



Description and Operation

Edwards Catalog Series 5560M is an integrated communication system designed to sound 55 system tones or one 20-second voice message in factory, hallway, office and personnel areas. The Mini-Mi is available either with or without a strobe. The Mini-Mi has three modes of operation: stand-alone tone generation, stand-alone voice generation and system audio operation. The Mini-Mi is in a NEMA Type 3R enclosure and is UL and cUL Listed.

Five modules are available for use with the Mini-Mi.

| Catalog Number | Description |
|----------------|--|
| 556A-M | Audio Coupler Module |
| 556A-M485 | Audio Coupler Module with RS485 Connectivity |
| 556T-M | Tone Module |
| 556T-M485 | Tone Module Board with RS485 Connectivity |
| 556V-M | Voice Module |

Electrical Specifications

| INPUT POWER | | | |
|----------------|------------------|---------------------|---------|
| Catalog Number | Voltage | Typical Current (A) | |
| | | Standby | Tone On |
| 5560M-AQ | 24V DC | .03 | .070 |
| | 24V AC 50/60 Hz | .08 | .16 |
| 5560M-N5 | 120V AC 50/60 Hz | .03 | .088 |
| 5560MS-AQ | 24V DC | .03 | .070 |
| | 24V AC 50/60 Hz | .08 | .16 |
| 5560MS-N5 | 120V AC 50/60 Hz | .03 | .086 |

CAUTION: To prevent damage to the circuit and to otherwise assure continued proper functioning, DO NOT operate the unit outside of the Regulated 24V DC/FWR voltage range of 16 - 33V DC/V FWR.

Installation

Installation should be completed in accordance with either the National Electrical Code or the Canadian Electrical Code, applicable local codes.

1. Remove (4) screws from cover and remove cover. Mount backplate on a 4" (102 mm) electrical box using (2) #8-32 x 5/8" screws (provided) and (2) #8 steel washers (provided) or other suitable hardware. For weatherproof applications, mount to the Cat. No. 449 back box (purchased separately) using (4) #6-32 x 3/4" screws (provided) and (4) #8 steel washers (provided) or other suitable hardware.

CAUTION

During installation, take care not to damage components on the printed circuit board.

2. Remove (2) screws holding pc board to speaker in the Mini-Mi housing and remove pc board. (See Figure 1.)

WARNING

Do not apply power to the unit until installation is completed and housing cover and outlet box cover are secured.

3. Insert appropriate module, plugging it into the main board. Secure to speaker using screws removed in step 2. (Figure 1)
4. Connect green ground wire to earth ground.

Feed power source wires through the backplate and connect to the unit's power source leads. Observe polarity for DC units.

For models with strobes, connect a second set of power source wires to the strobe power leads.

5. Select the appropriate module from below and make connections and settings as described below.

Audio Coupler Module Boards

Connect incoming 10V, 25V or 70V RMS audio line to AUD (+) and AUD (-) as shown in Figure 2.

Place the audio voltage jumper on the appropriate audio voltage (Figure 2).

Tone Module Boards

Set miniature programming switch on the printed circuit board (Figure 3) for the desired tone. Refer to Table 2.

RS485 Activation

For models with RS485 activation, connect the RS485 wires to terminals + TX/RX and - TX/RX on the module.

Set the dipswitch on the PC board for the appropriate baud rate (Table 1) and address (Table 2) as shown in Figures 2 and 3.

Set 100-ohm termination jumper (if required) JPx on PC board. Network termination is required if the unit is located at the beginning or end of the network bus. Termination reduces unwanted reflections caused by signal propagation.

Voice Module

One twenty-second message can be recorded on the voice module.

Apply power to unit. press and hold the record button while speaking clearly into the microphone to record your message. Release the button when recording is complete. Refer to Figure 4.

To test the message, press RUN. To stop message play, remove power from the unit.

Adjust volume for voice output using the potentiometer on the voice module board (Figure 4).

6. Place housing on backplate and secure using (4) screws removed in step 1.
7. Adjust volume using the potentiometer on the main board (Figure 1).
8. Verify operability.

