

Series E50H & E60H

# **High Fidelity Speakers and Speaker Strobes**



#### Description

The Wheelock Series E50H Wall and E60H Ceiling Speakers and Speaker Strobes are designed for high fidelity sound output for indoor applications. With the widest frequency response range (300 to 8000 Hz) in the industry, the Series EH features leading intelligibility with crisp, clear voice messages and tone signaling, ideal for emergency communications, mass notification, voice evacuation and fire alarm.

Providing a sleek aesthetic appearance, the wall and ceiling appliances feature dual voltage (25/70 VRMS) capability and field-selectable taps from 1/8 to 2 watts. For faster and easier installation, the low profile design incorporates a speaker mounting plate, and each model has a built-in level adjustment feature and snap-on cover with no visible mounting screws.

For visible signaling to meet the hearing impaired, the Series EH Speaker Strobe models incorporate the Low Current draw Series RSS Strobes.

Strobe options for wall mount models include 1575 or Wheelock patented MCW multi-candela strobe with field selectable candela settings of 15/30/75/110cd or the high intensity MCWH strobe with field selectable 135/185cd.

Ceiling mount models are available in 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 strobe portion of all Series EH Speaker Strobes may be synchronized when used in conjunction with the Wheelock DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels incorporating the Wheelock Patented Sync Protocol. Wheelock synchronized strobes offer an easy way to comply with ADA recommendations concerning photosensitive epilepsy.

Series EH Speaker Strobes are UL Listed for indoor use under Standard 1971 (Signaling Devices for the Hearing-Impaired) and Standard 1480 (Speaker Appliances), and ULC listed under CAN/ ULC-S526 (Visual-audible Signal Appliances, Fire Alarm) and under CAN/ULC-S541 (Speakers, Fire Alarm). All inputs employ IN/OUT wiring terminals for fast installation using #12 to #18 AWG wiring.

Color options for the Series EH Speakers and Speaker Strobes are red and white.

#### Features

#### Approvals and Compliance

- UL 1971, UL 1480, ULC-S526, ULC-S541
- ADA/NFPA/ANSI compliant
- Complies with OSHA 29 Part 1910.165

#### High fidelity sound output

- Efficient design for high intelligibility at minimum wattage across a frequency range of 300 to 8000 HZ

#### • Field Selectable Taps

- 25 or 70 VRMS operation
- 1/8 watt up to 2 watts

#### 6 Field Selectable Multi-candela Settings

- Wall mount models are available with Field Selectable Candela Settings of 15/30/75/110cd or 135/185cd (Multi-Candela models) or 1575cd (Single Candela model)
- Ceiling mount models are available with field selectable candela settings of 15/30/75/95cd or 115/177cd (Multi-candela models)

#### Mounting

- Low profile design incorporates speaker mounting plate for faster and easier installation
- Snap on grille cover with no visible mounting screws
- Quick installation with IN/OUT screw terminals using #12 to #18 AWG wires
- 4" square backbox prevents wire damage
- Series E50H No extension ring required
- Series E60H Optional Extender (E60 Ext) is available for mounting to 4" square backboxes

#### Compatibility and Requirements

- 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 Wheelock DSM, Wheelock Power Supplies or other manufacturers panels, incorporating the Wheelock Patented Sync Protocol



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

WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING A OR APPLYING THIS PRODUCT. VISIT WWW.COOPERNOTIFICATION.COM OR CONTACT COOPER NOTIFICATION 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 1971.

Table 1: Maximum RMS Current - Series E50H										
E50H Speaker Strobes	E50H Strobe Current - Wall Mount									
		24N	ICW	24M0	смн	241575W				
	15cd	30cd	75cd	110cd	135cd	185cd	15/75cd			
16-33 vdc	0.060	0.092	0.165	0.220	0.300	0.420	0.090			

Table 3: EH UL Reverberant dBA @ 10 Feet**									
Watts	1/8***	1/4	1/2	1	2				
E50H Speaker/ Speaker Strobe	73	76	79	82	84				
E60H Speaker	74	77	80	83	85				
E60H Speaker Strobe	74	77	80	82	85				

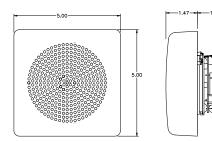
Table 2: Average RMS Current - Series E60H									
E60H Speaker Strobes	E60H Strobe Current - Ceiling Mount								
		24N	24MCCH						
	15cd	30cd	75cd	95cd	115cd	177cd			
16-33 vdc	0.065	0.105	0.189	0.249	0.300	0.420			

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

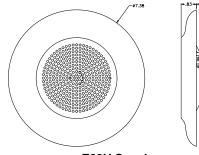
\*\*dBA ratings are based on testing under UL Standard 1480.

\*\*\* 1/8 watt tap is for private mode only.

