

GENTEX CORPORATION

Photoelectric Smoke Alarm 120VAC and 220VAC Single/Multiple Station Smoke Alarm

Applications

The 7000/7003 Series of photoelectric smoke alarms is designed for residential, commercial residential and other occupancies, including homes, apartments, hospitals and hotels, in compliance with ANSI/UL 217, NFPA 72, NFPA 101 and the International Codes (IBC/IFC/IRC). 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 and ANSI/UL 217 standards. It also provides a maintenance indicator and makes the 100% testing requirement easy.

Options include self-restoring 135°F (57.2°C) fixed temperature integral or isolated thermal, 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)
- Patented Three Position Test
- Nominal 2.5% Sensitivity
- Easy Wash® on-site maintenance washing program
- Quick-Disconnect Wiring Harness
- 90dBA Solid-State Non-Latching Piezo Horn
- Temporal 3 Evacuation Sounding Device (7003 Series)
- 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
- 12 month warranty from date of manufacture or 18 months from date of purchase

7000 /
7003
S E R I E S



**Easy Wash® -
On Site
Maintenance
Program**

Product Listings

SIGNALING



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

Product Compliance

- NFPA 72
- NFPA 101
- IBC/IFC/IRC
- City & State Ordinances/Laws/Regulations
- Quality Management System is certified to:
ISO 9001:2008



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

Model Number	Part Number	Voltage	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				●	●

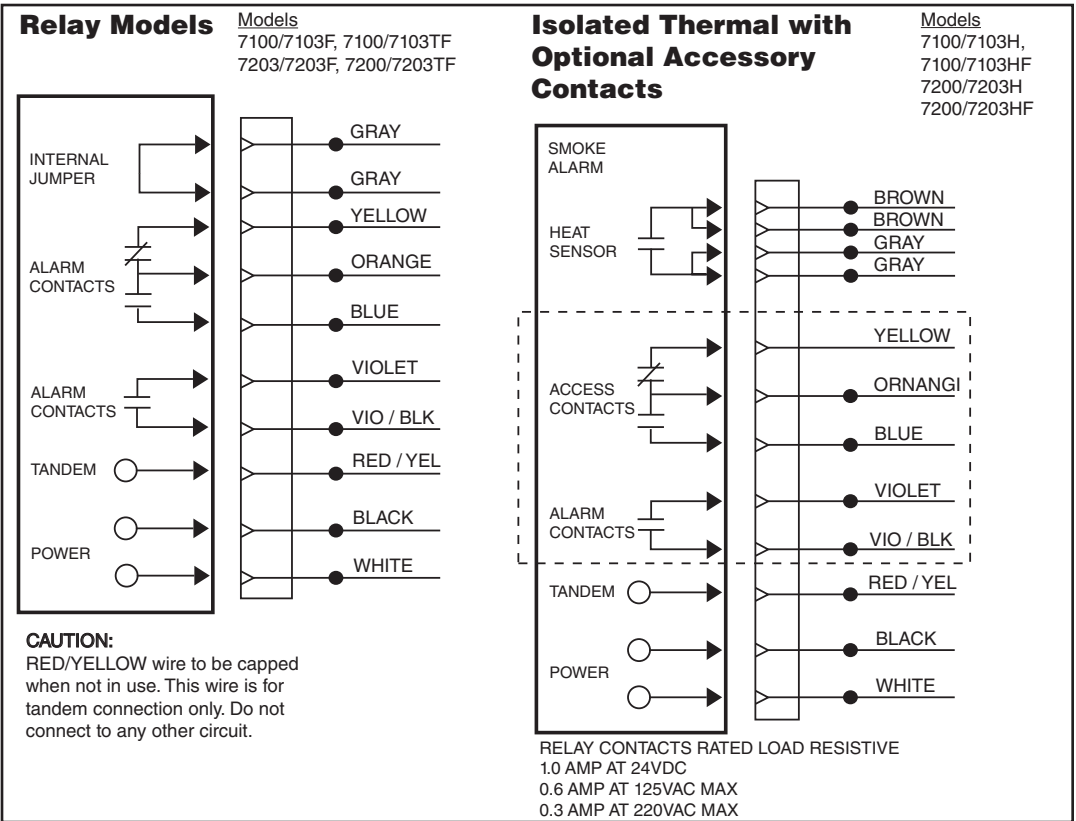
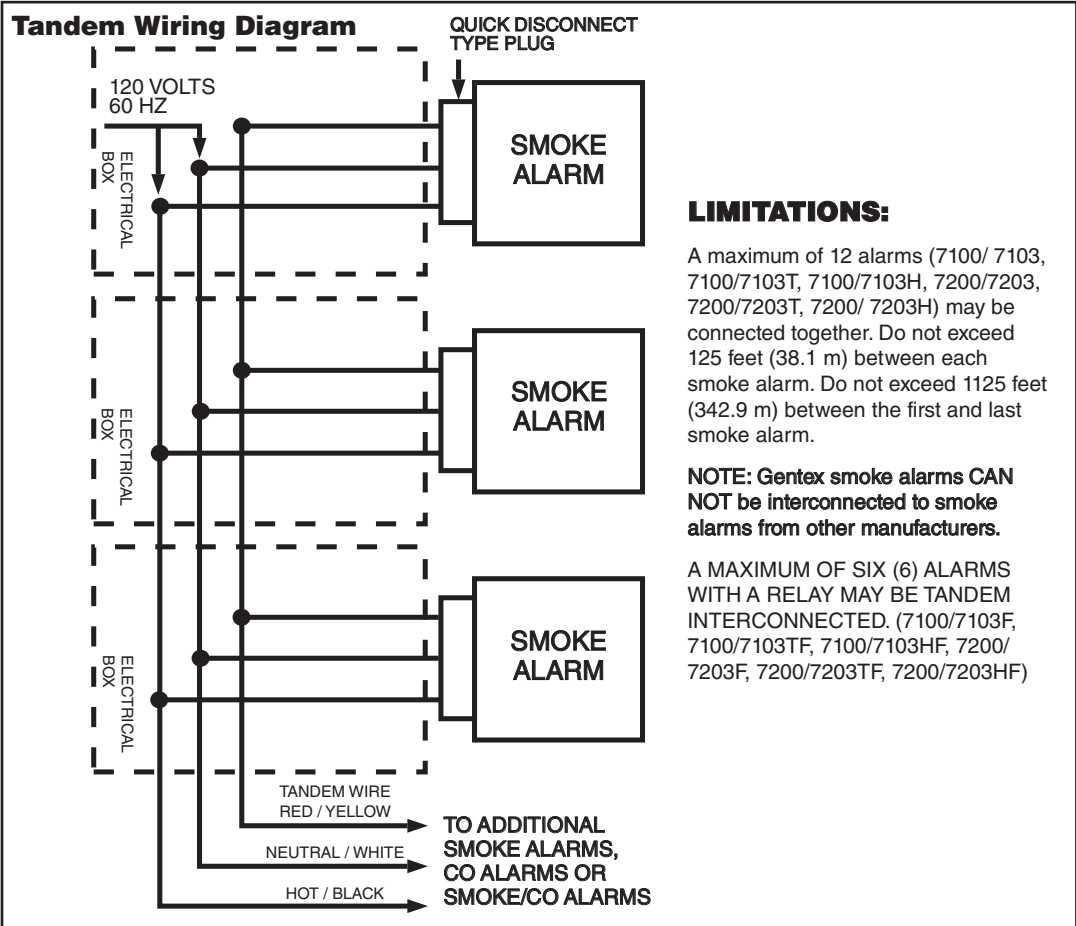
7003 (7103/7203) Series - Temporal 3 Evacuation Piezo Sounder

