accumulation Time         | 0~40 seconds *Other options available                  |
| Main Sound                | 85dB @1M   |
| Material                  | 1.6mm steel plate                                      |
| Color                     | Pearl gray   |
| Dimensions (mm) H x W x D | 1~4 loop: 400 x 500 x 130<br>5~8 loop: 600 x 500 x 150 |

### Specifications

| Model               | QA01              | QA05               | QA06              |
|---------------------|-------------------|--------------------|-------------------|
| Address Coding      |                   | Binary             |                   |
| Alarm Current       |                   | DC 26V 6mA         |                   |
| Standby Current     |                   | DC 26V 850μA       |                   |
| Sensitivity Setting |                   | Comply to EN54     |                   |
| Ambient Temperature |                   | 0°C ~ +50°C        |                   |
| Thermal Setting     | N/A               | 58°C               | 58°C              |
| Dimensions(mm)      | 102(Dia.) x 48(H) | 102(Dia.) x 54(H)  | 102(Dia.) x 46(H) |
| Weight              | 130g              | 130g               | 115g              |
| Material            |                   | Fire-proof plastic |                   |
| Color               |                   | White              |                   |

## Addressable Detectors

### Characteristics

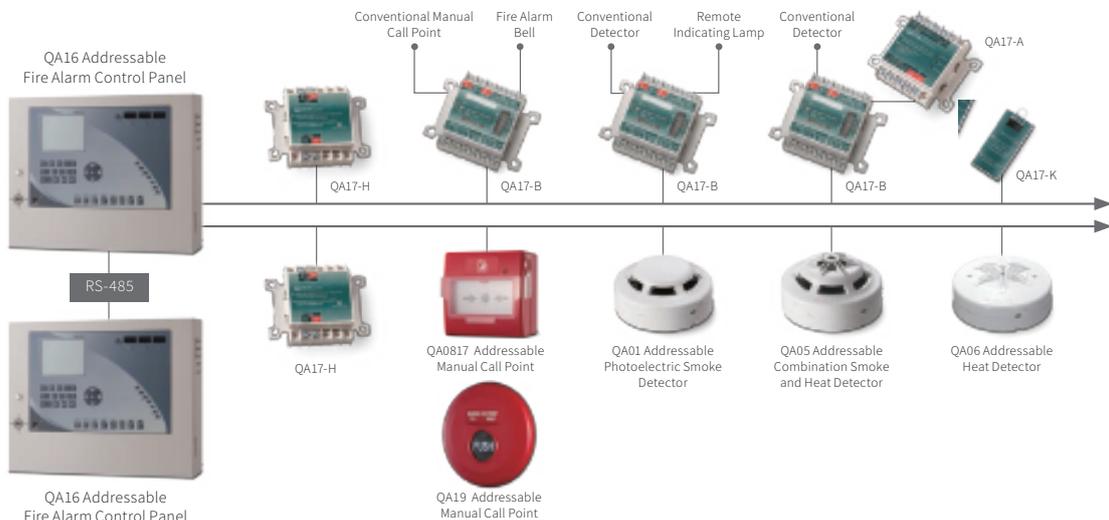
- Latching function helps to identify alarm device clearly and quickly.
- Address coding by dip switch makes the job easier.
- Magnetic test feature makes maintenance easy and simple.
- Non-loosening screws on base terminal for easy installation.
- Detector is made of high endurance, solid and colorfast Fire-proof plastic.
- Detector has passed strict EMC test, which greatly eliminates false alarms caused by interference from nearby sources.
- Dual LEDs for 360-degree visibility.

# QA Series

## Addressable Fire Alarm Systems



..... QA Series Addressable Fire Alarm System Configuration .....