Maintenance and Test

Examine the unit semi-annually for external accumulation of dirt. Clean if necessary.

The Adaptatone should be tested annually or as required by the local authority having jurisdiction to ensure continuous service.

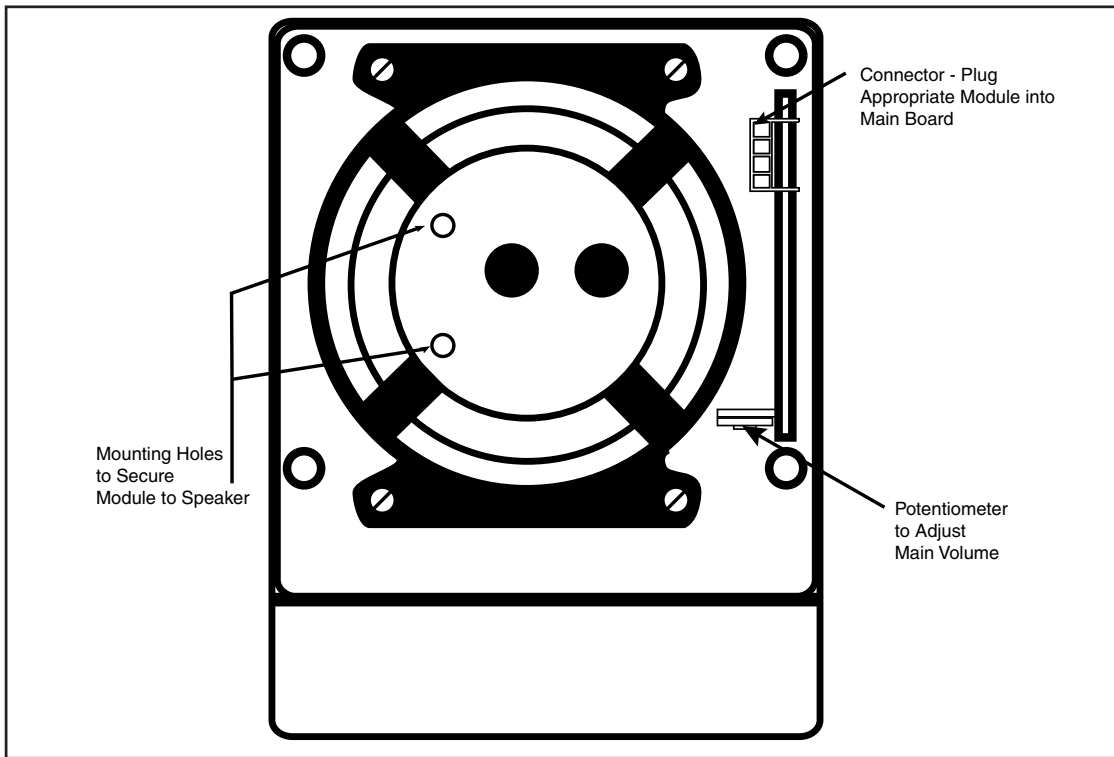


Figure 1. Mini-Mi Housing

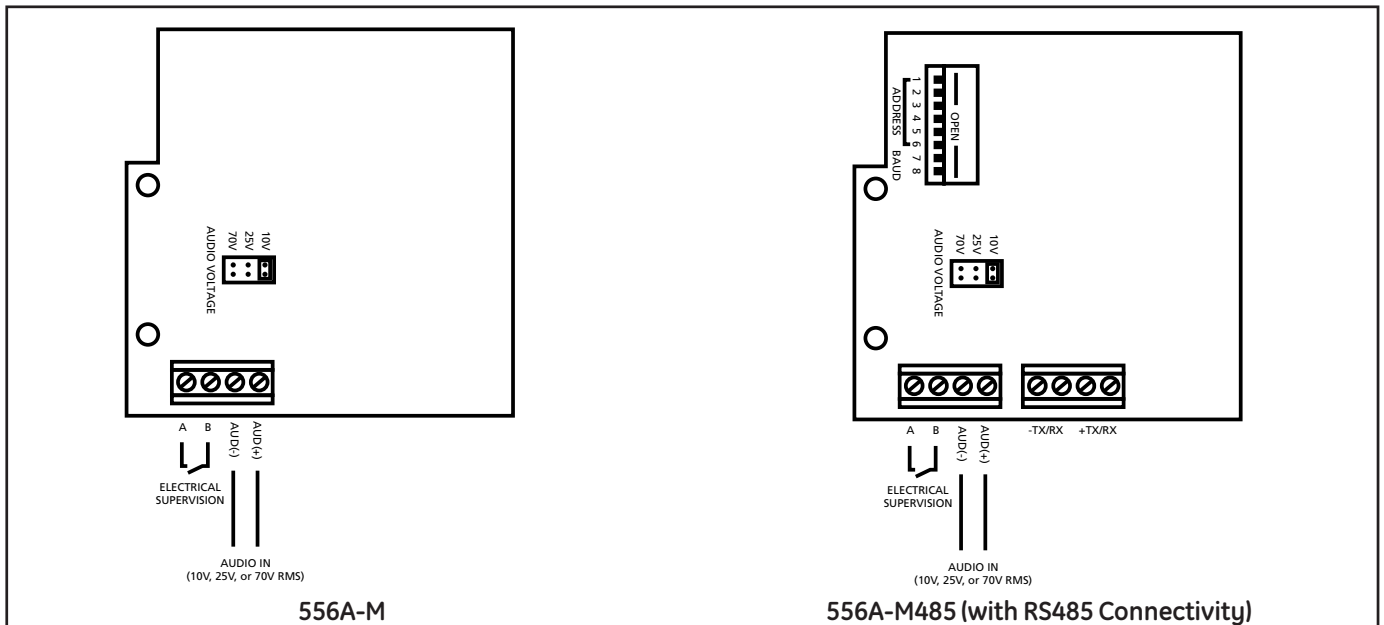


Figure 2. Audio Coupler Modules

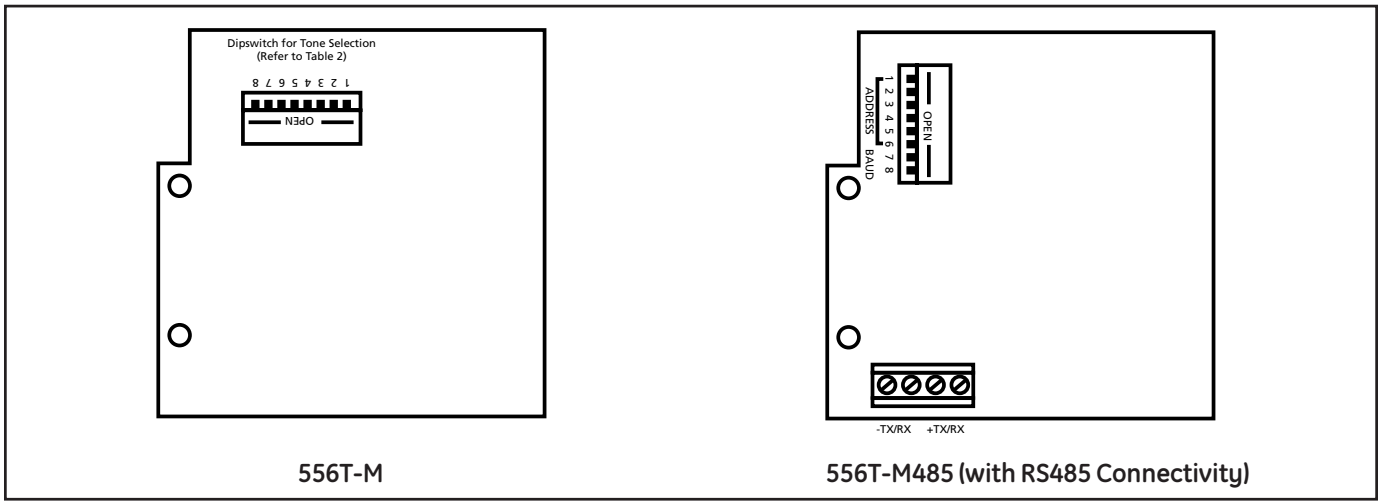


Figure 3. Tone Generator Module

