Effective January 2016 Supersedes January 2015

# Wheelock S 8" Ceiling Speakers & Speaker Strobes



# Description

The Wheelock S product line includes 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 8 watts.

The Wheelock S Speaker Strobe models incorporate the Low Current draw RSS Strobes. Strobe options for ceiling mount models include 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 S 8" Speakers and Speaker Strobes 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, tone signaling and visible signaling to alert the hearing impaired.

The strobe portion of all Series S Speaker Strobes may be synchronized when used in conjunction with the Wheelock DSM Sync Modules or Wheelock Power Supplies with Patented Sync Protocol. Wheelock synchronized strobes offer an easy way to comply with ADA recommendations concerning photosensitive epilepsy.

The Wheelock S 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.

The S 8" Ceiling Speakers and Speaker Strobes are available in three configurations:

- S8-70/25- Dual Voltage, multi-tap speaker
- S8-24MCC- Speaker strobe with field selectable settings of 15/30/75/95cd
- S8-24MCCH- Speaker strobe with field selectable candela settings of 115/117cd



# Technical Data TD450020EN Effective January 2016

# Features

- Frequency
  - · High efficient design for high minimum output wattage
  - 200 Hz-15 kHz
  - 400 HZ- 4 kHz (UL)
- 6 Field Selectable Settings
  - Ceiling mount models are available with field selectable candela settings of 15/30/75/95cd or 115/177cd (Multi-candela models)
- Field Selectable Taps
  - 1/8 watt to 8 watts
  - 25 or 70 VRMS operation
- Quick installation with IN/OUT screw terminals using # 12 to #18 AWG wires
- Speaker impedance: 8 ohms
- Round metal 12" grille, with white power coated finish
- Compatible with DC circuit supervision
- 24 VDC with wide UL "Regulated Voltage" using filtered DC or unfiltered VRMS input voltage
- Strobe Synchronization Components
  - Meet synchronizing standards with Wheelock's DSM Sync Modules, PS Power Supplies or SAFEPATH products
- Compliance
  - UL 1971, UL 1480, ULC-S526, ULC-S541
  - Low frequency requirements of UL 464 (520 Hz) to meet NFPA's 520 Hz tone requirements for sleeping areas
  - California State Fire Marshal (CSFM)
  - ADA/NFPA/ANSI/OSHA
  - FCC Part 15, ICE
  - 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 OR APPLYING THIS PRODUCT. VISIT WWW.EATON.COM/MASSNOTIFICATION OR CONTACT EATON 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.

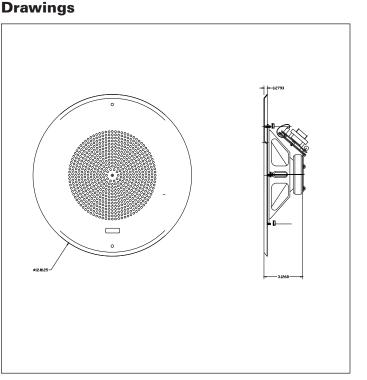


Figure 1. Wheelock S Speakers - Front & Side Views

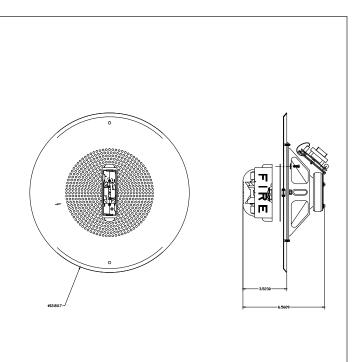


Figure 2. Wheelock S Speaker Strobes - Front & Side Views

# **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 1971.

Table 1. Maximum RMS Current

Model	Regulated Voltage Range VDC	UL/ULC Max Current a							
		24MCC			24MCCH				
		15	30	75	95	110	115	177	
S8 - 24MCC	16.0-33.0	0.065	0.105	0.189	0.249				
S8 -24MCCH	16.0-33.0						0.300	0.420	

### Table 2. UL Listed Models and Ratings

	UL Reverberant dBA at 10 Feet b				
Model	1/8 watts c	1/4 watts	1/2 watts	1 watts	2 watts
S 8 Speaker	75	78	81	84	87

