

# 7139CS / 7139LS Series

## Photoelectric Smoke Alarm with Visual Signaling Appliance

120 VAC with 9V Battery Back-Up Single/Multiple Station Smoke Alarm

12 units per carton, 21 pounds per carton

### Applications

The 7139CS and 7139LS photoelectric single/multiple station smoke alarms are engineered to virtually eliminate nuisance alarms and deliver outstanding performance wherever reliable fire protection is required. The Series has been designed to give reliable early warning of the presence of smoke where both audible and visual alarms are required for residential and commercial residential applications, including homes, apartments, hospitals, hotels and motels.

The 7139CS and 7139LS features a 90dBA solid state piezo signal and a 177 candela strobe with "FIRE" lettering. Upon activation, the smoke alarm will emit a 90dBA local audible signal and activate the high intensity strobe. During the alarm period the strobe will flash at a brightness of 177 candela 60 times per minute.

The 7139CS and 7139LS 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 UL Standards.

The 7139CS and 7139LS smoke alarms are ANSI/UL 217 and the strobe is listed per ANSI/UL 1971 and are warranted for one year from date of purchase.

### Standard Features

- Available in 120 VAC with 9v battery back-up
- 9 foot line cord (7139LS model)
- Photoelectric smoke sensing technology
- 177 candela rating
- Horn frequency 3100Hz (nominal)
- 90dBA temporal 3 evacuation piezo horn
- Nominal 2.5% sensitivity
- Patented three position test switch
- Form C relay contacts for remote annunciation (7139CS models)
- Relay operates on battery back-up
- Quick-disconnect wiring harness (7139CS models)
- Interconnect with Gentex tandem capable smoke alarms (7139CS models)
- Non-latching (self restoring) alarm
- 5-to-1 signal-to-noise ratio
- Pulsing LED sensing chamber
- Fully insect screened
- Easy Wash® on-site maintenance washing program
- Mounting hardware adapts to standard junction boxes
- Low or missing battery indicator
- One year warranty from date of purchase



### Product Listings

SIGNALING



LISTED

- ANSI/UL 217 and ANSI/UL 1971 Listed
- MEA: 285-91-E
- BFP (City of Chicago)
- MSFM Listing: 1929

### Product Compliance

- NFPA 72
- Americans with Disabilities Act (ADA)
- IBC/IFC/IRC
- Quality Management System is certified to: ISO 9001:2008

 **Easy Wash®**  
On Site Maintenance Program

**7139CS / 7139LS**

Model	Part Number	Voltage (VAC)	Wall Mount	Ceiling Mount	9 Foot Line Cord	Interconnect Up To 6 Units	Form C Contact	9V Battery Back-Up
7139CS-W	917-0019-002	120 VAC	*			*	*	*
7139CS-C	917-0020-002	120 VAC		*		*	*	*
7139LS	917-0018-002	120 VAC	*		*			*

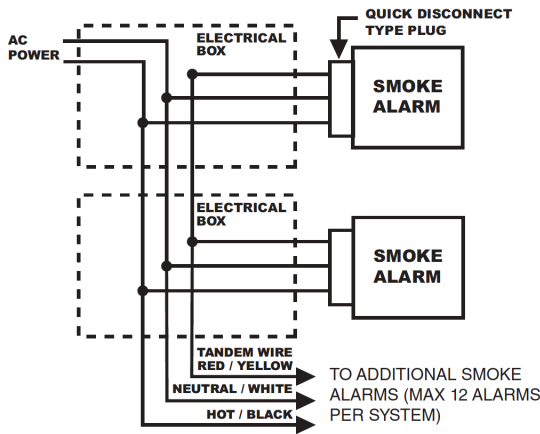
**Notes**

- Available in square configuration only.
- Line cord models not available for ceiling mount applications, wall mount only
- When testing 7139CS and 7139LS units, it may take up to 16 seconds longer for smoke alarm to go in or out of alarm mode.
- It is recommended that 7139CS and 7139LS Series smoke alarm be tested weekly
- Refer to Technical Bulletin 002 for Easy Wash® on site washing instructions
- The 7139CS and 7139LS units produce a temporal 3 audible alarm.
- Candela rating is a 177 candela strobe light listed to ANSI/UL 1971 listed strobe light
- Flash rate per minute: 60 minimum
- 9V battery back-up models, visual does not operate on battery back-up

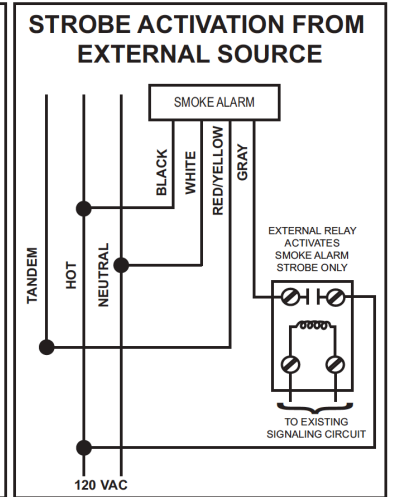
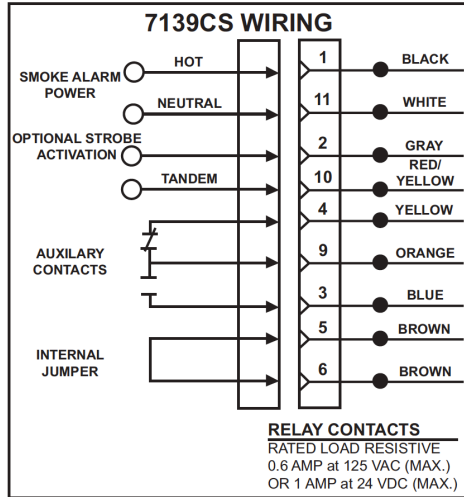
**Electrical Specifications**

