



## DESIGNED FOR ROUTINE SIGNALING

- Range of up to 200 feet
- Coded or sustained tones
- Model 350 – 12, 24, 120 and 240VAC; Model 450 – 12, 24, 125 and 250VDC
- Model 350 produces 100dBa at 10'
- Model 450 produces 99dBa at 10'
- Type 4X when installed with Panel Mount Gasket Kit or Weatherproof Backbox (Model WB); Type 4X and Type 12 when installed with Surface Mount Trim Ring (Model TR)
- UL and cUL Listed, CSA Certified and FM Approved

# Vibratone® Horns

## Models 350 and 450

The Models 350 and 450 Vibratone Horns produce a very loud horn tone by the electro-mechanical vibration of a diaphragm. Capable of reproducing coded blasts or sustained tones through the use of a number of control devices from a push button to a PLC. Federal Signal's Vibratone horn is excellent for general alarm, start and dismissal, coded paging, and process control signaling in areas of high ambient noise levels.

The Vibratone Model 350 is available in AC voltages; 12VAC, 24VAC, 120VAC and 240VAC. The Model 350 produces 100dBa @ 10', except the 12VAC model, which produces 94dBa @ 10'.

The Model 450 is available in DC voltages; 12VDC, 24VDC, 125VDC and 250VDC. The Model 450 produces 99dBa @ 10'.

Vibratone mounting options provide for surface, flush or semi-flush mounting on walls, panels, in cabinets, on 4-inch square outlet boxes, or in concrete and deep wall constructions.

Installed on the front of a Vibratone Horn, the optional Model PR Projector or Model PR2 Double Projector direct sound output straight ahead or to the sides, optimizing sound output for long, narrow rooms or corridors.

Vibratone horns are UL and cUL Listed, CSA Certified and FM Approved. They are designed and approved for use in Type 4X applications when installed with the Panel Mount Gasket Kit or Weatherproof Backbox (Model WB). They are approved for Type 4X and Type 12 applications when installed with the Surface Mount Trim Ring (Model TR, illustrated on page 124).

Each Vibratone horn is enclosed in a zinc die-cast housing and sealed with grey powder-coat paint. The Model 350 features a stainless steel diaphragm. The Model 450 utilizes an aluminum diaphragm and heavy duty contacts. The rugged construction of the Vibratone horns resists vandalism and the effects of harsh industrial environments.

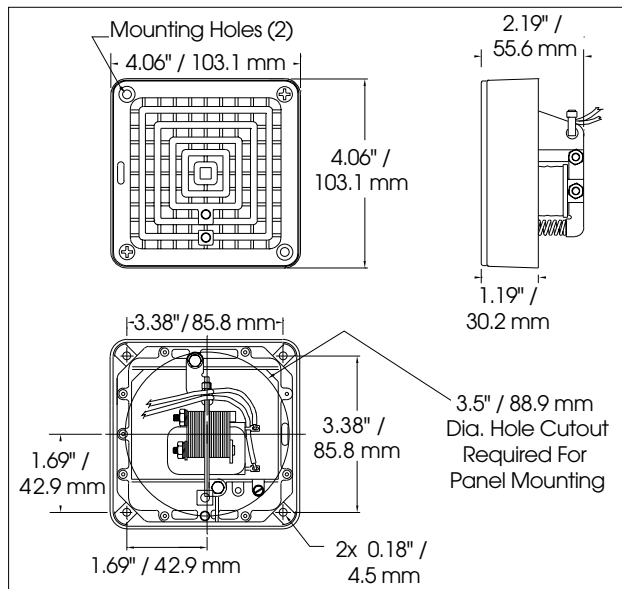
Compact size, loud output and heavy-duty construction make the Vibratone horns ideal for industrial and institutional signaling applications.

Model	Voltage	Operating Current	Decibels @	
			10'	1m
350-012-30	12VAC 50/60Hz	0.90 amps	94	104
350-024-30	24VAC 50/60Hz	0.90 amps	100	110
350-120-30	120VAC 50/60Hz	0.18 amps	100	110
350-240-30	240VAC 50/60Hz	0.09 amps	100	110
450-012-30	12VDC	0.13 amps	93	103
450-012-31	12VDC	0.50 amps	99	109
450-024-31	24VDC	0.25 amps	99	109
450-125-30	125VDC	0.05 amps	99	109
450-250-30	250VDC	0.03 amps	99	109

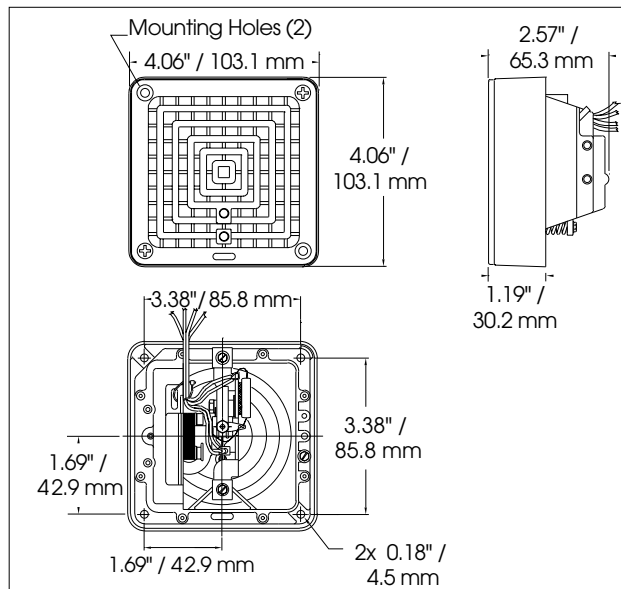


## VIBRATONE® HORNS (350/450)

### 350 HORN



### 450 HORN



## SPECIFICATIONS

Operating Temperature:	-65°F to 150°F	-54°C to 66°C
Net Weight:	1.4 lbs.	0.6 kg
Shipping Weight:	1.5 lbs.	0.7 kg
Height:	4.0"	102.0 mm
Width:	4.0"	102.0 mm
Depth:	2.5"	64.0 mm

## HOW TO ORDER

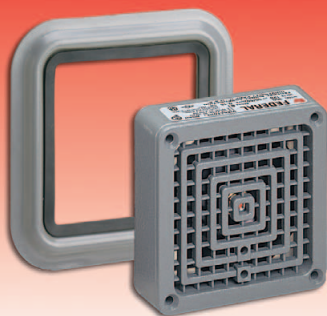
- Specify model and voltage
- Specify accessories from list
- Please refer to Model Number Index 350/450 beginning on page 374

## ACCESSORIES

<b>FB</b>	Wall box for flush mounting the Vibratone® horn in stud, 4" block, or other shallow wall construction; 4 <sup>3</sup> / <sub>8</sub> " square box; 2 <sup>7</sup> / <sub>8</sub> " deep; shipping weight 2 lbs. (0.91 kg)
<b>FBL</b>	Same as FB, but 3 <sup>13</sup> / <sub>16</sub> " deep for 6" x 8" concrete block, cinder block or other deep wall construction; shipping wt. 3 lbs. (1.36 kg)
<b>FG</b>	Flush grille which attaches to the basic unit and serves as the cover of the plastered-in FB flush box; 6" H x 6" W x 1 <sup>1</sup> / <sub>8</sub> " D; shipping wt. 1 lb. (0.45 kg)
<b>K8435666A</b>	Optional Panel Mounting Gasket Kit includes a gasket and hardware for surface or flush mounting the horn for NEMA Type 4X applications.
<b>PR</b>	Projector which concentrates sound into a basic area when attached to the basic model 350/450 units; 4" H x 4" W x 6" D; shipping weight 1 lb. (0.45 kg)
<b>PR2</b>	Double projector directs sounds to both sides when attached to the basic model 350/450 units; ideal for use in hallways; 4" H x 11 <sup>1</sup> / <sub>2</sub> " W x 4" D; shipping weight 2 lbs. (0.91 kg)
<b>SF</b>	Stamped surface plate used for installations on plastered-in 4" outlet switch boxes for semi-flush mountings; 6" H x 6" W x 1 <sup>1</sup> / <sub>2</sub> " D; shipping weight 1 lb. (0.45 kg)
<b>TR</b>	Gasketed trim ring allowing surface mount installations of 350/450 units while maintaining Type12 and Type 4X rating of enclosure.
<b>WB</b>	Cast aluminum neoprene-gasketed weatherproof housing for outside use, complete with mounting lugs; tapped for 1/2", 3/4" conduit; 4 <sup>3</sup> / <sub>8</sub> " square box; 2" deep mounting lugs on 4 <sup>1</sup> / <sub>2</sub> " centers; shipping weight 1 lb. (0.45 kg)

## REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Panel Mount Gasket Kit	K8435666A
Coil (120VAC only)	KFC1516C
Volume Control Kit (350 Horn only)	K8435663B
Gasket for WB	K8435696A



## DESIGNED FOR ROUTINE SIGNALING

- Effective range of 200 feet
- Coded or sustained tones
- Model 350TR – 24 and 120VAC  
Model 450TR – 24VDC
- Model 350TR produces 100dBa at 10' (110dBa at 1m)  
Model 450TR produces 99dBa at 10' (109dba at 1m)
- Type 4X and Type 12 enclosure
- UL and cUL Listed\*,  
CSA Certified and FM Approved

\* Only 350TR is cUL Listed

# Vibratone® Horns

## Models 350TR and 450TR

The Models 350TR and 450TR Vibratone Horns produce a very loud horn tone by the electro-mechanical vibration of a diaphragm. Capable of reproducing coded blasts or sustained tones, Federal Signal's Vibratone horn is excellent for general alarm, start and dismissal, coded paging, and process control signaling in areas of high ambient noise levels.

Well suited to the requirements of panel builders and other OEM customers, the 350TR and 450TR offer the benefits of quick and simple surface mount installation. Each horn is supplied with a gas-ketted trim ring. The trim ring is streamlined but durable, constructed of 18-gauge aluminum with Neoprene™ gaskets between the mounting surface and trim ring and between the trim ring and horn. The trim ring is sealed with gray powder coat paint for long life and corrosion resistance.

The Vibratone Model 350TR is available in 24VAC and 120VAC operating voltages. The Model 350TR produces 100dBa at ten feet (110dBa at 1 meter).

The Vibratone Model 450TR is available 24VDC. The Model 450TR produces 99dBa at ten feet (109dBa at 1 meter).

Vibratone horns are UL Listed, CSA Certified and FM Approved. The Models 350TR and 450TR are approved for Type 4X and Type 12 applications.

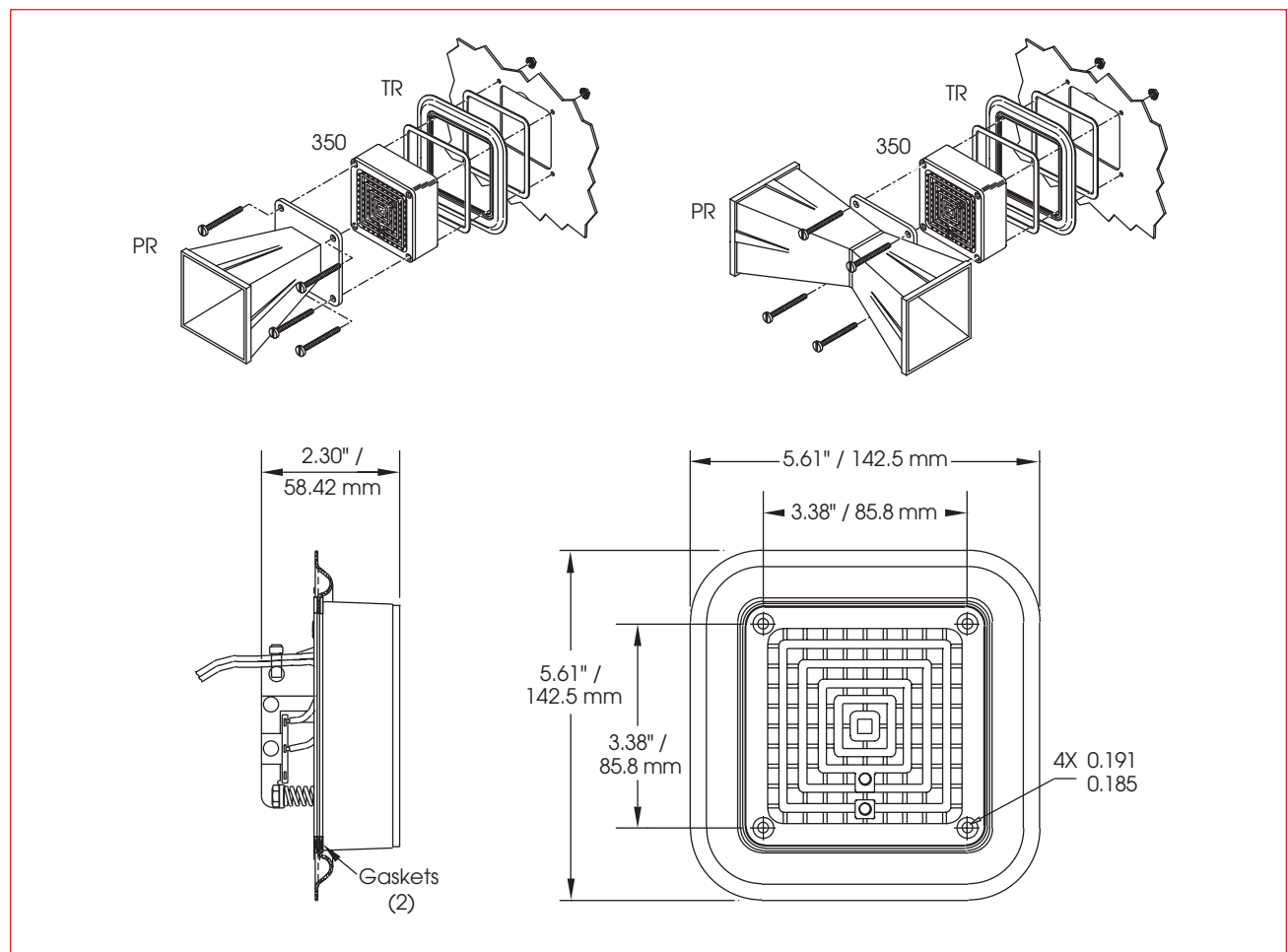
Each Vibratone horn is enclosed in a zinc die-cast housing and sealed with powder-coat paint. The Model 350TR features a stainless steel diaphragm. The Model 450TR utilizes an aluminum alloy diaphragm and heavy duty contacts. The rugged construction of the Vibratone horns resists vandalism and the effects of harsh industrial environments.

Compact size, loud output and heavy-duty construction make the VibraTone horns ideal for industrial and institutional signaling applications.



Model	Voltage	Operating Current	Decibels @	
			10'	1m
<b>350TR-024</b>	24VAC 50/60Hz	0.90 amps	100	110
<b>350TR-120</b>	120VAC 50/60Hz	0.18 amps	100	110
<b>450TR-024</b>	24VDC	0.25 amps	99	109

## VIBRATONE® HORNS (350TR/450TR)



### SPECIFICATIONS

Operating Temperature:	-65°F to 150°F	-54°C to 66°C
Net Weight:	1.7 lbs.	0.77 kg
Shipping Weight:	1.8 lbs.	0.81 kg
Height:	5.6"	142.2 mm
Width:	5.6"	142.2 mm
Depth:	2.5"	64.0 mm

### ACCESSORIES

<b>PR</b>	Projector which concentrates sound into a basic area when attached to the basic model 350/450 units; 4" H x 4" W x 6" D; shipping weight 1 lb. (0.45 kg)
<b>PR2</b>	Double projector directs sounds to both sides when attached to the basic model 350/450 units; ideal for use in hallways; 4" H x 11½" W x 4" D; shipping weight 2 lbs. (0.91 kg)
<b>TR</b>	Gasketed trim ring allowing surface mount installations of 350/450 units while maintaining Type12 and Type4X rating of enclosure.

### HOW TO ORDER

- Specify model and voltage
- Specify accessories from list
- Please refer to Model Number Index 350TR/450TR beginning on page 374

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Coil (120VAC only)	KFC1516C
Volume Control Kit	K8435663B





# Vibratone® Horns

## Model 350WB

### DESIGNED FOR ROUTINE SIGNALING USES

- Available in 120VAC and 240VAC
- Effective range 200 feet
- Coded or sustained tones
- Wall mount
- Produces 100dBa @ 10' (110dBa @ 1m)
- Type 4X, IP65 enclosure
- UL and cUL Listed, CSA Certified and FM Approved

The Model 350WB (AC current) Vibratone® horn produces sound by the electro-mechanical vibration of a stainless steel diaphragm. The horn mechanism with diaphragm is attached to the grille. Indoor or outdoor use is made possible by the water- and dust-tight backbox.

The 350WB is available in 120 or 240VAC for 50/60Hz. The sound output level is 100dBa nominal at ten feet (110dBa @ 1m).

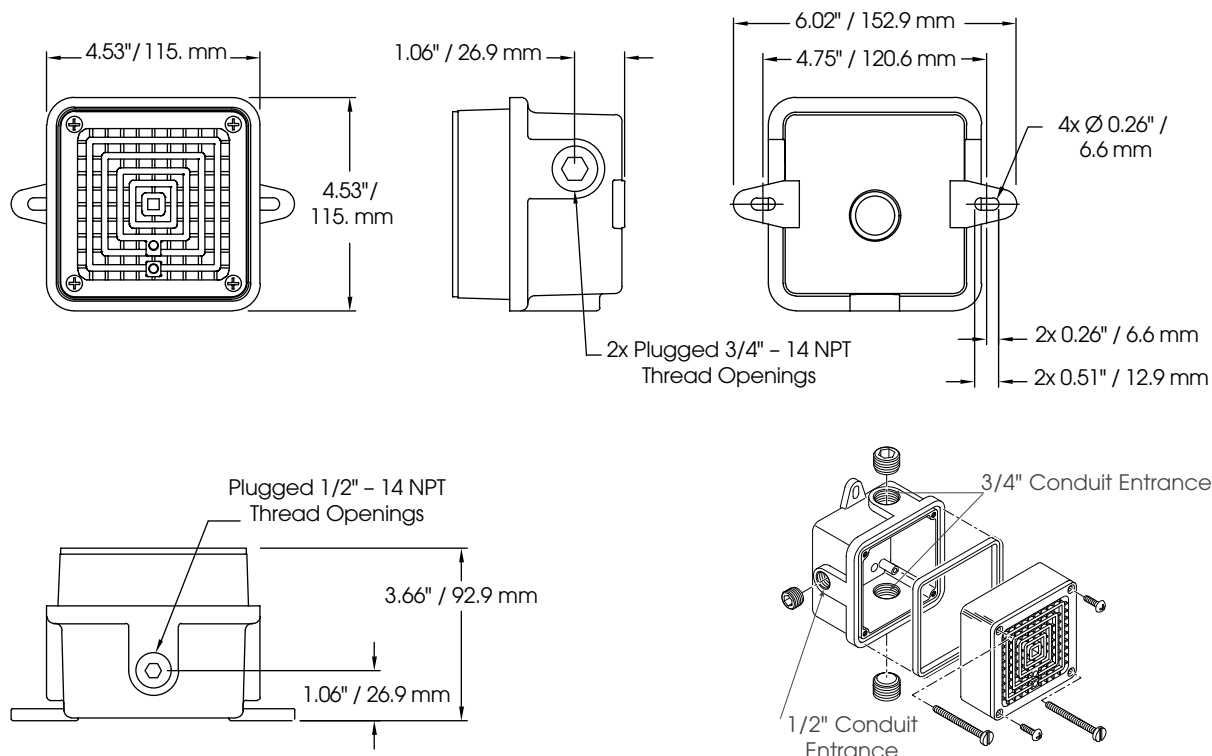
Model 350WB features a die-cast aluminum rear housing sealed with a gray enamel finish. The rugged outer housing resists vandalism without reducing sound output. Model 350WB is fused and utilizes a terminal block connection. The horn and backbox combination is UL and cUL Listed, CSA Certified and FM Approved.

