



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.

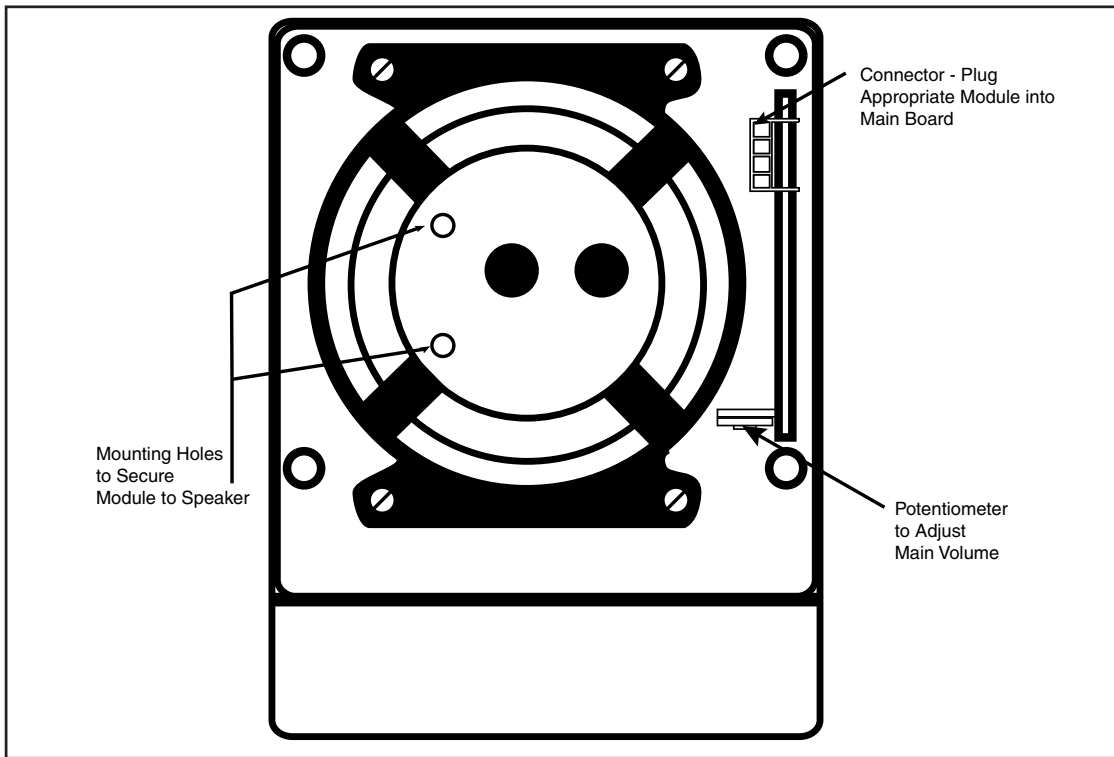


Figure 1. Mini-Mi Housing

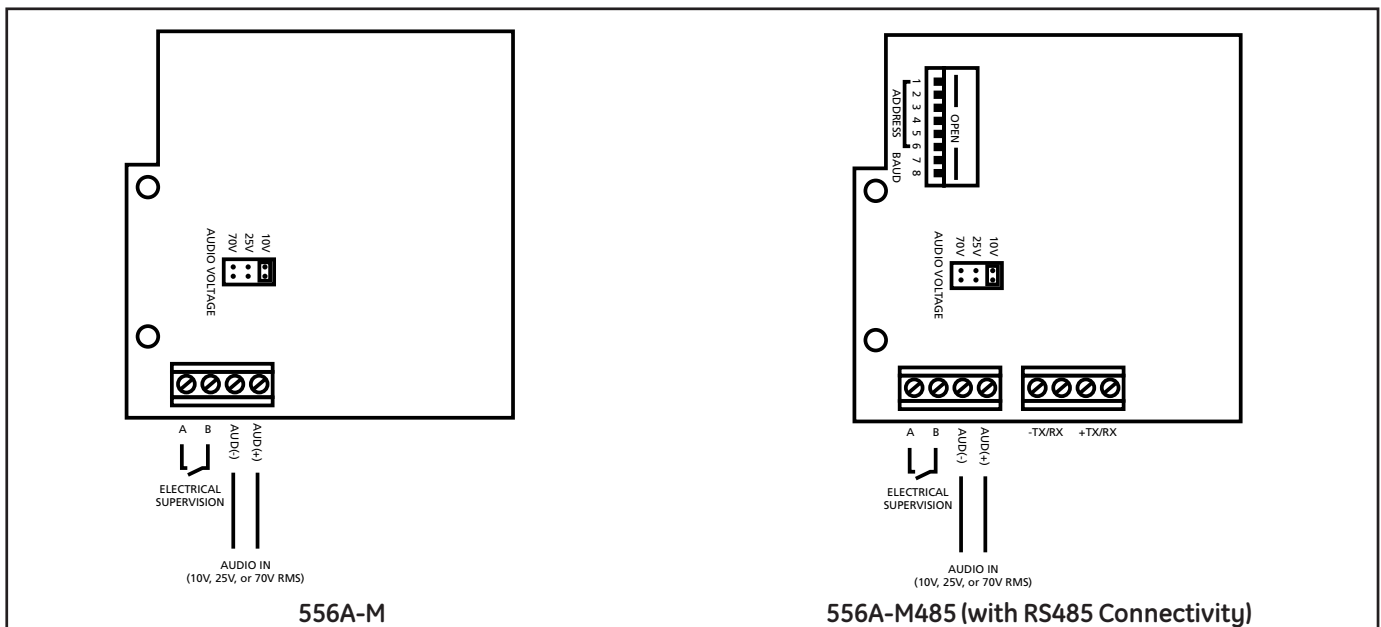


Figure 2. Audio Coupler Modules

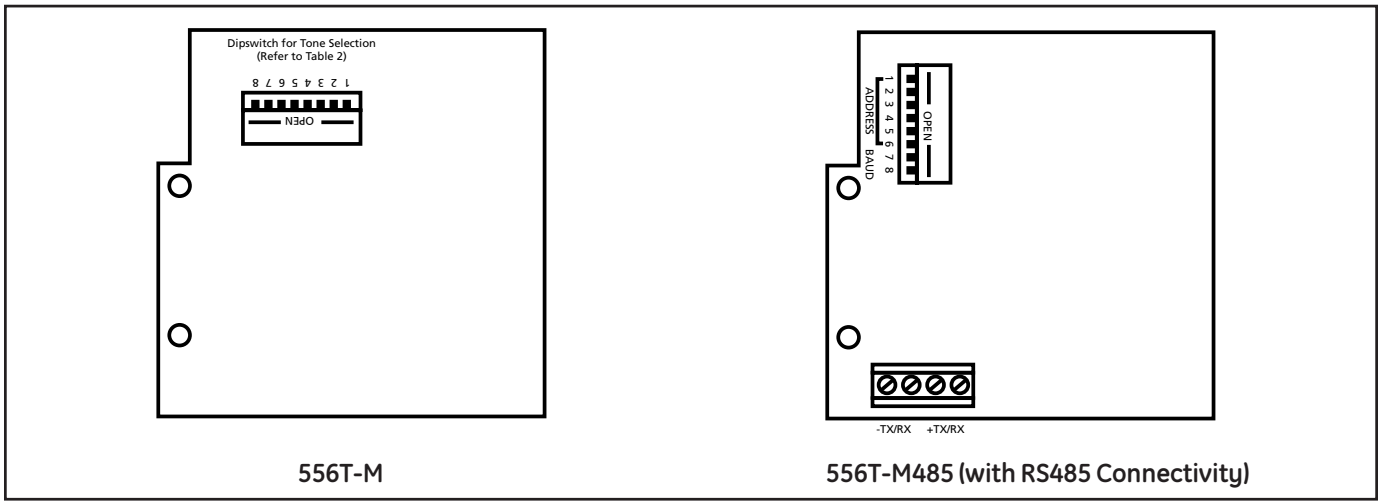


Figure 3. Tone Generator Module

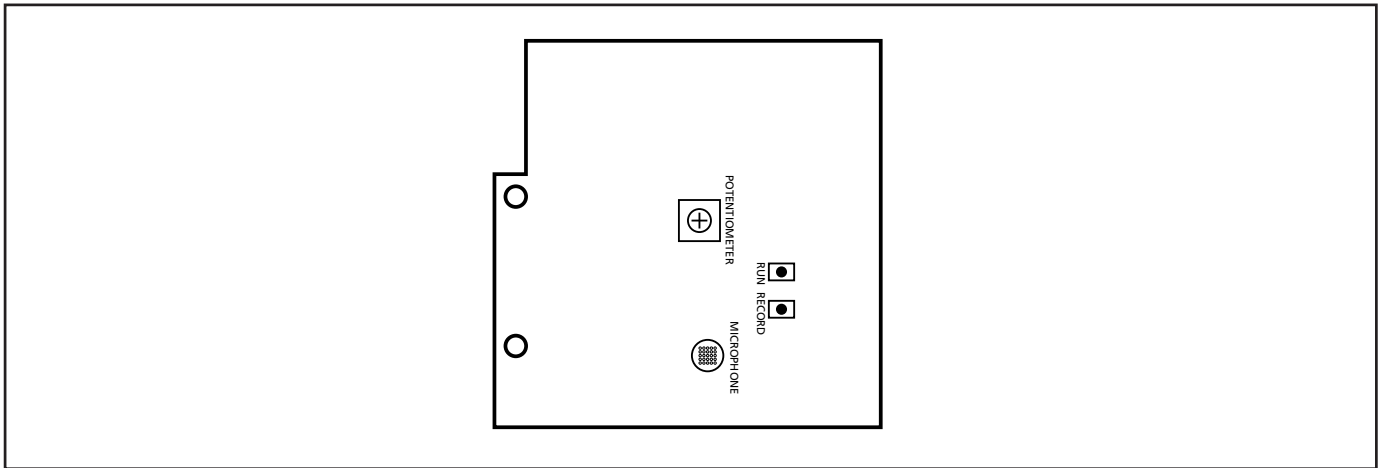


Figure 4. Voice Module

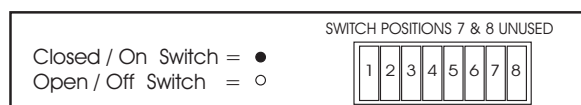
Table 1. Network Baud Rate setting

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.





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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

Electrical Specifications

INPUT POWER			
Catalog Number	Voltage*	Typical Current (A)	
		Standby	Tone On
5560MD-FJ	24V DC Regulated	.03	.130
5560MDR-FJ	24V DC Regulated	.03	.130
5560MDS-FJ	24V DC Regulated	.03	.130
5560MDRS-FJ	24V DC Regulated	.03	.130

Installation

Installation should be completed in accordance with either the National Electrical Code or the Canadian Electrical Code, applicable local codes and the latest edition of NFPA72, National Fire Alarm Code.

- 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.

- 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.

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

Feed power source wires from the notification appliance circuit through the backplate and connect to the unit's power source leads using wire nuts. Observe polarity for DC units.

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

- 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.

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.