## Module Series

### Characteristics

- Low power consumption in monitoring mode, high stability.
- Easy installation, either single module installation or several modules installed on a special mounting bar. Implanted type gang box is available to suit the decoration design.
- The Module is designed with separate input and output contacts to decrease the difficulty of moving external wiring.
- Control Module QA17-B is designed to control input & output for all kinds of systems. (fire alarm, smoke evacuation, sprinkler, foam , winding door...etc.)
- Output module QA17-A can directly connect with power source. The output voltage from N.O. & N.C. will be the same as input voltage.
- Monitor module QA17-K is designed to monitor security condition, such as water supply, pump action ...etc.

### Specifications

| Model                     | QA17-K   | QA17-B                                 | QA17-A                                   | QA17-H  |
|---------------------------|--|--|--|---|
| Type                      | Monitor Module                                 | Control Module                         | Output Module                            | Isolator Module                               |
| Purpose                   | Confirmation of external signal                | Input & Output for all systems         | Supply higher current such as evacuation | Isolate from control unit when external fault |
| System Connected          | Receive activation signal from external device | Series with conventional detector      | Series with QA17-B                       | Series with all system zone                   |
| Input Source              | Activation signal                              | Loop signal                            | 24VDC / 110VAC / 220VAC                  | Zone short circuit                            |
| Output Contacts/Load      | N/A  | 1 in 2 out COM. N.O. N.C. 1.5A @30V DC | COM. N.O. N.C. 4A @30VDC, 2.5A @ 250VAC  | N/A   |
| EOL Resistor              | 10kΩ   | 10kΩ                                   | N/A                                      | N/A   |
| Address Coding            | Binary   | Binary                                 | N/A                                      | N/A   |
| Ambient Temp.             | 0°C ~ +50°C                                    |  |  |   |
| Material                  | Fire-proof plastic                             |  |  |   |
| Color                     | Green  |  |  |   |
| Dimensions (mm) H x W x D | 55 x 27 x 16                                   |  | 60 x 76 x 31                             |   |

## Addressable Manual Call Points

### Specifications

| Model                | QA19                               | QA0817                       |
|----------------------|------------------------------------|------------------------------|
| Purpose              | Signal will directly sent to panel |                              |
| System Connected     | Control panel zone                 |                              |
| Input Source         | Zone signal                        |                              |
| Output Contacts/Load | N/A                                |                              |
| Address Coding       | Binary                             |                              |
| Operating Voltage    | 26 V DC                            |                              |
| Alarm Current        | 6mA                                |                              |
| Quiescent Current    | 850μA                              |                              |
| Ambient Temperature  | 0°C ~ +50°C                        |                              |
| Material             | Fire-proof plastic                 |                              |
| Color                | Red                                |                              |
| Dimensions(mm)       | 140(Dia.) x 45(H)                  | 87.5(H) x 87.5(W) x 54(D)    |
| Remarks              | -                                  | Protection Cover is optional |

# QA12 & 5-QA12

## Fire Alarm Control Panel



5-QA12



QA12

### Characteristics

- Alarm verification up to 7 seconds for real fire confirmation and avoid false alarm from environment interference.
- Zone test mode to perform alarm and fault functional test.
- Each zone has a separate disable function.
- Fault indications for wire disconnection, unstable AC power, battery short circuit or disconnection and internal PCB unplug.
- 5-QA12 only up to 5 zones, QA12 could up to 80 zones.

### Specifications

| Model                          | 5-QA12                                  | QA12   |
|--------------------------------|---|--|
| Power                          | 220V AC, 50/60Hz *Others also available |  |
| Battery Capacity               | 24V/4Ah                                 |  |
| # of heat detectors connected  | No limit *Except electronic-type        |  |
| # of smoke detectors connected | 30/zone *Horing Lih manufactured        |  |
| End of Line Resistor           | 10kΩ *One per zone                      |  |
| Material                       | 1.2mm steel plate                       |  |
| Color                          | Pearl gray *Others also available       |  |
| Dimensions (mm)<br>H x W x D   | 320 x 250 x 100                         | 10 zone : 450 x 330 x 130<br>20 zone : 550 x 330 x 130<br>30 zone : 680 x 380 x 150<br>40 / 50 zone : 950 x 420 x 150<br>60 ~ 80 zone : 1300 x 420 x 170 |



