Re-entrant Speaker and Speaker-Strobe

757 Series

Overview

EDWARDS's Integrity Series life safety and mass notification/ emergency communications (ECS/MNS) re-entrant speakers and speaker-strobes are high quality appliances for emergency voice communications, as well as alert and alarm tone signals.

Integrity's rugged plastic housing is made from durable and fire retardant, high impact plastic with a slightly textured surface. Housings are rated for outdoor use and are available in red or white. Integrity's ingenious mounting plate firmly holds the device in place with a single screw. This ensures quick and attractive installation. A separate trim plate is not required. Speaker terminals accept up to #12 AWG (2.5mm^2) wire for polarized connections. Strobe connections are made to color-coded wire leads.

Life safety strobes are shipped with standard wall mount style FIRE lens markings. Where ceiling orientation, other languages, or different lens markings are required, EDWARDS offers optional LKW and LKC series Lens Marking Kits. These optional lens markings simply snap on to the strobe. Consult EDWARDS for availability of special lens markings.

Integrity strobes are designed for 16 to 33 Vdc operation and must be connected to signal circuits that output a constant (not pulsed) voltage. A diode is used to allow full signal circuit supervision.

Standard Features

- **UL 1971-listed synchronizing strobe**
  Integrity strobes synchronize to the latest UL 1971 requirements when used with a synchronization source.
- **Genesis-compatible**
  All Genesis and Integrity strobes on the same circuit meet UL 1971 synchronization requirements when used with an external control module.
- **ECS/MNS models available**
- **Listed for public and private mode applications**
  UL 1971-listed as signaling devices for the hearing impaired and UL 1638-listed as protective visual signaling appliances.
- **98 dBA Output**
  High efficency driver produces a loud 98 dBA at 15 watts.
- **Multiple Output Taps, 25 or 70 Volt Models**
  Easy to select for 2, 4, 8, and 15 watt operation. Integrity speakers are supplied with a DC Blocking Capacitor for audio circuit supervision.
- **Outdoor rated**
  Durable red or white Noryl front plate is ideal for outdoor, industrial or harsh environments.
- **Field changeable field markings**
  Lens language or standard "FIRE" marking is easily changed with optional LKW (wall orientation) and LKC (ceiling orientation) lens kits.

Application

NOTE: The installation of visible and audible signals are subject to national and local standards, codes, and ordinances. Consult your Authority Having Jurisdiction for device installation requirements, application standards, and minimum performance specifications.

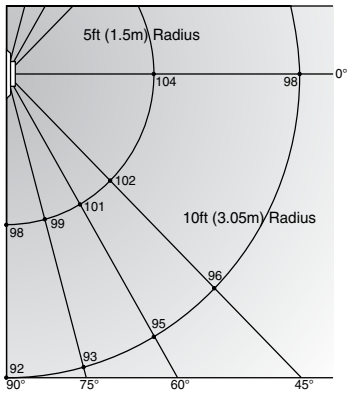
Speakers

All Integrity speakers include a DC blocking capacitor to allow electrical supervision of the audio distribution circuit. Models for 25 V_{RMS} and 70 V_{RMS} circuits are available. Wattage taps from 2 W to 15 W provide on-site flexibility.

The suggested sound pressure level for each signaling zone used with alert or alarm signals is a minimum of 15 dB above the average ambient sound level or 5 dB above the maximum sound level having a duration of at least 60 seconds, whichever is greater. This is measured 5 feet (1.5 m) above the floor.

Doubling the distance from the signal to the ear will theoretically cause a 6dB reduction in the received sound pressure level. The actual effect depends on the acoustic properties of materials in the space. Doubling the power output of a device (e.g.: a speaker from 1W to 2W) will increase the sound pressure level by 3dBA.

Re-entrant Speaker-Strobe



Typical Sound Output Distribution dBA measured in anechoic chamber

Strobes

EDWARDS clear strobes are UL 1971-listed for use indoors as wall- or ceiling- mounted public-mode notification appliances for the hearing impaired. Prevailing codes require strobes to be used where ambient noise conditions exceed specified levels, where occupants use hearing protection, and in areas of public accommodation. Consult with your Authority Having Jurisdiction for details.