Capable of reproducing coded blasts or sustained tones, Federal Signal's Vibratone horns are excellent for general alarm, start/dismissal, coded paging and process control signaling in areas where their sound output exceeds ambient noise levels. Compact size and various installation options make them ideal for institutional use.

Model	Voltage	Operating Current	Decibels @	
			10'	1m
350WB-120	120VAC 50/60Hz	0.18 amps	100	110
350WB-240	240VAC 50/60Hz	0.09 amps	100	110



## VIBRATONE® HORN (350WB)



### SPECIFICATIONS

Operating Temperature:	-65°F to 150°F	-54°C to 66°C
Net Weight:	2.7 lbs.	1.2 kg
Shipping Weight:	2.8 lbs.	1.2 kg
Height:	5.3"	134.6 mm
Width:	5.3"	134.6 mm
Depth:	3.66"	92.9 mm

### HOW TO ORDER

- Specify model and voltage
- Please refer to Model Number Index 350WB beginning on page 374

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Coil (120VAC only)	KFC1516C
Volume Control Kit	K8435663B



# Vibratone® Hazardous Location Horn

Model 350WBX

## DIVISION 2 VIBRATING HORN

- Available in 120VAC and 240VAC
- Effective range of 200 feet
- Rated for Class I, Division 2; Class II, Division 2; Class III
- For coded or sustained tones
- Produces 100dBa @ 10' (110dBa @ 1m)
- Type 4X enclosure
- UL and cUL Listed and CSA Certified

Model 350WBX (AC current) Vibratone® horn produces sound by the electro-mechanical vibration of a stainless steel diaphragm. The horn mechanism with diaphragm is attached to the grille. The water- and dust-tight backbox is ideal for indoor or outdoor use.

The Model 350WBX is available in 120 or 240VAC for 50/60Hz. Its sound output level is 100dBa nominal at ten feet (110dBa @ 1 meter).

This hazardous location horn accommodates surface, flush or semi-flush mounting on walls, panels, and in cabinets.

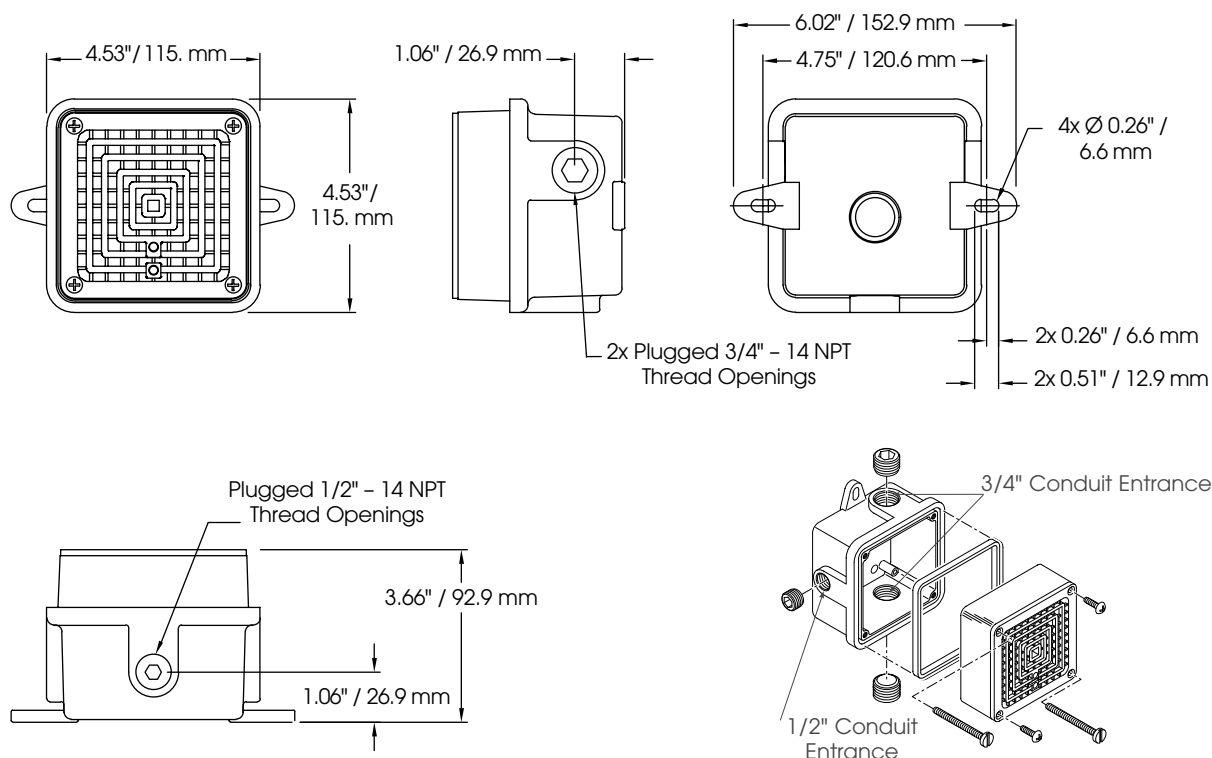
The Model 350WBX features a die-cast zinc housing with a corrosion-resistant polyurethane finish. The rugged outer grille resists vandalism without reducing sound output. The 350WBX is fused and utilizes a terminal block connection. The 350WBX is approved for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; and Class III.

Capable of producing coded blasts or sustained tones, Federal Signal's Vibratone horns are excellent for general alarm, start/dismissal, coded paging and process control signaling in areas where their sound output exceeds ambient noise levels. Compact size and a variety of installation options make them ideal for institutional use.

Model	Voltage	Operating Current	Decibels @	
			10'	1m
350WBX-120	120VAC 50/60Hz	0.18 amps	100	110
350WBX-240	240VAC 50/60Hz	0.09 amps	100	110



## VIBRATONE® HORN (350WBX)



### SPECIFICATIONS

Operating Temperature:	-65°F to 150°F	-54°C to 66°C
Net Weight:	2.7 lbs.	1.2 kg
Shipping Weight:	2.8 lbs.	1.2 kg
Height:	4.53"	115.0 mm
Width:	6.02"	152.0 mm
Depth:	3.66"	92.9 mm

### HOW TO ORDER

- Specify model and voltage
- Please refer to Model Number Index 350WBX beginning on page 374

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Coil (120VAC only)	KFC1516C
Volume Control Kit	K8435663B
Fuse, 1 amp, 250V	K148A155A-01



# Explosion-Proof Vibrating Horns

Models 31X and 41X

## DESIGNED FOR USE IN EXPLOSION-PROOF ATMOSPHERES

- Corrosion-resistant cast aluminum housings
- Produces 100dBa @ 10' (110dBa @ 1m)
- UL and cUL Listed and CSA Certified

These Federal Signal explosion-proof vibrating horns are constructed for safe use in hazardous environments. They are enclosed in heavy-duty copper-free cast aluminum housings tapped for  $\frac{3}{4}$ -inch conduit.

Federal Signal Models 31X and 41X are corrosion-resistant vibrating horns with stainless steel diaphragms. Model 41X is available in 24VDC. The Model 31X is available in 120VAC and 240VAC and features an internal volume control.

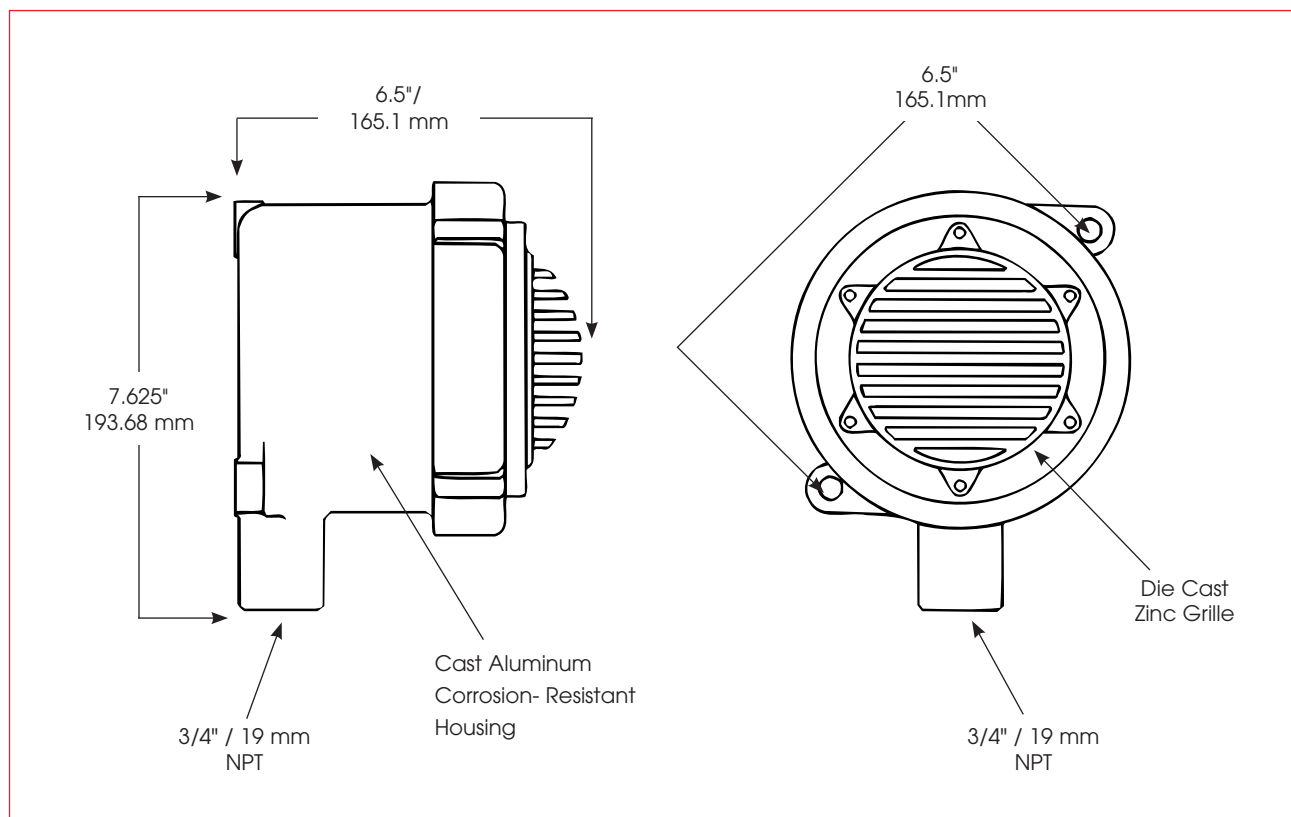
The 31X and 41X models are UL and cUL Listed for Class I, Division 1, Groups C & D; Class II, Division 1, Groups E, F, and G; and Class III. Both are CSA (Canadian Standards Association) Certified. A five minute duty cycle applies to both models.

Model	Voltage	Operating Current	Decibels @	
			10'	1m
<b>31X-120-3</b>	120VAC 50/60Hz	0.20 amps	99	110
<b>31X-240</b>	240VAC 50/60Hz	0.10 amps	99	110
<b>41X-024-1</b>	24VDC	1.20 amps	99	110





## EXPLOSION-PROOF HORNS (31X/41X)



### SPECIFICATIONS

Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:		
31X	7.5 lbs.	3.4 kg
41X	9.0 lbs.	4.1 kg
Shipping Weight:		
31X	8.1 lbs.	3.7 kg
41X	10.3 lbs.	4.7 kg
Height:		
31X	7.625"	193.68 mm
41X	7.625"	193.68 mm
Depth:		
31X	6.5"	165.1 mm
41X	6.5"	165.1 mm
Diameter:		
31X	6.5"	165.1 mm
41X	6.5"	165.1 mm

### HOW TO ORDER

- Specify model and voltage
- Please refer to Model Number Index 31X/41X beginning on page 374

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Grill, Cover	KH6962J
Coil 3lx, 120VAC	KFC1516C
Coil 3lx, 240VAC	KFC1506C
Coil 4lx, 24VDC	KFC1463



# Resonating Horns

## Models 55 and 56

### DESIGNED FOR HIGH AMBIENT NOISE AREAS

- Resonated column of air generates sound
- Model 55 produces 105dBa @ 10' (115dBa @ 1m)
- Model 56 produces 106dBa @ 10' (116dBa @ 1m)
- Indoor/outdoor use
- Models 55 and 56 are FM Approved
- Model 55 (120VAC) is UL Listed and CSA Certified

The Federal Signal Models 55 and 56 are electric horns that produce sound by means of a diaphragm, which resonates a column of air. Because the output is greater than that of a vibrating horn resonating horns can be used wherever a louder, more powerful signal is required.

Both models feature corrosion-resistant cast aluminum housings with a brass projector. These projectors are designed to match the frequency of the vibrating diaphragm to produce a smooth musical tone. The housings are tapped for 1/2" conduit (swivel bracket included).

Models 55 and 56 are finished in gray enamel and equipped with a straight projector. These weatherproof horns are water and dust-tight when installed with conduit.

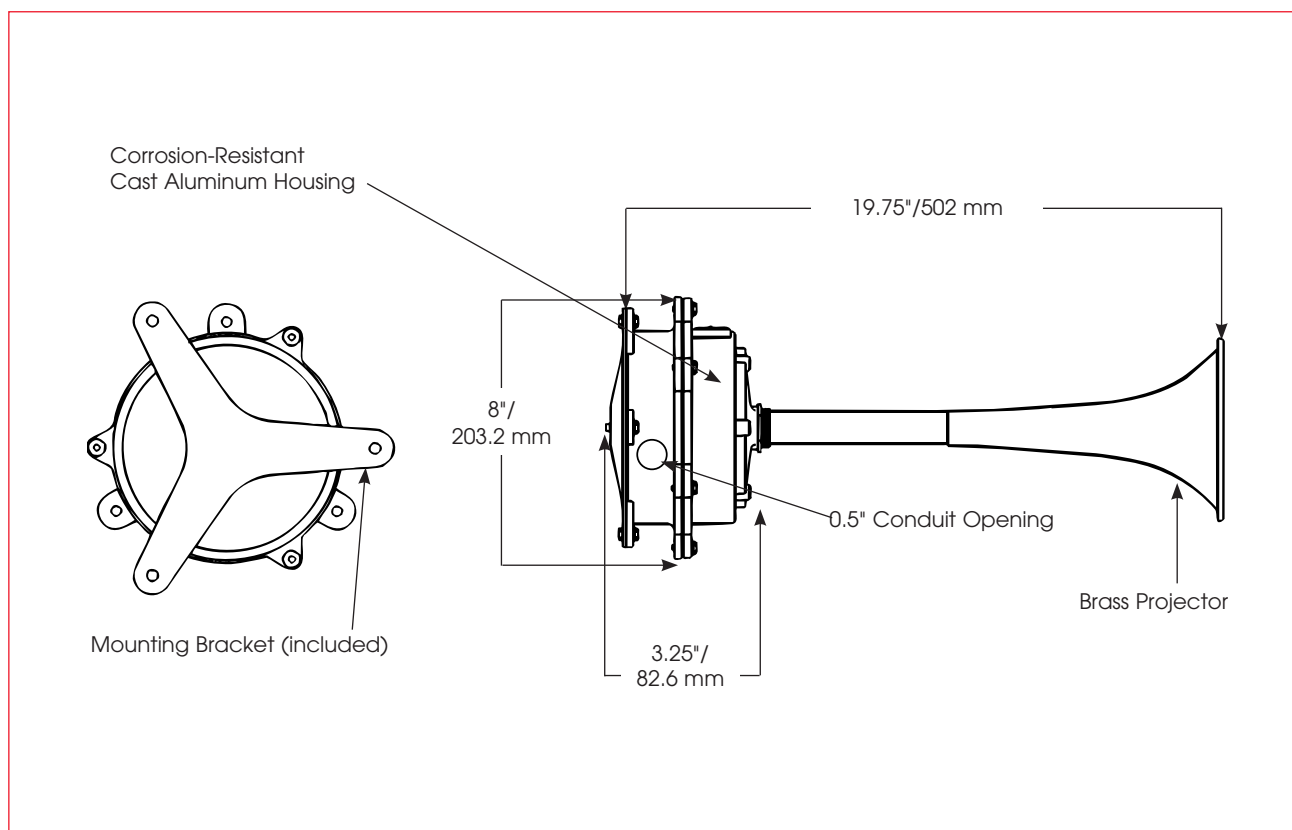
Model 55 is also UL Listed for indoor/outdoor use. Both models are FM Approved. Models 55 and 56 have a duty cycle of five minutes on, five minutes off.

Models 55 and 56 are ideal for both indoor and outdoor use. They require minimum maintenance; their rugged designs seal out corrosive dust and vapors. Both models have sufficient output to penetrate through high ambient noise levels.

Model	Voltage	Operating Current	Decibels @	
			10'	1m
55-024-1	24VAC 60Hz	3.00 amps	105	115
55-120-1	120VAC 60Hz	0.75 amps	105	115
56-024-1	24VDC	3.00 amps	106	116
56-125-1	125VDC	0.25 amps	106	116
56-250-1	250VDC	0.25 amps	106	116



## RESONATING HORNS (55/56)



### SPECIFICATIONS

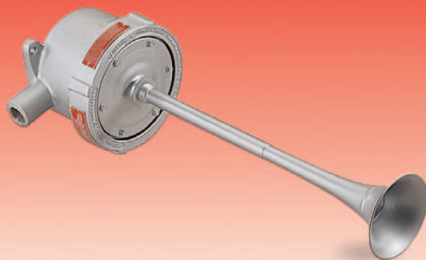
Operating Temperature:	-35°F to 150°F	-37°C to 66°C
Net Weight:	5.0 lbs.	2.3 kg
Shipping Weight:	6.2 lbs.	2.8 kg
Height:	8.0"	203.2 mm
Width:	8.0"	203.0 mm
Length:	19.75"	502.0 mm
Duty Cycle:	5 minutes ON/5 minutes OFF	

### HOW TO ORDER

- Specify model and voltage
- Please refer to Model Number Index 55/56 beginning on page 374

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Projector	K8283C071-0G
Mounting Bracket Accessory Kit	K8233A046-0G
Mounting Kit, Bulk Head	K8233A036
Coil, 120VAC	KFC456



# Explosion-Proof Resonating Horn

## Model 55X

### DESIGNED FOR USE IN EXPLOSION-PROOF ATMOSPHERES

- Corrosion-resistant cast aluminum housings
- Produces 105dBa @ 10' (115dBa @ 1m)
- Type 4X, IP66 enclosure
- UL and cUL Listed and CSA Certified

This Federal Signal explosion-proof resonating horn is constructed for safe use in hazardous environments. It is enclosed in heavy-duty die-cast aluminum housing which is tapped for  $\frac{3}{4}$ -inch conduit.