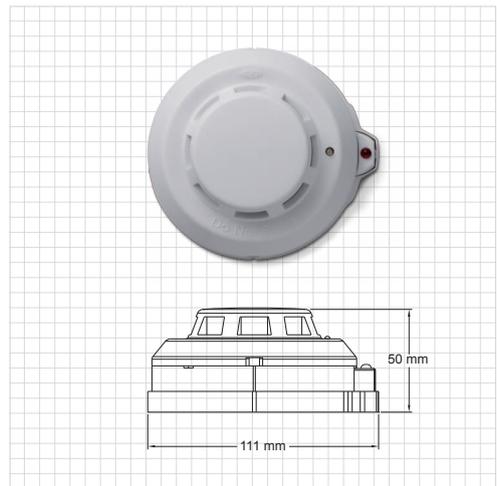
# AHS-871

## Photoelectric Smoke Detector

### Characteristics

- Detector has a monitoring LED that operates about every 16 seconds (flash) during standby status. When there is smoke, the detector will issue fire signal after 16 consecutive confirmations. (every 0.3 second) If any dust causes flashing or an intermittent signal, it will return to normal status after 32 confirmations.
- The coating of terminal contacts meets the Rohs and provides better results on corrosion and conductive.
- Each detector has added specific components that will effectively isolate interference from electromagnetic fields and lightning strike.
- All detectors use high-density steel for the contacting plate material.

Approvals: EN54



| Specifications      |                                      |        |                               |
|---------------------|--------------------------------------|--------|-------------------------------|
| Model               | AHS-871                              |        |                               |
| Type                | 2-wire                               | 3-wire | 4-wire                        |
| Alarm Contact       | N/A                                  | N/A    | 0.8A @30V DC<br>0.4A @125V AC |
| Voltage Range       | 12 ~ 30V DC                          |        |                               |
| Alarm Current       | Max.30mA                             |        |                               |
| Standby Current     | 20 ~ 30µA (Loop response under 75µA) |        |                               |
| Sensitivity Setting | Comply to EN 54                      |        |                               |
| Ambient Temperature | -10°C ~ +55°C                        |        |                               |
| Material            | Fire-proof plastic                   |        |                               |
| Dimensions          | 111mm(Dia.) x 50mm(H)                |        |                               |
| Weight              | About 170g                           |        |                               |
| Color               | White                                |        |                               |

| Effective alert area |                    |
|----------------------|--------------------|
| Building Height      | Area Covered       |
| Under 4M             | 150 M <sup>2</sup> |
| 4 ~ 20M              | 75 M <sup>2</sup>  |



# QA31

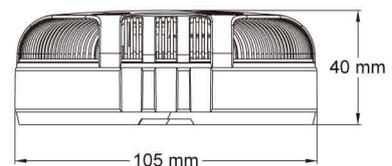
## Single Station Smoke Detector

### Characteristics

- The QA31 features advanced photoelectric technology for precise detection. When smoke is detected or the manual test button is pressed, the buzzer sounds and LED flash.
- Low-Battery Warning: Unit beeps and LED flash intermittently to indicate battery needs replacing.
- Simple test method: Press test button to hear the alarm sound and confirm the unit is in normal condition.
- Easy installation: Install directly to proper location without any wiring.
- It is equipped with 9VDC battery, and optional 110VAC or 220VAC power plug is available.
- Optional relay output : COM. NO. NC.
- Optional series connection wiring can co-activate up to 15 detectors.