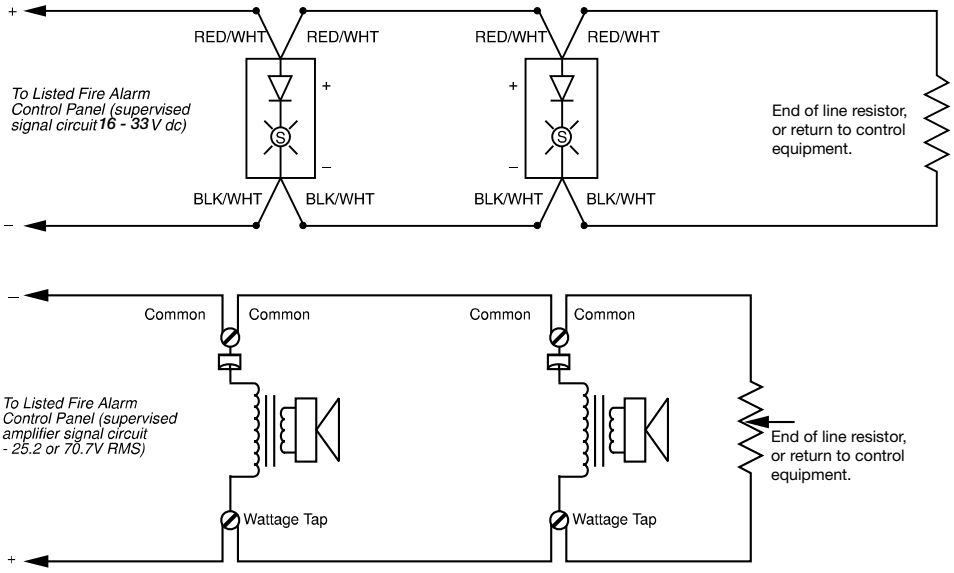
As part of the Enhanced Integrity line of products, 757 Series strobes exceed UL synchronization requirements (within10 milli-seconds over a two-hour period) when used with a synchronization source. Synchronization is important in order to avoid epileptic sensitivity.

Integrity strobes are fully compatible with EDWARDS Genesis signals.

WARNING: These devices will not operate without electrical power. As fires frequently cause power interruptions, further safeguards such as backup power supplies may be required.

Typical Wiring

The strobe must be connected to signal circuits which output a constant (not pulsed) 24 Vdc voltage. Depending on the model, the speaker must be connected to either 25 or 70 V audio circuits.

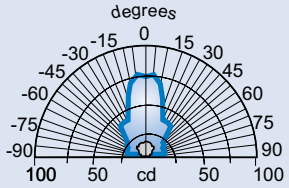


Light Distribution Patterns

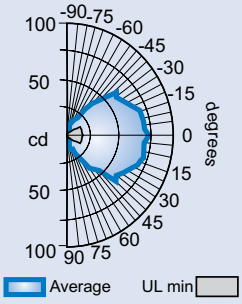
UL 1971 WALL MOUNTED STROBE LIGHT OUTPUT

15/75 cd (-7A) Series Strobes

Horizontal Output



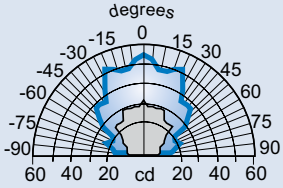
Vertical Output



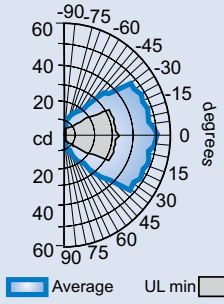
Average UL min

30 cd (-3A) Series Strobes

Horizontal Output



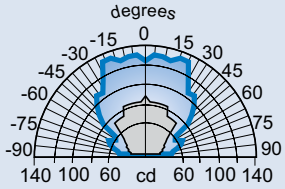
Vertical Output



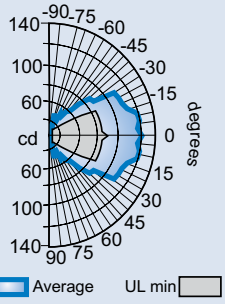
Average UL min

75 cd (-4A) Series Strobes

Horizontal Output



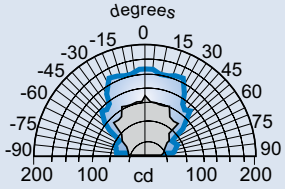
Vertical Output



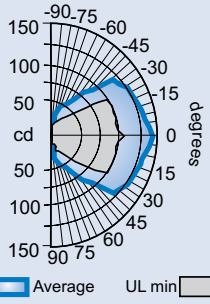
Average UL min

110 cd (-8A) Series Strobes

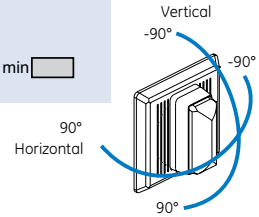
Horizontal Output



Vertical Output



Average UL min



Operating Current (RMS)

UL Rating	15/75 cd	30 cd	75 cd	110 cd
16 Vdc	150	130	263	329
16 Vfwr	210	189	333	420

Typical Current	15/75 cd	30 cd	75 cd	110 cd
24 Vdc	90	89	159	180
24 Vfwr	128	134	255	260

Vdc: Volts direct current, regulated and filtered
Vfwr: Volts full wave rectified

Notes

1. Current values are shown in mA.
2. 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 determines the heating affect and therefore, the trip and hold threshold for those devices.