Federal Signal Model 55X is a resonating electric horn which produce sound by means of a diaphragm which resonates a column of air. The Model 55X is available in 120VAC.

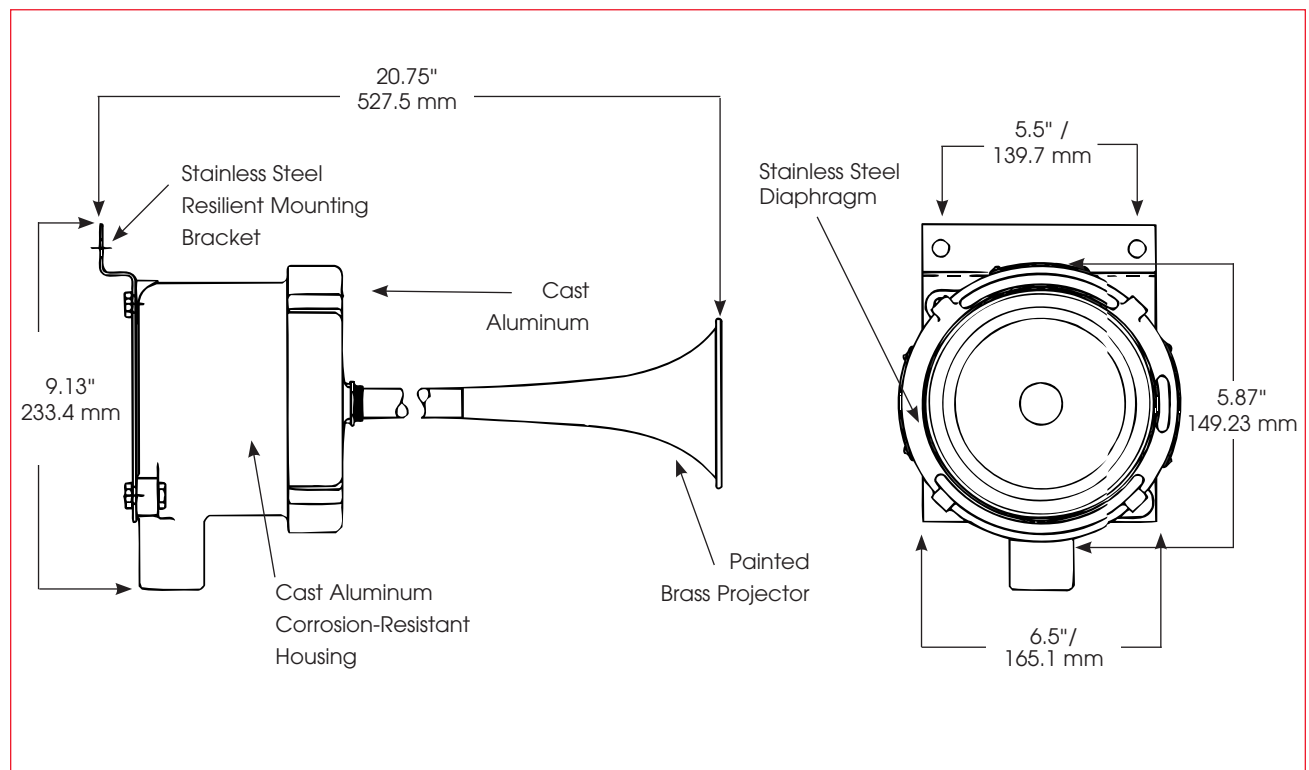
The 55X is UL Listed for Class I, Division 1, Groups C & D; Class I, Division 2, Groups C & D; Class II, Division 1, Groups E, F & G; and Class III. A five minute duty cycle applies.

This resonating explosion-proof horn is designed for locations where the danger of explosion or fire exists, such as refineries, laboratories, mines and grain elevators.

Model	Voltage	Operating Current	Decibels @	
			10'	1m
55X-120-1	120VAC 60Hz	0.65 amps	105	115



## EXPLOSION-PROOF HORNS (55X)



### SPECIFICATIONS

Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:	10.5 lbs.	4.8 kg
Shipping Weight:	12.5 lbs.	5.7 kg
Height:	5.87"	149.35 mm
Width:	6.5"	165.1 mm
Length:	20.75"	527.5 mm

### HOW TO ORDER

- Specify model
- Please refer to Model Number Index 55X beginning on page 374

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Straight Projector	K8283C071-0G
Mounting Bracket	K8233A046-0G





# Air Horns

## Models 3H and 6H

### DESIGNED FOR USE IN HAZARDOUS LOCATIONS

- Available in 120VAC
- Wide variety of tones and sizes
- For indoor/outdoor use
- Type 4X enclosure

Federal Signal offers a line of air horns in a variety of tones and sizes for the industrial marketplace. High, medium and low tones are available which provides a wide range of frequencies and high sound output.

Federal Signal air horns feature a one-piece, cast aluminum alloy housing which has been treated to provide corrosion resistance. The horns include specialized long-lasting stainless steel diaphragms. These precisely machined horns will yield peak performance at proper working air pressures and are virtually indestructible. The 3-inch horn (Model 3H) has a threaded female pipe connection. The Model 6H features flanges for additional support.

Federal Signal air horns operate with 20 to 150 p.s.i., (pounds per square inch) but they are tuned for 80 to 90 p.s.i. operation. The horn frequency (pitch) depends on both the diameter and length of the projector. Decibel output at 10 feet is 122dBa (132dBa @ 1m).

The horns require a 120VAC Federal Signal air valve (air valve sold separately). Use Model EVS with the 3H and Model EVL with the 6H.

Air horns can be used indoors, outdoors, or anywhere compressed air can be provided.

Federal Signal Air Horns are the loudest audible signals offered for indoor applications.

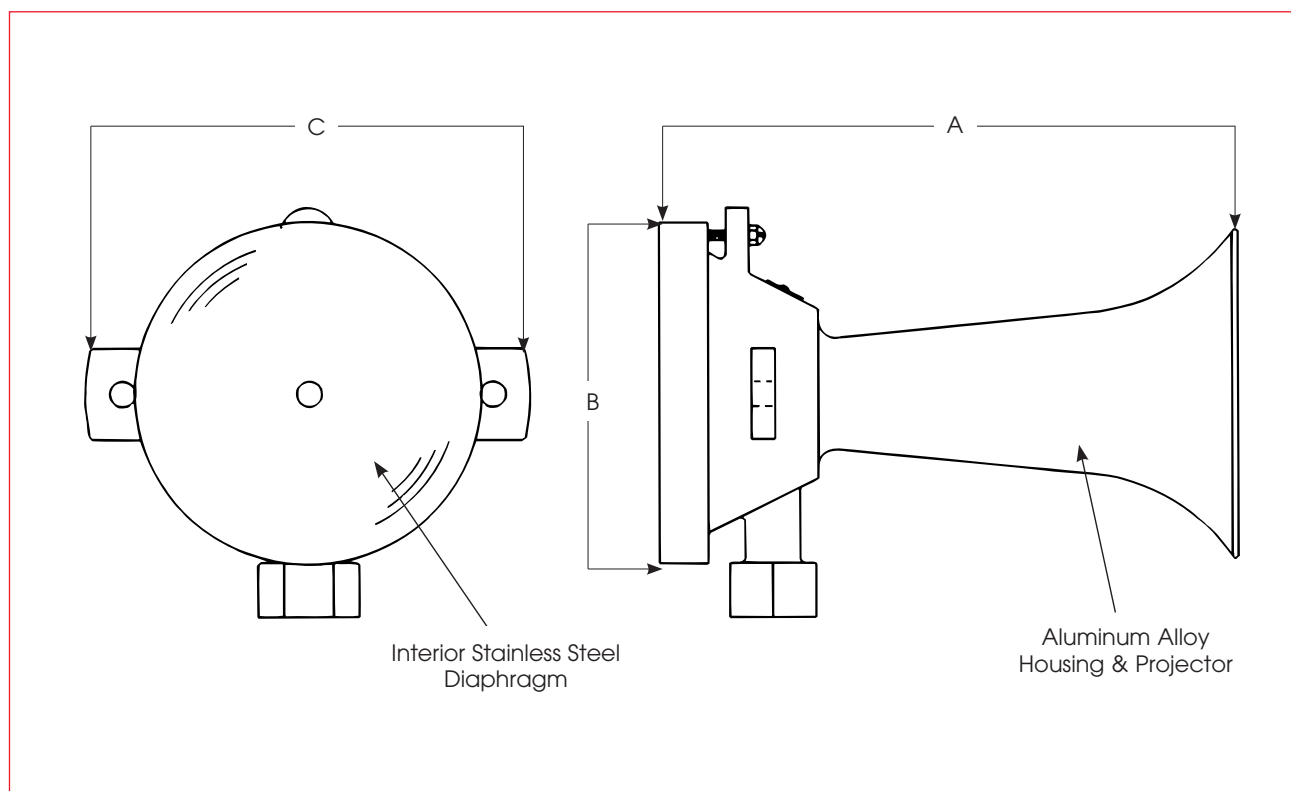
They are not subject to sparking and are ideal for hazardous locations (the valves need to be located in a non-hazardous location).

Model	Air Consumption Cubic Ft./Sec.	Valve Model*	Frequency	Decibels @	
				10'	1m
<b>3H</b>	0.20	<b>EVS-120</b>	750Hz	112	122
<b>6H</b>	0.45	<b>EVL-120</b>	295Hz	122	132

\* 120VAC valves sold separately



## AIR HORNS (3H/6H)



## SPECIFICATIONS

<i>Model</i>	<i>Net Weight</i>	<i>Shipping Weight</i>	<i>Dimensions (in./mm)</i>			<i>Diaphragm Dia. (in./mm)</i>	<i>Pipe Size</i>
			<i>A</i>	<i>B</i>	<i>C</i>		
3H	1.6 lbs. 0.73 kg	2.1 lbs. 0.95 kg	4.88" 124.0 mm	4.75" 121 mm	3.63" 92.0 mm	3.0" 76.0 mm	0.38" 9.5 mm
6H	9.7 lbs. 4.4kg	11.4 lbs. 5.17 kg	12.38" 314.0 mm	9.5" 241.0 mm	6.5" 165.0 mm	5.0" 152.0 mm	0.75" 19.0 mm

## REPLACEMENT PARTS

### Description

3H Diaphragm

6H Diaphragm

### Part Number

K8271A020

K8271A077

## HOW TO ORDER

- Specify air horn model
- Specify valve model (sold separately)
- Please refer to Model Number Index 3H/6H beginning on page 374



# Resonating Horn

## Model 52

### DESIGNED FOR OFF-ROAD VEHICLES

- Available in 24VDC
- Withstands extreme outdoor conditions
- Produces 114dBa @ 10' (124dBa @ 1m)
- Surface mount with flanges
- Type 4X enclosure

The Federal Signal Model 52 resonating horn produces 114dBa @ 10 feet (124dBa @ 1m) with a 1,000 foot range. It is capable of penetrating high ambient noise levels. Being electrically-activated, the Model 52 does not require an air compressor for operation. The Model 52 is able to withstand the shocks, vibrations, dust and atmospheric conditions encountered in off-road use. The operating temperature range is -40°F to 185°F (-40°C to 85°C).

Rubber gaskets and a power connector make the Model 52 completely watertight. The projector and internal parts are made of zinc-coated steel or stainless steel to resist corrosion; the exterior is sealed with gray enamel paint. The housing is die-cast aluminum. Tied and adhesive-bonded internal wiring helps prevent electrical shorts, wire breakage, and loose connections. The Model 52 is available in 24VDC. It's 18-32V operating range allows for voltage inconsistencies. The Model 52 has a duty cycle of five minutes on and five minutes off.

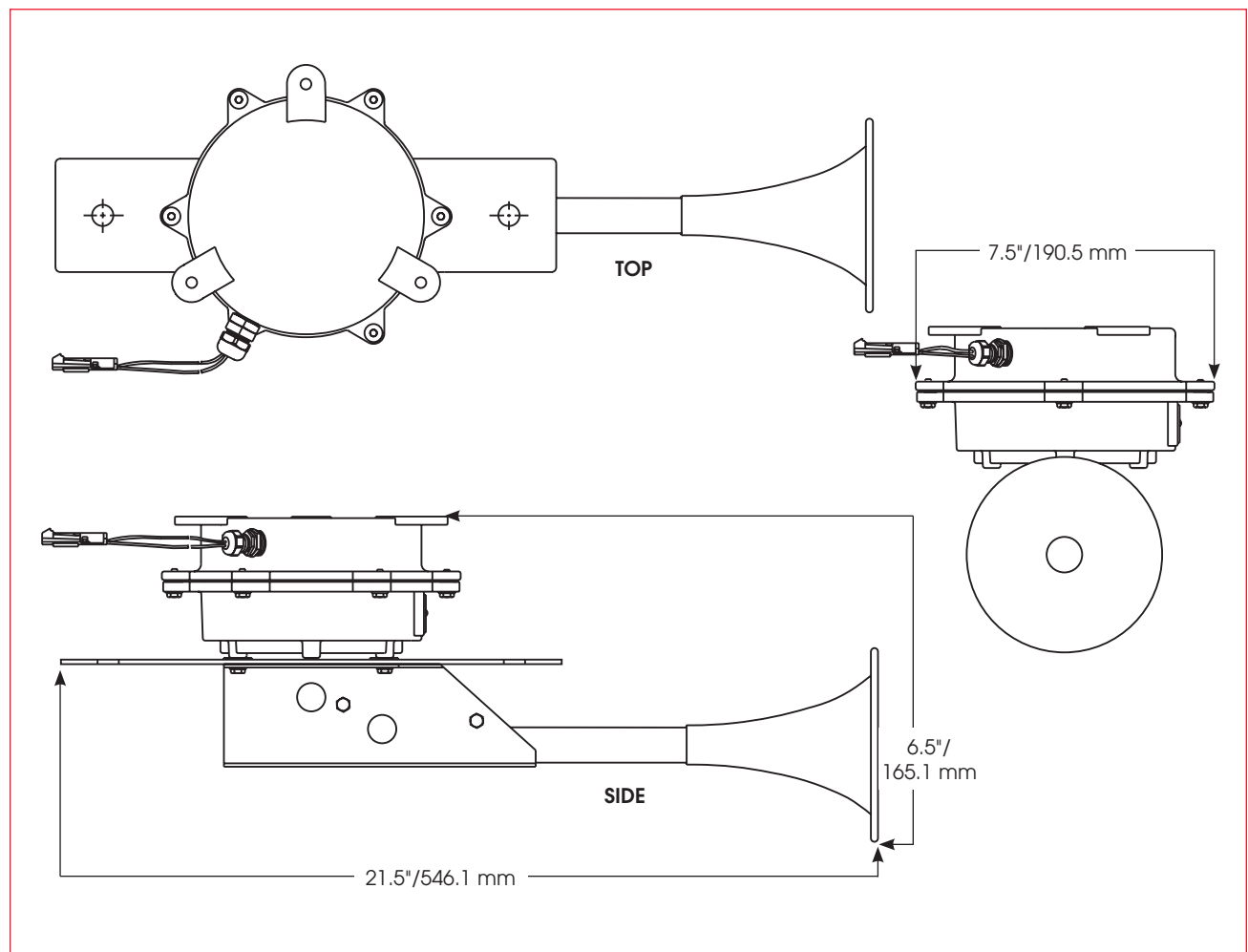
Federal Signal's Model 52 resonating horn is specifically designed for off-road vehicles. It provides the very loud sound for which an air-horn is usually required, but without the need for an expensive compressor.

Used by major manufacturers of construction equipment, Model 52 resonating horns suit the warning needs of any off-road vehicle working in a high noise environment, including excavators, backhoes, compactors (steamrollers), loaders, tractors, bulldozers, trenchers, and scrapers.

Model	Voltage	Operating Current	Decibels @	
			10'	1m
52-024-1	24VDC	4.0 amps	114	124



## RESONATING HORN (52)



### SPECIFICATIONS

Operating Temperature:	-40°F to 185°F	-40°C to 85°C
Net Weight:	9.0 lbs.	4.08 kg
Shipping Weight:	10.0 lbs.	4.54 kg
Height:	6.5"	165.1 mm
Width:	7.5"	190.5 mm
Depth:	21.5"	546.1 mm

### HOW TO ORDER

- Specify model and voltage
- Please refer to Model Number Index 52 beginning on page 374

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Projector, Straight	K8233C081B-02



## DESIGNED FOR GENERAL ALARM OR PAGING

- Vibrating mechanism
- Three gong sizes – four, six, or ten-inch
- A range of output available – 98-102dBa @ 10' (108-112dBa @ 1m)
- Optional weatherproof backbox provides Type 3R enclosure
- UL and cUL Listed, CSA Certified and FM Approved

# Vibratone® Bells

Models A4, A6 and A10  
Models 500 and 600

Federal Signal's Vibratone® heavy duty bell product line utilizes a modular approach to combine gongs and mechanisms allowing for greater flexibility and selection. Three gong sizes are available: the Model A4 is four inches in diameter, the Model A6 is six inches in diameter, and the Model A10 is ten inches in diameter. Each larger gong produces a different tone and a higher dBa output.

Vibrating bells produce a continuous ringing sound when voltage is applied. The Models 500 and 600 vibrating mechanisms are designed for AC and DC operation, respectively.

The Models 500 and 600 are UL and cUL Listed, CSA Certified and FM Approved.

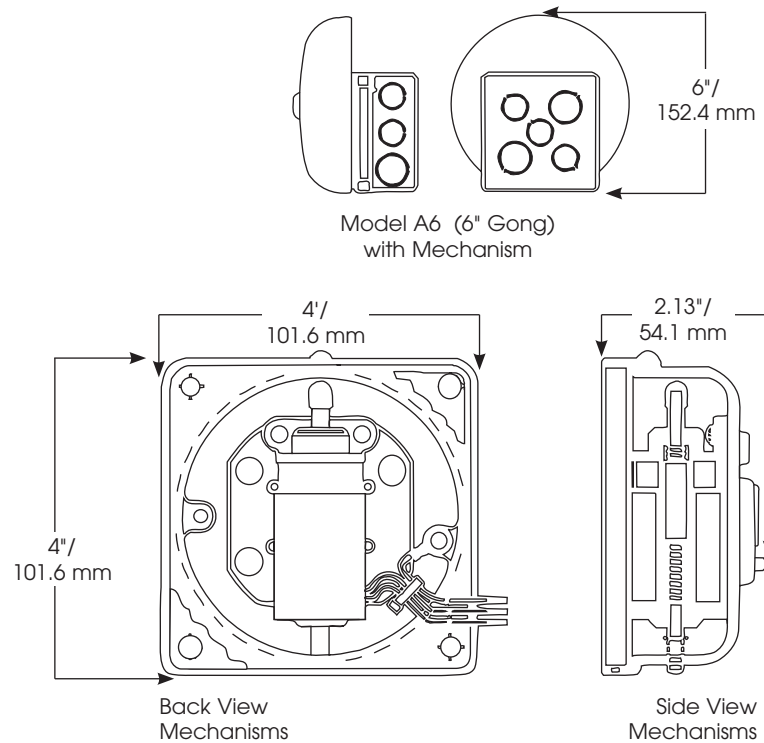
Federal Signal's Vibratone bells can be used in any industrial application, whether to signal danger or for start and dismissal. A variety of mounting accessories will accommodate almost any environment.

