

# **Series ET Speakers and Speaker Strobes**

Series ET Devices

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## **SERIES ET70**

**SERIES ET90** 

#### Description

The 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 Harding's 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 Harding's MCC multicandela 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 ET Strobes may be synchronized when using the Wheelock DSM Sync Modules, Harding Power Supplies or other manufacturers panels incorporating the Wheelock Sync Protocol. Harding 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**

- Approvals include: UL Standard 1971, UL Standard 1480, New York City (MEA), California State Fire Marshall (CSFM), Factory Mutual (FM), and Chicago (BFP) See approvals by model in Specifications and Ordering Information
- ADA/NFPA/UFC/ANSI compliant
- Meets OSHA 29 Part 1910.165
- 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)
- 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 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 frequency range of 400 to 4000 HZ
- Fast installation with IN/OUT screw terminals using #12 to #18 AWG wires



Sport Sport

Represented by:

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.COOPERNOTIFICATION.COM OR CONTACT HARDING 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.
- "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".

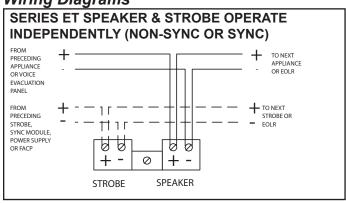
| Table 1: UL Max Current*        |         |         |        |            |                                     |        |       |       |       |       |       |        |       |  |
|---------------------------------|---------|---------|--------|------------|-------------------------------------|--------|-------|-------|-------|-------|-------|--------|-------|--|
| ET70/ET90<br>Speaker<br>Strobes | ı       | ET70 St | urrent | - Wall M   | ET90 Strobe current - Ceiling Mount |        |       |       |       |       |       |        |       |  |
|                                 | 241575W |         | 241    | <b>ICW</b> |                                     | 24MCWH |       | 24MCC |       |       |       | 24MCCH |       |  |
|                                 | 1575cd  | 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 |  |

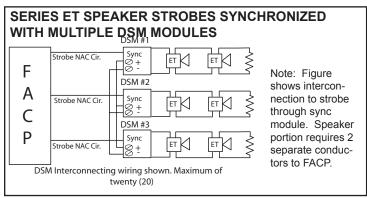
| Table 2: ET70/ET90 | ole 2: ET70/ET90 UL Reverberant dBA @ 10 Feet** |      |         |      |      |      |      |  |  |  |  |
|--------------------|---|------|---------|------|------|------|------|--|--|--|--|
| watts              | 1/8   | 1/4  | 1/4 1/2 |      | 2    | 4    | 8    |  |  |  |  |
| ET Speaker         | 75.0  | 78.0 | 81.0    | 84.0 | 87.0 | 90.0 | 93.0 |  |  |  |  |
| ET Speaker Strobe  | 75.0  | 78.0 | 81.0    | 84.0 | 87.0 | 90.0 | 93.0 |  |  |  |  |

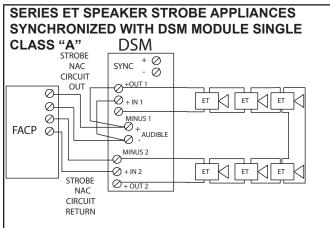
<sup>\*\*</sup>dBA ratings are based on UL testing under UL Standard 1480

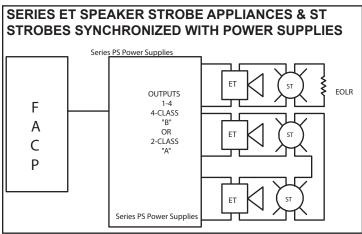
\*UL max current rating is the maximum RMS current within the listed voltage range (16-33v for 24v units). For strobes the UL max current is usually at the minimum listed voltage (16v for 24v units). For audibles the max current is usually at the maximum listed voltage (33v for 24v units). For unfiltered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

# Wiring Diagrams#









For wiring information on Power Supplies, please refer to Data Sheet #89100.