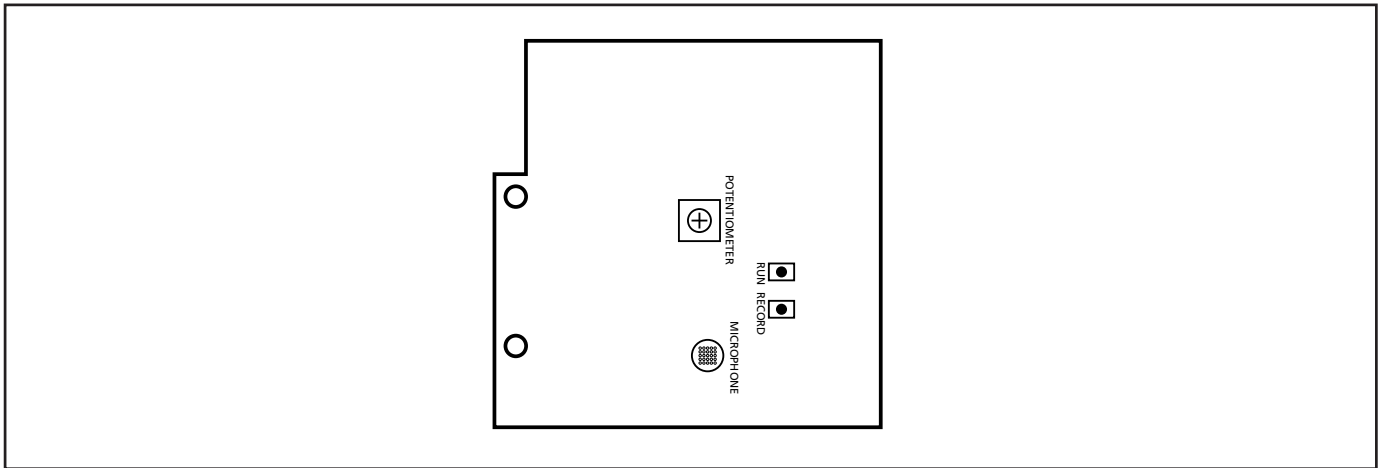


Figure 4. Voice Module

Table 1. Network Baud Rate setting

| Baud Rate | 7 | 8 |
|-----------|--------|--------|
| 1200 | OPEN | OPEN |
| 2400 | CLOSED | OPEN |
| 9600 | OPEN | CLOSED |
| 19200 | CLOSED | CLOSED |

