

## Photoelectric Smoke Alarm 120 VAC and 220 VAC Single Station Smoke Alarm

7000/7003

S E R I E S

### Applications

The 7000/7003 Series of photoelectric smoke alarms is designed for residential, commercial residential and other occupancies defined by NFPA 101 and IBC, including homes, apartments, hospitals and hotels, in compliance with UL 217, UL1730, IBC and NFPA 72. Available in many different models, the 7000/7003 Series is engineered to virtually eliminate nuisance alarms and deliver outstanding performance wherever reliable fire protection is required.

The Gentex 7000/7003 Series provides an exclusive patented three position test feature that simulates a 0.85% and 3.5% actual smoke condition in full compliance with NFPA 72, UL 217 and UL1730 standards. It also provides a maintenance indicator and makes the 100% testing requirement easy.

Options include self-restoring 135°F fixed temperature integral or isolated thermals, and Form A/Form C dry contacts for remote annunciation. Tandem interconnection of up to 12 units is available on several models; tandem interconnection of up to 6 units is available on "F" models, which activate the dry contacts from a remote alarm through the tandem wire or a local alarm.

**The 7003 Series provides the temporal 3 evacuation tone as a standard feature. When testing the 7003 Series it may take up to 16 seconds longer to go in or out of alarm.**

### Standard Features

- Available in 120VAC and 220VAC
- Horn Frequency 3100Hz (Nominal)
- Nominal 2.5% Sensitivity
- Functional Test Switch — Patented Three Position Test
- On-Site Maintenance Washing Program
- Quick-Disconnect Wiring Harness
- 90dBA Solid-State Non-Latching Piezo Horn
- Temporal 3 Evacuation Sounding Device (7003 Series)
- 1 Year Warranty From Date of Purchase
- 5-to-1 Signal-to-Noise Ratio
- Pulsing LED Sensing Chamber
- Fully Insect Screened
- Solid-State LED Condition Indicator
- Mounting Hardware Adapts to Standard Junction Boxes
- Dust Cover to Prevent Contamination During Installation
- Complies With IBC/IFC (7003 Series)



### Product Listings



This symbol on the product's nameplate means it is Listed by UNDERWRITERS LABORATORIES, INC.

- BFP (City of Chicago)
- MSFM Listing #1929
- BS+A/MEA #927-84-SA
- CSFM #7257-569:104
- UL 217 and UL1730 Listed

### Product Compliance

- NFPA 72
- NFPA 101
- IBC/IFC



## 7000 (7100/7200) Series - Solid State Piezo Sounder

Model Number	Part Number	Voltage	Local 90dBA Piezo	Integral 135°F Thermal	Isolated 135°F Thermal	Tandem Up To 12 Units	Tandem Up To 6 Units	Form A/C Contacts
7100	907-1109-002	120VAC	●			●		
7100T	907-1110-002	120VAC	●	●		●		
7100H	907-1111-002	120VAC	●		●	●		
7100F	907-1113-002	120VAC	●				●	●
7100TF	907-1114-002	120VAC	●	●			●	●
7100HF	907-1115-002	120VAC	●		●		●	●
7200	907-1204-002	220VAC	●			●		
7200T	907-1205-002	220VAC	●	●		●		
7200H	907-1206-002	220VAC	●		●	●		
7200F	907-1207-002	220VAC	●				●	●

