

by Honeywell

Cooper-Wheelock Series E60

Description

Series E60 Speakers provide high audio output with clear audibility and are designed to meet the critical needs of the life safety industry for effective emergency voice communications and tone signaling. In addition, the strobes provide visible signaling to alert the hearing impaired.

The Cooper-Wheelock Series E60 Ceiling Speakers and Speaker Strobes are designed for high efficiency sound output, with dual voltage (25/70 VRMS) capability and field selectable taps from 1/8 to 2 watts. These E60 Multi-Candela ceiling appliances are part of the new family of ceiling mount strobe appliances that will also be available on strobes, horns and horn/strobes. Optional Extender (E60 Ext) is for mounting on 4" (10.2 cm) backboxes with no extension ring.

The Series E60 Speaker Strobe models incorporate the Low Current draw Series RSS Strobes. These ceiling mount round models are available in Cooper-Wheelock patented MCC multi-candela ceiling strobe with field selectable intensities of 15/30/75/95cd or the high intensity MCCH strobe with field selectable 115/177cd.

The low profile design incorporates a speaker mounting plate for faster and easier installation. Each model has a built-in level adjustment feature and snap-on cover with no visible mounting screws.

The strobe portion of all Series E60 Speaker Strobes may be synchronized when used in conjunction with the Cooper-Wheelock SM-12/24-R and/or DSM-12/24-R sync modules. Cooper-Wheelock synchronized strobes offer an easy way to comply with ADA recommendations concerning photosensitive epilepsy.

Series E60 Speaker Strobes are UL Listed for indoor use under Standard 1971 (Signaling Devices for the Hearing-Impaired) and Standard 1480 (Speaker Appliances), and use a Xenon flashtube with solid state circuitry enclosed in a rugged Lexan® lens to provide maximum reliability for effective visual signaling. All inputs are supervised and employ IN/OUT wiring terminals for fast installation using 12 to 18 AWG wiring. Color options for the Series E60 Speakers and Speaker Strobes are red and white.

Lexan® is a registered trademark of GE Plastics, a subsidiary of General Electric Company.

Series E60 Speakers and Speaker Strobes



Features

- Meets UL Standards 1971 and 1480 (model dependent).
- ADA/NFPA/ANSI compliant.
- Complies with OSHA 29 Part 1910.165.
- Ceiling mount strobe models are available with field selectable candela settings of 15/30/75/95cd or 115/177 cd (Multi-candela models).
- Strobes produce 1 flash per second over the regulated voltage range.
- 24 VDC with wide UL "Regulated Voltage" using filtered DC or unfiltered VRMS input voltage.
- · Synchronize with the Cooper-Wheelock SM and DSM.
- Field selectable taps for 25 or 70 VRMS operation from 1/8 watt up to 2 watts.
- High efficiency design for maximum output at minimum wattage across a frequency range of 400 to 4000 Hz.
- Fast installation with IN/OUT screw terminals using 12 to 18 AWG wires.
- Optional extender (E60 Ext) is used for mounting on 4" (10.2 cm) backboxes with no extension ring.

An ISO 9000-2000 Company



NOTE: All CAUTIONS and WARNINGS are identified by the symbol . All warnings are printed in bold capital letters.

WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. VISIT WWW.COOPERWHEELOCK.COM OR CONTACT COOPER-WHEELOCK FOR THE CURRENT INSTALLATION INSTRUCTIONS. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS OR WARNINGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE, AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

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.
- Series NS Strobe products are listed under UL Standard 1971 for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%).
- "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".

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Table 1: Average RMS Current							
E60 Strobe Current - Ceiling Mount							
E60		24	24 MCCH				
Speaker	15cd	30cd	75cd	95cd	115cd	177cd	
Strobes							
24 vdc	0.045	0.070	0.119	0.159	0.195	0.270	
UL max*	0.065	0.105	0.189	0.249	0.300	0.420	

* RMS current ratings are per UL average RMS method. 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 (33 v for 24 units). For unfiltered FWR ratings, see installation instructions.