Model	Voltage	Operating Current	Decibels @ 10'	1m
<b>BELLS</b>				
<b>A4</b>	–	–	98	108
<b>A6</b>	–	–	100	110
<b>A10</b>	–	–	102	112
<b>VIBRATING MECHANISMS</b>				
<b>500-024-1</b>	24VAC	0.4 amps	–	–
<b>500-120-1</b>	120VAC	0.08 amps	–	–
<b>500-240-1</b>	240VAC	0.04 amps	–	–
<b>600-012-1</b>	12VDC	0.8 amps	–	–
<b>600-024-1</b>	24VDC	0.4 amps	–	–
<b>600-125-1</b>	125VDC	0.08 amps	–	–
<b>600-250-1</b>	250VDC	0.03 amps	–	–





## VIBRATONE® BELLS (A4/A6/A10/500/600)



### SPECIFICATIONS

Model	Net Weight	Shipping Weight	Height	Width	Depth
500	1.0 lb. 0.45 kg	1.1 lb. 0.4 kg	4.0" 101.6 mm	4.0" 101.6 mm	2.125" 54.0 mm
600	1.0 lb. 0.45 kg	1.1 lb. 0.4 kg	4.0" 101.6 mm	4.0" 101.6 mm	2.125" 54.0 mm
A4	0.5 lb. 0.23 kg	0.7 lb. 0.32 kg	4.0" 101.6 mm	4.0" 101.6 mm	1.25" 31.8 mm
A6	1.0 lb. 0.45 kg	1.2 lb. 0.54 kg	6.0" 152.4 mm	6.0" 152.4 mm	1.75" 44.5 mm
A10	3.5 lbs. 1.59 kg	4.0 lbs. 1.8 kg	10.0" 254.0 mm	10.0" 254.0 mm	2.25" 57.2 mm

### HOW TO ORDER

- Specify mechanism model and voltage, and gong model\*
- Specify accessories from list
- Please refer to Model Number Index A4/A6/A10/500/600 beginning on page 374

\* Each gong sold separately

### ACCESSORIES

<b>FB</b>	Deep back box for flush mounting A4 gong with any mechanism
<b>FBL</b>	Extra deep back box for flush mounting A4 gong with any mechanism
<b>FG</b>	Grille for flush mounting A4 gong and any mechanism in FB back box
<b>SF</b>	Surface mounting plate for plastered-in 4" boxes
<b>WB</b>	Weatherproof back box



# Vibratone® Bell Assemblies

Models 504WB and 506WB

## GONG, MECHANISM, AND BACK BOX IN ONE ASSEMBLY

- Available in 120VAC
- Four-inch or six-inch gong
- Four-inch gong produces 98dBa @ 10' (107dBa @ 1m)
- Six-inch gong produces 100dBa @ 10' (109dBa @ 1m)
- Type 3R enclosure
- UL and cUL Listed, CSA Certified and FM Approved

Federal Signal's Vibratone® Bells Models 504WB and 506WB are completely assembled and include the gong, vibrating AC mechanism, and the gasketed back box. These assemblies feature heavy duty, industrial grade housings and powder-coat paint treatments for added durability and performance.

These bells are offered in a 120VAC version.

The four inch, heavy duty gong, produces 98dBa @ 10' (107dBa @ 1m). The six inch heavy duty gong produces 100dBa @ 10' (109dBa @ 1m). Vibratone gongs are tempered to give them superior output and long lasting durability.

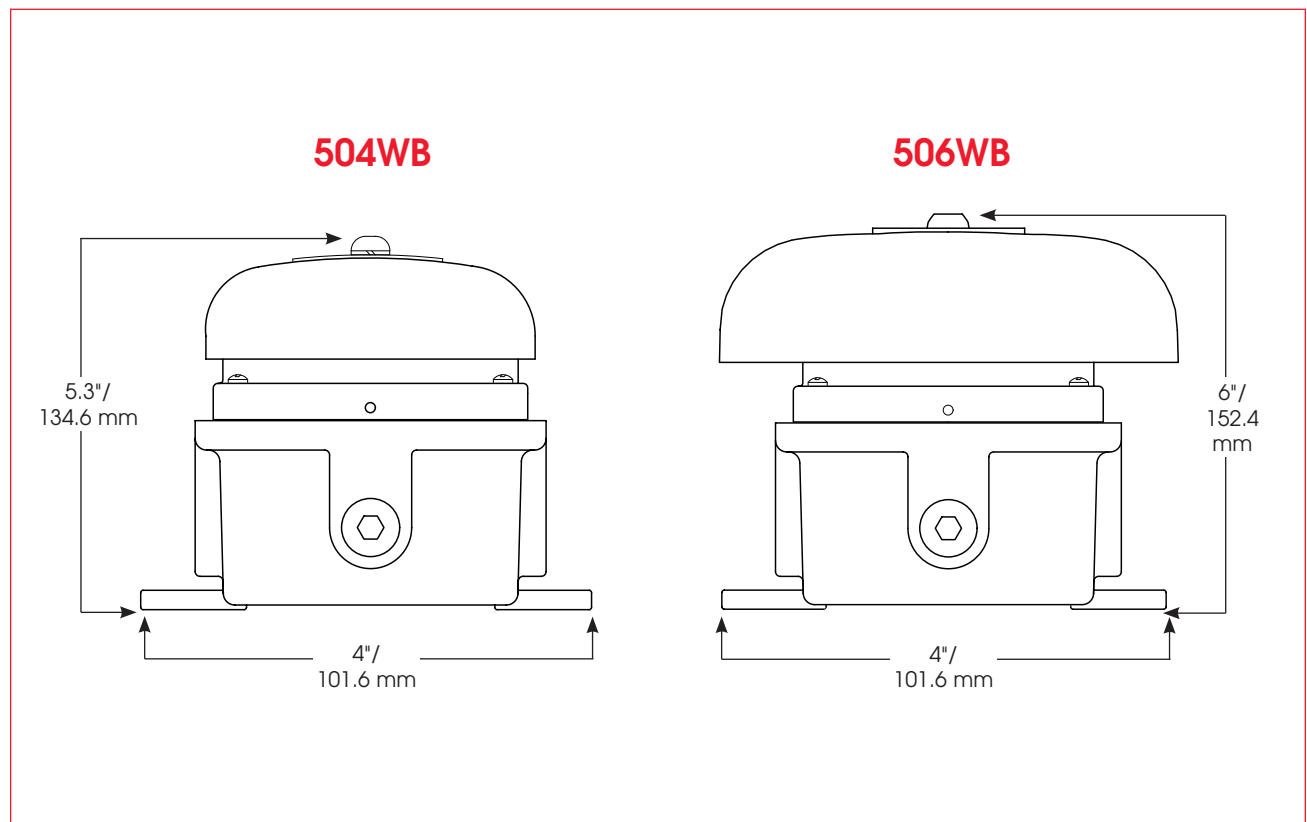
The Models 504WB and 506WB both contain internal terminal blocks which simplifies installation. This method also allows for an uninterrupted, single run of wiring.

These bells are UL and cUL Listed, CSA Certified and FM Approved. The entire assembly is rated for Type 3R.

Model	Operating Voltage	Current	Decibels @	
			10'	1m
504WB-120	120VAC	0.08 amps	98	107
506WB-120	120VAC	0.08 amps	100	109



## VIBRATONE® BELL ASSEMBLIES (504WB/506WB)



### SPECIFICATIONS

Operating Temperature: -31°F to 150°F -35°C to 66°C

#### Net Weight:

Model 504	1.05 lbs.	0.48 kg
Model 506	2.5 lbs.	1.13 kg

#### Shipping Weight:

Model 504	1.65 lbs.	0.75 kg
Model 506	3.0 lbs.	1.36 kg

#### Height:

Model 504	5.3"	134.6 mm
Model 506	6.0"	152.4 mm

#### Width:

Model 504	5.3"	134.6 mm
Model 506	6.0"	152.4 mm

#### Depth:

Model 504	4.0"	101.6 mm
Model 506	4.0"	101.6 mm

### HOW TO ORDER

- Specify model and voltage
- Please refer to Model Number Index 504WB/506WB beginning on page 375



# Explosion-Proof General Alarm Siren

## Model AX

### DESIGNED FOR USE IN EXPLOSION PROOF ATMOSPHERES

- Available with 120VAC/125VDC universal motor
- Produces 105dBa @ 10' (115dBa @ 1m)
- Wall mount
- Maintenance free
- Type 3R enclosure
- UL and cUL Listed and CSA Certified

The Federal Signal Model AX siren was introduced in 1937 and received UL listing in 1938. This high pitched siren features a unique rotor and stator design that produces a distinctive tonal quality.

The universal motor operates on 120VAC or 125VDC. This siren features oversized ball bearings which are lubricated for the life of the siren, eliminating periodic maintenance.

The Model AX is UL listed for use in Class I, Division 1, Groups C and D; Class II, Division 2, Groups E, F, & G; and Class III locations. This siren is cUL Listed and CSA Certified.

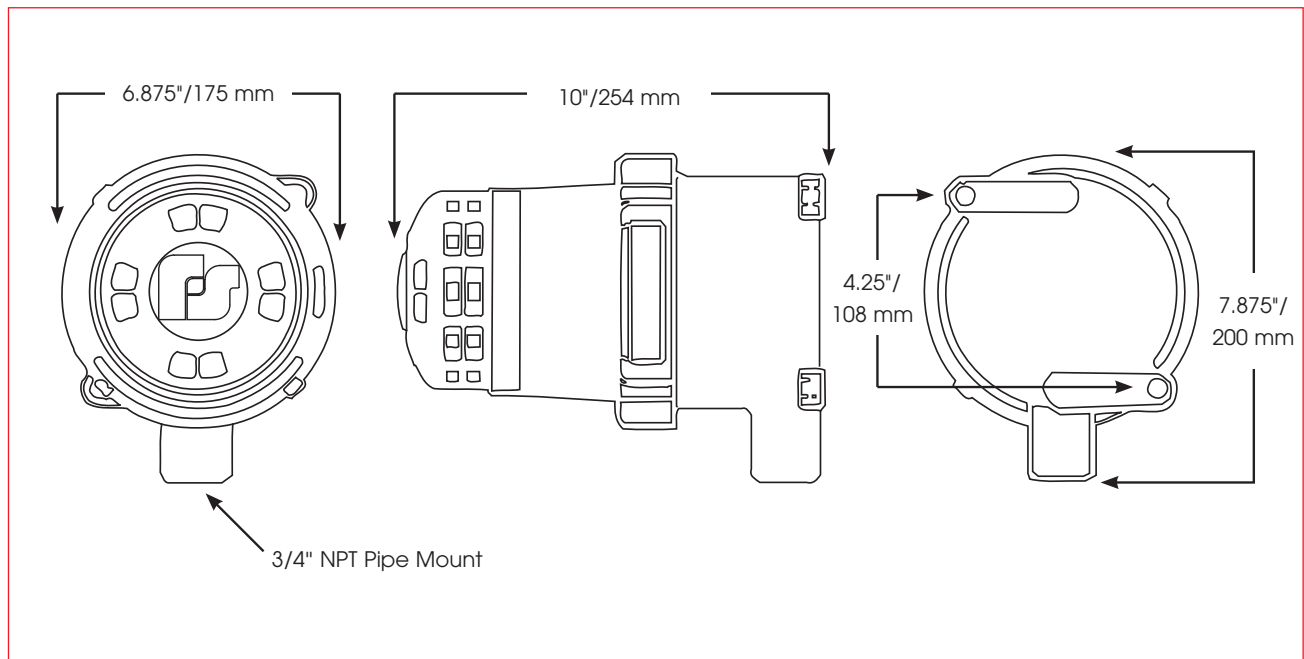
Model	Voltage	Operating Current	Decibels @ 10'	Decibels @ 1m	Frequency
AX-120SB	120VAC/VDC	1.9 amps	105	115	1830Hz

### Hazardous Location Rating:

T-Code at Maximum Ambient Temperature, °C		
Hazardous Location	40°C	66°C
Class I, Groups C & D	T4A/120°	T4/135°
Class II and Class III	T4/135°	T3C/160°



## EXPLOSION PROOF ALARM SIREN (AX)



### SPECIFICATIONS

Operating Temperature:	-13°F to 150°F	-25°C to 65°C
Motor:	Universal	Universal
Net Weight:	10.0 lbs	4.5 kg
Shipping Weight:	13.4 lbs	6.1 kg
Height:	7.875"	200.0 mm
Width:	6.875"	175.0 mm
Depth:	10.0"	254.0 mm

### HOW TO ORDER

- Specify model
- Please refer to Model Number Index AX beginning on page 375

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Motor	K8242C074B





# General Alarm Siren

## Model A

### ELECTROMECHANICAL SIREN

- Available with 120VAC/VDC universal motor
- Rugged, durable and corrosion resistant
- Maintenance-free
- Produces 103dBa @ 10' (113dBa @ 1m)
- Type 3R enclosure
- UL and cUL Listed and FM Approved

The Federal Signal Model A is a general-purpose electro-mechanical siren that produces a distinctive sound and tonal quality for industrial applications. It has a high maximum pitch which provides excellent contrast to industrial ambient noise. Introduced in 1918, the Model A is still used today in many rugged and extreme environments and applications.

The Model A features a universal motor and operates with 120VAC or 125VDC. The fractional horsepower motor drives a ported aluminum rotor within the specially designed stator to produce a unique sound. A small internal fan cools the motor during operation. The recommended duty cycle is five minutes on/five minutes off. This siren produces an attention-getting 103dBa @ 10' (113dBa @ 1m) and 1060Hz at full R.P.M.

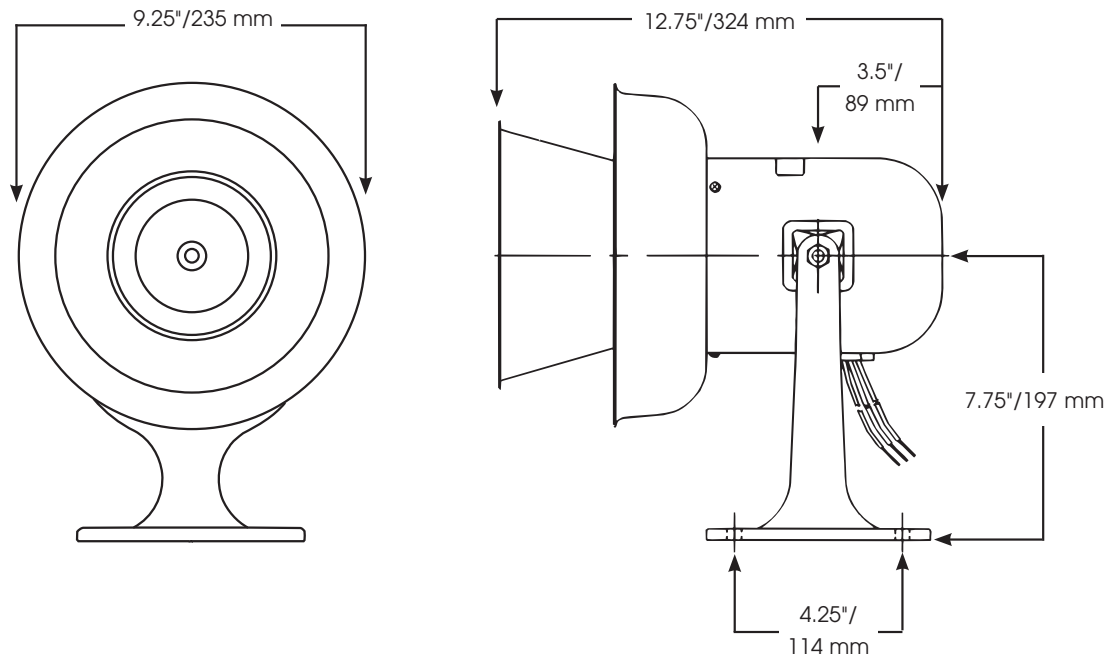
The Model A's metal housing is sealed with red powder coat for an attractive appearance and superior corrosion resistance. The swivel mount bracket accommodates wall and surface mount installations.

The Model A is UL and cUL Listed and FM Approved.

Model	Voltage	Operating Current	Decibels @		Frequency
			10'	1m	
A-120	120VAC/VDC	1.9 amps	103	113	1060Hz



## GENERAL ALARM SIREN (A)



### SPECIFICATIONS

Voltages:	120VAC/VDC	120VAC/VDC
Motor:	Universal	Universal
Net Weight:	9.0 lbs.	4.1 kg
Shipping Weight:	11.6 lbs.	5.3 kg
Width:	9.25"	235.0 mm
Length:	12.75"	324.0 mm

### HOW TO ORDER

- Specify model and voltage
- Please refer to Model Number Index A beginning on page 375

### REPLACEMENT PARTS

<b><u>Description</u></b>	<b><u>Part Number</u></b>
Rotor Assembly	K8179A046-03
Motor	K8118052A



# General Alarm Siren

## Model L

### ELECTROMECHANICAL SIREN

- Available with 120VAC/VDC and 240VAC/VDC universal motor
- Rugged, durable and corrosion resistant
- Produces 112dBa @ 10' (122dBa @ 1m)
- Maintenance-free
- Type 3R enclosure
- CSA Certified

The Federal Signal Model L is a general-purpose electro-mechanical siren that produces a distinctive sound and tonal quality for industrial applications. It has a low maximum pitch which provides excellent contrast to industrial ambient noise. Introduced in 1946, the Model L is still used today in many rugged and extreme environments and applications.

The Model L features a universal motor and operates with 120VAC/ 125VDC. The Model L is also available for 240VAC/ 250VDC operation. The fractional horsepower motor drives a ported aluminum rotor within the specially designed stator to produce a unique sound. The recommended duty cycle is five minutes on/five minutes off. This siren produces an attention-getting 112dBa @ 10 feet (122dBa @ 1m).

