

Harrington Signal Inc.  
 2519 4th Avenue, Moline, Illinois 61265  
 P.O. Box 590, Moline, Illinois 61266-0590  
 Phone: (800) 577-5758 Local: (309) 762-0731 Fax: (309) 762-8215  
 Internet: www.harringtonfire.com



### Description

The Wheelock high performance Series ET Speakers and Series ET Speaker Strobes provide high audio output, clear audibility, dual voltage (25/70 VRMS) capability and field selectable taps from 1/8 to 8 watts. They 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 low profile design incorporates a speaker mounting plate for faster and easier installation. Each model has a built-in level adjustment feature and an aesthetic two (2) screw grille cover. The Series ET Speaker Strobe models incorporate Low Current draw Series RSS Strobes.

Strobe options for wall mount models include 1575 cd or Wheelock's 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's patented MCC multi-candela ceiling strobe with field selectable intensities of 15/30/75/95cd or the high intensity MCCH strobe with field selectable

The strobe portion of all Series ET Strobes may be synchronized when using the Wheelock SM, 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 ET70 and ET90 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 Series ET speakers and speaker strobes are red, white, or nickel plated.

### Features

- 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)



Series ET70



Series ET90

- Ceiling mount models are available with field selectable candela settings of 15/30/75/95cd or 115/177cd (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 sync modules or panels with built-in Wheelock Patented Sync Protocol
- Field selectable taps for 25 or 70 VRMS operation from 1/8 watt to 8 watts
- High efficiency design for maximum output at minimum wattage across a

### Ordering Information

Model Number	Part Number	Description
ET70-24MCW-FR	ET70-24MCW-FR	Wall Mount Speaker Strobe, Red, Multi-Candela
ET70-24MCW-FW	ET70-24MCW-FW	Wall Mount Speaker Strobe, White, Multi-Candela
ET70-24MCWH-FR	ET70-24MCWH-FR	Wall Mount Speaker Strobe, Red, High-Candela
ET70-24MCWH-FW	ET70-24MCWH-FW	Wall Mount Speaker Strobe, White, High-Candela
ET90-24MCC-FR	ET90-24MCC-FR	Ceiling Mount Speaker Strobe, Red, Multi-Candela
ET90-24MCC-FW	ET90-24MCC-FW	Ceiling Mount Speaker Strobe, White, Multi-Candela
ET90-24MCCH-FR	ET90-24MCCH-FR	Ceiling Mount Speaker Strobe, Red, High Candela
ET90-24MCCH-FW	ET90-24MCCH-FW	Ceiling Mount Speaker Strobe, White, High Candela
ET70-R	ET70-R	Wall Mount Speaker, Red
ET70-W	ET70-W	Wall Mount Speaker, White
ET90-R	ET90-R	Ceiling Mount Speaker, Red
ET90-W	ET90-W	Ceiling Mount Speaker, White

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.COOPERNOTIFICATION.COM](http://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 “Requested Voltage Range”.
- All candela ratings represent minimum effective strobe intensity based on UL Standard 1971.
- Series Exceder Strobe products are Listed under UL Standards 1971 and 464 for indoor use with a

**Table 1: UL Max Current\***

ET 70 / ET90 Speaker Strobes	ET70 Strobe Current - Wall Mount							ET90 Strobe Current - Ceiling Mount					
	241575W	24 MCW				24MCWH		24MCC				24MCCH	
	1575 cd	15cd	30cd	75cd	110cd	135cd	185cd	15cd	30cd	75cd	95cd	115cd	177cd
16-33 VDC	0.090	0.060	0.092	0.165	0.220	0.300	0.420	0.065	0.105	0.189	0.249	0.300	0.420