Model Number	Part Number	Voltage	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 also available (710/713 Series).
- When testing 7103/7203 Series, it may take up to 16 seconds longer for smoke alarm to go in or out of alarm mode.
- It is recommended that 7000/7003 Series smoke alarm be tested weekly.
- Refer to Technical Bulletin 002 for Easy Wash® on site washing instructions
- 7100/7200 units produce a non-temporal audible alarm and are therefore not intended for locations where the desired action of the occupant(s) is evacuation.
- 7103/7203 units produce a temporal 3 audible alarm. Per NFPA 72, the American National Standard Audible Emergency Evacuation Signal as defined in ANSI S3.41, is required whenever the intended response is to evacuate the building.

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	0.045 amps
Operating Current (Relay Options)	0.070 amps
Operating Ambient Temp Range	40°F to 100°F (4.4°C-38°C)
Alarm Horn Rating	meets or exceeds 85dBA at 10 ft. (3.048 m)
Nominal Sensitivity.....	2.5% Obscuration
"F" Auxiliary Relay	1 Form A & 1 Form C (0.6 amp)
"T" Integral Thermal (Self-Restoring)	135°F (57.2°C) at 50 ft. (15.24 m)
"H" Isolated Thermal Form A (Self-Restoring)	135°F (57.2°C) at 50 ft. (15.24 m)
Size	Diameter at base: 5.75 in. (14.605 cm)
.....	Overall diameter: (6.25 in. (16.51 cm)
.....	Depth: 2.625 in. (6.6675 cm)

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 smoke 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 smoke alarm to annunciate 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 smoke alarm shall have tandem interconnect capability of up to 12 units or up to 6 units with relay contacts.
9. The alarm shall have the capability to tandem interconnect with all Gentex tandem capable smoke alarms, CO alarms or combination smoke/CO alarms, including 9000/9003 Series, 710CS/713CS Series, 7109CS/7139CS Series, GN-200/GN-300 Series, S1209 Series, CO1209 Series and GN-503 Series
10. The manufacturer shall provide other compatible alarm models with the following optional features: a) 135°F (57.2°C) isolated thermal with normally opened contact for remote connection to local alarm or annunciator; b) 135°F (57.2°C) 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 ANSI/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

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Gentex Corporation reserves the right to make changes to the product data sheet at their discretion.

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