Sound Level Output

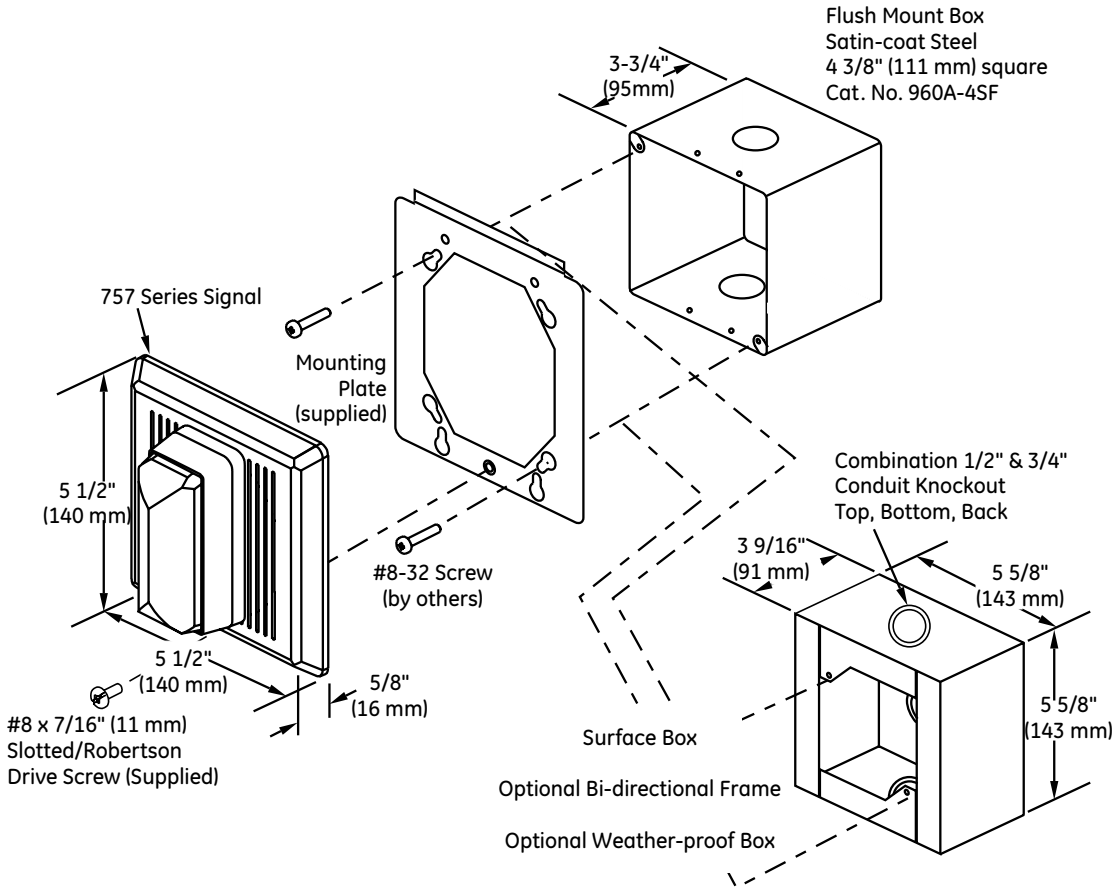
	Speaker		Speaker-strobe	
Wattage	UL 1480	Average	UL 1480	Average
2 W	90.0	90.3	84.0	86.2
4 W	93.0	93.4	87.0	89.4
8 W	96.0	95.7	90.0	91.8
15 W (UL)	96.0	98.2	90.0	94.1

Sound level output notes

- All values shown are dBA measured at 10 feet (3.01m).
- UL1480 values measured in reverberation room.
- Average values are measured in anechoic chamber.

Installation and Mounting

All models fit to flush mounted EDWARDS box, Catalog Number 960A-4SF. Optional flush trims are not required. For surface mount, use EDWARDS's custom indoor and outdoor surface boxes painted in color-matched red or white epoxy. EDWARDS recommends that these Life safety and ECS/MNS speaker/strobes always be installed in accordance with the latest recognized edition of national and local codes.