### Specifications and Ordering Information

|                 | Order | Wall<br>Mount | Cailing | Non- | Strobe Sync w/ - DSM or    | Strobe Can-     | #<br>Model   | #<br>Model | #<br>Model      | Mounting    | Agency Approvals |     |      |    |     |
|-----------------|-------|---------------|---------|------|----------------------------|-----------------|--------------|------------|-----------------|-------------|------------------|-----|------|----|-----|
| Model           |       |               |         |      | Wheelock Power<br>Supplies |                 | Color<br>RED | Color      | Color<br>Nickel | Options     | UL               | MEA | CSFM | FM | BFP |
| ET70-24MCW-FR   | 9020  | Х             | -       | Х    | X                          | 15/30/75/110    | Х            | -          |                 | L,O,P,Q,U,Y | Х                | Х   | Х    | Х  | Х   |
| ET70-24MCW-FW   | 9021  | Х             | -       | Х    | X                          | 15/30/75/110    | -            | Х          |                 | L,O,P,Q,U,Y | Х                | Х   | Х    | Х  | Х   |
| ET70-24MCW-FN   | 3091  | Х             | -       | Х    | X                          | 15/30/75/110    | *            | -          | Х               | L,O,P,Q,U,Y | Х                | Х   | Х    | Х  | Х   |
| ET70-241575W-FR | 7848  | Х             | -       | Х    | Х                          | 15 (75 on Axis) | Х            | -          |                 | L,O,P,Q,U,Y | Х                | Х   | Х    | Х  | Х   |
| ET70-241575W-FW | 7853  | Х             | -       | Х    | Х                          | 15 (75 on Axis) | -            | Х          | -               | L,O,P,Q,U,Y | Х                | Х   | Х    | Х  | Х   |
| ET70-241575W-FN | 3092  | Х             | -       | Х    | X                          | 15 (75 on Axis) | -            | -          | Х               | L,O,P,Q,U,Y | Х                | Х   | Х    | Х  | Х   |
| ET70-24MCWH-FR  | 3472  | Х             | -       | Х    | Х                          | 135/185         | Х            | -          | -               | L,O,P,Q,U,Y | Х                | Х   | Х    | Х  | -   |
| ET70-24MCWH-FW  | 3475  | Х             | -       | Х    | Х                          | 135/185         | -            | Х          | -               | L,O,P,Q,U,Y | Х                | Х   | Х    | Х  | -   |
| ET70-24MCWH-FN  | 0061  | Х             | -       | Х    | Х                          | 135/185         | -            | -          | Х               | L,O,P,Q,U,Y | Х                | Х   | Х    | Х  | -   |
| ET70WP-2475-FR  | 9077  | Х             | -       | Х    | Х                          | 180             | Х            | -          | -               | M (Outdoor) | Х                | -   | Х    | Х  | -   |
| ET90-24MCC-FW   | 3164  | -             | Х       | Х    | X                          | 15/30/75/95     | -            | Х          | -               | L,Q,U,V,Y   | Х                | Х   | Х    | Х  | -   |
| ET90-24MCC-FR   | 3163  | -             | Х       | Х    | Х                          | 15/30/75/95     | Х            | -          | -               | L,Q,U,V,Y   | Х                | Х   | Х    | Х  | -   |
| ET90-24MCC-FN   | 3186  | -             | Х       | Х    | Х                          | 15/30/75/95     | -            | -          | Х               | L,Q,U,V,Y   | Х                | Х   | Х    | Х  | -   |
| ET90-24MCCH-FW  | 3473  | -             | Х       | Х    | Х                          | 115/177         | -            | Х          | -               | L,Q,U,V,Y   | Х                | Х   | Х    | Х  | -   |
| ET90-24MCCH-FR  | 0139  | -             | Х       | Х    | Х                          | 115/177         | Х            | -          | -               | L,Q,U,V,Y   | Х                | Х   | Х    | Х  | -   |
| ET90-24MCCH-FN  | 0062  | -             | Х       | Х    | Х                          | 115/177         | -            | -          | Х               | L,Q,U,V,Y   | Х                | Х   | Х    | Х  | -   |
| ET70-R          | 7840  | Х             | Х       | -    | -                          | -               | Х            | -          | -               | L,O,P,Q,U,Y | Х                | Х   | Х    | Х  | Х   |
| ET70-W          | 7844  | Х             | Х       | -    | -                          | -               | -            | Х          | -               | L,O,P,Q,U,Y | Х                | Х   | Х    | Х  | Х   |
| ET70-N          | 3097  | Х             | Х       | -    | -                          | -               | -            | -          | Х               | L,O,P,Q,U,Y | Х                | Х   | Х    | Х  | Х   |
| ET90-R          | 7842  | Х             | Х       | -    | -                          | -               | Х            | -          | -               | L,Q,U,V,Y   | Х                | Х   | Х    | Х  | Х   |
| ET90-W          | 7846  | Х             | Х       | -    | -                          | -               | -            | Х          | -               | L,Q,U,V,Y   | Х                | Х   | Х    | Х  | Х   |
| ET90-N          | 3098  | Х             | Х       | -    | -                          | -               | -            | -          | Х               | L,Q,U,V,Y   | Х                | Х   | Х    | Х  | Х   |

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

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

### Architects and Engineers Specifications

The speaker appliances shall be Harding Series ET Speakers and speaker strobe appliances shall be Harding 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 15/30/75/95 cd 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 DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels with built-in 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 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.

All speakers and speaker strobes shall be backward compatible.





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