## Table 3. Specification & Ordering Information

Model	Order #	Strobe Candela	White	Lettering	Ceiling	Mounting Options	Sync w/ DSM or Wheelock Power Supplies
S 8 Speakers						·	
S8-70/25 S8-24MCC S8-24MCCH	0052 0054 0056	15/30/75/95 115/177	X X X	FIRE FIRE	X X X	DD, CC DD, CC DD, CC DD, CC	X X
Back Box CBB-8	3314						

### Table 4. Specifications

Physical	
Material	White textured UV stabilized, colored impregnated engineered plastic. Exceeds 94V-0 UL flammability rating
Weight	S Speaker: 3.1 lbs (1.41 kg); S Speaker Strobe 3.12 lbs (1.42 kg)
Lens (Material type)	GE Lexan 943 A
Dimensions	S Speaker: 12.81" Diameter x 0.28"D; S Speaker Strobe: 12.81" Diameter x 3.52"D;
Operating Temperature	Indoor: 33.8°F to 120.2°F (0°C to 49°C) and maximum humidity of 93%
Mounting & Wire Connections	
Mounting (indoor only)	CBB - 8 SSB - 8
Wire Connections	#12 through #18 AWG
Power & General	
Operating voltage	25/70 VRMS
Strobe Output Rating	UL 1971, ULC S526
Strobe Flash Rate	Strobes are designed to flash at 1 flash per second
Synchronization Models	Strobes can be synchronized with Wheelock's DSM Sync Modules, PS Power Supplies or SAFEPATH products, using Wheelock patented sync protocol
Frequency Range	200 Hz to 15000 Hz ; 400 Hz to 4000 Hz ( UL )

a 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.

b dBA ratings are based on testing under UL Standard 1480.

c 1/8 watt tap is for private mode only.

# **Architects and Engineers Specifications**

Series S, 8" UL listed ceiling speakers and speaker strobes specifications: The series S8 eight-inch supervised UL Standard 1480 Listed Ceiling speaker shall be mounted to round metal 12" grille, with a white powder coated finish, designed for indoor use. The speaker shall have a dual voltage transformer (25/70V) with jumper selectable <sup>1</sup>/s, <sup>1</sup>/4, <sup>1</sup>/2, 1, 2, 4, 8 wattage taps. The frequency response shall be 200Hz 15kHz, per UL Standard 1480 shall be 400Hz 4kHz. The sensitivity shall be 93 dBA @ 10 feet with 8 watts of source power, 90 dBA @ 10 feet with 4 watts of source power, 87 dBA @ 10 feet with 2 watts of source power, 84 dBA @ 10 feet with 1 watts of source power, 81 dBA @ 10 feet with 1/2 watt of source power, 78 dBA @ 10 feet with 1/4 watt of source power, 75 dBA @ 10 feet with 1% watt of source power. The magnet weight shall be 9.5 ounces. The speaker impedance shall be 8 ohms.

The Speaker Strobe versions shall be Wheelock Series RSS Strobe Appliances or approved equals. The Series RSS shall meet and be listed for UL Standard 1971 (Emergency Devices for the Hearing-Impaired) for Indoor Fire Protection Service. The strobe shall be listed for indoor use and shall meet the requirements of FCC Part15 Class B. The strobe appliances shall produce a flash rate of one (1) flash per second over the Regualed Voltage Range and shall incorporate a Xenon flashbute enclosed in a rugged Lexan lens. All inputs shall be compatible with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP). The Series RSS Strobe shall be of low current design. The strobe intensity shall have field selectable settings and shall be rated per UL Standard 1971 at 15/30/75/95cd or 115/177cd.

When synchronization is required, the appliance shall be compatible with Wheelock's DSM Sync Modules or Wheelock's Power Supplies with built-in Patented Wheelock 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 strobes shall be designed for indoor surface of flush mounting.

The speaker shall be listed to the low frequency requirements of UL 464 (520 Hz) to meet NFPA's 520 Hz tone requirements for sleeping areas.

UL 1971, UL 1480, ULC-S526, ULC-S541, CSFM, FCC.

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.



WE ENCOURAGE AND SUPPORT NICET CERTIFICATION 3 YEAR WARRANTY

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