Table 2. Tone Programming and Switch Configuration

| SWITCH POSITIONS | 1 | 2 | 3 | 4 | 5 | 6 | DESCRIPTION | HEX |
|-------------------------|---|---|---|---|---|---|---|-----|
| Ding Dong | ○ | ○ | ○ | ○ | ○ | ● | Percussive pairs of 700 and 570 Hz tones each damped to zero | 01 |
| Warble | ○ | ○ | ○ | ○ | ● | ○ | 575 and 770 Hz alternately, 87 ms each | 02 |
| Siren | ○ | ○ | ○ | ○ | ● | ● | 600-1250 Hz up and down sweep in 8 seconds and repeat | 03 |
| Stutter | ○ | ○ | ○ | ● | ○ | ○ | Percussive 470 Hz, 83 ms on, 109 ms off | 04 |
| Slow Whoop | ○ | ○ | ○ | ● | ○ | ● | 600-1250 Hz upward sweep in 4 seconds and repeat | 05 |
| Beep | ○ | ○ | ○ | ● | ● | ○ | 470 Hz, 0.55 seconds on, 0.55 seconds off | 06 |
| Chime 1 | ○ | ○ | ○ | ● | ● | ● | 700 Hz percussive repeat at 1 Hz | 07 |
| Fast Whoop | ○ | ○ | ● | ○ | ○ | ○ | 600-1250 Hz upward sweep in 1 second and repeat | 08 |
| Hi/Lo | ○ | ○ | ● | ○ | ○ | ● | 780 to 600 Hz alternately, 0.52 seconds each | 09 |
| Rapid Siren | ○ | ○ | ● | ○ | ● | ○ | 600-1250 Hz up and down sweep in 0.25 seconds and repeat | 0A |
| Yeow | ○ | ○ | ● | ○ | ● | ● | 1250 - 600 Hz downward sweep in 1.6 seconds and repeat | 0B |
| Horn | ○ | ○ | ○ | ● | ○ | ○ | 470 Hz continuous | 0C |
| Air Horn | ○ | ○ | ● | ● | ○ | ● | 370 Hz continuous | 0D |
| Dual Tone | ○ | ○ | ● | ● | ● | ○ | 450 - 500 Hz, 0.4 to 0.5 second cycle | 0E |
| Chime 2 | ○ | ○ | ● | ● | ● | ● | 575 Hz percussive repeat at 1 Hz | 0F |
| Westminster | ○ | ● | ○ | ○ | ○ | ○ | Two measures: 411 Hz, 520 Hz, 407 Hz, 312 Hz | 10 |
| Three Blind Mice | ○ | ● | ○ | ○ | ○ | ● | Four measures: 787 Hz, 714 Hz, 625 Hz, 952 Hz, 333 Hz | 11 |
| Phasor | ○ | ● | ○ | ○ | ● | ○ | 416 - 625 Hz up and down sweep in 13 ms and repeat | 12 |
| Telephone | ○ | ● | ○ | ○ | ● | ● | 570 and 770 Hz alternately, 50 ms each for 1.2s, 1.5 s delay and repeat | 13 |
| Staircase | ○ | ● | ○ | ● | ○ | ○ | 440 - 2000 Hz up and down steps, 750 ms delay and repeat | 14 |
| 3 Tone Alert | ○ | ○ | ○ | ○ | ○ | ● | 463, 641 and 896 Hz, 200 ms each 1 second delay and repeat | 15 |
| RESERVED | ○ | ● | ○ | ● | ● | ○ | RESERVED | 16 |
| RESERVED | ○ | ● | ○ | ● | ● | ● | RESERVED | 17 |
| RESERVED | ○ | ● | ● | ○ | ○ | ○ | RESERVED | 18 |
| RESERVED | ○ | ● | ● | ○ | ○ | ● | RESERVED | 19 |
| RESERVED | ○ | ● | ● | ○ | ● | ○ | RESERVED | 1A |
| NFPA Whoop | ○ | ● | ● | ○ | ● | ● | Three 422 - 775 Hz upward sweeps, 850 ms each, 1s delay and repeat | 1B |
| 3 Pulse Horn* | ○ | ● | ● | ● | ○ | ○ | 470 Hz, 3 0.5s pulses separated by 0.5s followed by 1.5s delay and repeat | 1C |
| 3 Pulse Air Horn* | ○ | ● | ● | ● | ○ | ● | 370 Hz, 3 0.5s pulses separated by 0.5s followed by 1.5s delay and repeat | 1D |
| 3 Pulse Dual Tone* | ○ | ● | ● | ● | ● | ○ | 450 - 500 Hz, 0.4 to 0.5s cycle, 3 0.5s pulses separated by 0.5s followed by 1.5s delay and repeat | 1E |
| 3 Pulse Chime 2* | ○ | ● | ● | ● | ● | ● | 575 Hz, 3 0.5s pulses separated by 0.5s followed by 1.5s delay and repeat | 1F |
