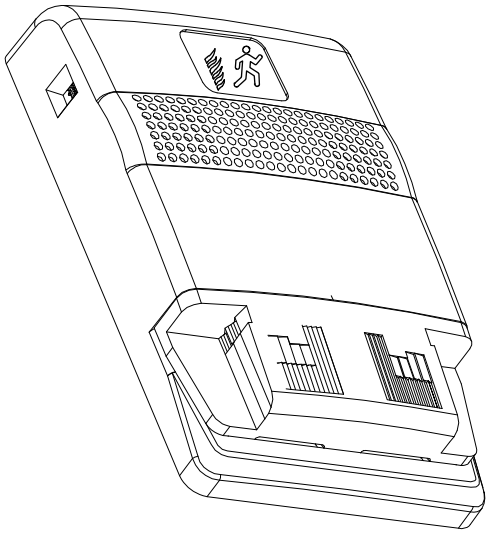
EDWARDS
A UTC Fire & Security Company

Genesis Temporal Horn-Strobe Installation Sheet



Description

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

Table 1: Models

Description	Number	
Horn-strobe, 15 to 110 multi-cd, white	ADTG1-HDVM EG1-HDVM G1-HDVM	MG1-HDVM XLSG1-HDVM ZG1-HDVM
Horn-strobe, 15 to 110 multi-cd, white, with FIRE marking	ADTG1F-HDVM EG1F-HDVM G1F-HDVM	MG1F-HDVM XLSG1F-HDVM ZG1F-HDVM
Horn-strobe, 15 to 110 multi-cd, red	ADTG1R-HDVM EG1R-HDVM G1R-HDVM	MG1R-HDVM XLSG1R-HDVM ZG1R-HDVM
Horn-strobe, 15 to 110 multi-cd, red, with FIRE marking	ADTG1RF-HDVM EG1RF-HDVM G1RF-HDVM	MG1RF-HDVM XLSG1RF-HDVM ZG1RF-HDVM
Trim plate, white	ADTG1T EG1T G1T	MG1T XLSG1T ZG1T
Trim plate, white, with FIRE marking	ADTG1T-FIRE EG1T-FIRE G1T-FIRE	MG1T-FIRE XLSG1T-FIRE ZG1T-FIRE
Trim plate, red	ADTG1RT EG1RG 1RT	MG1RT XLSG1RT ZG1RT
Trim plate, red, with FIRE marking	ADTG1RT-FIRE EG1RT-FIRE G1RT-FIRE	MG1RT-FIRE XLSG1RT-FIRE ZG1RT-FIRE

There are field-configurable options for selecting dB output, horn signal, or strobe signal output. See Figure 1.

The strobe includes a field-configurable switch for selecting the desired candela output. The candela output setting is locked in place and remains visible after final installation. See Figure 2.

This strobe features an enhanced synchronization circuit to comply with the latest requirements of UL 1971 *Signaling Devices for the Hearing Impaired* and the latest Canadian standard CAN/ULC-S526. Synchronized operation requires a separately installed synchronization control module. See Table 2 for a list of compatible synchronization modules.

Table 2: Compatible synchronization module models [1]

Description	Number		
Genesis Signal Master Snap-on Mount	EG1M ADTG1M	MG1M XLSG1M	G1M ZG1M
Genesis Signal Master - Remote Mount	EG1M-RM	MG1M-RM	G1M-RM
Auto-Sync Output Module	SIGA-CC1S	SIGA-MCC1S	
Dual Input Signal Module	SIGA-CC2A	SIGA-MCC2 A	
Auxiliary Power Supply	APS6A	APS10A	
Power Supply	BPS6A	BPS10A	

[1] Synchronization module requirements are determined by the application.

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.

P/N 3100560 • REV 5.0 • ISS 25AUG10

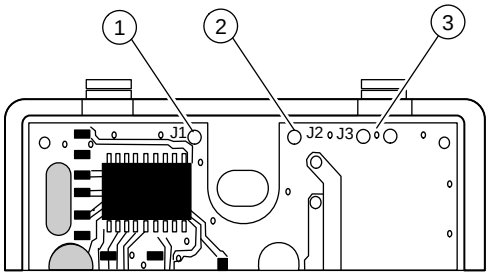
WARNING: Electrocution hazard. To avoid personal injury or death from electrocution, remove all sources of power and allow stored energy to discharge before installing or removing equipment.