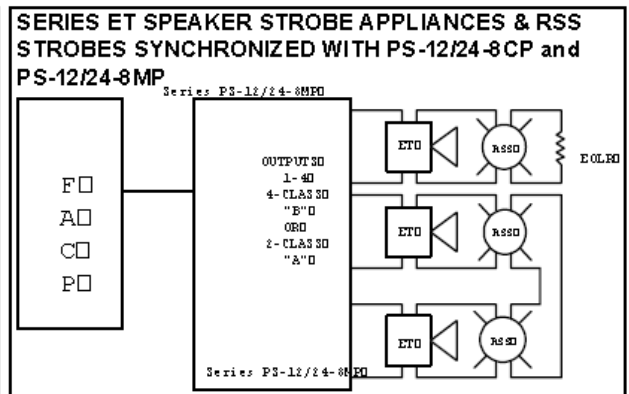
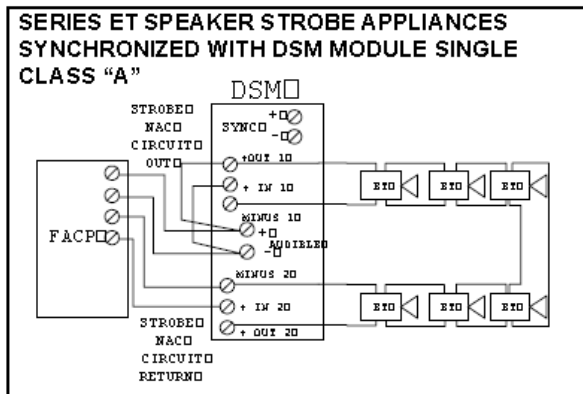
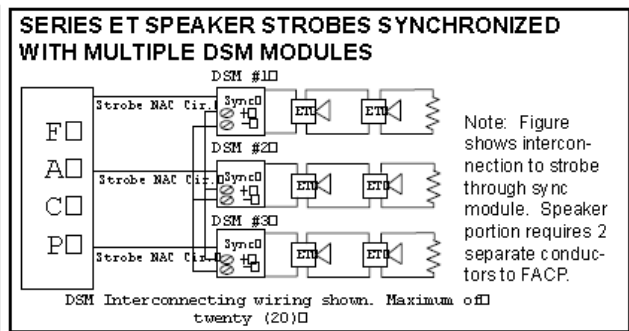
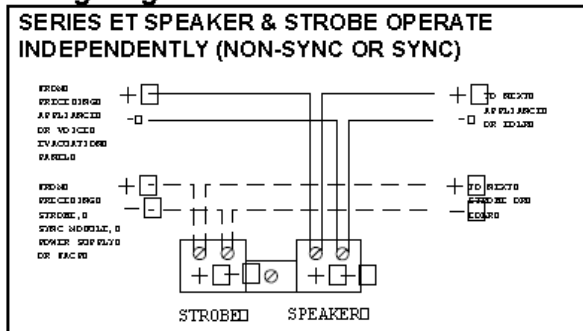
**Table 2: ET70 / ET90 UL Reverberant dBA @ 10 Feet\*\***

Watts	1/8	1/4	1/2	1	2	4	8
<b>ET Speaker</b>	75.0	78.0	81.0	84.0	87.0	90.0	93.0
<b>ET Speaker Strobe</b>	75.0	78.0	81.0	84.0	87.0	90.0	93.0

\*\* dBA Ratings are based on UL testing under UL Standard 1480

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

### Wiring Diagrams\*



For wiring information on the PS-24-8MC Power Supply, please refer to Data Sheet #8900.