### Specifications

|                     |  |
|---------------------|--|
| <b>Model</b>        | <b>QA31</b>                                      |
| Power               | 9V battery                                       |
| Sensitivity Setting | Comply to EN14604                                |
| Indicator           | Standby: flash every 45 seconds                  |
|                     | Alarm: flash and beep continuously               |
|                     | Battery abnormal: beeps and flash intermittently |
| Sound               | 90dB / M and above                               |
| Ambient Temperature | -10°C ~ +55°C                                    |
| Material            | Fire-proof plastic                               |
| Dimensions          | 105mm(Dia.) x 40mm(H)                            |
| Weight              | About 150g                                       |
| Color               | White  |
| Optional Function   | Type 1 : 9V battery                              |
|                     | Type 2 : includes signal transfer COM. N.O. N.C. |
|                     | Type 3 : build-in 110VAC or 220VAC plug          |
|                     | Type 4 : Type 2 + Type 3                         |



### Effective alert area

|                 |                    |
|-----------------|--------------------|
| Building Height | Area Covered       |
| Under 4M        | 150 M <sup>2</sup> |
| 4 ~ 20M         | 75 M <sup>2</sup>  |



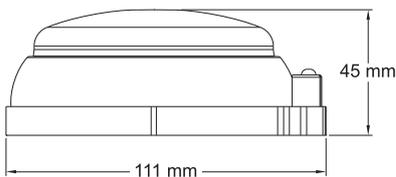
# AHR-871

## Mechanical Rate of Rise Heat Detector



### Characteristics

- Heat-sensing diaphragm can operate for unlimited number of times and is not affected by room temperature. The conducting parts use gold coating to avoid oxidation.
- Uses glass tube to avoid humidity and stabilize the ventilation function. Glass tube also can expel non-fire heat to avoid false alarms.
- The unit is completely sealed; its function is not affected by humidity, dust or insects.
- This detector has passed strict quality control through automatic repetitive testing and been calibrated automatically under stable temperature and humidity conditions. Thus, quality and reliability are consistent from the first detector produced to millionth.



### Specifications

| Model                      | AHR-871               |        |                               |
|----------------------------|-----------------------|--------|-------------------------------|
| Type                       | 2-wire                | 3-wire | 4-wire                        |
| Alarm Contact              | N/A                   | N/A    | 0.8A @30V DC<br>0.4A @125V AC |
| Voltage Range              | 12 ~ 30V DC           |        |                               |
| Alarm Current @24V DC 470Ω | 40mA                  | 40mA   | 35mA                          |
| Alarm Temperature          | Comply to EN54        |        |                               |
| Ambient Temperature        | 0°C ~ +55°C           |        |                               |
| Material                   | Fire-proof plastic    |        |                               |
| Dimensions                 | 111mm(Dia.) x 45mm(H) |        |                               |
| Weight                     | About 130g            |        |                               |
| Color                      | White                 |        |                               |

### Effective alert area

|                     |                   |                   |
|---------------------|-------------------|-------------------|
| Construction/Height | Under 4M          | 4M ~ 8M           |
| Fire-proof Building | 90 M <sup>2</sup> | 45 M <sup>2</sup> |
| Ordinary Building   | 50 M <sup>2</sup> | 30 M <sup>2</sup> |



# AH-9920

## Mechanical Fixed Temperature Heat Detector

### Characteristics

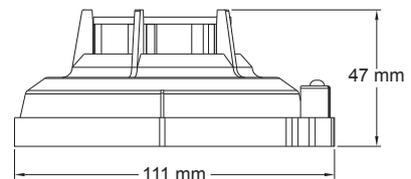
- This detector operates on the temperature differential sensing principle, with a UL approved sensor making mechanical contact. It is made of high quality material, providing excellent contact despite any environmental interference.
- This detector is suitable for locations with high temperatures differentials, such as places (kitchen, restaurant and boiler house) where there is constant use of heat.
- This detector has passed strict quality control and repetitive testing; hence its quality is durable and highly reliable.
- Through its professional design, the heat collector can accelerate its response rate after being heated, and has a protective device to avoid accidental response caused by distortion, bumping and dropping in order to increase the reliable product.
- The unit is completely sealed; its function is not affected by humidity, dust or insects.

