

## INTRODUCTION

The Gentex GX91/GX93 is a high-quality, remote, audible signaling appliance rated 75-85dBA at 10 feet. This appliance is ideal for applications where a dependable alarm signal is required in hotels, dormitories, apartments, and other installations.

## LOCATION

The appliance is intended for use in fire protective signaling systems and is to be installed in accordance with the applicable requirements of NFPA 72 and the local authorities having jurisdiction. The GX91/GX93 is intended for indoor installation only. This appliance is not listed for outdoor applications.

## INSTALLATION AND WIRING

Unit Dimensions: 2.84" Wide X 4.48" High X 0.5" Deep

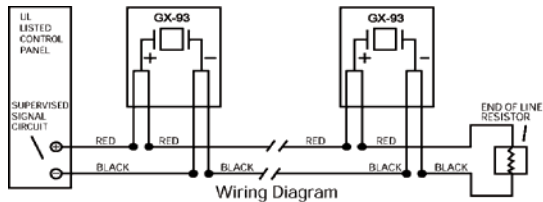
### MOUNTING BOXES

- Handy Box: 4" x 2-1/8" (approx.)  
 Switch Box: 3" x 2" (approx.) with conduit knockouts  
 Masonry Box: 3-3/4" x 2" (approx.) with 1/2" and 3/4" concentric knockouts  
 Non-Metallic Switch Box: 3-3/4" x 2-5/16" (approx.)

**NOTE: A mounting box must be installed for each remote signaling appliance.**

### WIRE CONNECTIONS

- The GX91/GX93 has two terminals for power-in and power-out supply circuits.
- Make the wire connections as follows: Positive to the (+) terminal and negative to the (-) terminal.
- Run a minimum 18-gauge insulated conductor from the signaling appliance in the system. Use UL Listed Class 1 wire.

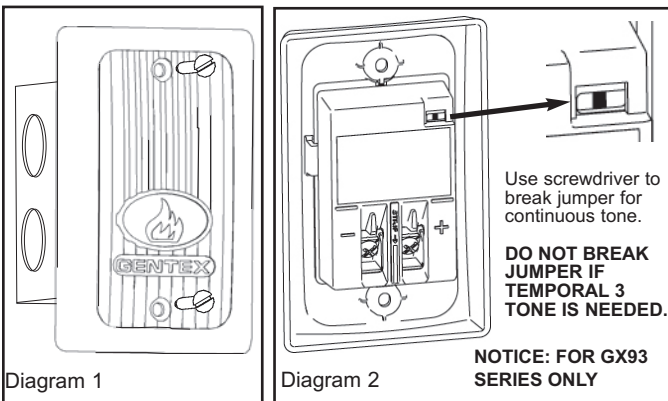


- NOTES:**
- Do not use looped wire under terminals. Break wire run to provide supervision of connection.
  - Voltage supplied to signal when the panel is latched.
  - NFPA 72 requires that an audible signal appliance that emits a continuous signal while energized have a temporal pattern imposed on it if the alarm signal is intended to evacuate the building.
  - To synchronize the GX93, use the AVSM Control Module.

- Install the GX91/GX93 unit to the mounted rough-in box.
- Secure the unit to the box using the two mounting screws (supplied).

- CAUTION:** When installing, route field wiring away from sharp projections, corners, and internal components.
- The GX91 is a continuous tone only unit.
  - The GX93 is a temporal 3 or continuous tone unit. The GX93 is factory set in temporal 3 mode. To enable continuous tone, break jumper on back of unit as shown in Diagram 2.

**NOTICE: Once jumper has been broken, the option to revert from continuous to temporal 3 tone is not possible. DO NOT BREAK JUMPER IF TEMPORAL 3 TONE IS NEEDED.**



## CHECKOUT AND TROUBLESHOOTING

- Supply power to the system control panel. The auxiliary alarms in the system should not alarm.
- If alarm is heard:
  - Check all smoke and fire detection units in the system to make sure that they have not been activated.
  - Check all wiring connections to make sure detection circuits are not reversed or shorted together. Check wire color codes and trace.

