

No. 632 PRODUCTS OF COMBUSTION DETECTOR

GENERAL DESCRIPTION

The No. 632 is a six volt products of combustion detector designed for use in small to moderately sized fire systems. It may be used with Ademco's No. 508, 340R and 342R controls in listed installations and with the 330 and 330R series controls in non-listed installations. If other control equipment is used, the power supply must be DC or full-wave rectified AC. Full specifications for the detector appear in Table 1 below:

TABLE 1

Voltage	6V DC, + 50% - 15%
Idle Current	25mA.
Alarm Current	66mA.
Alarm Relay	SPDT - N.O./N.C. contacts, 2 amp resistive @ 120VAC/28VDC
Supervisory Relay	SPST - N.O. 2 amp resistive @ 120VAC/28VDC

PLANNING AN INSTALLATION

Before installing detectors, please review carefully the "Application Notes", found on page 64. In general, Ademco suggests that the No. 632 be installed in homes, offices, nursing homes or other clean environments. No more than ten detectors should be placed on any one zone. Ademco's Fire Early Warning System should be used on larger systems.

Table II below shows how many No. 632s can be used with basic Ademco controls;

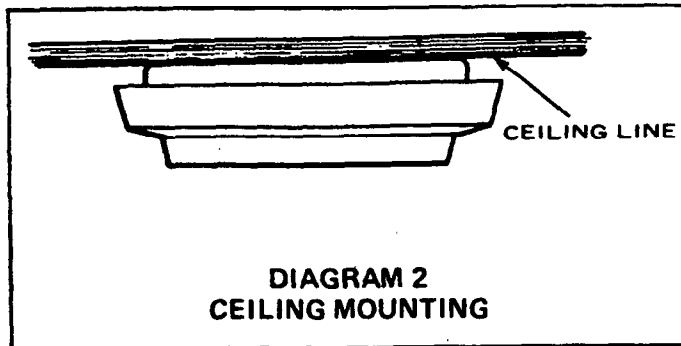
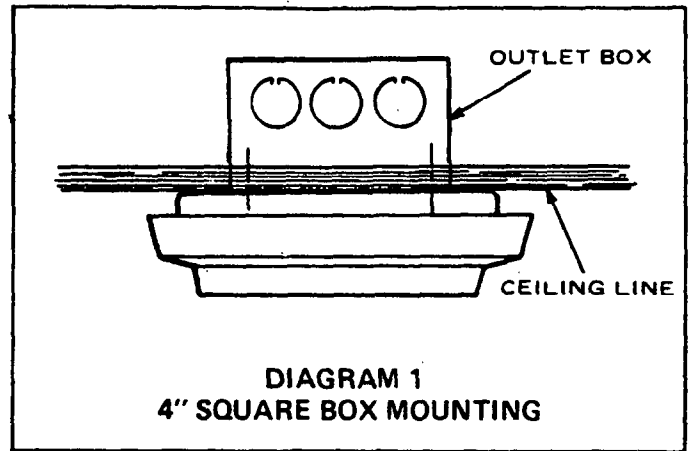
TABLE II

<u>ADEMCO CONTROL</u>	<u>ADEMCO STANDBY BATTERY</u>	<u>MAX. NUMBER NO. 632s</u>	<u>HOURS OF STANDBY CAPACITY</u>
330 Series	866	20 (with 4 incandescent remotes)	13
330 Series	493	20 (with 4 incandescent remotes)	7
330R, 340R Series	493	20 (with 4 incandescent remotes)	6

MOUNTING

No. 632 detectors can be mounted:

- (1) Directly to a 4" sq. 1-1/2" deep (#1900) electrical outlet box. (See Diagram 1).