Table 2: E60 UL Reverberant dBA @ 10 Feet**								
watts	1/8	1/4	1/2	1	2			
E60 Speaker	77	79.5	82.5	85	88			
E60 Speaker Strobe	77	79.5	82.5	85	88			

^{**}dBA ratings are based on UL testing under UL Standard 1480.

Architect and Engineer Specifications

The speaker appliances shall be Cooper-Wheelock Series E60 Speakers and the speaker strobe appliances shall be Cooper-Wheelock Series E60 Speaker Strobes or approved equals. 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 Emergency Devices for the Hearing-Impaired. In addition, the strobes shall be certified to meet the requirements of FCC Part 15, Class B.

All speakers shall be designed for a field selectable input of either 25 or 70 VRMS, with selectable power taps from 1/8 watt to 2 watts. All models shall have listed sound output of up to 89 dB at 10 feet and a listed frequency response of 400 to 4000 Hz. The speaker shall incorporate a sealed back construction. All inputs shall employ terminals that accept 12 to 18 AWG wire sizes. The strobe portion of the appliance shall produce a flash rate of one (1) flash per second over the Regulated Voltage Range and shall incorporate a Xenon flashtube enclosed in a rugged Lexon® lens. The strobe shall be of low current design. Where Multi-Candela Speaker Strobes are specified, the strobe intensity shall have field selectable settings and shall be rated per UL Standard 1971 15/30/75/95 cd or 115/77 cd for ceiling mount. The selector switch for selecting the candela shall be tamper resistant.

When synchronization is required, the strobe portion of the appliance shall be compatible with the Cooper-Wheelock's SM-12/24-R and/or DSM-12/24-R sync modules. The strobes shall not drift out of synchronization at any time during operation. If the sync module or power supply fails to operate, (i.e., contacts remain closed), the strobe shall revert to non-synchronized flash rate.

The speaker and speaker strobe appliances shall be designed for indoor flush mounting. The speaker and speaker strobe shall incorporate a speaker mounting plate with a snap-on grille cover with no visible screws for a level, aesthetic finish and shall mount to standard electrical hardware.

The finish of the Series E60 Speakers and Speaker Strobes shall be white or red. All speaker and speaker strobe appliances shall be backward compatible.

Specifications and Ordering Information

Model	Wall Mount	Ceiling Mount	Non- Sync	Strobe Sync w/ SM and DSM	Strobe Candela	Model Color RED	Model Color WHITE	Mounting Options
E60-R		Χ	_	_	_	Х	_	Q,U
E60-W		Χ	_	_	_	_	Χ	Q,U
E60-24MCC-FR	_	Χ	Х	X	15/30/75/95	Х	_	Q,U,V
E60-24MCC-FW	_	Χ	Х	X	15/30/75/95	_	Χ	Q,U,V
E60-24MCCH-FW	_	Χ	Х	X	115/177	_	Χ	Q,U,V
E60-24MCCH-FR	_	Χ	Х	X	115/177	Х	_	Q,U,V
E60EXT-R**						Х		
E60EXT-W**							Х	

NOTE 1: **E60 EXT is an attractive extender ring that mounts behind the peaker to permit mounting to a 4" square x 2 1/8" deep electrical box without a need for an extension ring on the box.

Mounting Accessories

Mounting			Max. Number of Conductors				
Options	Description	AWG #18	AWG. #16	AWG#14	AWG.#12		
Q	4" Square 2-1/8" or 1-1/2" Deep w/	1-1/2" 8	1-1/2" 8	1-1/2" 8	1-1/2" 4		
See Note 1	Extension Ring, Flush (BO)	2-1/8" 8	2-1/8" 8	2-1/8" 8	2-1/8" 8		
U	5" Square Backbox with Extension Ring, Flush (BO)						
V	SSB-4 Ceiling Support Bridge						
	Provisions for (4) J-nuts #8-32 LB 3-3/8" square Material:Steel						
Note 1: Option Q is typical of a steel city 52171 box with a steel city 53151 extension ring or equal.							