Genesis Temporal Horn Installation Sheet

Description

The Genesis Temporal Horn is an audible fire alarm notification appliance designed for indoor walls. See Table 1 for a list of model numbers.

The horn includes field configurable jumper options for selecting:

- Temporal or steady horn output (see Figure 1 item 1)
- High dB or low dB output (see Figure 1 item 2)

Table 1: Models

Description	Number	
Temporal horn, white	ADTG1-HD XLSG1-HD G1-HD	MG1-HD ZG1-HD
Temporal horn, white, with FIRE marking	ADTG1F-HD XLSG1F-HD G1F-HD	MG1F-HD ZG1F-HD
Temporal horn, red	ADTG1R-HD XLSG1R-HD G1R-HD	MG1R-HD ZG1R-HD
Temporal horn, red, with FIRE marking	ADTG1RF-HD XLSG1RF-HD G1RF-HD	MG1RF-HD ZG1RF-HD
Trim plate, white	ADTG1T XLSG1T G1T	MG1T ZG1T
Trim plate, white, with FIRE marking	ADTG1T-FIRE XLSG1T-FIRE G1T-FIRE	MG1T-FIRE ZG1T-FIRE
Trim plate, red	ADTG1RT XLSG1RT G1RT	MG1RT ZG1RT
Trim plate, red, with FIRE marking	ADTG1RT-FIRE XLSG1RT-FIRE G1RT-FIRE	MG1RT-FIRE ZG1RT-FIRE

Installation

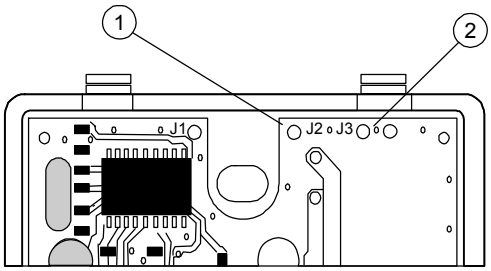
Install this device in accordance with applicable requirements in the latest editions of the NFPA codes and standards; the *National Building Code of Canada*; *the Canadian Electrical Code, Part 1*, Section 32, and in accordance with the local authorities having jurisdiction.

Caution: Electrical supervision requires breaking the wire run at each terminal. Do not loop the signaling circuit field wires around the terminals.

To install the horn:

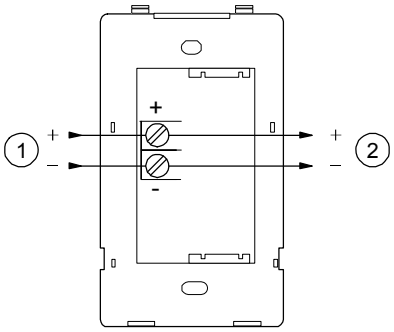
1. Remove the cover by depressing both tabs on the top of the unit with a small screwdriver and twisting slightly.
2. Set the horn signal and sound output level to desired settings. See Figure 1.
3. Connect the horn terminals to the signal circuit field wiring. Observe polarity for the unit to function properly. See Figure 1.
4. Mount the unit onto a compatible electrical box, making sure not to overtighten the mounting screws.
5. Replace the cover by aligning at the bottom, then snapping in at the top.
6. Test the unit for proper operation.

Figure 1: Horn settings



1. To change the horn signal from temporal to steady, cut from circle J2 to edge of circuit board
2. To change the horn sound output level from high dB to low dB. cut J3 by snipping the board trace between holes

Figure 2: Wiring diagram



1. From NAC output
2. To next NAC output

Note: Polarity is shown in the alarm condition.

Maintenance

Caution: To maintain the required agency listings, do not change factory applied finishes.

This unit is not serviceable or repairable. Should the unit fail to operate, contact the supplier for replacement.

Perform a visual inspection and an operational test twice a year or as directed by the local authority having jurisdiction.

Table 2: Sound level output (dBA)

Signal and voltage		Low	High
Temporal	16 VDC	76.0	81.4
	24 VDC	79.4	84.4
	33 VDC	82.1	86.3
Continuous	16 VDC	80.1	85.5
	24 VDC	83.5	88.6
	33 VDC	86.5	90.4

UL 464: Sound level output at 10 ft. (3.05 m) measured in a reverberant room.

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Table 3: Sound level output (dBA, temporal tone, peak)

Tonal and voltage	High
16 VDC	98.8
24 VDC	102.7
33 VDC	104.3
16 VFWR	102.4
24 VFWR	105.0
33 VFWR	106.9

CAN/ULC-S525: Meets or exceeds 85 dBA in an anechoic chamber at 10 ft. (3.05 m)

Table 4: Operating current in RMS (A)

Voltage	High	Low
16 VDC	0.026	0.019
24 VDC	0.036	0.027
33 VDC	0.041	0.033
16 VFWR	0.051	0.037
24 VFWR	0.069	0.052
33 VFWR	0.076	0.070

VDC = Volts direct current, regulated and filtered

VFWR = Volts full wave rectified

Table 5: Audible directional characteristics (horizontal pattern)

Angle (°) [1]	Sound output (dBA) [2]
−90	94
−45	97 (−6)
−30	100 (−3)
90	103
30	100 (3)
45	97 (6)
90	96

[1] Angles are measured from a perpendicular axis; positive angles to the right

[2] Peak output at 24 VDC, set for temporal tone.

Table 6: Audible directional characteristics (vertical pattern)

Angle (°) [1]	Sound output (dBA) [2]
−90	94
−40	97 (−6)
−25	100 (−3)
90	103 dBA
35	100 (3)
45	97 (6)
90	96

[1] Angles are measured from a perpendicular axis; positive angles are up.

[2] Peak output at 24 VDC, set for temporal tone.

Specifications

Operating Voltage	Regulated 16 to 33 VDC, 16 to 33 VFWR
Current	
Alarm	40 mA at 24 VDC
Operating	See Table 4
Sound level output	See Table 2 and Table 3
Audible directional characteristics	See Table 5 and Table 6
Wire size	12 to 18 AWG (0.75 to 2.50 mm²)
Compatible electrical boxes	North American 2-1/2 in. (64 mm) deep single-gang box Standard 4 in. square box 1-1/2 in. (38 mm) deep box European 100 mm² box
Operating environment	
Temperature	32 to 120°F (0 to 49°C)
Relative humidity	0 to 93% noncondensing

Note: This device was tested to the regulated 24 DC/FWR operating voltage limits of 16 V and 33 V. Do not apply 80% and 110% of these values for system operation.

Certification and compliance

UL rating	Regulated 24 DC and 24 FWR
North American standards	CAN/ULC-S525 and UL 464

Contact information

For contact information, see www.edwardsfiresafety.com.