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-strobe:

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, sound output level, and strobe signal to the desired settings. See Figure 1.
   - To change the strobe to temporal (private mode), cut from circle J1 to the edge of circuit board.
   - To change the horn signal from temporal to steady, cut from circle J2 to the edge of circuit board.
   - To change the horn output level from high dB to low dB, cut the J3 trace between the holes.
3. Slide the candela switch to the desired candela output by aligning it with the indicator located left of the switch. See Figure 2.
4. Connect the strobe terminals to the signal circuit field wiring. You must observe polarity for the unit to function properly. See Figure 3.
5. Mount the unit onto a compatible electrical box, making sure not to overtighten the mounting screws.
6. Replace the cover by aligning it at the bottom, then snapping it in at the top.
7. Test the unit for proper operation.

Figure 1: Horn and strobe settings



1. J1: Strobe signal output
2. J2: Temporal/steady horn signal output
3. J3: dB sound output

Note: If the strobe is set to temporal (private mode), this device is no longer UL 1971 listed and FM Approved but is UL 1638 listed.

Figure 2: Candela switch

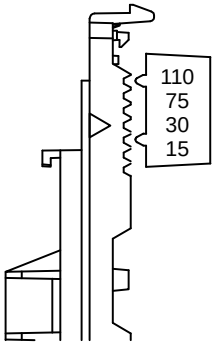
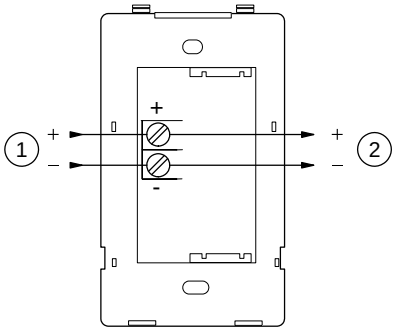


Figure 3: Wiring diagram



1. From compatible fire alarm control panel
2. To next appliance, EOL, or return to source

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.

Specifications

Operating Voltage	24 VDC or 24 VFWR nominal
Operating horn-strobe current	See Table 7
Sound level output	See Table 3 and Table 4
Audible directional characteristics	See Table 5 and Table 6
Light output	Selectable at 15, 30, 75, and 110 cd
Synchronization	Maximum allowed resistance between any two devices is 20 Ω. Refer to specifications for the synchronization control module, this strobe, and the control panel to determine allowed wire resistance.
Default settings	1 flash per second (fps)
Wire size	12 to 18 AWG (0.75 to 2.50 mm²)
Compatible electrical boxes	2-1/2 in. (64 mm) deep single-gang box 4 in. square box 1-1/2 in. (38 mm), 2-gang 4 in. octagonal with G1T or G1RT trim accessory
Operating environment	
Temperature	32 to 120°F (0 to 49°C)
Relative humidity	0 to 93% noncondensing

Table 3: UL Ratings, temporal output

Signal and voltage	Low	High
Temporal	76.0	81.4
Continuous	80.1	85.5

UL 464: Sound level output at 10 ft. (3.05 m) measured in a reverberant room at 16 V.

Table 4: Sound level output (dBA, temporal tone)

Voltage	High	Low
16 VDC	97.6	93.8
24 VDC	101.4	97.3
33 VDC	103.8	99.7
16 VFWR	101.3	97.3
24 VFWR	104.2	100.4
33 VFWR	106.0	102.7

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

Table 5: Audible directional characteristics (horizontal pattern)

Angle (°) [1]	Output (dB) [2]
0	0
+18	−3
+42	−6
-50	−3
-75	−6

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

[2] Peak output at 16 VDC, set for steady tone

Table 6: Audible directional characteristics (vertical pattern)

Angle (°) [1]	Output (dB) [2]
0	0
+20	−3
+45	−6
−20	−3
−52	−6

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

[2] Peak output at 16 VDC, set for steady tone.

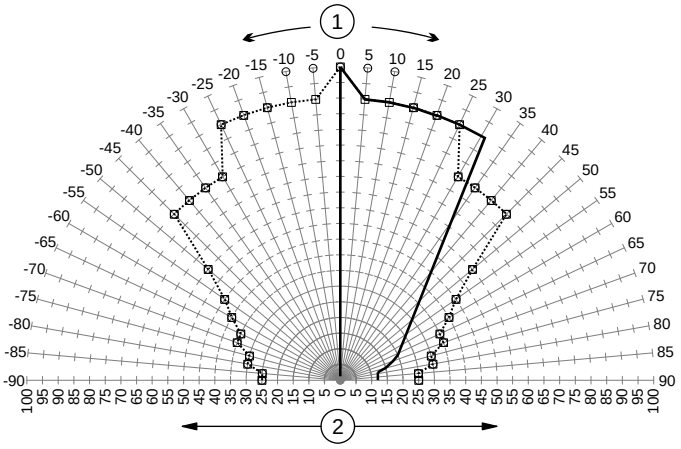
Table 7: Operating horn-strobe current in RMS (A)

Voltage	Strobe (cd)	Operating current
VDC	15	0.129
	30	0.167
	75	0.281
	110	0.337
VFWR	15	0.176
	30	0.230
	75	0.397
	110	0.443

VDC = Volts direct current, regulated and filtered
VFWR = Volts full wave rectified

Operating currents shown above were measured by UL at 16 VDC and 16 VFWR and high dB setting.