- To test the auxiliary alarms circuit, trip the alarm circuit at the main Control Panel or activate one of the fire detection units in the system. All auxiliary alarms should be activated.
- Always perform an operational test on this product on a regular basis after installation. Gentex suggests that this regularly scheduled testing be performed at least twice a year, or more often as may be dictated by the local authorities having jurisdiction.

**NOTE:** These testing and troubleshooting instructions are generalized. Please refer to the system control panel operating instructions for proper operation of the panel and fire detection system.

### WARNING

This appliance will not operate without electrical power. As fires frequently cause power interruptions, we suggest you discuss further safeguards with your local fire protection specialist.

## TO RETURN A GX91/GX93 UNIT

Should you experience problems with your GX91/GX93 unit, proceed as follows:

- Turn off electrical power to the auxiliary alarm circuit.
- Unscrew the unit from the mounting box.
- Disconnect the GX91/GX93 from the field wiring. Reconnect the two positive supply voltage circuits and the two negative supply voltage circuits of the auxiliary alarm circuit to maintain power to other auxiliary alarm appliances in the system.
- Carefully pack the unit (the manufacturer cannot be responsible for consequential damage). Include your return address and complete details as to the nature of difficulties being experienced and the date of installation.
- Prior to returning, contact Gentex Corporation for RMA Number at FP\_RMA@gentex.com.

## ELECTRICAL SPECIFICATIONS

Horn Mode	Minimum dBA @ 10Ft. Per UL464 @ 24V	Minimum dBA @ 10Ft. Per UL464 @ 12V
Temporal 3 Tone	81	78
Continuous Tone	86	83

	HORN RATINGS OVER INPUT VOLTAGE RANGE OF 16-33V		HORN RATINGS OVER INPUT VOLTAGE RANGE OF 8-17.5V	
	Regulated 24VDC Max. Operating (mA)	Unregulated 24VFWR Max. Operating (mA)	Regulated 12VDC Max. Operating (mA)	Unregulated 12VFWR Max. Operating (mA)
GX91	11	13	7	10
GX93	18	20	13	17

- NOTE:**
- DC Voltage Range Limits: 8-17.5V and 16-33V. FWR Voltage Range Limits: 8-17.5V and 16-33V. This product was only tested to the stated voltage range(s); do not apply 80% and 110% of this range for system operation.
  - The three pulse temporal pattern is to be used for evacuation use only.
  - The sound output for the temporal 3 tone is rated lower since the time the horn is off is averaged into the sound output rating. While the horn is producing a tone in the temporal 3 mode its sound pressure is the same as the continuous mode. Units have been tested to 0°C, 49°C and 93% humidity and are rated 10-16VDC/VFWR and 20-30VDC/VFWR -20%, +10% per CAN/ULC CS607/CS895.

### LIMITED WARRANTY

The Company warrants to purchasers of its products for commercial use that, for a period of 36 months from the date of purchase or 42 months from the date of manufacture, whichever is less, its products will be free from defects in materials and workmanship under normal use and service. The Company will repair or replace, at its option, any product that proves to be defective within the warranty period, which remedy is expressly agreed to be exclusive as a condition of sale. In no event shall the Company be liable for lost profits or any other consequential or incidental damages upon any theory whatsoever, including negligence or strict liability. ALL WARRANTIES EXCEPT AS SET FORTH ABOVE, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE DISCLAIMED. The Company makes a different warranty for its products sold to customers for personal, family or household use, and copies of that published warranty are not included with each product and will be supplied for examination upon request.

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**GENTEX CORPORATION** REMOTE AUDIBLE SIGNALING APPLIANCE  
 A Smarter Vision®

INSTRUCTION MANUAL  
 MODELS GX91/GX93 12/24 VDC

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