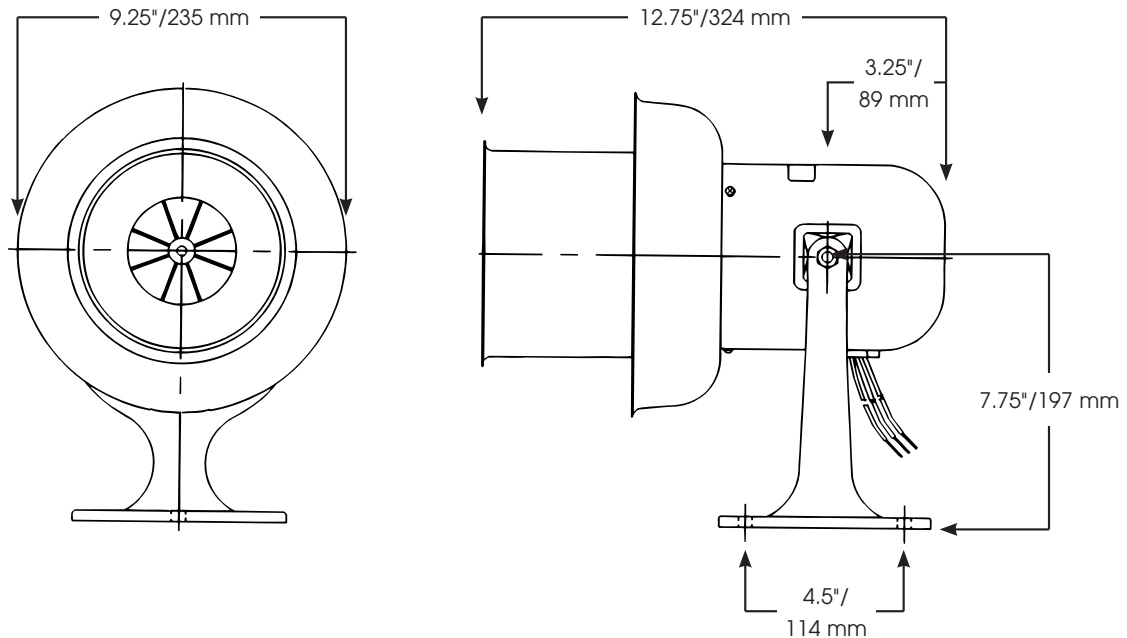
The Model L's metal housing is sealed with red powder coat for an attractive appearance and superior corrosion resistance. The swivel mount bracket accommodates wall and surface mount installations.

The Model L is CSA Certified.

Model	Voltage	Operating Current	Decibels @		Frequency
			10'	1m	
<b>L-120</b>	120VAC/VDC	1.95 amps	112	122	700Hz
<b>L-240</b>	240VAC/VDC	1.0 amps	112	122	700Hz



## GENERAL ALARM SIREN (L)



### SPECIFICATIONS

Voltages:	120VAC/VDC or 240VAC/VDC	
Motor:	Universal	Universal
Net Weight:	12.0 lbs	5.4 kg
Shipping Weight:	14.2 lbs	6.4 kg
Width:	9.25"	235.0 mm
Length:	12.75"	324.0 mm

### HOW TO ORDER

- Specify model and voltage
- Please refer to Model Number Index L beginning on page 375

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Rotor Assembly	K8170B204A
Motor – 120VAC /120VDC	K82831051A
Motor – 240VAC /250VDC	K8283A700



## PERFECT SIZE MEETS SUPERIOR PERFORMANCE!

- Operates on 9–28VDC
- Choice of 28 tones
- Produces 82–100dBa @ 10' (92–110dBa @ 1m)
- Compact size – 3" tall x 3.66" wide
- Panel or wall mount
- PLC compatible
- CE Compliant
- Type 4X, IP54 (IP65 with optional deep base)

# StreamLine® Low Profile Mini Sounder

## Model LP4

Federal Signal introduces the Model LP4 low profile, electronic piezo sounder. The LP4 is a compact multi-tone sounder ideal for OEM and general alarm applications.

The low voltage LP4 provides the user with the choice of 28 different tones, switch selectable during installation. Each electrical connection has two terminals for looping in and out, eliminating the need for a separate terminal block and therefore, making installation easier. A second tone is available if a third wire is installed and connected to the second tone terminals.

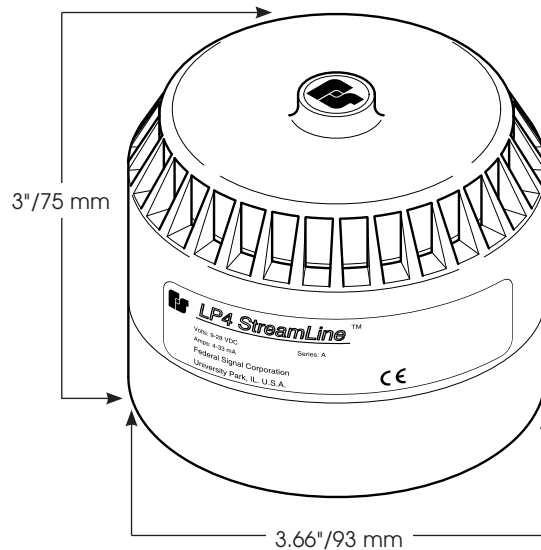
The LP4 sounder operates on a voltage range of 9–28VDC without the need for adjustment. The dB output ranges from 82–100dBa at 10 feet (92–110dBa @ 1m) depending on the tone selected. The volume control provides for 20dBa of adjustment. Due to its low current consumption, the LP4 is PLC compatible.

The rugged White ABS casing provides a high degree of strength and protection from the elements. The operating temperature range of -13°F to 158°F (-25°C to 70°C) allows for use in a wide range of environments. The shallow base provides for flush mount wiring, and features a unique twist assembly for easy installation. A deep base with knockouts is available as an option.

Model	Voltage	Operating Current	Decibels @	
			10'	1m
LP4-09-028	9-28VDC	3-33mA	82-100	92-110



## STREAMLINE® LOW PROFILE MINI SOUNDER (LP4)



### SPECIFICATIONS

Operating Temperature:	-13°F to 158°F	-25°C to 70°C
Net Weight:	10.0 oz.	0.283 Kg
Shipping Weight:	10.3 oz.	0.29 Kg
Height (from bottom):	3.0"	75.0 mm
Diameter:	3.66"	93.0 mm

### HOW TO ORDER

- Specify model and voltage
- Please refer to Model Number Index LP4 beginning on page 375

### ACCESSORIES

<u>Description</u>	<u>Part Number</u>
Deep Base, White (1.88" D x 3.63" W)	DBLP



# StreamLine® Low Profile Micro Sounder

## Model LP5

### PERFECT SIZE MEETS SUPERIOR PERFORMANCE!

- Available in 9–30VDC
- Choice of 4 tones
- Indoor use
- Cost effective, two-wire micro unit
- Produces 76–87dBa @ 10' (86–97dBa @ 1m)
- Panel or wall mount
- CE Compliant

Federal Signal's Model LP5 low-profile sounder is an economical two-wire micro unit that produces an effective audible signal for indoor applications.

Model LP5 operates on 9–30VDC power, and is capable of producing one of four tones: "Continuous", "Two-Tone", "Pulsed" and "Sweeping". Tone selection is made by wiring the leads to the 2.5mm screw terminal block. Each tone can function at a high or low dB level, depending upon DIP switch selection (low of 3mA to a high of 15mA). Output ranges from 76 to 87dBa @ 10' (86 to 97dBa @ 1m).

The White ABS plastic cover is removed for easy access to dip switches and the wiring terminal block. Circuitry meets with CE approval. The operating temperature range is -13°F to 185°F (-25°C to 85°C) allowing for a wide range of applications.

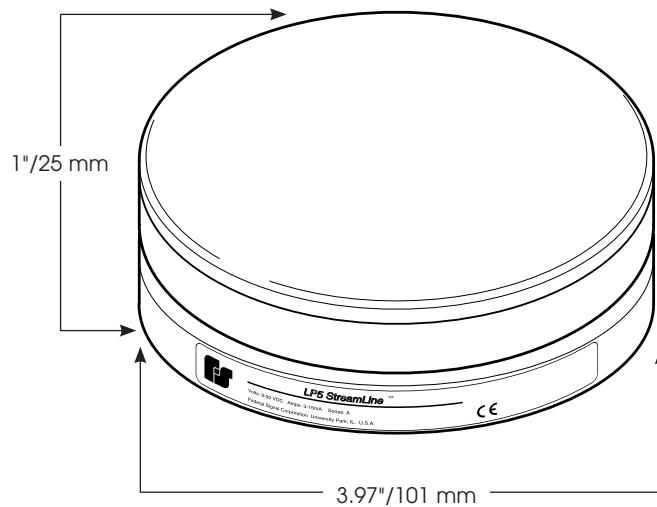
This device works well in panel or wall mount installations due to its unobtrusive low profile. With current consumption as low as 3mA, the unit is compatible with PLC and low voltage controls.

Model	Voltage	Operating Current	Decibels @	
			10'	1m
LP5-09-030	9-30VDC	3-15mA	76-87	86-97





## STREAMLINE® LOW PROFILE SOUNDER (LP5)



### SPECIFICATIONS

Operating Temperature:	-13°F to 185°F	-25°C to 85°C
Net Weight:	0.33 lb.	0.155 kg
Shipping Weight:	0.4 lb.	0.2 kg
Diameter:	3.97"	101.0 mm
Depth:	1.0"	25.0 mm

### HOW TO ORDER

- Specify model and voltage
- Please refer to Model Number Index LP5 beginning on page 375



# Electronic Siren

## Model SST-MV

### ELECTRONIC SIREN WITH FOUR SELECTABLE TONES

- Multi-voltage design accepts 24VDC and 120/240VAC
- Produces one of four tones – wail, yelp, horn and temporal slow whoop
- Produces 109.5-111dBa @ 10'
- Omni-directional swivel mount
- Type 3R enclosure (with WB backbox)
- UL and cUL Listed

Federal Signal's SST-MV is an electronic siren capable of producing one of four high decibel tone outputs from the same unit.

The Model SST-MV features internal amplification and the tone circuitry to produce four different tones. The user selects from the wail, yelp, horn or temporal slow whoop tone by reconfiguring internal jumpers.

The SST-MV operates on 24VDC, 120VAC or 240VAC. The TYPE 3R housing is molded from impact-resistant ASA (acrylic-styrene-acrylonitrile) plastic, making it resistant to ultra-violet light and ideal for indoor or outdoor use.

The omni-directional swivel mount system allows the output to be pointed anywhere within a 360° half-sphere.

This electronic siren is UL and cUL Listed.

The Model SST-MV can be used as a stand-alone, high output, audible warning device in any application where voice paging is not required.

Typical applications include emergency warning, start and dismissal, fire alarm, general alarm and evacuation.

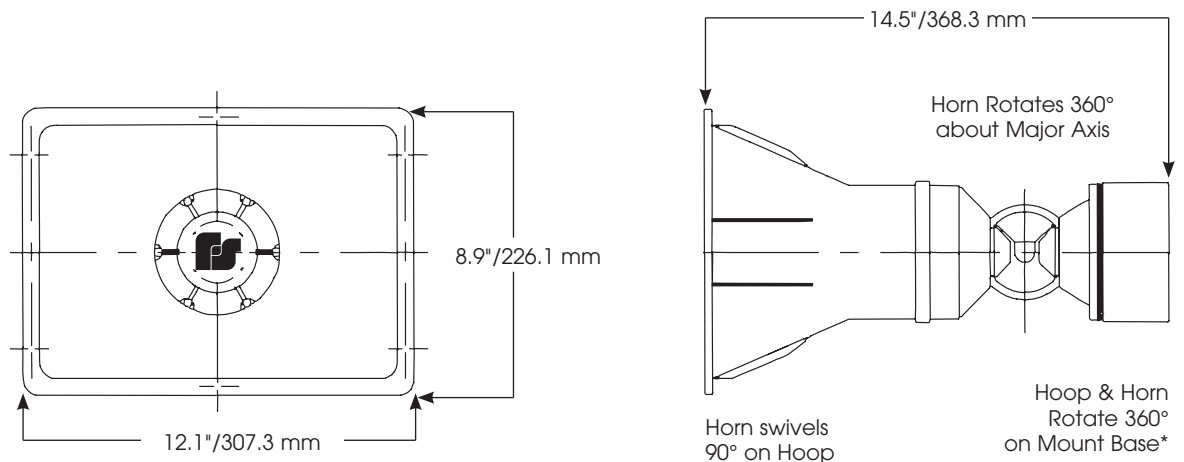
Federal Signal's Model SST-MV Electronic Siren is an economical multi-tone siren that is designed to hold up to the rigors of corrosive environments.

Model	Voltage	Operating Current
SST-MV	24VDC	600mA
SST-MV	120VAC	210mA
SST-MV	240VAC	120mA

Tone	Decibels @	
	10'	1m
Wail	109.5	119.5
Yelp	111.0	121.0
Horn	107.0	117.0
Temporal Slow Whoop	111.0	121.0



## ELECTRONIC SIREN (SST-MV)



\*Mounts on Any Standard Electrical Box

### SPECIFICATIONS

Operating Temperature:	-31°F to 161°F	-35°C to 72°C
Shipping Weight:	5.2 lbs.	2.4 kg
Net Weight:	4.4 lbs.	2.0 kg
Height:	14.5"	368.3 mm
Width:	12.1"	307.3 mm
Depth:	8.9"	226.1 mm

### HOW TO ORDER

- Specify model
- Specify Accessories:  
Weatherproof Backbox (WB)
- Please refer to Model Number Index  
SST-MV beginning on page 375

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
PC Board Assembly	K2001177D-01
Connector, 4-Position	K140340B
Adapter (Beige)	K8476121A
Adapter (Grey)	K8476121A-04
Gasket	K8476122A
Speaker Assembly	K8504002A



# Remotely Selectable Electronic Siren

## Model SST3-MV

### ELECTRONIC SIREN WITH THREE REMOTELY SELECTABLE TONES

- Multi-voltage design accepts 24VDC and 120/240VAC
- Produces three tones – wail, yelp and horn
- Produces 109.5-111dBa @ 10'
- Omni-directional swivel mount
- Type 3R enclosure (with WB back box)
- UL and cUL Listed

Federal Signal's SST3-MV is an electronic siren capable of producing three different high decibel tones from the same unit.

The Model SST3-MV features internal amplification and the circuitry required to produce three different tones. The user activates each tone (wail, yelp or horn) with dry contacts from a remote point.

The SST3-MV operates on 24VDC, 120VAC or 240VAC. The NEMA 3R housing is molded from impact resistant ASA (acrylic-styrene-acrylonitrile) plastic, making it resistant to ultra-violet light and ideal for indoor or outdoor use.

The omni-directional swivel mount system allows the output to be pointed anywhere within a 360° half-sphere.

This electronic siren is UL and cUL Listed.

The Model SST3-MV can be used as a stand-alone, high-output, audible warning device in any application where multiple tones are needed but voice paging is not required.

Typical applications include emergency warning, start and dismissal, fire alarm, general alarm and evacuation.

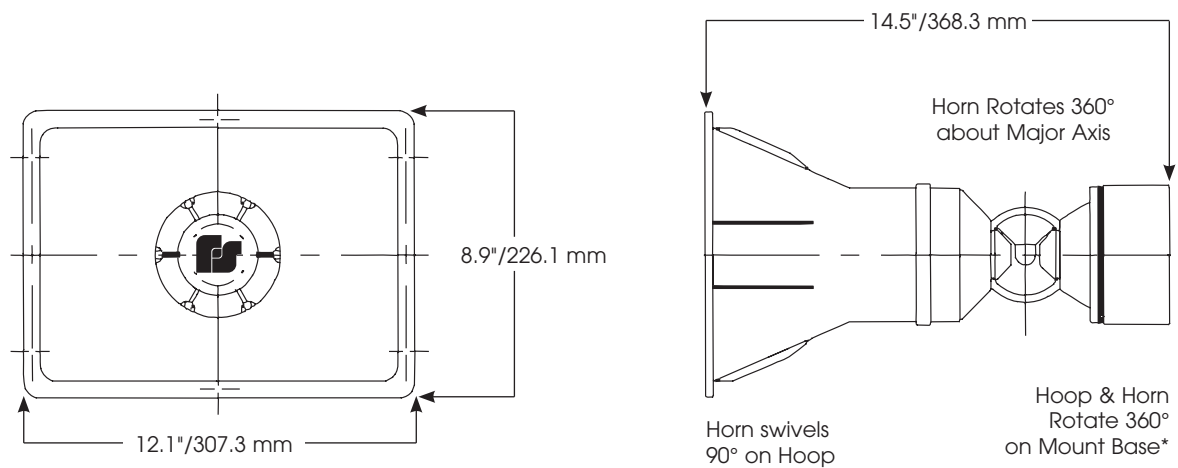
Federal Signal's Model SST3-MV Electronic Siren is an economical multi-tone siren designed to hold up in the rigors of corrosive environments.

Model	Voltage	Operating Current
SST3-MV	24VDC	600mA
SST3-MV	120VAC	210mA
SST3-MV	240VAC	120mA

Tone	Decibels @	
	10'	1m
Wail	109.5	119.5
Yelp	111.0	121.0
Horn	107.0	117.0



## ELECTRONIC SIREN (SST3-MV)



\*Mounts on Any Standard Electrical Box

### SPECIFICATIONS

Operating Temperature:	-31°F to 161°F	-35°C to 72°C
Net Weight:	4.4 lbs.	2.0 kg
Shipping Weight:	5.2 lbs.	2.4 kg
Height:	14.5"	368.3 mm
Width:	12.1"	307.3 mm
Depth:	8.9"	226.1 mm
Maximum Contact Resistance	1000 ohms	1000 ohms

### HOW TO ORDER

- Specify model
- Specify Accessories:  
Weatherproof Backbox (WB)
- Please refer to Model Number Index  
SST3-MV beginning on page 375

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
PC Board Assembly	K2005110A
Connector, 4-Position	K140340B
Adapter (Beige)	K8476121A
Adapter (Grey)	K8476121A-04
Gasket	K8476122A
Speaker Assembly	K8504002A



## DESIGNED FOR USE IN EXPLOSION-PROOF ENVIRONMENTS

- Multi-voltage design – accepts 24VDC, 120VAC or 240VAC
- Produces one of four tones – wail, yelp, horn and temporal slow whoop
- Produces 101-108dBa @ 10'
- NEMA 4X, IP66 Approved
- UL and cUL Listed

# Explosion-Proof Electronic Siren

## Model SSTX-MV

Federal Signal's SSTX-MV is an explosion-proof electronic siren capable of producing one of four high decibel tones from the same unit. The circuitry is contained in a rugged die-cast aluminum amplifier housing. The unique threaded rear access cover eliminates traditional time consuming bolting patterns. The access cover is also equipped with a braided cable lanyard securing it to the housing whenever the cover is open for installation or maintenance.

The Model SSTX-MV features internal amplification and tone circuitry capable of reproducing one of four different tones. The user selects from the wail, yelp, horn or temporal slow whoop tone by reconfiguring the internal jumpers.

This unit operates on 24VDC, 120VAC or 240VAC. It is capable of producing up to 108dBa @ 10 feet (118dBa @ 1m).

This electronic siren is UL and cUL Listed for Class I, Division 1, Groups B, C & D.

The Model SSTX-MV can be used as a stand-alone, full output, audible warning device in any explosion-proof environment where voice paging is not required.