| European Police | ● | ○ | ○ | ○ | ○ | ○ | 969 Hz and 800 Hz alternately 0.250 seconds each | 20 |
| European Fire | ● | ○ | ○ | ○ | ○ | ● | 982 Hz and 864 Hz downward sweep in 0.134 seconds | 21 |
| European Slow Whoop | ● | ○ | ○ | ○ | ● | ○ | 658 Hz to 1312 Hz upward sweep in 3s followed by 0.5s delay and repeat | 22 |
| European General | ● | ○ | ○ | ○ | ● | ● | 1087 Hz for 0.5 seconds followed by 0.5 second delay and repeat | 23 |
| European Toxic | ● | ○ | ○ | ● | ○ | ○ | 982 Hz continuous | 24 |
| European Police 2 | ● | ○ | ○ | ● | ○ | ● | 554 Hz and 440 Hz alternately 0.800 seconds each | 25 |
| European Stutter | ● | ○ | ○ | ● | ● | ○ | 3876 Hz for 0.146 seconds followed by 0.102 seconds delay and repeat | 26 |
| European Sweep | ● | ○ | ○ | ○ | ● | ● | 1315 Hz to 413 Hz downward sweep in 1.17 seconds and repeat | 27 |
| Telephone 2 | ● | ○ | ● | ○ | ○ | ○ | Alternate tones at 567 Hz and 326 Hz, for 0.052 seconds each | 28 |
| Buzzer | ● | ○ | ● | ○ | ○ | ● | 1315 Hz to 746 Hz alternating for 0.003 seconds each | 29 |
| Genesis Horn Cont. | ● | ○ | ● | ○ | ● | ○ | Continuous Genesis horn | 2A |
| Genesis Horn Temp. | ● | ○ | ● | ○ | ● | ● | Temporal Genesis horn | 2B |
| Warning 1 | ● | ○ | ● | ● | ○ | ○ | 1207 Hz and 493 Hz, alternately 0.002 seconds each | 2C |
| Warning 2 | ● | ○ | ● | ● | ○ | ● | 2336 Hz and 493 Hz, alternately 0.005 seconds each | 2D |
| Warning 2 Beep | ● | ○ | ● | ● | ● | ○ | 0.500s of 2336 Hz and 493 Hz each alternating for 0.005s followed by 1s delay | 2E |
| Caution | ● | ○ | ● | ● | ● | ● | 453 Hz for 0.040s, 235 Hz for 0.020s, 235 Hz for 0.160s, 260 Hz for 0.050s, 260 Hz for 0.1009s, 235 Hz for 0.050s | 2F |
| Multi-tone | ● | ● | ○ | ○ | ○ | ○ | 376, 357, 352, 382, 355, 375, 384, 375 and 364 Hz alternately on for 0.050s | 30 |
| Attention | ● | ● | ○ | ○ | ○ | ● | 2232, 4545, 3704, 2777, 4347, 3704, 2500 Hz alternately on for 0.003s | 31 |
| High Freq. Steady Alert | ● | ● | ○ | ○ | ● | ○ | 2500 Hz continuous | 32 |
| High Freq. Fast Siren | ● | ● | ○ | ○ | ● | ● | 2500 to 3048 Hz up and down sweep in 0.130 seconds | 33 |
| High Freq. Slow Siren | ● | ● | ○ | ● | ○ | ○ | 2500 to 3048 Hz up and down sweep in 0.500 seconds | 34 |
| DIN PFEER | ● | ○ | ○ | ○ | ○ | ● | Ramp downward from 1336 Hz to 522 Hz in 1.2 seconds and repeat | 35 |
| NFS 32 001 | ● | ○ | ○ | ○ | ○ | ○ | 584 Hz for 0.100 seconds and 461 Hz for 0.400 seconds | 36 |
| Ode to Joy | ● | ● | ○ | ● | ● | ● | 6.45 seconds of melody followed by 1 second delay and repeat | 37 |
| Twinkle Little Star | ● | ● | ● | ○ | ○ | ○ | 13.2 seconds of melody followed by 1 second delay and repeat | 38 |
| Dueling Banjos | ● | ● | ● | ○ | ○ | ● | 10.84 seconds of melody followed by 1 second delay and repeat | 39 |
| La Cucaracha | ● | ● | ● | ○ | ○ | ○ | 7.10 seconds of melody followed by 1 second delay and repeat | 3A |
| Yellow Rose of Texas | ● | ● | ● | ○ | ○ | ● | 19.34 seconds of melody followed by 1 second delay and repeat | 3B |

*3 Pulse Tones are for Evacuation Use Only.