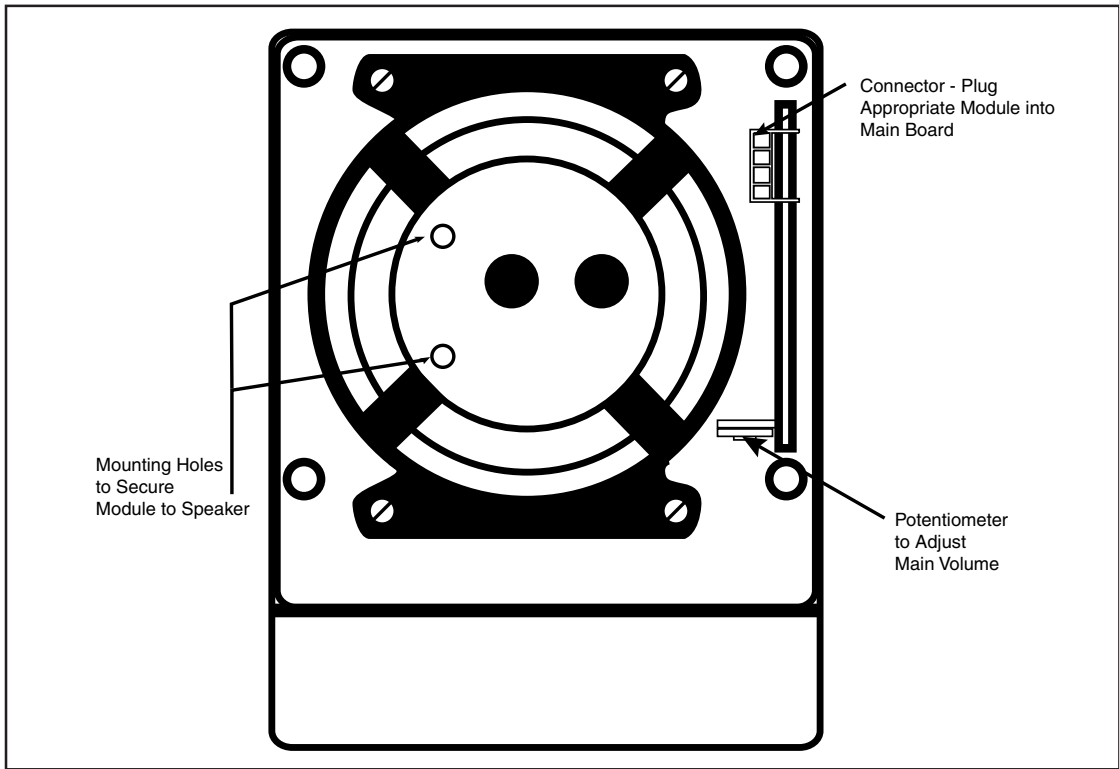


Figure 1. Mini-Mi Housing

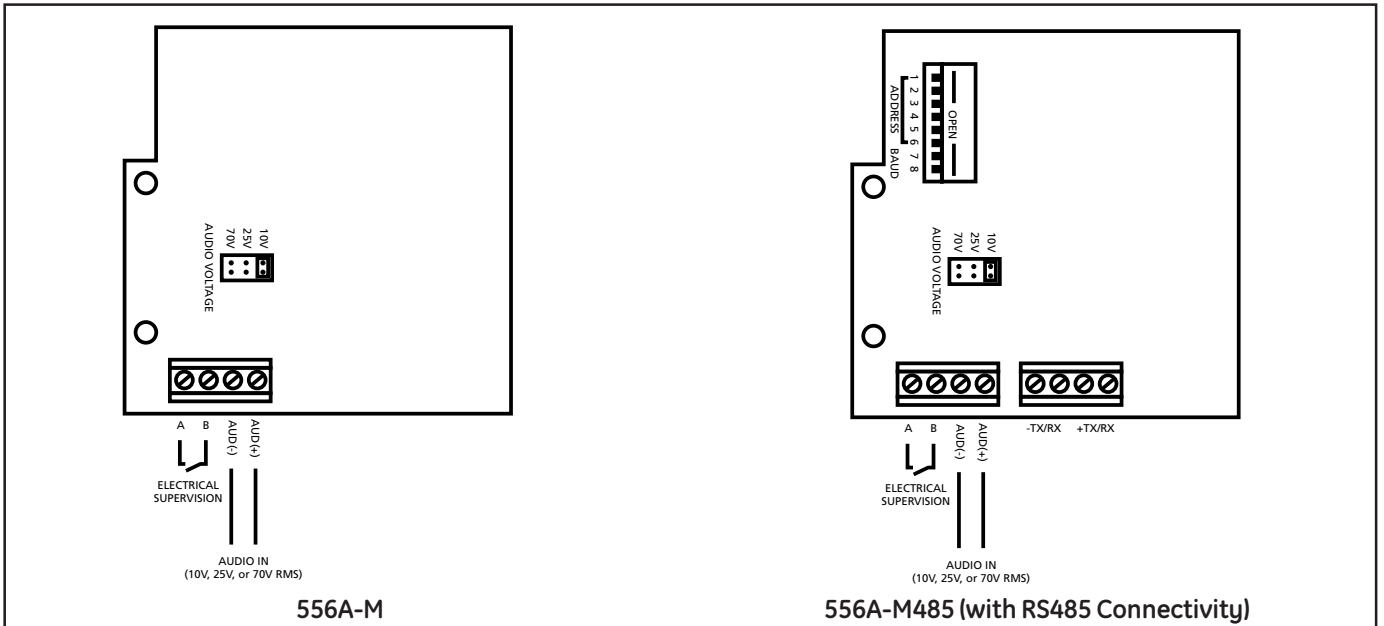


Figure 2. Audio Coupler Modules

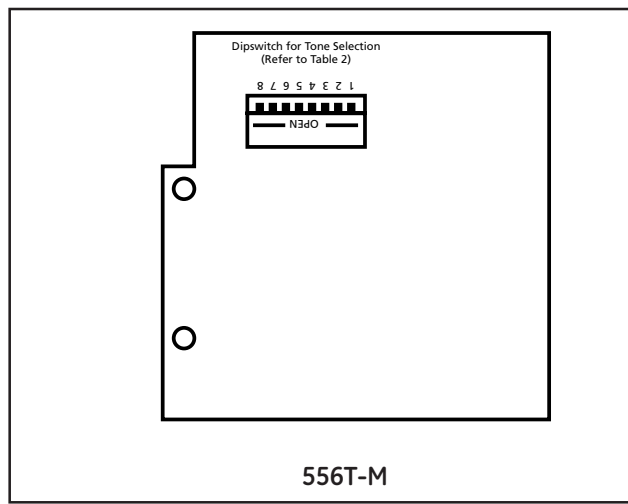


Figure 3. Tone Generator Module

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

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