Technical Data TD450030EN

Effective November 2020 Supersedes August 2016

ET80 & ET-1010 vandal resistant speakers and speaker strobes







Description

The Wheelock ET Vandal Resistant speakers and speaker strobes provide a full range of rugged, high performance combinations specifically designed to meet the critical needs of the life safety industry for voice and tone signaling. Available in compact, aesthetically pleasing package styles, each ET model covers both 25 and 70 volt audio systems, and has multiple wattage taps from 1/⁸ to 8 watts. Their high-efficiency design provides improved voice clarity and higher sound output for typical low frequency fire evacuation signal, such as the "slow whoop" and "temporal Code-3".

ET80 Speaker Strobes are designed to meet the latest requirements of NFPA 72 (National Fire Alarm Code), ANSI 117.1 (American National Standard of Accessible and Usable Buildings and Facilities) and UL Standard 1971 (Standard for Signaling Devices for the Hearing Impaired) and UL Standard 1480 (Speakers for Fire Protective Signaling Systems).

Series ET80 Speaker Strobes are UL Listed for indoor use, wall mount, under Standards 1971 and 1480 for Speaker Appliances, and incorporate a Lexan® lens to provide maximum reliability for effective visible signaling. The ET80-24MCW-FR-ULC model is specifically listed under ULC. Strobe options include Multi-candela MCW strobes with field selectable 15/30/75/110 or MCWH strobes with field selectable 135/185 candela. Single candela 1575 strobes (rated 15cd with 75 cd on axis) are also available.

ET80 Speaker Strobes, when used with Wheelock DSM Sync Modules or Wheelock Power Supplies produce synchronized strobe flashes for compliance with ADA guidelines concerning photosensitive epilepsy.



Features

Effective November 2020

- Approvals Include: UL Standard 1480, UL Standard 1971, California State Fire Marshal (CSFM), New York City (MEA), Chicago (BFP), CAN/ULC-S541-07, and FCC Part 15
- · Complies with OSHA 29, Part 1910.165
- Designed to meet or exceed NFPA/ANSI Standards and ADA Accessibility Guidelines
- High efficiency speakers designed for maximum output at minimum wattage across 400 to 4000 Hz frequency range (562-4470 Hz for ULC Model ET80)
- Field selectable taps for 25 or 70 VRMS operation from 1/8 watt up to 8 watts in 3 dB steps
- ET80 Speaker Strobe models available with Multi-candela strobes rated 15/30/75/110cd and 135/185cd or single candela strobes rated 15cd (with 75cd on axis)
- All strobe inputs are compatible with standard reverse polarity type supervision of circuit wiring by an alarm panel
- Attractive package styles for flush or surface mounting to standard low cost backboxes
- ET-1010 models UL Listed for outdoor use with Wheelock WBB outdoor backbox
- Vandal resistant die cast grilles
- Sealed back speaker construction for extra protection and improved audibility
- Fast installation with IN/OUT screw terminals using #12 to #18 AWG wring
- Compliance with RFI limits in FCC Part 15, Class "B" for compatibility with sensitive detection and communication circuits
- Audio inputs include a 10 uF blocking capacitor for compatibility with DC supervision of Speaker Notification Appliance Circuits

Note: Please read these specifications and associated installation instructions, before using, specifying, or installing this product. Visit Eaton.com/ Lifesafetynotification for current installation instructions.

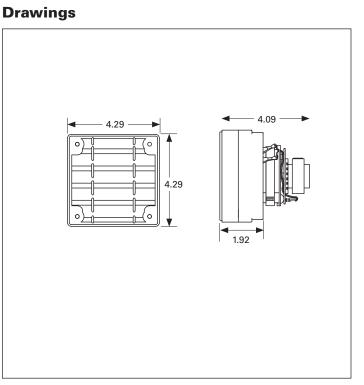


Figure 1. ET80 Speaker - Front & Side Views

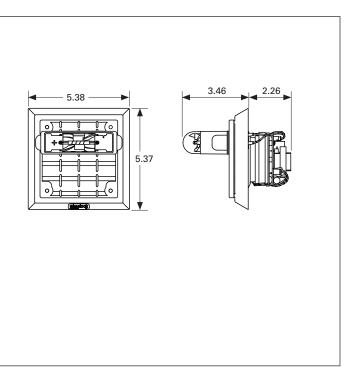


Figure 2. ET-1010 Speaker Strobe - Front & Side Views

General Notes

- Strobes are designed to flash at 1 flash per second minimum over their "Regulated Voltage Range". Note that NFPA-72 specifies a flash rate of 1 to 2 flashes per second and ADA Guidelines specify a flash rate of 1 to 3 flashes per second
- All candela ratings represent minimum effective Strobe intensity based on UL Standard 1971
- "Regulated Voltage Range" is the newest terminology used by UL to identify the voltage range. Prior to this change UL used the terminology "Listed Voltage Range"

Speaker dBA at 10 feet (ET-1010)

Specification and ordering information

Watts	1/8	1/4	1/2	1	2	4	8
dBA	77	80	83	86	87	92	94

Notes:

- 1. A 10 uF blocking capacitor for DC supervision of speaker NAC'S by the Voice Evacuation System is factory wired in series with the speaker input
- 2. dBA is rated per UL Standard 1480

Speaker dBA at 10 Feet (ET-1080 and ET80-24MCW)

Watts	1/8	1/4	1/2	1	2	4	8
ET80 dBA	78ª	81	84	87	90	92	94
ET-1080 dBA	78	81	84	87	90	93	96

^aFor UL model only. ULC model not listed for use with 1/8 watt tap setting.

