

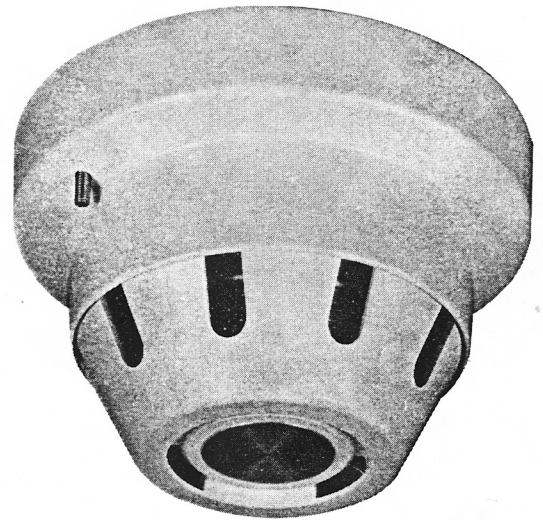


PID-C2 IONIZATION SMOKE DETECTOR

PID-C2 is an improved product of combustion detector. There are two basic parts, the standard head and the interchangeable base. These items may be combined to obtain a configuration suited to the needs of most all fire alarm systems.

Built better by design

1. PID-C2's exceptional capabilities result from incorporating new compensating circuits for stable operation under conditions of extremes in temperature, humidity and atmospheric changes.
2. The unit is also designed to provide positive, trouble-free operation in locations subject to both strong external vibrations and voltage fluctuation.
3. One of the many special design features incorporated is a stainless steel screen to exclude bugs & lint from entering the sensing & balance chambers. Therefore making this model much more trustworthy.
4. Many units can be powered from in a single loop because the high-impedance circuitry of Model PID-C2 keeps power consumption very low.
5. The unit features all solid-state circuitry and a special locking screw which locks the detector head to the base securely.
6. An added benefit of this design is that of cleaning convenience. Periodic cleaning can be performed without disassembly.



MODEL PID-C2



Operation

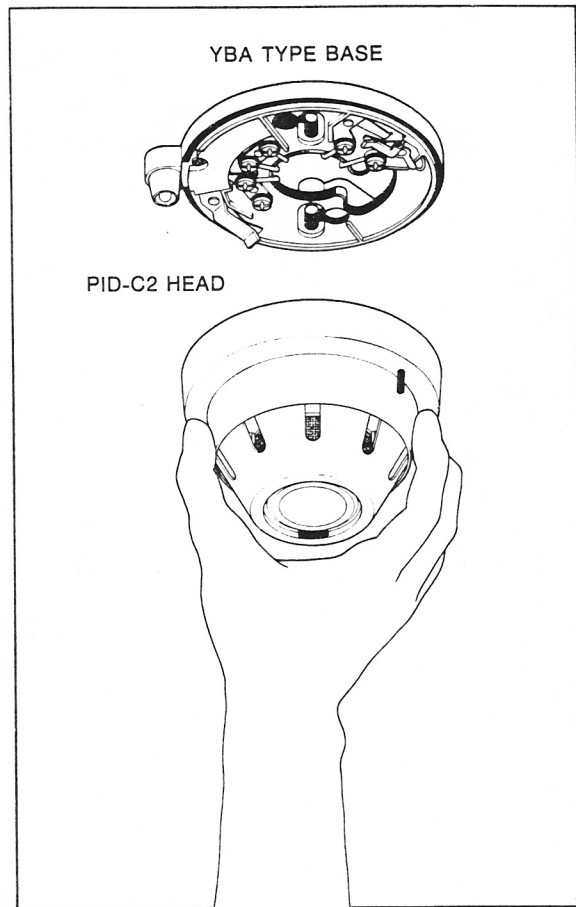
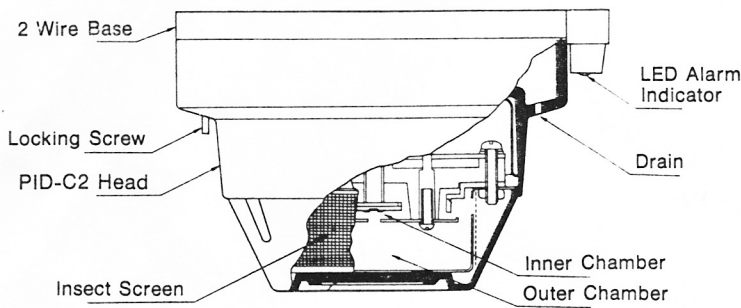
The PID-C2 Ionization Smoke Detector has two chambers; an outer sampling chamber and an inner balance chamber. Smoke or invisible combustion gasses can freely penetrate the outer chamber, but the inner chamber is virtually closed to prevent easy entry. With both chambers ionized by a single radioactive source, a very small current flows in the circuit. The presence of visible smoke or invisible gasses have a great influence upon the current flow in the outer chamber and will cause a change in the voltage ratio between chambers. This difference is then amplified inside the detector and transmitted to the fire alarm control unit to which it is connected.

