



FIRE ALARM EQUIPMENT



Genesis® Horns, Strobes & Horn/Strobes

Field Configurable Horn & Strobe Output

EG1* Series

FEATURES

- > Unique low-profile design
- > Attractive appearance
- > Ultra-slim - protrudes less than one inch from wall
- > No visible mounting screws
- > Exclusive FullLight® Strobe Technology
- > Low current draw
- > 15/30/75/110 and 95-177 candela output models
- > High (default) or low dB horn
- > Temporal (default) or steady horn
- > Public mode flash rate (default) or private mode temporal flash

AGENCY APPROVALS

- > UL 1971 Listed for the hearing impaired
- > UL 1638 Listed as protective visual signaling appliances
- > UL 464
- > ULC S525 & S526
- > CE Marked
- > FCC
- > MEA, FM, CSFM pending

The Genesis line of signals are the smallest, most compact audible and visible emergency signaling devices in the world. About the size of a deck of playing cards, these devices are designed to blend with any building environment. Edwards Genesis horn/strobes do not require bulky specular reflectors. Instead, an exclusive mask-and-cavity design, channels and conditions light to produce a highly controllable distribution pattern. Intensive development employing this new technology have given rise to a new benchmark in strobe performance – FullLight® technology.

The EG1-HDVM series horn/strobes offer 15 to 110 candela output, which is selectable with a conveniently-located switch on the side of the device. The EG1-HDVMH series offers 95 to 177 candela output. The candela output setting remains clearly visible even after final installation, yet it stays locked in place to prevent unauthorized tampering. Its horn output reaches as high as 99 dB and features a unique multiple frequency tone that results in excellent wall penetration and an unmistakable warning of danger. Horns may be configured for either coded or non-coded signal circuits. They can also be set for low dB output with a jumper cut that reduces horn output by 5 dB.

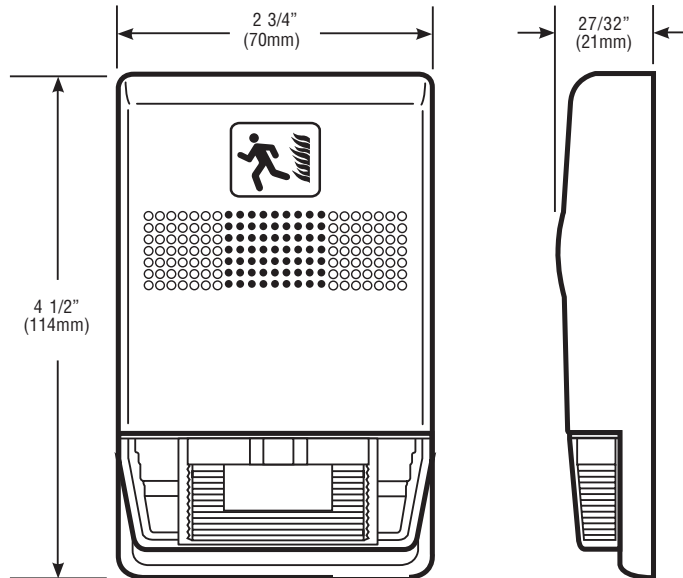
When installed with the Cat.No. EG1M Signal Master, strobe flashes from devices on the same circuit are synchronized to within 10 milliseconds of each other indefinitely. The Signal Master also permits independent horn control over a single pair of wires. Only one Signal Master is required per circuit. No separate backbox — simply snap it onto the back of the first signal on the circuit.

*Insert "R" for red, "W" for white
"RF" for red with fire marking, "F" for white with fire marking.