UL Max^b current

Model number	ET80-241575		80-24M ULC m	ET80-24MCWH			
Candela	1575cd	15cd	30cd	75cd	110cd	135cd	185cd
16-33 VDC	0.090	0.060	0.092	0.165	0.220	0.300	0.420

^b UL max current rating is the maximum RMS current within the listed voltage range (16-33v for 24v units). For strobes the UL max current is usually at the minimum listed voltage (16v for 24v units). For audibles the max current is usually at the maximum listed voltage (33v for 24v units). For unfiltered FWR ratings, see installation instructions.

Model number	Order code	Color	Mounting location	Mounting options∘	Candela	Agency approvals					
						UL	MEA	CSFM	FM	BFP	ULC
ET-1010-R	3135	Red	Wall/ceiling	K,N,O,R	-	Х	Х	Х	Х	Х	-
ET-1010-W	3137	White	Wall/ceiling	K,N,O,R	-	Х	Х	Х	Х	Х	-
ET-1080-R	3141	Red	Wall/ceiling	0,P,Q,Y	-	Х	Х	Х	Х	Х	-
ET-1080-R-ULC-D	9834	Red	Wall/ceiling	0, P, Q, Y	-	Х	Х	Х	Х	Х	Х
ET-1080-W-ULC-D	9835	White	Wall/ceiling	0,P,Q,Y	-	Х	Х	Х	Х	Х	Х
ET80-24MCW-FR	3476	Red	Wall	0,P,Q,R,Y	15/30/75/110	Х	Х	Х	Х	-	-
ET80-24MCW-FW	3477	White	Wall	0,P,Q,R,Y	15/30/75/110	Х	Х	Х	Х	-	-
ET80-24MCWH-FR	3478	Red	Wall	0,P,Q,R,Y	135/185	Х	Х	Х	Х	-	-
ET80-24MCWH-FW	3479	White	Wall	0, P, Q, R, Y	135/185	Х	Х	Х	Х	-	-
ET80-24MCW-FR-ULC	4112	Red	Wall	P,Q	15/30/75/110	-	-	-	-	-	Х

• Refer to data sheet TD450028EN for mounting options.

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Architects and engineers specifications

The speaker appliances shall be Wheelock ET-1010, ET-1080 or ET80 vandal resistant speakers and speaker strobes or equivalent. The speakers shall be UL Listed under Standard 1480 for Fire Protective Service and speakers equipped with strobes shall be listed under UL Standard 1971 for Signaling Devices for the Hearing-Impaired ET-1010 models shall be Listed for outdoor use under UL Standard 1480. All speakers shall include both 25 and 70 volt VRMS inputs with field selectable power taps from 1/8 to 8 watts with listed sound output up to 96 dB for speakers or speaker strobes. Strobes shall be listed for 16-33 VDC input using filtered power or unfiltered power. All models shall have provisions for standard NAC supervision and IN/OUT field wiring using terminals that accept #12 to #18 AWG wiring.

Combination speaker strobe appliances shall incorporate a Xenon flashtube enclosed in a rugged Lexan lens or equivalent with solid state circuitry. Strobes shall meet UL Standard 1971 and produce a flash rate of one (1) flash per second minimum over the listed input voltage (16VDC-33VDC) range. Multi-candela strobe intensity shall be rated per UL Standard 1971 at 15/30/75/110cd 135/185cd. The 1575 candela strobes shall be specified when 15 candela UL Standard 1971 Listing with 75 candela intensity on-axis is required.

All strobes versions shall incorporate circuitry for synchronized strobe flash and shall be designed for compatibility with Wheelock DSM Sync Modules and Wheelock power supplies.

All UL Standard 1971 Listed strobe appliances shall be verified to meet FCC Part 15, Class "B" . Strobe activation shall be via independent input from the speaker notification appliance circuit.

The combination speaker strobe appliances may be installed indoors and surface or flush mounted. They shall mount to standard electrical hardware requiring no additional trimplate or adapter. All appliances shall be vandal resistant die cast metal finished in a textured red or white color.

Note: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Cooper Wheelock Inc., dba Eaton standard terms and conditions.



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Eaton 1000 Eaton Boulevard Cleveland, OH 44122 United States Eaton.com

Eaton Life safety & mass notification solutions 273 Branchport Ave. Long Branch, NJ 07740 Eaton.com/Lifesafetynotification

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