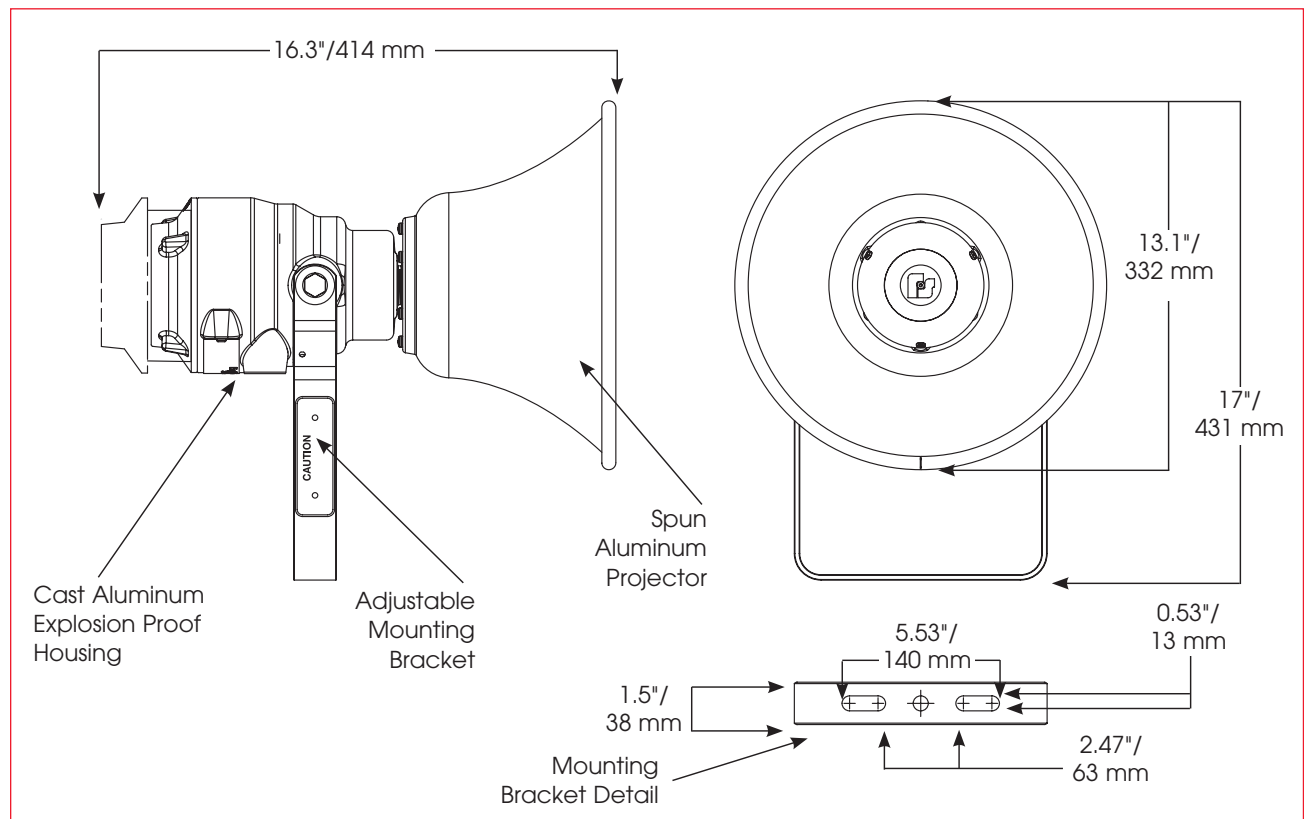
Typical uses include emergency warning, start and dismissal, general alarm and evacuation.

Federal Signal's Model SSTX-MV Explosion-Proof Electronic Siren is an economical multi-tone siren that is designed to hold up to the rigors of explosive and corrosive environments.

Model	Voltage	Operating Current	Decibels @	
			Tone	10' 1m
SSTX-MV	24VDC	0.60 amps	Wail	108 118
SSTX-MV	120VAC	0.21 amps	Yelp	108 118
SSTX-MV	240VAC	0.12 amps	Horn	101 111
SSTX-MV	240VAC	0.12 amps	Temporal Slow Whoop	102 112



## EXPLOSION-PROOF ELECTRONIC SIREN (SSTX-MV)



### SPECIFICATIONS

Operating Temperature:	-31°F to 161°F	-35°C to 72°C
Net Weight:	15.4 lbs.	7.0 kg
Shipping Weight:	22.8 lbs.	10.4 kg
Height:	17.0"	431.80 mm
Width:	13.1"	332.73 mm
Depth:	16.3"	414.02 mm

### HOW TO ORDER

- Specify model number
- Please refer to Model Number Index SSTX-MV beginning on page 375

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
PCB Assembly	K2001177D-01
Connector, 4-Position	K140340B
Projector Assembly	K8593100A
Driver Assembly	K8593097A





## DESIGNED FOR USE IN EXPLOSION-PROOF ENVIRONMENTS

- Multi-voltage design – accepts 24VDC, 120VAC or 240VAC
- Produces three tones – wail, yelp and horn
- Produces 101-108dBa @ 10'
- NEMA 4X, IP66 Approved
- UL Listed and cUL Listed

# Explosion-Proof Remotely Selectable Electronic Siren

## Model SSTX3-MV

Federal Signal's SSTX3-MV is an explosion-proof electronic siren capable of producing three high decibel tones from the same unit. The integrated circuitry is contained in a rugged die cast aluminum housing. The unique threaded rear access cover eliminates traditional time consuming bolting patterns. The access cover is also equipped with a braided cable lanyard securing it to the housing whenever the cover is open for installation or maintenance.

The Model SSTX3-MV features internal amplification and tone circuitry capable of reproducing three tones. The user activates each tone (wail, yelp or horn) with dry contacts from a remote point.

This unit operates on 24VDC, 120VAC or 240VAC. It is capable of producing 108dBa @ 10 feet (118dBa @ 1m).

This electronic siren is UL and cUL Listed for Class I, Division 1, Groups B, C & D.

The Model SSTX3-MV can be used as a stand-alone, full output, audible warning device in any explosion-proof environment where multiple tones are needed but voice paging is not required.

Typical uses include emergency warning, start and dismissal, general alarm and evacuation.

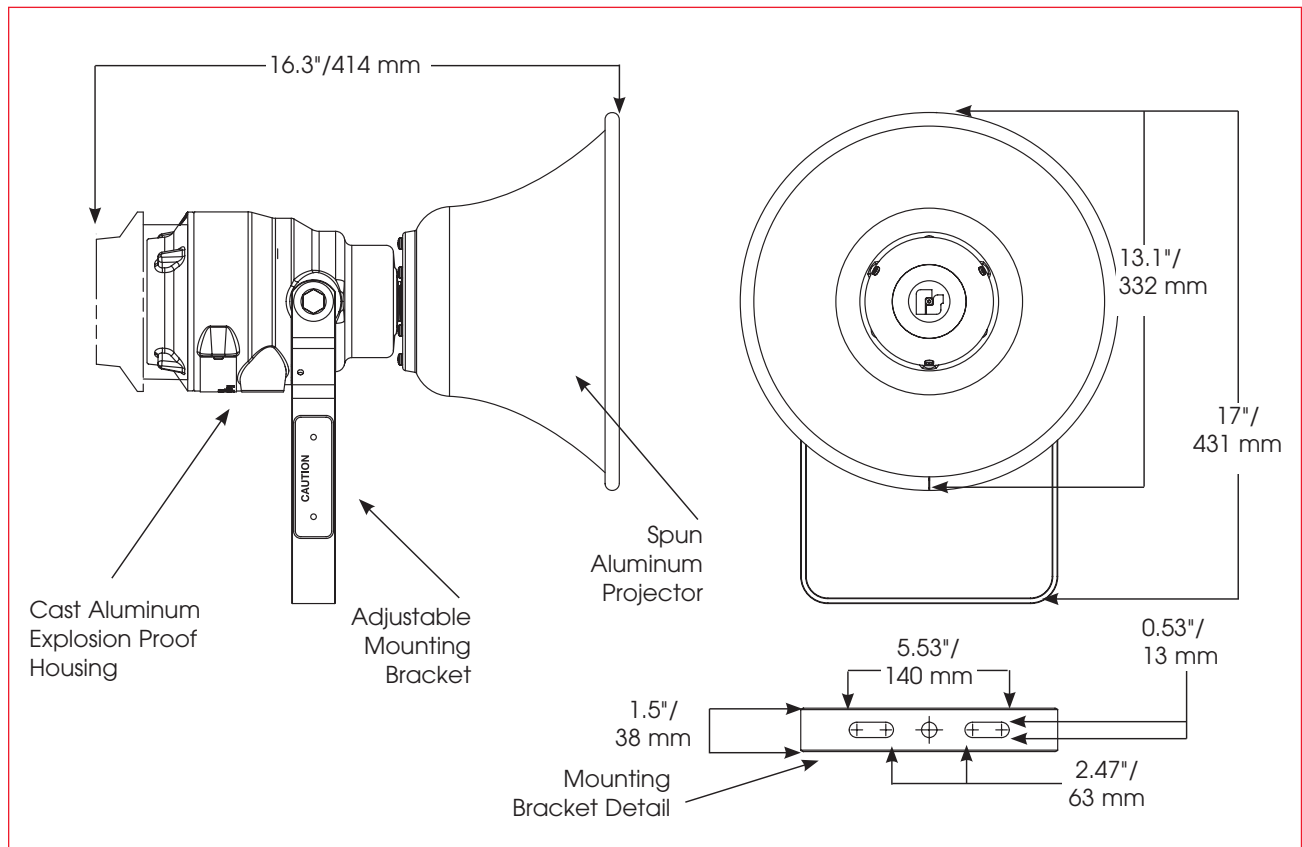
Federal Signal's Model SSTX3-MV Explosion-Proof Electronic Siren is an economical multi-tone siren that is designed to hold up to the rigors of explosive and corrosive environments.

Model	Voltage	Operating Current
SSTX3-MV	24VDC	600mA
SSTX3-MV	120VAC	210mA
SSTX3-MV	240VAC	120mA

Tone	Decibels @ 10'	Decibels @ 1m
Wail	108	118
Yelp	108	118
Horn	101	111



## EXPLOSION-PROOF ELECTRONIC SIREN (SSTX3-MV)



### SPECIFICATIONS

Operating Temperature:	-31°F to 161°F	-35°C to 72°C
Net Weight:	15.4 lbs.	7.0 kg
Shipping Weight:	22.8 lbs.	7.4 kg
Height:	17.0"	431.80 mm
Width:	13.1"	332.73 mm
Depth:	16.3"	414.02 mm
Maximum contact resistance	1000 ohms	1000 ohms

### HOW TO ORDER

- Specify model number
- Please refer to Model Number Index SSTX3-MV beginning on page 375

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
PCB Assembly	K2005110A
Connector, 4-Position	K140340B
Projector Assembly	K8593100A
Driver Assembly	K8593097A



# SelecTone® Plant Wide Warning and PA Systems

## STAND ALONE SIGNALING, PLANT WIDE SIGNALING AND PUBLIC ADDRESS

- Available in 24VDC, 24VAC, 120VAC and 240VAC
- Command Units, Speaker/Amplifiers, Tone Cards and Connector Kits
- Indoor, outdoor and hazardous location models
- UL and cUL Listed and CSA Certified

SelecTone® systems cover the full range of industrial communication applications; start and dismissal, emergency evacuations, process control signaling, voice messages and public address. The SelecTone product family includes all the equipment necessary for a comprehensive industrial signaling and communications system; dependable, high-quality Command Units, weatherproof, dust- and watertight, hazardous location and explosion proof Speaker/Amplifiers, Tone Modules with pre-recorded digital voice messages, tones or melodies, and the Connector Kits that make it all work together. Every model is designed with the greatest care for long life in harsh, industrial environments.

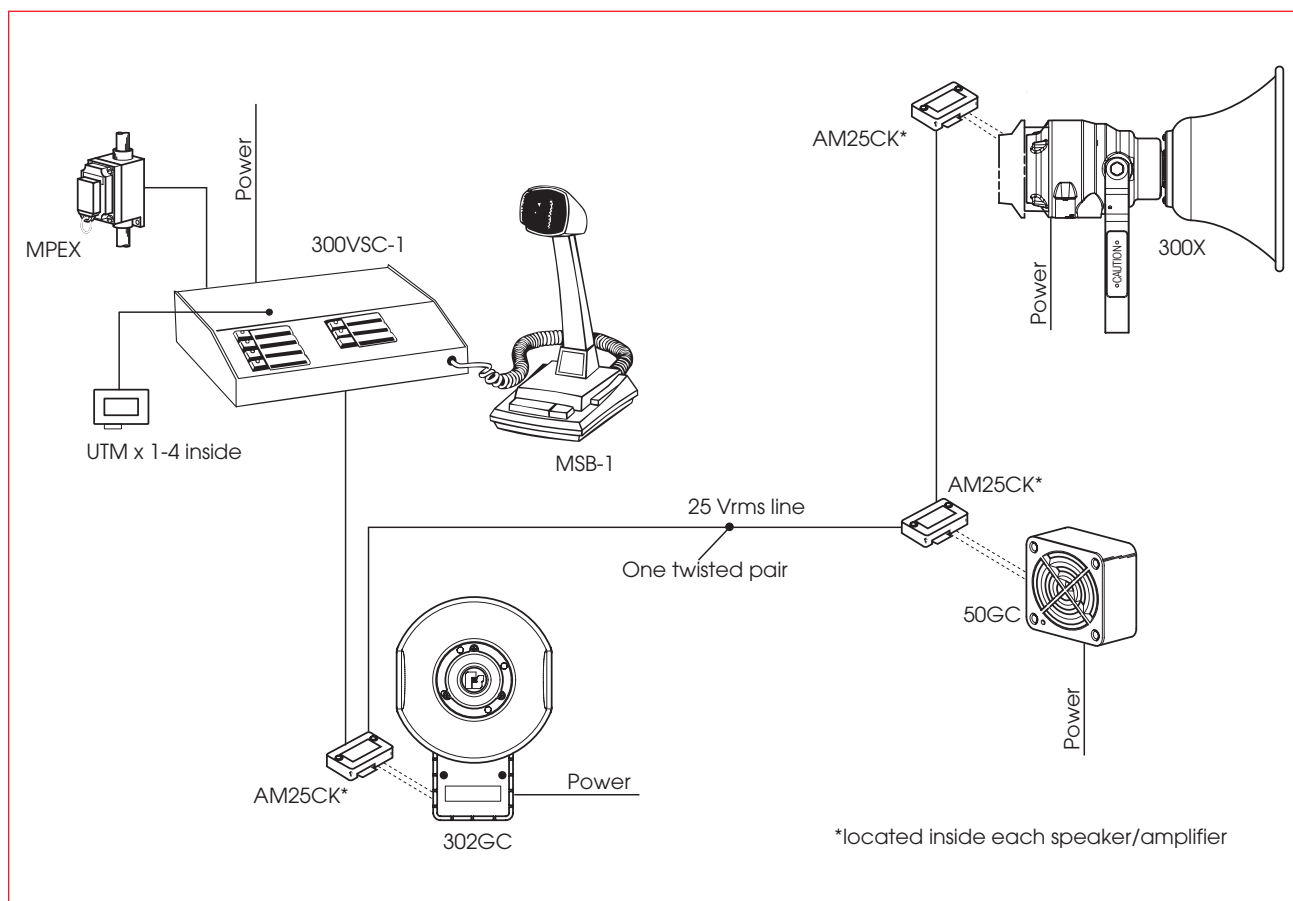
SelecTone Speaker/Amplifiers are self-amplified speakers designed to broadcast pre-recorded tones, voice messages, melodies and live public address. Because the communication signal is amplified by each device, rather than by costly central amplifiers, the expense of running high-powered audio lines in conduit is eliminated. Each Speaker/Amplifier is designed for long life in harsh industrial environments. Systems provide limitless expansion for future growth. A range of models with outputs from 88dBa to 114dBa are available to overcome industrial noise levels. Each has an integrated volume control. SelecTone Speaker/Amplifiers can be used to expand existing public address systems without adding central amps. Systems are fault tolerant – if one device fails, the others continue to operate. Each Speaker/Amplifier can also be used for stand-alone signaling applications.

SelecTone Command Units are the centerpiece of a total plant communication strategy. Each Command unit provides central control of four tones and public address. Each is equipped with local and remote microphone access and tone initiation. Auxiliary audio inputs support background music. Communication is prioritized with local microphone as highest, followed by tones 1 through 4, remote microphone, then auxiliary audio. An on-board amp supports a local speaker. Rack mount, wall mount and desktop models are available.

Connector Cards tie the SelecTone® system together. Installed in each Speaker/Amplifier, Connector Cards provide communication with the SelecTone Command Unit. They can also be used to add SelecTone Speaker/Amplifiers to existing centrally amplified public



## PLANT WIDE WARNING AND PA SYSTEMS



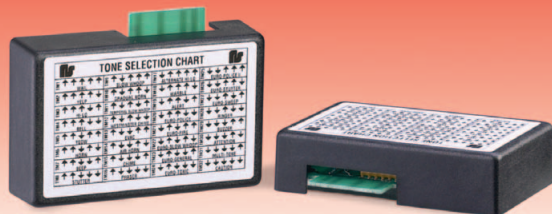
address systems. Each Connector Card is designed to create a balanced line audio system for superior noise suppression and clear communication.

Tone Modules offer tones, messages and melodies for every application, location and event. The Universal Tone Module (UTM) provides a selection of 32 distinct tones for use in plant-wide communication systems with a SelecTone Command Unit and a limitless number of Speaker/Amplifiers or for use in stand along applications with a

single Speaker/Amplifier. Tones are easily selected via DIP switches and the modules are designed for quick plug-in installation. When a custom voice message, tone or melody is the solution, Federal Signal offers the TM33 Custom Tone Module. Users can select from a library of thousands of messages and melodies or they can provide a tape, script or digital sound file for professional recording in any language.