### Specifications

| Model                      | AH-9920                  |        |                               |
|----------------------------|--------------------------|--------|-------------------------------|
| Type                       | 2-wire                   | 3-wire | 4-wire                        |
| Alarm Contact              | N/A                      | N/A    | 0.8A @30V DC<br>0.4A @125V AC |
| Thermal Setting            | 70°C or other selections |        |                               |
| Voltage Range              | 12 ~ 30V DC              |        |                               |
| Alarm Current @24V DC 470Ω | 40mA                     | 40mA   | 35mA                          |
| Alarm Temperature          | Comply to EN54           |        |                               |
| Ambient Temperature        | -10°C ~ +55°C            |        |                               |
| Material                   | Fire-proof plastic       |        |                               |
| Dimensions                 | 111mm(Dia.) x 47mm(H)    |        |                               |
| Weight                     | About 100g               |        |                               |
| Color                      | White                    |        |                               |

### Effective alert area

|                     |                   |                   |
|---------------------|-------------------|-------------------|
| Construction/Height | Under 4M          | 4M ~ 8M           |
| Fire-proof Building | 60 M <sup>2</sup> | 30 M <sup>2</sup> |
| Ordinary Building   | 30 M <sup>2</sup> | 15 M <sup>2</sup> |





AH-9717



AH-9717 with base

# AH-9717

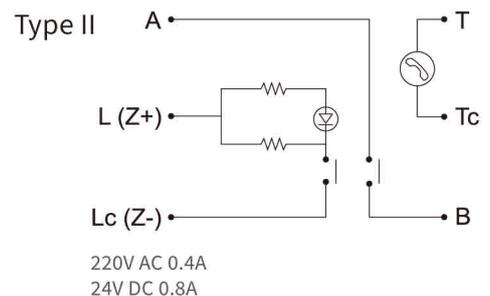
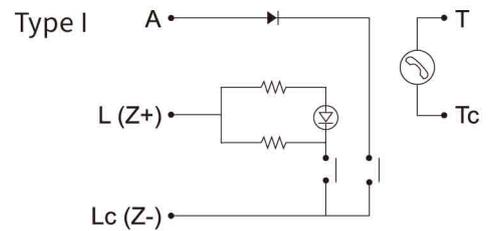
## Manual Call Point

### Features

- Emergency press alarm, immediately activates fire alarm signal.
- Indicator light above fire alarm push-button confirms the alarm signal transfer.
- There are a phone jack and reset button behind the cover cap.
- Type I is simultaneous dual loop, Type II is simultaneous dual signal transfer (refer to diagram below)
- Optional base is available.

### Specifications

| Model             | AH-9717                                     |
|-------------------|---|
| Operating Power   | 24V DC 30mA                                 |
| Operating Contact | Max. 30V DC 500mA                           |
| Sub-function      | Phone jack, confirmation LED, reset button. |
| Material          | Fire-proof plastic                          |
| Dimensions        | 140mm(Dia.) x 45mm(H)                       |
| Weight            | About 160g                                  |



220V AC 0.4A  
24V DC 0.8A



AH-0218

# AH-0218 AH-9719

## Fire Alarm Bell & Indicating Lamp



AH-9719

### AH-0218 Fire Alarm Bell 6"

- High efficiency low current consumption on 24VDC motorized bells.
- Terminals will accept 2.5mm cables.
- Simple installation via multi-fixing base plate for all types of location.
- Fitted with two series diodes for fault monitoring.
- Option of customized discs printed with company name and logo.
- *12VDC bells are also available.*

### AH-9719 Fire Indicating Lamp

- Uses white bulb (or low current LED) and installed inside the red lamp cover.
- When lit, it is clear visible within 10 meters.