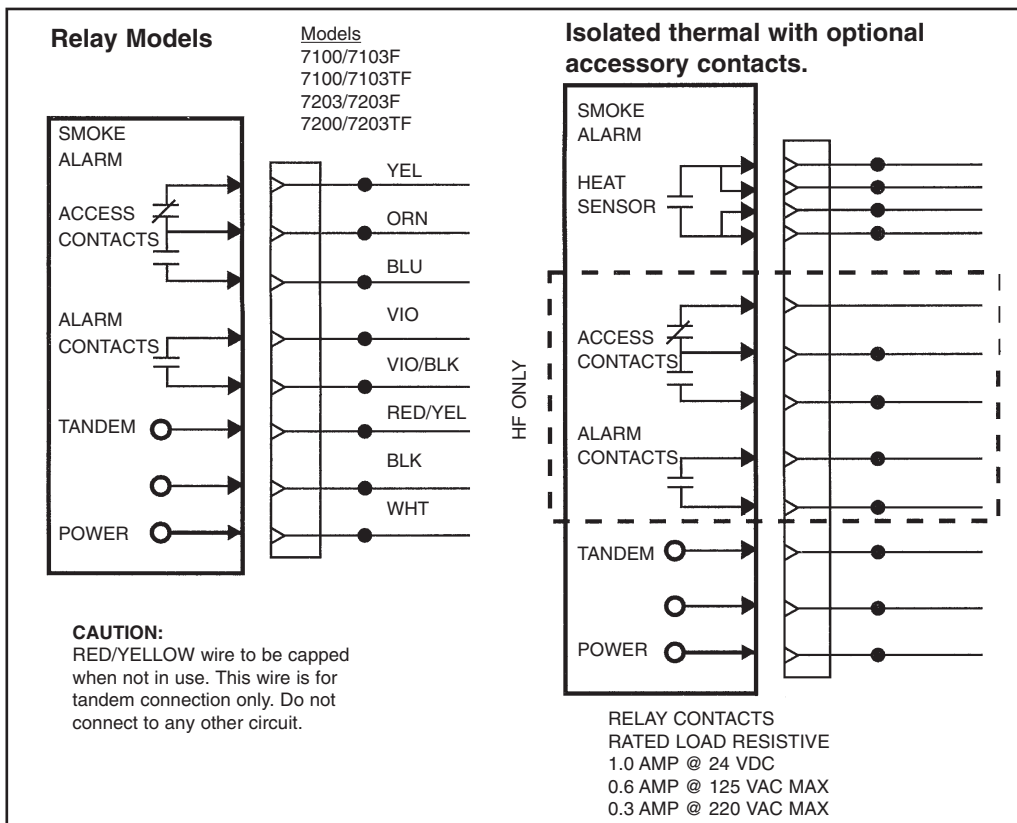
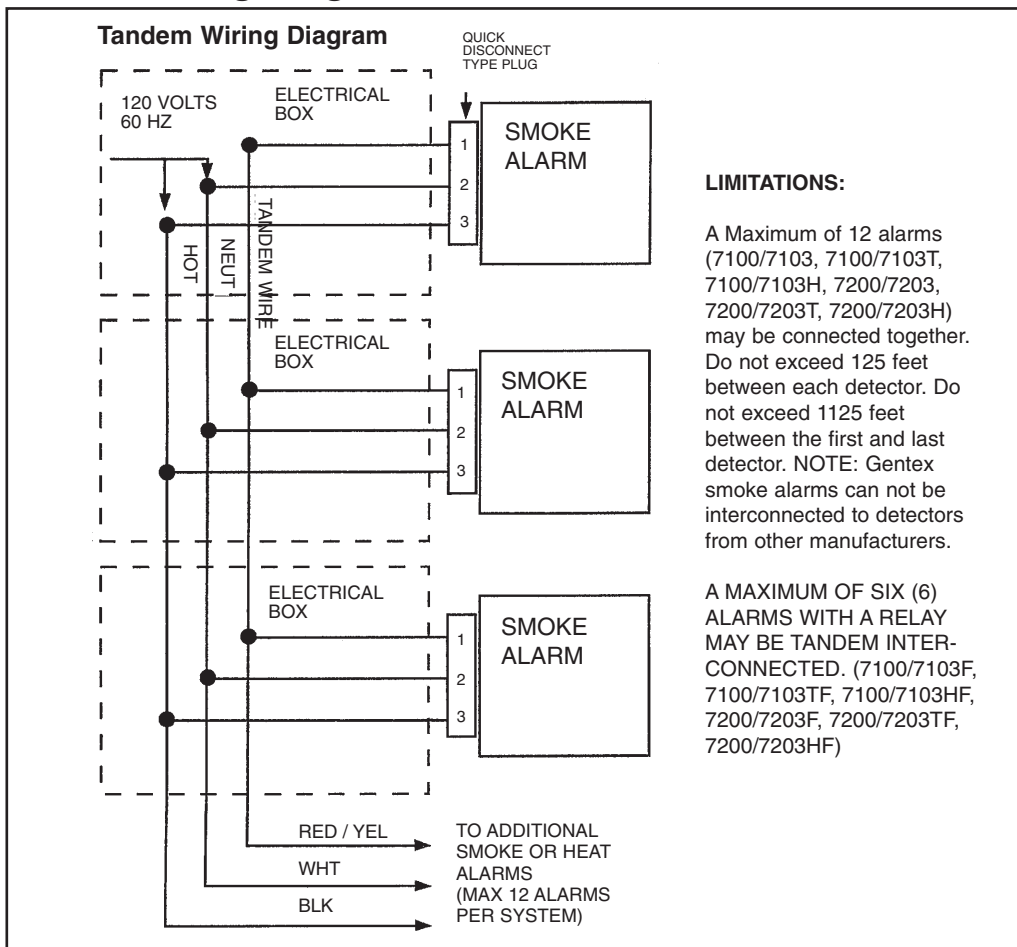
## 7003 (7103/7203) Series - Temporal 3 Piezo Sounder