Model	Order Code	Wall Mount	Ceiling Mount	Non-Sync	Strobe Sync or w/ SM, DSM or PS-12/24-8CP/MP	Strobe Candela	# Red Colored Model	# White Colored Model	# Nickel Colored Model	Mounting Options	Agency Approvals				
											UL	MEA	CSFM	FM	BFP
ET70-24MCW-FR	9020	X	-	X	X	15/30/75/110	X	-	-	L,O,P,Q,U,Y	X	X	X	X	X
ET70-24MCW-FW	9021	X	-	X	X	15/30/75/110	-	X	-	L,O,P,Q,U,Y	X	X	X	X	X
ET70-24MCW-FN	3091	X	-	X	X	15/30/75/110	*	-	X	L,O,P,Q,U,Y	X	X	X	X	X
ET70-241575W-FR	7848	X	-	X	X	15(75 on Axis)	X	-	-	L,O,P,Q,U,Y	X	X	X	X	X
ET70-241575W-FW	7853	X	-	X	X	15(75 on Axis)	-	X	-	L,O,P,Q,U,Y	X	X	X	X	X
ET70-241575W-FN	3092	X	-	X	X	15(75 on Axis)	-	-	X	L,O,P,Q,U,Y	X	X	X	X	X
ET70-24MCWH-FR	3472	X	-	X	X	135/185	X	-	-	L,O,P,Q,U,Y	X	X	X	X	*
ET70-24MCWH-FW	3475	X	-	X	X	135/185	-	X	-	L,O,P,Q,U,Y	X	X	X	X	*
ET70-24MCWH-FN	0061	X	-	X	X	135/185	-	-	X	L,O,P,Q,U,Y	X	X	X	X	*
ET70WP-2475-FR	9077	X	-	X	X	180	X	-	-	M (Outdoor)	X	X	X	*	*
ET90-24MCC-FW	3164	-	X	X	X	15/30/75/95	-	X	-	L,Q,U,V,Y	X	X	X	X	*
ET90-24MCC-FR	3163	-	X	X	X	15/30/75/95	X	-	-	L,Q,U,V,Y	X	X	X	X	*
ET90-24MCC-FN	3186	-	X	X	X	15/30/75/95	-	-	X	L,Q,U,V,Y	X	X	X	X	*
ET90-24MCCH-FW	3473	-	X	X	X	115/177	-	X	-	L,Q,U,V,Y	X	X	X	X	*
ET90-24MCCH-FR	0139	-	X	X	X	115/177	X	-	-	L,Q,U,V,Y	X	X	X	X	*
ET90-24MCCH-FN	0062	-	X	X	X	115/177	-	-	X	L,Q,U,V,Y	X	X	X	X	*
ET70-R	7840	X	X	-	-	-	X	-	-	L,O,P,Q,U,Y	X	X	X	X	X
ET70-W	7844	X	X	-	-	-	-	X	-	L,O,P,Q,U,Y	X	X	X	X	X
ET70-N	3097	X	X	-	-	-	-	-	X	L,O,P,Q,U,Y	X	X	X	X	X
ET90-R	7842	X	X	-	-	-	X	-	-	L,Q,U,V,Y	X	X	X	X	X
ET90-W	7846	X	X	-	-	-	-	X	-	L,Q,U,V,Y	X	X	X	X	X
ET90-N	3098	X	X	-	-	-	-	-	X	L,Q,U,V,Y	X	X	X	X	X

# Models are available in either Red or White. Call Customer Service for Order Code & Delivery.

\*PENDING

**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.

## Engineering Specifications

The speaker appliances shall be Wheelock Series ET Speakers and speaker strobe appliances shall be Wheelock Series ET 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 Signaling 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 8 watts. All models shall have listed sound output of up to 93 dB at 10 feet and a listed frequency response of 400 to 4000 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 and shall incorporate a Xenon flashtube enclosed in a rugged Lexan® 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 at 15/30/75/110cd or 135/185cd for wall mount and 15/30/75/95cd or 115/177cd for ceiling mount. The selector switch for selecting the candela shall be tamper resistant. The 1575 strobe shall be specified when 15 candela UL Standard 1971 listing with 75 candela on-axis is required (e.g. ADA compliance).

When synchronization is required, the strobe portion of the appliance shall be compatible with Wheelock's SM, DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels with built-in Wheelock 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 on-synchronized flash rate.

The speaker and speaker strobe appliances shall be designed for indoor surface or flush mounting. The speaker and speaker strobe shall incorporate a speaker mounting plate with a grille cover which is secured with two screws for a level, aesthetic finish and shall mount to standard electrical hardware requiring no additional trimplate or adapter.

The finish of the Series ET speakers and speaker strobes shall be white, red, or nickel plate.

NOTICE: The information contained in this document is intended only as a summary and is subject to change without notice. The devices described in this document have specific instruction sheets which cover various technical, limitation and liability information. Copies of these instruction sheets and the General Product Warning and Limitations Document, which also contains important information are provided with the product and are available from Harrington Signal Inc. Fire Alarm. Information contained in these documents should be consulted before specifying or using the product. For further information or assistance concerning particular problems contact Harrington Signal Inc. Harrington Signal Inc. Fire Alarm reserves the right to change specifications without notice. Quality manufactured by Cooper Wheelock Inc. for Harrington Signal.