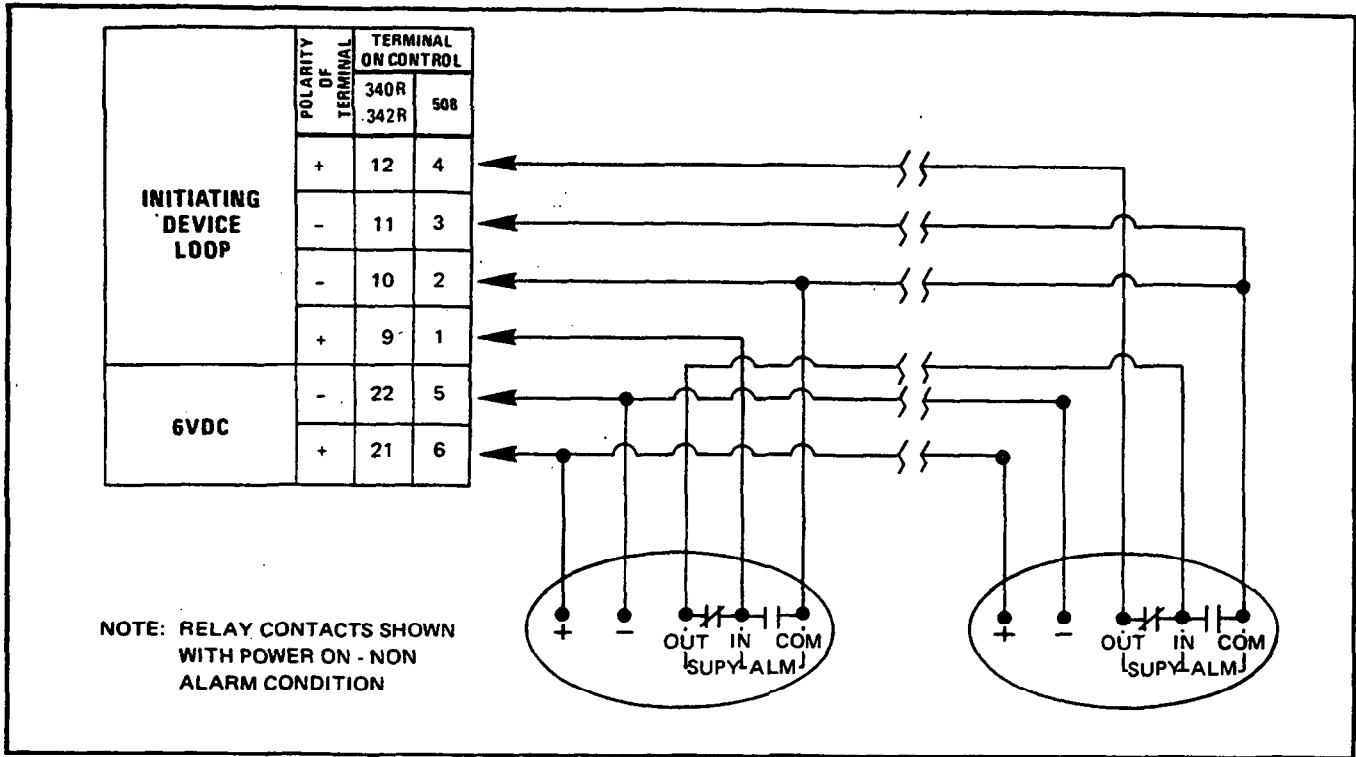
- (2) Directly to the ceiling. (See Diagram 2).