Operating Voltage .....	120 VAC, 60 Hz
Operating Current .....	0.400 amps (peak)
Operating Ambient Temp Range.....	40°F to 100°F
Alarm Horn Rating.....	90dBA at 10 feet
Nominal Sensitivity.....	2.5% obscuration
Auxiliary Relay.....	1 Form C (0.6 amp)
Size .....	5.5" square
	Depth: 4.75"
Secondary Power Source .....	Alkaline 9V battery
	Duracell® MN 1604

**Wiring Diagram**  
7139CS



**LIMITATIONS**  
Maximum of 12 smoke alarms may be connected together. Do not exceed 125 feet between each smoke alarm. Do not exceed 1125 feet between the first and last smoke alarm.

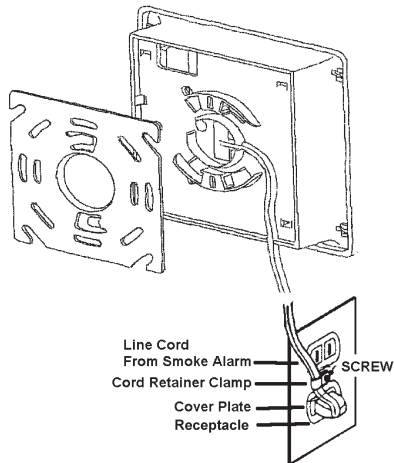


# 7139CS / 7139LS Series

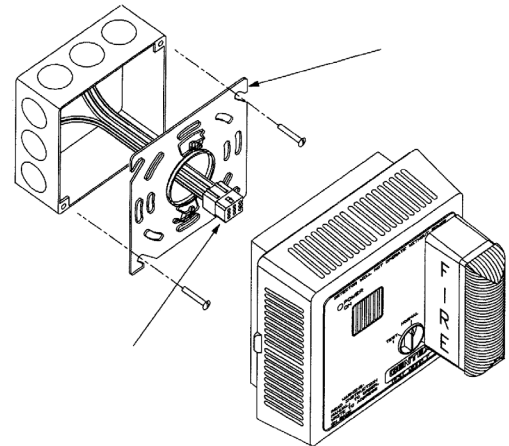
## Photoelectric Smoke Alarm with Visual Signaling Appliance

### Installation

7139LS



7139CS



### Architect & Engineering Specifications

The photoelectric smoke alarm shall be a Gentex Model 7139CS or 7139LS approved equal which shall provide at least the following features and functions.

- Nominal sensitivity shall be 2.5%.
- The smoke alarm shall utilize an infrared LED sensing circuit which pulses in 4 to 5 second intervals; when subjected to smoke the pulse rate shall increase 8 times. After 2 consecutive pulses in smoke, the smoke alarm will alarm.
- 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.
- The sensing chamber shall be fully screened to prevent entrance of small insects, thus reducing the probability of false alarms.
- A temporal 3 piezo horn rated at 90dBA at 10ft.
- A visual LED monitor (condition indicator) will pulse in normal operation and will remain solid in alarm.
- The visual signal shall have a minimal light output of 177 candela and will flash one time per second.
- 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 alarm within 20-36 seconds. Also the detector shall test for the most sensitive setting. An alarm during this test will be a maintenance indicator.
- The 7139CS smoke alarm shall be provided with a Form C relay contact for remote annunciation purposes.
- The 7139LS smoke alarm shall be provided with a 9 foot line cord with a strain relief connection, if a portable unit.
- The 7139CS shall have interconnect capabilities of up to 6 units.
- The manufacturer shall provide other compatible smoke alarm models with the following optional features: a) auxiliary Form C relay contact for initiating remote functions and annunciation; b) relay option that is capable of activation by tandem interconnect wire.
- Unit must be capable of providing a monitored battery back-up. The alarm shall have a 9V alkaline battery as a back-up in the event building power is lost.
- Unit must be ANSI/UL 217 and ANSI/UL 1971 listed for wall mount (7139CS and 7139LS) or ceiling mount (7139CS only).
- Unit shall also meet all requirements of the NFPA 72 and the Americans with Disabilities Act ADA).

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. Smoke alarms which do not meet all of the requirements of this specification will not be considered.

**GENTEX**  
CORPORATION

Fire Protection Products Group | 10985 Chicago Drive | Zeeland, MI 49464  
gentex.com | Phone: 616.392.7195 | Toll-free: 800.436.8391 | Fax: 616.392.4219

551-0037-04

**Important Notice:** These materials have been prepared by Gentex Corporation ("Gentex") for informational purposes only, are necessarily summary, and are not purported to serve as legal advice and should not be used as such. Gentex makes no representations and warranties, express or implied, that these materials are complete and accurate, up-to-date, or in compliance with all relevant local, state and federal laws, regulations and rules. The materials do not address all legal considerations as there is inevitable uncertainty regarding interpretation of laws, regulations and rules and the application of such laws, regulations and rules to particular fact patterns. Each person's activities can differently affect the obligations that exist under applicable laws, regulations or rules. Therefore, these materials should be used only for informational purposes and should not be used as a substitute for seeking professional legal advice. Gentex will not be responsible for any action or failure to act in reliance upon the information contained in this material. Gentex Corporation reserves the right to make changes to the product data sheet at their discretion.