## SELECTONE® PRODUCTS

<i>Product</i>	<i>Page</i>
Universal Tone Module	166
Custom Tone Module	168
Connector Kits	170
Speaker/Amplifiers	174-190
Command Units	192-198
Relay Activation	200



# SelecTone® Universal Tone Module

Model UTM

## A TONE FOR EVERY SIGNALING NEED

- 32 switchable tones
- Compatible with all SelecTone® equipment
- Plug-in installation
- RFI and EMI shielded
- UL and cUL Listed, CSA Certified and CSFM Approved

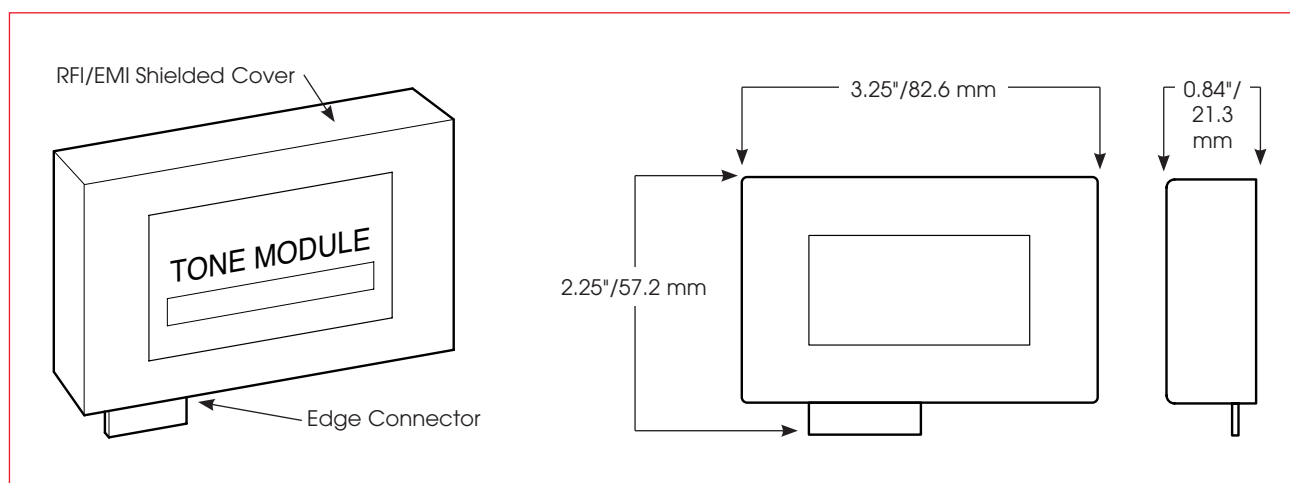
Federal Signal's Universal Tone Module (UTM) is a microcontroller-based tone generator capable of producing 32 different tones. The UTM is the key component of a SelecTone® System or a single SelecTone device. Tone selection is made by setting five DIP switches.

Housed in a plastic cover impregnated with stainless steel fibers, the circuitry is shielded from RFI (radio frequency interference) and EMI (electro-magnetic interference). The edge connector allows for quick and simple installation.

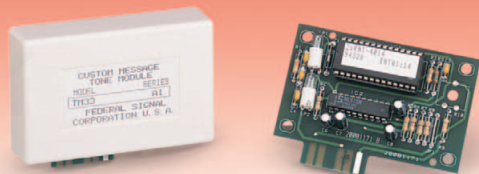
In addition to working with the entire SelecTone® line of speaker/amplifier products, the Model UTM is compatible with the EM3 Extension Module, 300VSC-1 Command Unit, 300VSC-1044SB Command Unit and 300SCW-1 Command Unit. Federal Signal's UTM provides crisp, clear digital signals easily distinguished from the ambient noise of commercial, institutional and industrial environments.



## UNIVERSAL TONE MODULE (UTM)



DIP Switch	Tone		Sound	Frequency	Repetition Rate
1 2 3 4 5					
↑ ↑ ↑ ↑ ↑	Wail	TM1	Conventional Siren	560-1055Hz	11 cycles/minute
↑ ↑ ↑ ↑ ↓	Yelp	TM2	Rapid Siren	560-1055Hz	3.3 cycles/second
↑ ↑ ↑ ↓ ↑	Hi-Low	TM3	Alternating Hi and Low	561Hz and 760Hz	50 cycles/minute
↑ ↑ ↑ ↓ ↓	Bell	TM4	Bell, Struck Rapidly	801Hz	50 cycles/minute
↑ ↑ ↓ ↑ ↑	Yeow	TM5	Descending High to Low, Repeated	545Hz and 1296Hz	36 cycles/minute
↑ ↑ ↓ ↑ ↓	Horn	TM6	Steady Horn	470Hz	Continuous
↑ ↑ ↓ ↓ ↑	Beep	TM7	Slow Intermittent Horn	470Hz	50 cycles/minute
↑ ↑ ↓ ↓ ↓	Stutter	TM8	Rapid Intermittent Horn	470Hz	5 cycles/minute
↑ ↓ ↑ ↑ ↑	Slow Whoop	TM9	Slow Ascending Low to High, Repeated	424Hz and 1163Hz	15 cycles/minute
↑ ↓ ↑ ↑ ↓	Gradual Horn	TM10	Steady Horn, Gradually Increasing in Volume	514Hz	Continuous
↑ ↓ ↑ ↓ ↑	Temporal Slow Whoop	TM11	NFPA Coded Slow Whoop	424Hz and 774Hz	15 cycles/minute
↑ ↓ ↑ ↓ ↓	Westminster Chime	TM12	Westminster Chime	Musical Tone	1 cycle/8 tones
↑ ↓ ↓ ↑ ↑	Evac	TM13	Amplitude Modulated Siren	479Hz	4.3 cycles/second
↑ ↓ ↓ ↑ ↓	Air Horn	TM14	Steady Horn	400Hz and 800Hz	Continuous
↑ ↓ ↓ ↓ ↑	Chime	TM15	Single Strike Chime	Musical Tone	49 cycles/minute
↑ ↓ ↓ ↓ ↓	Phaser	TM16	Rapid Siren	600-1200Hz	15 cycles/second
↓ ↑ ↑ ↑ ↑	Alternating Hi/Low	TM17	Alternating High-to-Low	363Hz and 518Hz	60 cycles/minute
↓ ↑ ↑ ↑ ↓	Warble	TM18	Extremely Rapid Siren	560-1055Hz	6.3 cycles/second
↓ ↑ ↑ ↓ ↑	Alert	TM19	Slow Sweep Tone	400-1560Hz	Ascending
↓ ↑ ↑ ↓ ↓	Euro-Police	TM20	Alternating Hi and Low	969Hz and 800Hz	30 cycles/minute
↓ ↑ ↓ ↑ ↑	Euro-Fire	TM21	Sweep Tone	900-800Hz	Continuous
↓ ↑ ↓ ↓ ↑	Euro-Slow Whoop	TM22	Slow Sweep Tone	650-1290Hz	17 cycles/minute
↓ ↑ ↓ ↓ ↓	Euro-General	TM23	Intermittent Horn	969Hz	60 cycles/minute
↓ ↑ ↓ ↓ ↓	Euro-Toxic	TM24	Steady Horn	969Hz	Continuous
↓ ↓ ↑ ↑ ↑	Euro-Police II	TM25	Slow Alternating Hi and Low	554Hz and 440Hz	Alternating Slow
↓ ↓ ↑ ↑ ↓	Euro-Stutter	TM26	Intermittent Beep	2840Hz	252 ms/cycles
↓ ↓ ↑ ↓ ↑	Euro-Sweep	TM27	Sweep Tone	1163 - 397Hz	Descending
↓ ↓ ↑ ↓ ↓	Ringer	TM28	Continuous Ringing Tone	560Hz and 326Hz	Fast Alternating
↓ ↓ ↓ ↑ ↑	Buzzer	TM29	Buzzer Tone	1318Hz and 760Hz	Continuously Alternating
↓ ↓ ↓ ↑ ↓	Attention	TM30	Extremely Rapid Siren	Multiple Frequency	1 cycle, 8 tones
↓ ↓ ↓ ↓ ↑	Multi-Tone	TM31	Extremely Rapid Siren	Multiple Frequency	1 cycle, 8 tones
↓ ↓ ↓ ↓ ↓	Caution	TM32	Extremely Rapid Siren	Multiple Frequency	1 cycle, 8 tones



# SelecTone® Custom Tone Module

## Model TM33

### CUSTOM PRE-RECORDED DIGITAL MESSAGE

- Non-volatile memory
- Compatible with any SelecTone® unit
- Plug-in installation
- UL and cUL Listed

Federal Signal's Model TM33 Digital Tone Module provides audio input for any SelecTone® speaker/amplifier. The tone module holds a single pre-recorded voice message, tone or melody.

The user selects from a library of standard pre-recorded messages, tones or melodies, or creates a customized recording.

Each tone module contains the latest microprocessor based digital messaging system. This new PCBA module is capable of a 30 second playback of any custom tone or voice message. The tone or message can be reprogrammed at any time with the use of the 300FP field programmer, see separate catalog page for details. The model TM33 can either be set to play through once and stop or loop continuously.

This solid state digital device will work with Federal Signal speaker/amplifiers (including 50GC, 50GCB, 300GC, 300GCX, 302GC, 302GCX, 300X, 302X, 304GC, 314GC, 304GCX, 314GCX, 304X, and 314X) and the 300VSC-1, 300SCW-1, 300VSC-1044SB SelecTone Command Panels\*.

The TM33's digital messaging capabilities are ideal for emergency evacuation announcements. Clear, concise, pre-determined instructions or custom tones can be broadcast.

Manufacturing facilities often require an audible signal to indicate status (i.e. standby, shut down, operational, etc.). Simple pre-recorded melodies can indicate these situations, while voice messages can warn operators.

Many industrial facilities utilize public address systems to broadcast repetitive pre-recorded information. The Model TM33 provides high-quality audio output in these applications.

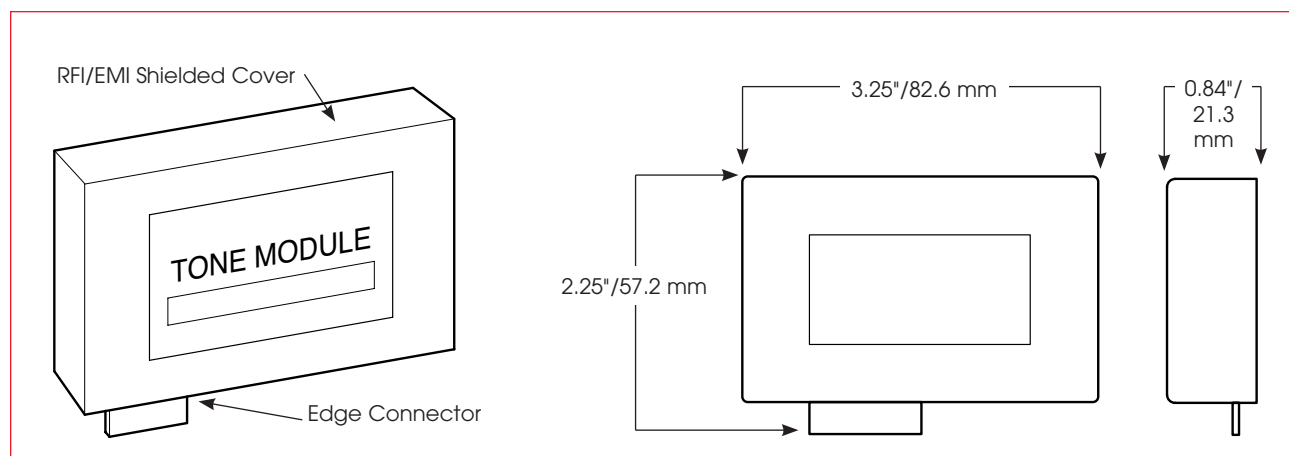
Federal Signal's TM33 Custom Tone Module provides the user with the option of producing a completely customized digital message, in any language.

\* Not compatible with the EM3 Extension Module





## CUSTOM TONE MODULE (TM33)



## STANDARD LIBRARY FOR TM33 AND COMMCENTER® CHIPS

### VOICE MESSAGES

"An automatic guided vehicle is approaching. Please step aside."  
 "System is now in auto shutdown mode."  
 "Lockout has been removed; system is coming on line."  
 "Check status light for current system condition."  
 "Auto shut down has begun. Raw materials must be replenished and system reset."  
 "You have entered a restricted area."  
 "The automatic doors are closing. Please stand clear."  
 "The overhead door is closing. Please stand clear."  
 "Safety glasses must be worn in this area at all times."  
 "This is a hard hat area."  
 "A forklift is approaching. Please stand clear."  
 "Attention! We will be testing the fire alarm system shortly. This is only a test."  
 "Attention! For the next thirty seconds a test will be conducted of the emergency evacuation system. This is only a test."  
 "Please evacuate the building. This is not a test."  
 "Warning, this machine is about to start up. Please stand clear."  
 TM3 followed by "Please take shelter immediately. This is a severe weather alert."  
 TM11 followed by "Please evacuate the building. This is not a test."  
 TM5 followed by "Tornado alert. Report to your designated area."  
 TM12 followed by "All clear. Return to work area."

### NOVELTY MELODIES

Camp Town Races	Saints Come Marching In
Doggie in the Window	La Cucaracha
Maple Leaf Rag	Merrily We Roll Along
The Entertainer	The Mulberry Bush
Worms Crawl In	

### CLASSICAL MELODIES

Bach	Fugue in "D" Minor
Bach	Fugue in "A" Minor
Beethoven	5th Symphony
Beethoven	Sonata Theme
Chopin	Minuet Waltz
Chopin	Polonaise in "A" Minor
Greig	Dance Caprice
Greig	Concerto in "A" Minor
Rackoczy	March
Strauss	Blue Danube
Tchaikovsky	Concerto in "B" Flat Minor
Rossini	William Tell Overture

### FOLK MELODIES

Coventry Carol	Cradle Song
Dance Macabre	Dixie Land
Lightly Row	London Bridge
Go Tell Aunt Rhody	Greensleeves
Henry Martin	Home on the Range
Love's Complaint	Morning Song
Oh Suzannah	Oh Wondrous Enchantment
Prince Igor	Suwanee River
Watchman's Song	

### ETHNIC MELODIES

Irish Jig	J'ai Du Bon Taboc
My Bonnie	Norwegian Dance
The Horn Pipe	

### PATRIOTIC MELODIES

Battle Hymn of the Republic  
 My Country 'tis of Thee  
 Taps

### TONES AND SIGNALS

See page 167 for a list of tones or [www.federalsignal-indust.com](http://www.federalsignal-indust.com)

## REPLACEMENT PARTS

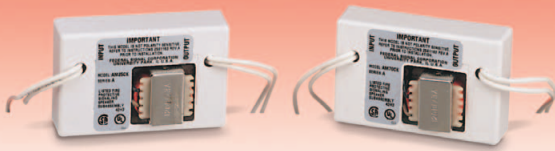
Blank Message Module	RMB9999SD
Pre-recorded Message Module (Please specify message)	RM1SD

## HOW TO ORDER

- Specify Model, see Model Number Index TM33 on page 371
- Choose Message Source
  - Select from Standard Library Above
  - Send script to Federal Signal to be recorded in studio (additional charge incurred)
  - Send field-recorded electronic file in .wav or .mps format to Federal Signal to be transferred to chip (additional charge incurred)

# SelecTone® Connector Kits

Models AM25CK and AM70CK



## EXPANDS PUBLIC ADDRESS SYSTEM CAPACITY

- Interfaces SelecTone® speaker/amplifiers with an existing paging system
- Works in 25 or 70 Vrms systems
- Creates a “balanced line” SelecTone® System
- UL and cUL Listed, CSA Certified and CSFM Approved

The Models AM25CK and AM70CK are connector kits which allow the use of SelecTone® speaker/amplifiers (1 Vrms devices) to be used in any public address system (25 or 70 Vrms).

Using these connectors and the 25 Vrms output from the 300VSC-1, 300VSC-1044SB, 300SCW-1 or 300MB SelecTone Command Center creates a true “balanced line” system which will filter all extraneous noise from the audio lines.

Expanding a centrally amplified public address system often requires the addition of another control amplifier. With the appropriate connector kits and SelecTone speaker/amplifiers, the system can easily be expanded, without the costly addition of a central amplifier.

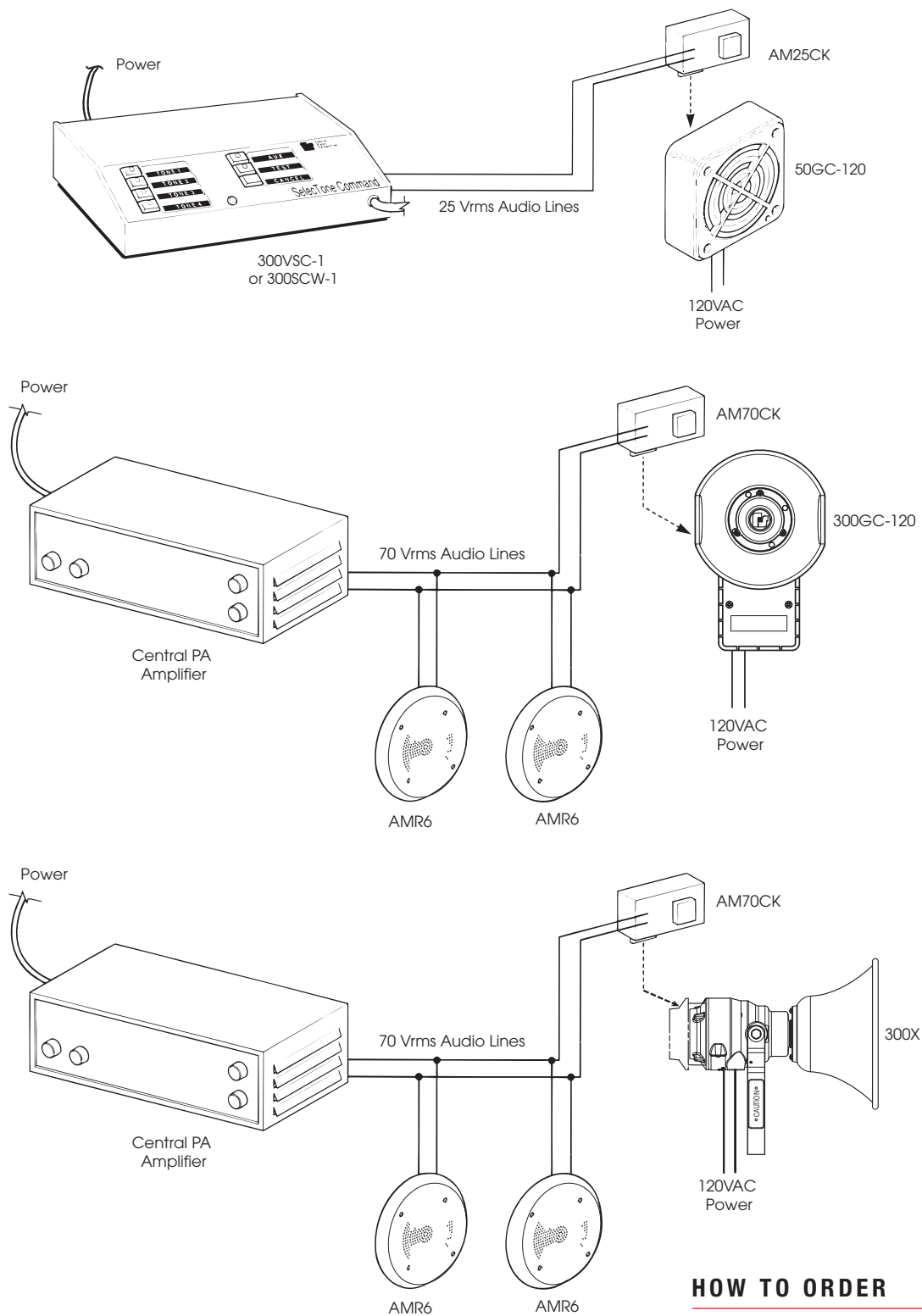
Public address equipment manufacturers do not offer a wide selection of explosion-proof products. Now adding a Class I, Division 1, or Class I, Division 2 device to an existing central PA system is simple; select either a 300X, 300GCX, or 302GCX speaker/amplifier and the appropriate connector kit.