TECHNICAL INFORMATION



Feature	Description
Housing	Red or white textured UV stabilized, color impregnated engineered plastic. Exceeds 94V-0 UL flammability rating.
Lens	Optical grade polycarbonate (clear)
Mounting (indoor wall mount only)	Flush mount: 2 1/2" inch (64mm) deep one-gang box Surface mount: Edwards model 27193 surface mount box, wiremold box, or equivalent surface-mount box With optional trim plate: one-gang, two-gang, four-inch square, octagonal, or European single-gang box
Wire Connections	Screw terminals: single input for both horn and strobe, #18 to #12 AWG (0.75 mm ² to 2.5 mm ²) wire size
Operating Environment	Indoor only: 32-120° F (0-49° C) ambient temperature; 0-93% relative humidity.
Agency Listings/Approvals	UL 1971, UL 1638, UL 464, ULC S525, ULC S526, CE, FCC, (MEA, FM, CSFM pending). (All models comply with ADA Code of Federal Regulation Chapter 28 Part 36 Final Rule.)
Strobe Output	Selectable 15 cd, 30 cd, 75 cd, or 110 cd output or Selectable 95 - 177 cd output
Operating Voltage	EG1-VM series strobes: Non-coded, filtered 16-33V DC or unfiltered 16-33V DC FWR EG1-HD temporal horns: Non-coded, filtered 16-33V DC or unfiltered 16-33V DC FWR (or coded when set to steady) EG1-P steady horns: Coded or non-coded, filtered 20-31V DC or unfiltered 20-27V FWR EG1-HDVM series temporal tone horn/strobes: Non-coded, filtered 16-33V DC or unfiltered 16-33V DC FWR (or coded (audible NAC only) when used with optional EG1M Genesis Signal Master)
Strobe Output Rating	UL 1971, UL 1638, ULC S526: selectable 15 cd, 30 cd, 75 cd, or 110 cd output
Strobe Flash Rate	EG1-VM series strobes and EG1-HDVM series temporal horn/strobes: one flash per second synchronized with optional EG1M Genesis Signal Master indefinitely within 10 milliseconds (or self-synchronized within 200 milliseconds over thirty minutes on a common circuit without EG1M Genesis Signal Master) Temporal setting (private mode only): synchronized to temporal output of horns on same circuit
Compatible Synchronization Module	EG1M, EG1M-RM
Horn Pulse Rate	EG1-HD temporal-tone horns and EG1-HDVM series temporal-tone horn-strobes: temporal rate synchronized with optional EG1M Genesis Signal Master indefinitely within 10 milliseconds (or self-synchronized within 200 milliseconds over thirty minutes on a common circuit without EG1M Genesis Signal Master) EG1-P steady-tone horns: continuous, steady tone only
Temporal Audible Pattern	1/2 sec ON, 1/2 sec OFF, 1/2 sec ON, 1/2 sec OFF, 1/2 sec ON, 1 1/2 sec OFF, then repeat cycle





FIRE ALARM EQUIPMENT

Current Data

EG1-HDVM WALL MOUNT HORN/STROBES - HIGH dB SETTING

UL Nameplate Rating (UL1971, Effective May 2004)

	15cd RMS		30cd RMS		75cd RMS		110cd RMS	
16 Vdc	129		167		281		337	
16 Vfwr	176		230		397		443	
Typical Current (Measured by Edwards)								
	15cd		30cd		75cd		110cd	
	RMS	mean	RMS	mean	RMS	mean	RMS	mean
16 Vdc	102	89	135	129	246	242	309	305
20 Vdc	88	77	109	104	193	190	248	243
24 Vdc	81	71	94	90	161	158	203	200
33 Vdc	74	64	72	74	124	121	154	151
16 Vfwr	144	77	182	106	352	212	393	249
20 Vfwr	141	68	162	87	274	158	362	210
24 Vfwr	136	65	152	76	235	133	282	165
33 Vfwr	125	54	144	65	201	101	232	123

EG1-HD WALL MOUNT TEMPORAL HORNS

UL Nameplate Rating (UL1971, Effective May 2004)

	High dB RMS		Low dB RMS	
16 Vdc	26		19	
24 Vdc	36		27	
33 Vdc	41		33	
16 Vfwr	51		37	
24 Vfwr	69		52	
33 Vfwr	76		70	
Typical Current (Measured by Edwards)				
	High dB		Low dB	
	RMS	Mean	RMS	Mean
16 Vdc	22	17	17	14
20 Vdc	24	19	19	16
24 Vdc	27	21	22	18
33 Vdc	32	25	26	22
16 Vfwr	34	15	30	14
20 Vfwr	40	19	34	16
24 Vfwr	45	21	38	18
33 Vfwr	52	24	47	22

EG1-HDVM WALL MOUNT HORN/STROBES - LOW dB SETTING

UL Nameplate Rating (UL1971, Effective May 2004)

	15cd RMS		30cd RMS		75cd RMS		110cd RMS	
16 Vdc	122		160		274		330	
16 Vfwr	162		216		383		429	
Typical Current (Measured by Edwards)								
	15cd		30cd		75cd		110cd	
	RMS	mean	RMS	mean	RMS	mean	RMS	mean
16 Vdc	96	84	130	124	243	240	203	297
20 Vdc	79	70	104	99	189	186	241	237
24 Vdc	68	61	88	84	156	154	197	193
33 Vdc	56	52	71	68	118	116	146	143
16 Vfwr	128	69	80	104	344	204	389	244
20 Vfwr	118	60	157	84	266	156	243	200
24 Vfwr	113	54	144	74	230	128	279	161
33 Vfwr	112	48	137	64	197	99	226	117

EG1-P WALL MOUNT PIEZO HORNS

UL Nameplate Rating (UL1971, 5/04)

Typical Current

	RMS	RMS	Mean
20 Vdc	9	10	10
24 Vdc	10	11	11
31 Vdc	12	12	12
20 Vfwr	8	9	8
24 Vfwr	9	10	9

EG1-VM WALL MOUNT STROBES

UL Nameplate Rating (UL1971 Standard (revised) Effective 5/04)