Specifications

Model	757-7A-RSxx	757-3A-RSxx	757-8A-RSxx
UL 1638 & ULC S526 Rating (note 2)	75 cd	30 cd	110 cd
UL 1971 Rating (note 2)	15 cd wall, 15 cd ceiling	30 cd wall, 15 cd ceiling	110 cd wall, 60 cd ceiling
Input/Operating Volts	Speaker: 25 VRMS (suffix "-RS25" or 70 VRMS (suffix "-RS70") - see ordering table Strobe: 16-33 Vdc Continuous		
Speaker Taps/Output (note 1)	Measured at 10' (3.05 m): 15W = 98 dBA, 8W = 95 dBA, 4W = 93 dBA, 2W = 90 dBA		
Speaker Driver	Sealed construction, compression driver, 8 ohm voice coil		
Strobe Flash Rate	Synchronized at one flash per second. External control module necessary to meet UL 1971 synchronization requirements of 10 milliseconds over a two-hour period		
Synchronization Sources	SIGA-CC1S, SIGA-MCC1S, SIGA-CC2A, SIGA-MCC2A, G1M-RM BPS6A, BPS10A, APS6A, APS10A, iO64, iO500, Fireshield Plus 3, 5 and 10 zone.		
Flash Tube Enclosure	Clear LEXAN		
Lens Markings	Supplied with LKW-1 "FIRE" red letters, vertical both sides (Wall Mount) - see LKW and LKC series for ceiling style and optional markings		
INDOOR Operating Environment	-31 to 150° F (-35 to 66° C) ambient temperature. 85% relative humidity @ 30° C.		
OUTDOOR Operating Environment (must use weatherproof box)	95% relative humidity @ 60° C; -35-150° F (-31-66° C) ambient temperature (757-7A: rated at 17.7 cd @ -35° C per UL/@ -40° C per ULC) (757-8A: rated at 70.7 cd @ -35° C per UL/@ -40° C per ULC) (757-3A: rated at 9.0 cd @ -35° C per UL/@ -40° C per ULC)		
Wire Connections	Speaker: Terminals for up to #12 AWG (2.5mm^2) Strobe: 6" (150 mm) color-coded polarized wire leads		
Housing (note 3)	Textured, color impregnated engineered plastics - exceeds 94V-0 UL flammability rating		
Mounting - INDOOR	Flush: 960A-4SF Flush Box Surface: 757A-SB Backbox Bi-directional (note 3)' 757A-BDF Mounting Frame (note 3)		
Mounting - OUTDOOR	Surface only: 757A-WB Weatherproof Box (note 3)		
Agency Listings	UL 1971, UL 1638, UL 1480, ULC S526, ULC S541, MEA, CSFM, FM (All models comply with ADA Code of Federal Regulation Chapter 28 Pt. 36 Final Rule)		

Note 1: Measured in reverberant room using 400-4000Hz band linited pink noise per UL 1480. Subtract 3dBA for models with strobes.
Note 2: Strobe candela ratings apply to clear strobes.
Note 3: RED housing is standard, add Suffix "W" for WHITE

Ordering Information

Catalog Number	Description	Ship Wt., lb. (kg)
25 Volt Re-Entrant Speakers, Speaker/Strobes		
757-1A-R25	Speaker, Red	2.5 (1.2)
757-1A-R25W	Speaker, White	
757-7A-RS25	Speaker-Strobe, 15/75cd, Red	
757-7A-RS25W	Speaker-Strobe, 15/75cd, White	
757-3A-RS25	Speaker-Strobe, 30cd, Red	
757-3A-RS25W	Speaker-Strobe, 30cd, White	
757-8A-RS25	Speaker-Strobe, 110cd, Red	
757-8A-RS25W	Speaker-Strobe, 110cd, White	
70 Volt Re-Entrant Speakers, Speaker/Strobes		
757-1A-R70	Speaker, Red	2.5 (1.2)
757-1A-R70W	Speaker, White	
757-7A-RS70	Speaker-Strobe, 15/75cd, Red	
757-7A-RS70W	Speaker-Strobe, 15/75cd, White	
757-3A-RS70	Speaker-Strobe, 30cd, Red	
757-3A-RS70W	Speaker-Strobe, 30cd, White	
757-8A-RS70	Speaker-Strobe, 110cd, Red	
757-8A-RS70W	Speaker-Strobe, 110cd, White	
Mounting Accessories		
960A-4SF	Flush Box, Indoor	1.5 (0.7)
757A-SB	Surface Box, Red, Indoor	
757A-SBW	Surface Box, White, Indoor	
757A-WB	Weatherproof Box, Red, Surface	
757A-WBW	Weatherproof Box, White, Surface	

Lens Marking Kits*	
LKW-1	“FIRE”, Wall Orientation (supplied)
LKW-1R	“FIRE”, Wall Orientation (red with white lettering)
LKW-2	“FEU”, Wall Orientation
LKW-3	“FIRE/FEU”, Wall Orientation
LKW-4	“SMOKE”, Wall Orientation
LKW-5	“HALON”, Wall Orientation
LKW-6	“CO2”, Wall Orientation
LKW-7	“EMERGENCY”, Wall Orientation
LKW-8	“ALARM”, Wall Orientation
LKW-9	“FUEGO”, Wall Orientation
LKW-10	“ALERT”, Wall Orientation

*Change “W” to “C” for Ceiling Mount (e.g. LKC-1)