Model Number	Part Number	Voltage	Local 90dBA Piezo	Integral 135°F Thermal	Isolated 135°F Thermal	Tandem Up To 12 Units	Tandem Up To 6 Units	Form A/C Contacts
7103	907-1116-002	120VAC	●			●		
7103T	907-1117-002	120VAC	●	●		●		
7103H	907-1118-002	120VAC	●		●	●		
7103F	907-1120-002	120VAC	●				●	●
7103TF	907-1121-002	120VAC	●	●			●	●
7103HF	907-1122-002	120VAC	●		●		●	●
7203	907-1208-002	220VAC	●			●		
7203T	907-1209-002	220VAC	●	●		●		
7203H	907-1210-002	220VAC	●		●	●		
7203F	907-1211-002	220VAC	●				●	●

### Notes:

The 7000/7003 Series are round units. Square units as 710/713 also available.

# 7000/7003 Series Wiring Diagrams



# 7000/7003

# SERIES

### Electrical Specifications

Operating Voltage (7100/7103) .....	120 VAC, 60Hz
Operating Voltage (7200/7203) .....	220 VAC, 50Hz
Operating Current .....	.045 amps
Operating Current (Relay Options) .....	.070 amps
Operating Ambient Temp Range .....	40°F to 100°F
Alarm Horn Rating .....	90dBA at 10 ft.
Nominal Sensitivity .....	2.5% Obscuration
“F” Auxiliary Relay .....	1 Form A & 1 Form C (0.6 amp)
“T” Integral Thermal (Self-Restoring) .....	135°F at 50 ft.
“H” Isolated Thermal Form A (Self-Restoring) .....	135°F at 50 ft.
Size .....	Diameter: 6.5 in. OA (5.75 in. at Ceiling) Depth: 2.625 in.

### Architect & Engineering Specifications

The Photoelectric Smoke alarm shall be a Gentex Model 7100/7103/7200/7203 or approved equal which shall provide at least the following features and functions.

1. Nominal sensitivity shall be 2.5%.
2. The alarm shall utilize an infrared LED sensing circuit which pulses in 4 to 5 second intervals when subjected to smoke. After 2 consecutive pulses in smoke, the alarm will activate.
3. The alarm shall provide minimum 5-to-1 signal-to-noise ratio in the optics frame to assure stability of operation in environments of high RF and transient conditions.
4. The sensing chamber shall be fully screened to prevent entrance of small insects, thus reducing the probability of false alarms.
5. A solid state piezo alarm rated at 90dBA at 10ft.
6. A visual LED monitor (condition indicator) will slow pulse in normal operation and rapid pulse in alarm.
7. An easily accessible test knob shall be provided. The test knob in the TEST position will simulate an actual smoke condition of approximately 3.5% causing the detector to alarm within 20-36 seconds. It will also have the capability of testing to 0.85% as a required minimum. A magnetic switch closure or other switch closure, or smoke generating equipment which does not scatter the light beam or test sensitivity is not sufficient, as indicated in National Code.
8. The detector shall have tandem interconnect capability of up to 12 units or 6 units with relay.
9. The alarm shall have tandem interconnection capabilities of 12 units on 7100/7100T/7100H/7103/7103T/7103H/7200/7200T/7200H/7203/7203T/7203H and shall have tandem interconnection capabilities of 6 units on 7100F/7100TF/7100HF/7103F/7103TF/7103HF/7200F/7200TF/7200HF/7203F/7203TF/7203HF.
10. The manufacturer shall provide other compatible alarm models with the following optional features: a) 135°F isolated thermal with normally opened contact for remote connection to local alarm or annunciator; b) 135°F integral thermal; c) auxiliary Form A/Form C relay contacts for initiating remote functions and annunciation; d) relay option that is capable of activation by tandem interconnect wire. Thermal sensor shall be self-restoring.
11. Unit must be UL 217 listed for both wall and ceiling mount.
12. Unit shall be listed by Underwriters Laboratories, California State Fire Marshal (CSFM) and the Bureau of Standards and Appeals (NYC).

All equipment shall be completely factory assembled, wired and tested, and the contractor shall be prepared to submit a certified letter testifying to this condition. Alarms which do not meet all of the requirements of this specification will not be considered.

24 units per carton  
32 pounds per carton

## GENTEX CORPORATION

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551-0038-01

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