	15cd RMS		30cd RMS		75cd RMS		110cd RMS	
16 Vdc	103		141		255		311	
16 Vfwr	125		179		346		392	
Typical Current (Measured by Edwards)								
	15cd		30cd		75cd		110cd	
	RMS	mean	RMS	mean	RMS	mean	RMS	mean
16 Vdc	85	79	127	124	245	243	285	283
20 Vdc	71	66	98	96	188	186	240	238
24 Vdc	59	55	82	80	152	150	191	190
33 Vdc	46	44	64	63	112	111	137	136
16 Vfwr	119	64	169	97	332	203	376	240
20 Vfwr	103	51	143	76	253	150	331	198
24 Vfwr	94	44	129	65	218	121	262	152
33 Vfwr	87	37	112	52	179	89	205	106

CURRENT DATA NOTES & COMMENTS

1. Current values are shown in mA.
2. UL Nameplate Rating can vary from Typical Current due to measurement methods and instruments used.
3. Edwards recommends using the Typical current for system design including NAC and Power Supply loading and voltage drop calculations.
4. Use the Vdc RMS current ratings for filtered power supply and battery AH calculations. Use the Vfwr RMS current ratings for unfiltered power supply calculations.
5. Fuses, circuit breakers and other overcurrent protection devices are typically rated for current in RMS values. Most of these devices operate based upon the heating affect of the current flowing through the device. The RMS current (not the mean current) determines the heating affect and therefore, the trip and hold threshold for those devices.
6. Our industry has used 'mean' currents over the years. However, UL will direct the industry to use the 2004 RMS values in the future.





dBA OUTPUT - HIGH dB SETTING

	UL464		Average	Peak
	Temporal	Steady	Temporal/Steady	Temporal/Steady
16 Vdc	81.4	85.5	91.4	94.2
24 Vdc	84.4	88.6	94.5	97.6
33 Vdc	86.3	90.4	96.9	99.5

EG1-P dB OUTPUT

	UL464		Average	Peak
	Temporal	Steady	Temporal/Steady	Temporal/Steady
20 Vdc	76.7	89.5	91	91
24 Vdc	77.1	90	91.1	91.1
31 Vdc	77.2	90.4	91.6	91.6

Genesis horns and strobes mount to any standard one-gang surface or flush electrical box. Matching optional trim plates are used to cover oversized openings and can accommodate one-gang, two-gang, four-inch square, or octagonal boxes, and European 100 mm square.



Genesis Horn-strobe with optional trim plate

Temporal models are factory set to sound in a three-pulse temporal pattern. Units may be configured for use with coded systems by cutting a jumper on the circuit board. This results in a steady output that can be turned on and off (coded) as the system applies and removes power to the signal circuit. A

dBA OUTPUT - LOW dB SETTING

	UL464		Average	Peak
	Temporal	Steady	Temporal/Steady	Temporal/Steady
16 Vdc	76.0	80.1	86.3	89.2
24 Vdc	79.4	83.5	89.8	92.5
33 Vdc	82.1	86.5	92.5	95.3

dBA NOTES

1. All values shown are dBA measured at 10 feet (3.01m).
2. UL 464 values measured in reverberation room.
3. Average and Peak values are measured in anechoic chamber.

Genesis Signal Master is required when horn-strobe models are configured for coded systems. Non-temporal, horn-only models sound a steady tone. Models are shipped from the factory ready for use as UL 1971 compliant signals for public mode operation. These signals may be configured for temporal flash by cutting a jumper on the circuit board.

Strobes and horn-strobes may be set for 15, 30, 75 or 110 candela output. The device does not have to be removed to change the output setting. The setting remains visible through a small window on the side of the device after the cover is closed.

Models are factory set for high dB output. Low dB output may be selected by cutting a jumper on the circuit board which reduces the output by about 5 dB.

ORDERING INFORMATION

Catalog Number		Description
White	Red	
EG1-HDVM	EG1R-HDVM	Genesis Horn/Strobe (selectable 15, 30, 75, or 110 cd output, selectable high/low dB output)
EG1-VM	EG1R-VM	Genesis Strobe (selectable 15, 30, 75, or 110 cd output)
EG1-HD	EG1R-HD	Genesis Temporal Horn (selectable high/low dB output)
EG1-P	EG1R-P	Genesis Steady Horn (not compatible with Genesis Signal Master)
EG1F-HDVM	EG1RF-HDVM	Genesis Horn/Strobe (selectable 15, 30, 75, or 110 cd output, selectable high/low dB output) - with "FIRE" marking
EG1F-VM	EG1RF-VM	Genesis Strobe (selectable 15, 30, 75, or 110 cd output) - with "FIRE" marking
EG1F-HD	EG1RF-HD	Genesis Temporal Horn (selectable high/low dB output) - with "FIRE" marking
EG1F-P	EG1RF-P	Genesis Steady Horn with "FIRE" marking (not compatible with Genesis Signal Master)
Mounting Accessories		
EG1T	EG1RT	Genesis Trim Plate (for two-gang or 4" square boxes)
EG1T-FIRE	EG1RT-FIRE	Genesis Trim Plate (for two-gang or 4" square boxes) with "FIRE" markings
27193-16	27193-11	One-gang surface mount box
Synchronization Modules		
EG1M		Genesis Signal Master - Snap-on Mount
EG1M-RM		Genesis Signal Master - Remote Mount (1-gang)