#### Specifications

| Model             | AH-0218                                    |
|-------------------|--|
| Dimensions        | ø6" (152mm) x 56mm(H)                      |
| Voltage           | 24V DC                                     |
| Current           | 25mA                                       |
| Sound Output      | 93dB @1M                                   |
| Movement          | Motor, Pinion and striker                  |
| Movement Features | DC Motor, acetal gear wheel, steel striker |
| Gong              | Steel, secured with phillips screw         |
| Base Plate        | Molded black polycarbonate                 |
| Material          | Steel plate                                |
| Weight            | About 850g                                 |

#### Specifications

| Model               | AH-9719                |
|---------------------|------------------------|
| Dimensions          | 90mm(Dia.) x 70mm(H)   |
| Consumption Current | 24V DC 60mA / LED 20mA |
| Bulb                | 30V/2W bulb or LED     |
| Material            | Fire-proof plastic     |
| Weight              | About 70g              |



# NQ618 NQ418

## Fire Alarm Bell



NQ618



NQ418

### Features

- Bell with plastic base, total insulation from electricity and easy installation.
- Motor energized, low power consumption, long operating life.
- Bell shell is made of steel plate, so it will sound loud and clear.
- 12VDC bells are also available.

### Specifications

| Model        | NQ618                  | NQ418                  |
|--------------|------------------------|------------------------|
| Dimensions   | ø6" (152mm) x 58mm (H) | ø4" (100mm) x 52mm (H) |
| Voltage      | 24V DC                 |                        |
| Current      | 28mA                   |                        |
| Sound Output | 90dB @1M               |                        |
| Material     | Steel Plate            |                        |
| Base Plate   | ABS plastic            |                        |
| Weight       | About 810g             | About 375g             |



# AH-01313

## Remote Indicating Lamp



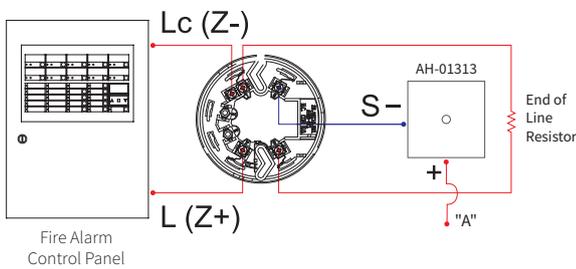
### Features

This unit is designed to ensure that alarm signal can be actually transmitted to all locations. Especially for a closed room, any fire inside can be indicate outside.

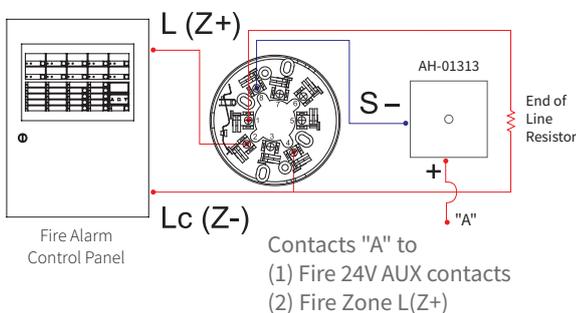
### Characteristics

- Outstanding look from the design of art
- Low current consumption
- High intensity LED for quick identification

#### AHMB-071



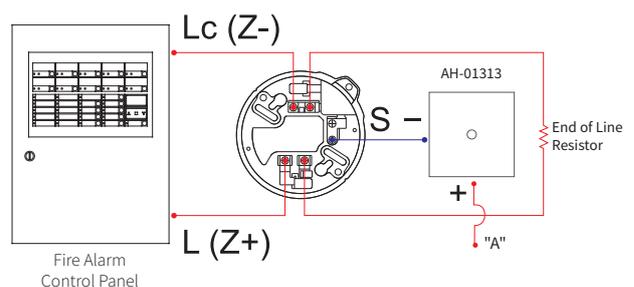
#### AHMB-031



### Specifications

| Model                 | AH-01313                |
|-----------------------|-------------------------|
| Power Source          | 24V DC                  |
| Alarm Current @24V DC | 12mA                    |
| Standby Current       | N/A                     |
| Ambient Temperature   | -10°C ~ +55°C           |
| Material              | Fire-proof plastic      |
| Color                 | White surface/ Red LED  |
| Dimensions            | 70mm(H)x70mm(W)x15mm(D) |
| Weight                | About 32g               |

### Wiring Diagram





# AH-413

## Remote Indicating Lamp

### Features

This unit is designed to ensure that alarm signal can be actually transmitted to all locations. Especially for a closed room, any fire inside can be indicate outside.