# Speaker/Speaker Strobe Diagrams with Dimensions

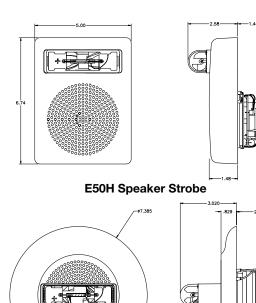


E50H Speaker



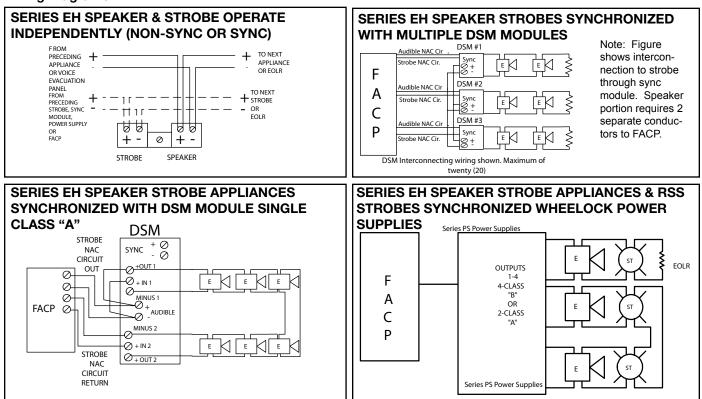


E60H Speaker



E60H Speaker Strobe

### Wiring Diagrams<sup>#</sup>



### For wiring information on the Wheelock power supplies, please refer to Data Sheet # S9100.

<sup>#</sup> For detail using DSM Sync Module refer to Data Sheet S3000 or Installation Instructions P83177 for DSM. For wiring information on the power supplies refer to Installation Instructions P84905.

Modol	Order Code N		Ceiling Mount		Strobe Sync w/ DSM or Wheelock Power Supplies	Strobe	Model	Model	Mounting Op-	Agency Approvals	
						Candela	Color Red	Color White	tions	UL	ULC
E50H-R	9863	Х	Х	-	-	-	Х		E, AA	Х	Х
E50H-W	9864	Х	Х	-	-	-		Х	E, AA	Х	Х
E50H-24MCW-FR	0092	Х	-	Х	Х	15/30/75/110	Х		E, BB	Х	Х
E50H-24MCW-FW	0093	Х	-	Х	Х	15/30/75/110		Х	E, BB	Х	Х
E50H-24MCWH-FR	0094	Х	-	Х	Х	135/185	Х		E, BB	Х	Х
E50H-24MCWH-FW	0097	Х	-	Х	Х	135/185		Х	E, BB	Х	Х
E50H-241575W-FR		Х		Х	Х	15/75	Х		E, BB	Х	Х
E50H-241575W-FW		Х		Х	Х	15/75		Х	E, BB	Х	Х
E60H-R	9867		Х	-	-	-	Х	-	E	Х	Х
E60H-W	9874		Х	-	-	-	-	Х	E	Х	Х
E60H-24MCC-FR	0187	-	Х	Х	Х	15/30/75/95	Х	-	E	Х	Х
E60H-24MCC-FW	0188	-	Х	Х	Х	15/30/75/95	-	Х	E	Х	Х
E60H-24MCCH-FR	0189	-	Х	Х	Х	115/177	Х	-	E	Х	Х
E60H-24MCCH-FW	0190	-	Х	Х	Х	115/177	-	Х	E	Х	Х
E60EXT-R***	3578						Х			Х	-
E60EXT-W***	3757							Х		Х	-

### **Specifications and Ordering Information**

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

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

# Wheelock Series E50H

The speaker appliances shall be Wheelock Series E50H High Fidelity Speakers, and the High Fidelity Speaker Strobe appliances shall be Wheelock Series E50H Speaker Strobes or approved equals. The speakers shall be UL Listed under UL 1480 for Fire Protective Service and speakers equipped with strobes shall be listed under UL 1971 for Emergency Devices for the Hearing-Impaired. In addition, the strobes shall be certified to meet the requirements of FCC Part 15, Class A.

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 87 dBA at 10 feet and a listed frequency response of 300 to 8000 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 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 1971 at 15/30/75/110cd or 135/185cd for wall mounting. Models with 1575 candela shall also be offered for wallmount applications. 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 Wheelock's DSM sync modules or Wheelock Power Supplies with built-in Patented Sync Protocol. 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 a nonsynchronized flash rate.

The speaker and speaker strobe appliances shall be designed for indoor flush mounting to 4" x 2-1/8" electrical boxes without need for an extension ring or surface mounting to Wheelock's E50SB or E50SSB surface boxes. The speaker and speaker strobe shall incorporate a speaker mounting plate with a snap-on grille cover. The finish of the Series E50H speakers and speakers strobes shall be white or red.

# Wheelock Series E60H

The speaker appliances shall be Wheelock Series E60H High Fidelity Speakers, and the High Fidelity Speaker Strobe appliances shall be Wheelock Series E60H Speaker Strobes or approved equals. The speakers shall be UL Listed under UL 1480 for Fire Protective Service and speakers equipped with strobes shall be listed under UL 971 for Emergency Devices for the Hearing-Impaired. In addition, the strobes shall be certified to meet the requirements of FCC Part 15, Class A.

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 87 dB at 10 feet and a listed frequency response of 300 to 8000 Hz. The speaker shall also 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. 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 1971 15/30/75/95cd or 115/177cd 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 Wheelock DSM sync modules or the Wheelock Power Supplies with built-in Patented Sync Protocol. 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 a 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 E60H Speakers and Speaker Strobes shall be white or red. All speaker and speaker strobe appliances shall be backward compatible.



WE ENCOURAGE AND SUPPORT NICET CERTIFICATION 3 YEAR WARRANTY

# E50H/E60H 6/12

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**COOPER** Notification