Applications

The unique combination of features enables the PID-C2 to be used in any location where temperature, humidity and/or noise would combine to make many detectors inappropriate. The units can be connected to a fire alarm control panel using a 2-wire loop circuit with end-of-line resistor or using a 4-wire loop circuit. In addition, the interchangeability afforded by the Common Base allows the use of other compatible types of detectors on the same line.

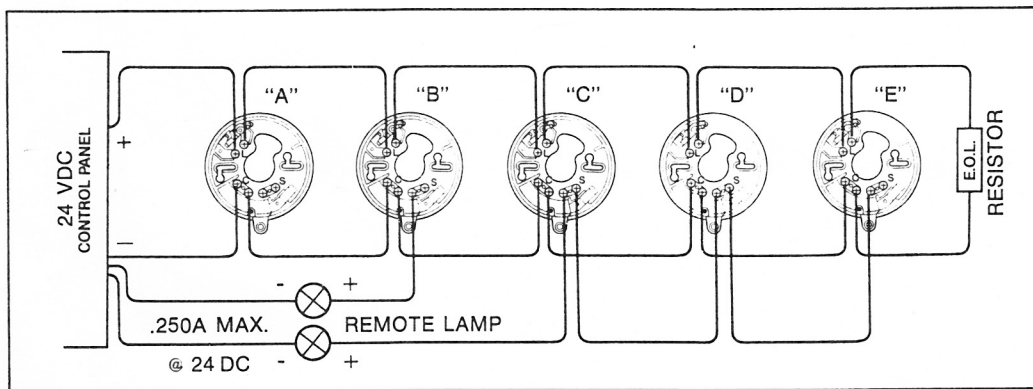
GENERAL DATA

VOLTAGE:	
RATED	18.8 — 27.7 VDC
WORKING	16-30 VDC
CURRENT:	
NORMAL	15-17 μ A
ALARM	.250 AMPS MAX. @ 24 DC
RADIOACTIVE SOURCE:	AM-241
AMBIENT TEMPERATURE:	+ 32°F — +120°F
WEIGHT:	5.5 OZ. W/O SOCKET
MOUNTING:	3" OCTAGONAL OUTLET BOX
COLOR:	BONE WHITE



TYPICAL WIRING DIAGRAM

Model YBA-RL/4 Base: Wiring should be made as shown to only the L and C terminals when a remote lamp is NOT required as shown for unit "A". If a remote lamp IS required, terminal S is used to power one side of the lamp. If each detector is to have its own remote lamp, then refer to unit "B". If, however, a group of detectors are to light a single remote lamp, then refer to units "C, D, and E". In this case should any one or more detectors go into alarm, the common remote lamp will light. In all cases, an end-of-line resistor will go across terminals L and C of the last detector base on two wire EOLR type systems.



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