WIRING

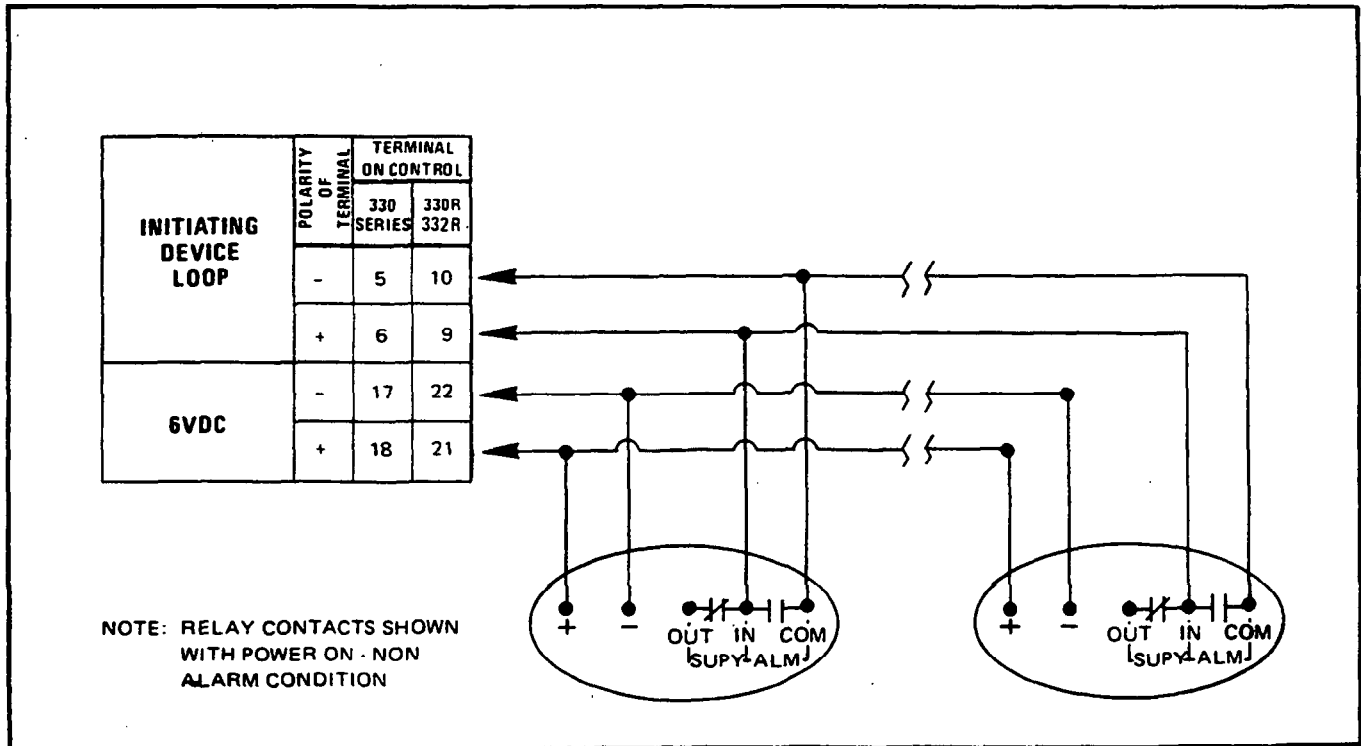
Wiring connections are made to the hex terminals located on the printed circuit board (See Diagram 5). Wires are pulled through the hole in the base (for outlet box mounting) or over the side of the base (for surface mounting). Since No. 632 detectors operate at low voltage, conduit need not be used except where required by local codes. All wiring must be in compliance with the National Electrical Code and/or local codes having jurisdiction. Proper gauge wiring must be used. Each conductor should be identifiable to avoid wiring errors. Table III gives loop lengths for the No. 632 (for 15% of detectors in alarm). Diagram 3 shows 4-wire or 6-wire wiring.

TABLE III

NO. 632 POWER LINES MAXIMUM LENGTH (FEET)			
WIRE SIZE	NO. OF DETECTORS		
	1-5	5-10	10-20
#18 AWG	350	175	95
#16 AWG	525	275	150
#14 AWG	880	440	240



**NO. 632 WIRING SUPERVISED CONTROLS
DIAGRAM 3**



**NO. 632 WIRING NON-SUPERVISED CONTROLS
DIAGRAM 4**

NOTE THAT THE NO. 632's SENSITIVITY CANNOT BE ADJUSTED IN THE FIELD. IF, AFTER FOLLOWING THE MAINTENANCE INSTRUCTIONS ON THE FOLLOWING PAGE, THE IDLE CURRENT OR FIRING CURRENT OF THE DETECTOR FALLS OUTSIDE THE PROPER RANGES, THE DETECTOR MUST BE RETURNED TO THE CUSTOMER SERVICE DEPARTMENT AT ADEMCO FOR REPAIR (AFTER A RETURN AUTHORIZATION NUMBER IS OBTAINED).

MAINTENANCE

In normal service, the No. 632 should be cleaned once a year. However, when more than average dust is present cleaning may be required more often. Moreover, if a fire should occur, the detector must be cleaned before putting it back into operation. FAILURE TO CLEAN WHEN PRESCRIBED MAY RESULT IN ACCIDENTAL ALARMS. To clean the detector, follow this procedure, observing Diagram 5:

- a. Turn off power to the system (disconnect at control panel).
- b. Remove the cover.
- c. Remove the TARGET from the unit.
- d. Using a Q-tip dipped in alcohol, clean the GOLD DOT inside the METAL CUP located directly under the target. Wipe dry with a lint free cloth.
- e. Clean the TARGET on the bottom with alcohol and wipe dry.
- f. Replace the target; make certain the tabs are securely seated. Replace the cover.
- g. Test the detector after cleaning.