### Characteristics

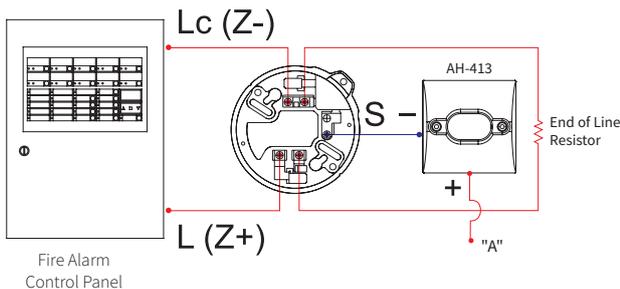
- Outstanding look from the design of art
- Low current consumption
- High intensity LED for quick identification
- Larger indicating lamp
- Applicable for 12VDC and 24VDC
- Flash light is available for optional feature

### Specifications

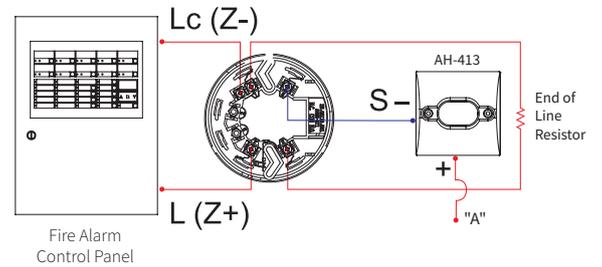
| Model                 | AH-413                  |
|-----------------------|-------------------------|
| Power Source          | 12/24V DC               |
| Alarm Current @24V DC | 15mA                    |
| Standby Current       | N/A                     |
| Ambient Temperature   | -10°C ~ +55°C           |
| Material              | Fire-proof plastic      |
| Color                 | White surface/ Red LED  |
| Dimensions            | 85mm(H)x85mm(W)x23mm(D) |
| Weight                | About 28g               |



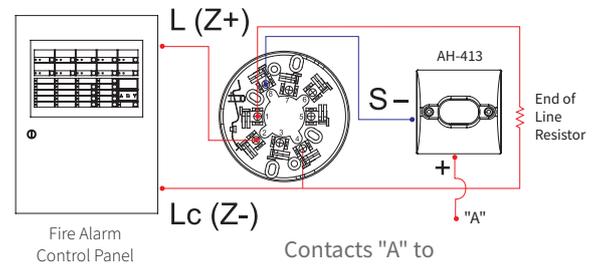
### Wiring Diagram



### AHMB-071



### AHMB-031



Contacts "A" to  
 (1) Fire 24V AUX contacts  
 (2) Fire Zone L(Z+)

# AH-03128 AH-07128

## Detector Test Device



AH-03128



AH-07128

### Characteristics

- For testing heat and smoke detectors.
- Extension pole is very flexible. It has five sections and can expand from 1.44m to 5m.

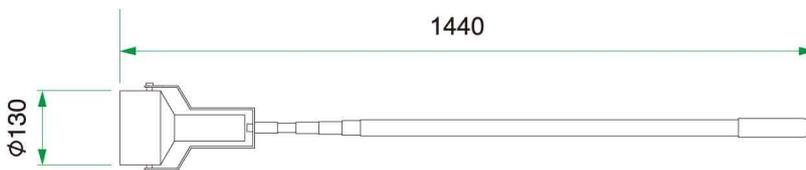
### AH-03128 Detector Testing and Removal Device

- Removal device is designed for AH-031 series detector. (AH-0311, AH-0315 and AH-0316)
- The extension pole on the test vessel allows the user to easily reach the detector.
- The enclosed gas torch its temperature can be adjusted.
- The smoke detector tester can spray about 500 times.

### AH-07128 Detector Testing Device

- Use with model nos. 8011, AH-0715, and 8016 with magnetic test feature.

### Dimensions of Test Device AH-03128 : mm



Removal  
AH-07152



AH-03151