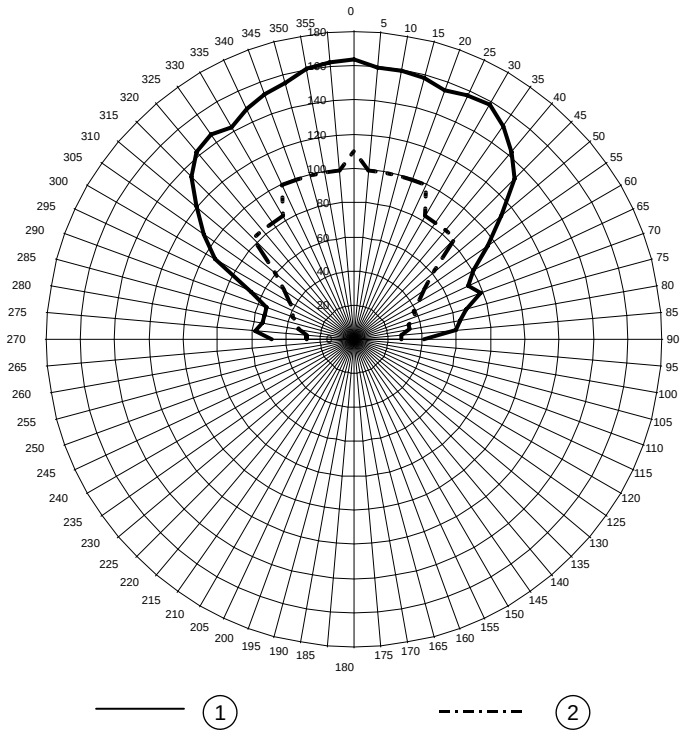
Figure 4: UL 1971 minimum light output (% of rating vs. angle)



1. Angle
2. Minimum UL required candela light output

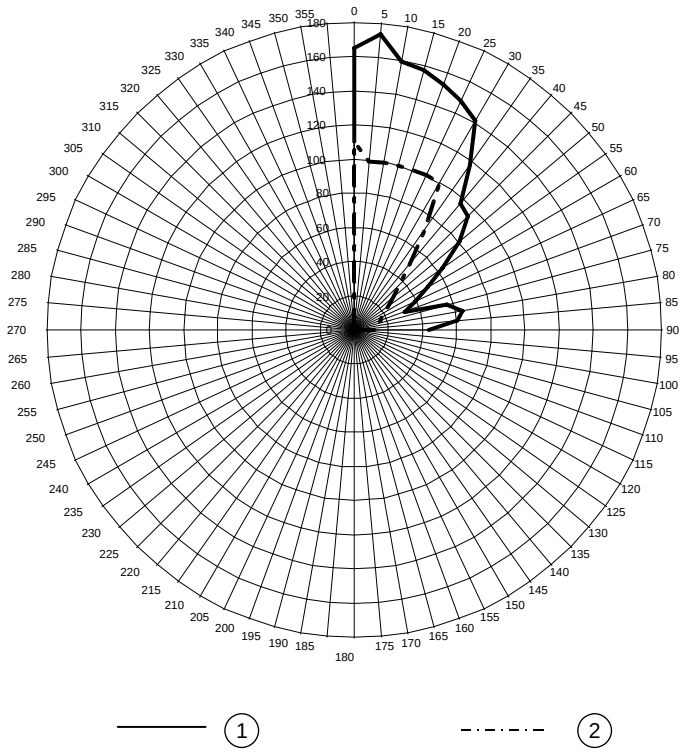
____ % of rated candela vertical specification
- - - - % of rated candela horizontal specification

Figure 5: Typical horizontal light output profile, 110 cd setting



1. Intensity (cd)
2. UL limit (cd)

Figure 6: Typical vertical light output profile, 110 cd setting



1. Intensity (cd)
2. UL limit (cd)

Regulatory information

Manufacturer	Edwards, A Division of UTC Fire & Security Americas Corporation, Inc. 8985 Town Center Parkway, Bradenton, FL 34202, USA
Year of manufacture	The first two digits of the date code (located on the product identification label) are the year of manufacture.
UL rating	Regulated 24 DC and 24 FWR
North American standards	Meets UL requirements for standards UL 464, UL 1638 and UL 1971 (see Figure 1) and Canadian requirements for standards ULC-S525 and ULC-S526.

Contact information

For contact information, see www.utcfireandsecurity.com.

P/N 3100560 • REV 5.0 • ISS 25AUG10