SelecTone typically require a minimum of 18-gauge twisted pair, isolated from the AC line. With an AM series connector kit and the 25 Vrms output of the SelecTone control, a balanced line is created which filters induced line noise. This also allows the installer to use smaller gauge wire without the risk of poor intelligibility.

Federal Signal’s SelecTone Connector Kits allow existing public address systems to be expanded with SelecTone speaker/amplifiers — no additional central amplifier is required.



## SELECTONE® CONNECTOR KITS (AM25CK/AM70CK)



### HOW TO ORDER

- Please refer to Model Number Index AM25CK/AM70CK beginning on page 375



# **SelectTone® Extension Module**

## **Model EM3**

### **DESIGNED FOR ADDING ADDITIONAL SIGNAL TONES**

- Reliable solid-state circuitry
- Indoor/outdoor use
- No separate power supply required
- Produces three tones with the same speaker/amplifier
- Type 3R enclosure
- UL and cUL Listed

The Federal Signal Model EM3 SelectTone® Extension Module is designed to add multi-tone capability to an individual SelectTone unit and can be used with Models 300, 300GC, and 302GC.

The die-cast aluminum alloy housing has the same dimensions as the main amplifier housing of the above mentioned models and is sealed with gray enamel paint. The EM3's internal components are protected from the elements by dust- and moisture-proof seals.

The EM3 Extension Module requires no power supply of its own. Its internal components are a wiring terminal strip, edge connector slots for three Model UTM tone modules and an interface to connect to a SelectTone 300, 300GC, or 302GC signaling device. The EM3 is not compatible with the TM33 Tone Module.

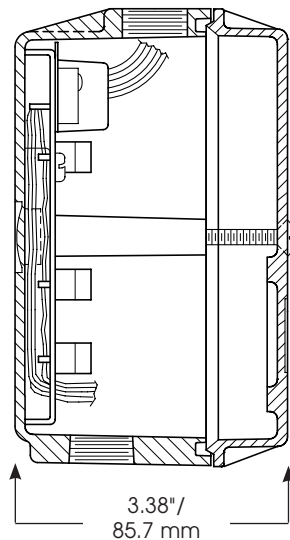
With the EM3, three functions can be simultaneously monitored rather than one. Tone activation and selection is accomplished by user-supplied, normally-open dry contacts.

Where voice communication is not necessary and the application requirements dictate up to three tone signals, the EM3 Extension Module allows a single SelectTone audible signal to fill those needs.

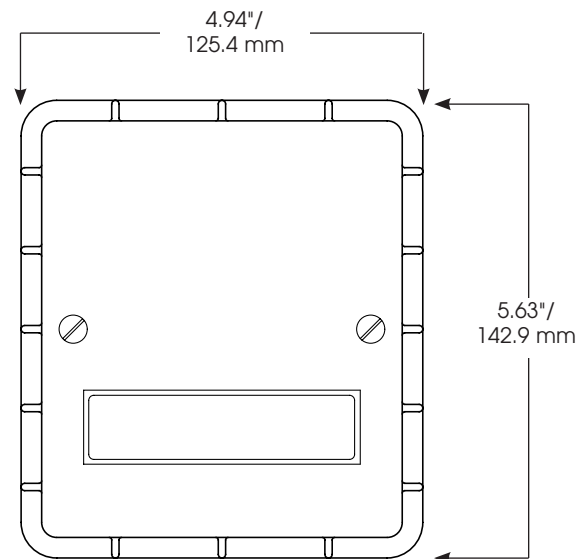
Adding Federal Signal's Model EM3 to a SelectTone speaker/ amplifier allows a single unit to produce up to three distinct tones.



## SELECTONE® EXTENSION MODULE (EM3)



Accepts up  
to 3 Tone  
Modules  
(purchased  
separately)



### SPECIFICATIONS

Operating Temperature:	-31°F to 161°F	-35°C to 72°C
Net Weight:	1.0 lbs.	0.45 kg
Shipping Weight:	2.2 lbs.	1.0 kg
Height:	5.63"	142.9 mm
Width:	4.94"	125.4 mm
Depth:	3.38"	85.7 mm

### HOW TO ORDER

- Specify model number
- Specify number of Universal Tone Modules (UTM), up to three (Reference page 167 for a complete list of tones)
- Please refer to Model Number Index EM3 beginning on page 375

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
PCBA, Series B	K200A481C
PCBA, Series C	K2001914B
PCBA Edge Connector	K124P011-S



# **SelectTone® Audible Signaling Device**

## **Model 50GC**

### **DESIGNED FOR INDOOR AND OUTDOOR USE**

- Available in 24VAC/24VDC, and 120VAC
- Solid-state circuitry
- Built-in gain control
- Produces 64dBa to 88dBa @ 10' (74dBa to 98dBa @ 1m)
- Flush or surface mount
- Type 3R enclosure
- UL and cUL Listed, and CSFM Approved

Federal Signal's Model 50GC SelectTone® Speaker Amplifier is designed to produce crisp, clear tones, digital voice messages and live public address.

In the Model 50GC a short, folded re-entrant horn is interposed between the diaphragm and surrounding air space. This design provides optimal dB output and very good frequency response.

The 50GC is UL Listed. It has been designed, tested and approved for use in Type 3R applications. When installed with the Model WB Weatherproof Backbox, the 50GC is suitable for use outdoors.

Internal gain control allows output adjustment from 64dBa to a maximum of 88dBa at 10 feet.

SelectTone Speaker Amplifiers are used individually or as part of a plant-wide emergency notification system. The Model UTM Universal Tone Module, with 32 tones, or the TM33 Custom Tone Module is plugged into a single SelectTone Speaker Amplifier for stand-alone use or into a SelectTone Command Unit for plant-wide signaling.

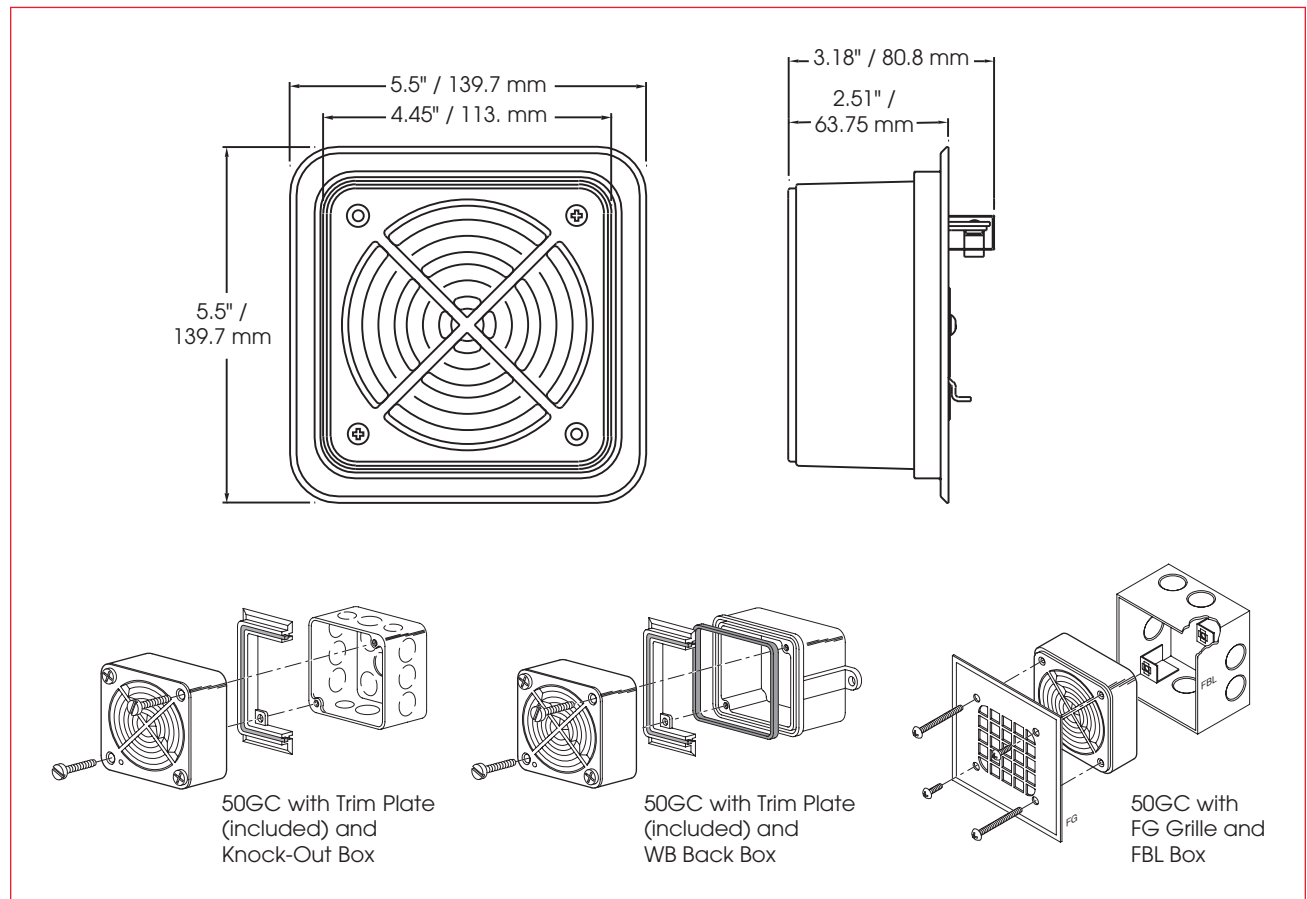
For plant-wide signaling, a Connector Kit is installed into each SelectTone Speaker Amplifier and wired to a central controller. SelectTone Command Units and CommCenter® Digital Message Centers broadcast tones, voice messages, melodies and live public address to an unlimited number of SelectTone Speaker Amplifiers.

The compact size and attractive appearance of the Model 50GC make it ideal for use in offices, hallways, reception, and plant areas where ambient noise levels are not exceedingly high, and even sound dispersal is desired. Emergency signaling and paging are common applications.

Model	Voltage	Operating Current	Standby Current	Decibels @	
				10'	1m
50GC-024BG	24VDC	0.09 amps	0.025 amps	88	98
50GC-024BG	24VAC 50/60Hz	0.29 amps	0.095 amps	88	98
50GC-120BG	120VAC 50/60Hz	0.04 amps	0.027 amps	88	98



## SELECTONE® AUDIBLE SIGNALING DEVICE (50GC)



### SPECIFICATIONS

Operating Temperature:	-31°F to 161°F	-35°C to 72°C
Net Weight:	1.7 lbs.	0.8 kg
Shipping Weight:	2.2 lbs.	1.0 kg
Height:	4.5"	114.0 mm
Width:	4.5"	114.0 mm
Depth:	3.18"	80.8 mm

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Accessories Kit (Trim Ring and Gasket)	K8476123A

### HOW TO ORDER

- Specify model and voltage
- Specify Tone Module for stand alone operation (sold separately)  
Universal Tone Module (UTM)  
Custom Tone Module (TM33)
- Specify Connector Kit (sold separately) for use in systems (Call factory for system design assistance)  
25 Vrms Connector Kit (AM25CK)  
70 Vrms Connector Kit (AM70CK)
- Specify Accessories:  
Weatherproof Back Box (WB)  
Grille (FG)  
Flush Mount Back Box (FBL)
- Please refer to Model Number Index 50GC beginning on page 375





# **SelectTone® Audible Signaling Device**

Model 50GCB

## **CEILING MOUNT 4" SPEAKER/AMPLIFIER**

- Available in 24VAC/24VDC and 120VAC
- Attractive round ceiling grille
- Appropriate for office environments
- Built in gain control
- Produces 64dBa to 88dBa @ 10' (74dBa to 98dBa @ 1m)
- Type 1, IP41 enclosure
- UL and cUL Listed, and CSFM Approved

Federal Signal's Model 50GCB SelectTone® Speaker Amplifier is designed to produce crisp, clear tones, digital voice messages and live public address. Designed to mount in ceilings, the 50GCB features a seven-inch white grille over a 4" speaker amplifier.

Internal gain control allows output adjustment from 64dBa to a maximum of 88dBa at 10 feet.

SelectTone Speaker Amplifiers are used individually or as part of a plant-wide emergency notification system. The Model UTM Universal Tone Module, with 32 tones, or the TM33 Custom Tone Module is plugged into a single SelectTone Speaker Amplifier for stand-alone use or into a SelectTone Command Unit for plant-wide signaling.

For plant-wide signaling, a Connector Kit is installed into each SelectTone Speaker Amplifier and wired to a central controller, a SelectTone Command Unit or a CommCenter® Digital Message Center. SelectTone Command Units and CommCenter Digital Message Centers can broadcast tones, voice messages, melodies and live public address to an unlimited number of SelectTone Speaker Amplifiers.

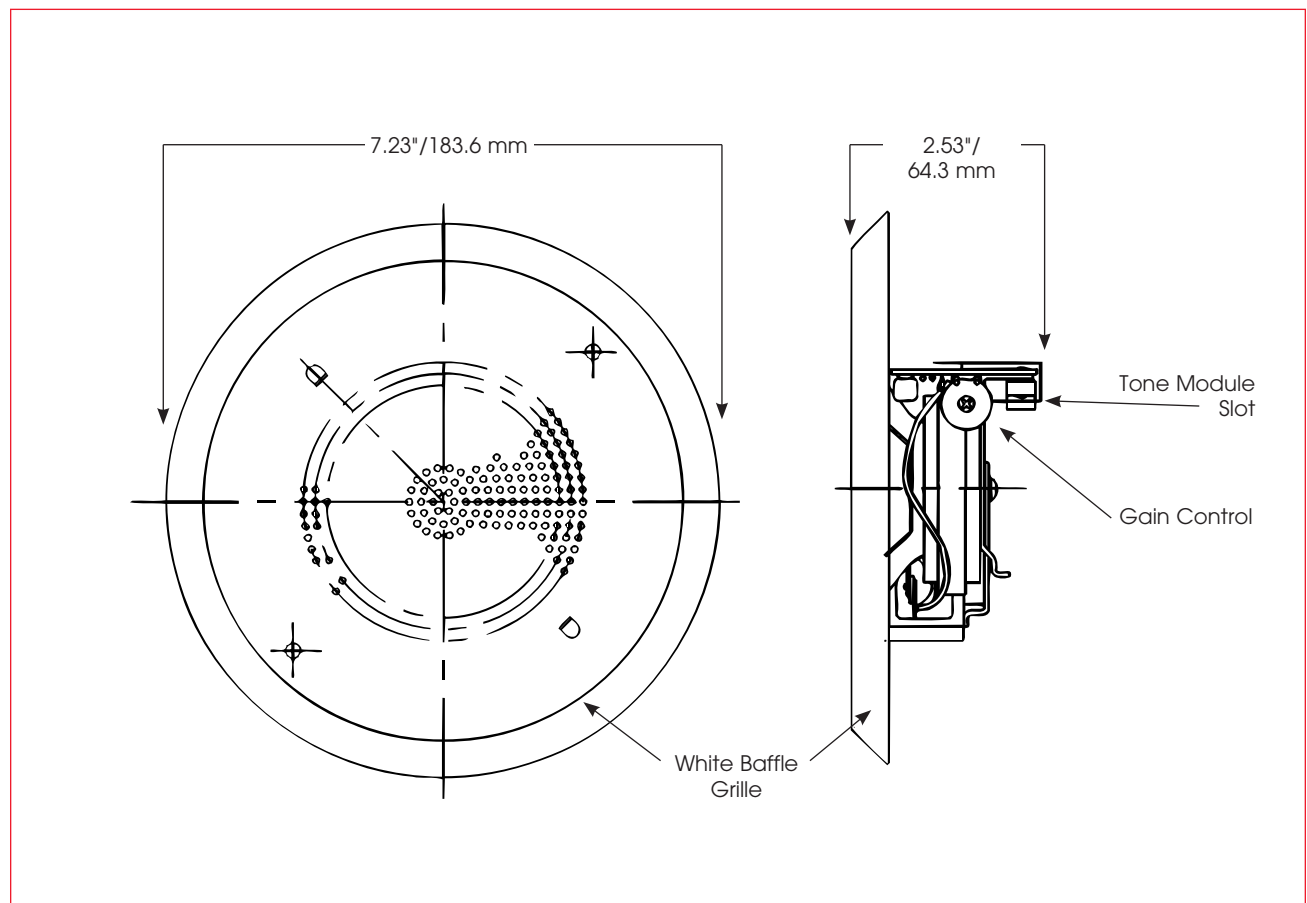
The 50GCB is designed for areas without high ambient noise levels, such as offices, hallways and receptions areas. The baffle allows the four-inch speaker to be installed easily in any suspended ceiling plenum with a Model R4NB backbox. The white grill of the 50GCB is attractive in most decors.

Emergency signaling or paging are common applications for SelectTone.

Model	Voltage	Operating Current	Standby Current	Decibels @	
				10'	1m
50GCB-024	24VDC	0.09 amps	0.025 amps	88	98
50GCB-024	24VAC 50/60Hz	0.29 amps	0.095 amps	88	98
50GCB-120	120VAC 50/60Hz	0.04 amps	0.027 amps	88	98



## SELECTONE® AUDIBLE SIGNALING DEVICE (50GCB)



### SPECIFICATIONS

Operating Temperature:	-31°F to 161°F	-35°C to 72°C
Net Weight:	1.6 lbs.	0.73 kg
Shipping Weight:	2.3 lbs.	1.04 kg
Depth:	2.53"	64.3 mm
Diameter:	7.23"	183.6 mm

### HOW TO ORDER

- Specify model and voltage  
Accessories (sold separately)
- Specify Tone Module for stand alone operation  
Universal Tone Module (UTM)  
Custom Tone Module (TM33)
- Specify Connector Kit for use in systems (Call factory for system design assistance)  
25 Vrms Connector Kit (AM25CK)  
70 Vrms Connector Kit (AM70CK)
- Specify Accessories:  
Back Box (R4NB)
- Please refer to Model Number Index 50GCB beginning on page 375



# SelecTone® Audible Signaling Device

Model 300, Series A1

## DC STAND-ALONE TONE SIGNALING WITH DC OPERATING VOLTAGE

- Available in 12VDC and 250VDC
- Compatible with Federal Signal UTM Tone Module
- Produces 110dBa @ 10' (120dBa @ 1m)
- Type 3R enclosure
- Indoor/outdoor use
- UL and cUL Listed

The Federal Signal SelecTone® Model 300 is a lightweight and compact, solid-state audible signaling device designed to amplify a pre-selected tone over existing ambient noises. The speaker cone and projector are made of spun aluminum. The internal amplifier circuitry and tone module are contained in a housing of die-cast aluminum. Dust- and moisture-proof gasketing provides protection from the elements. All external components are sealed with gray enamel paint.

The Model 300 is designed for applications which have 12, or 250VDC power supplies. The 250VDC version is UL and cUL Listed and CSA Certified. All models are rated Type 3R for indoor/outdoor use.

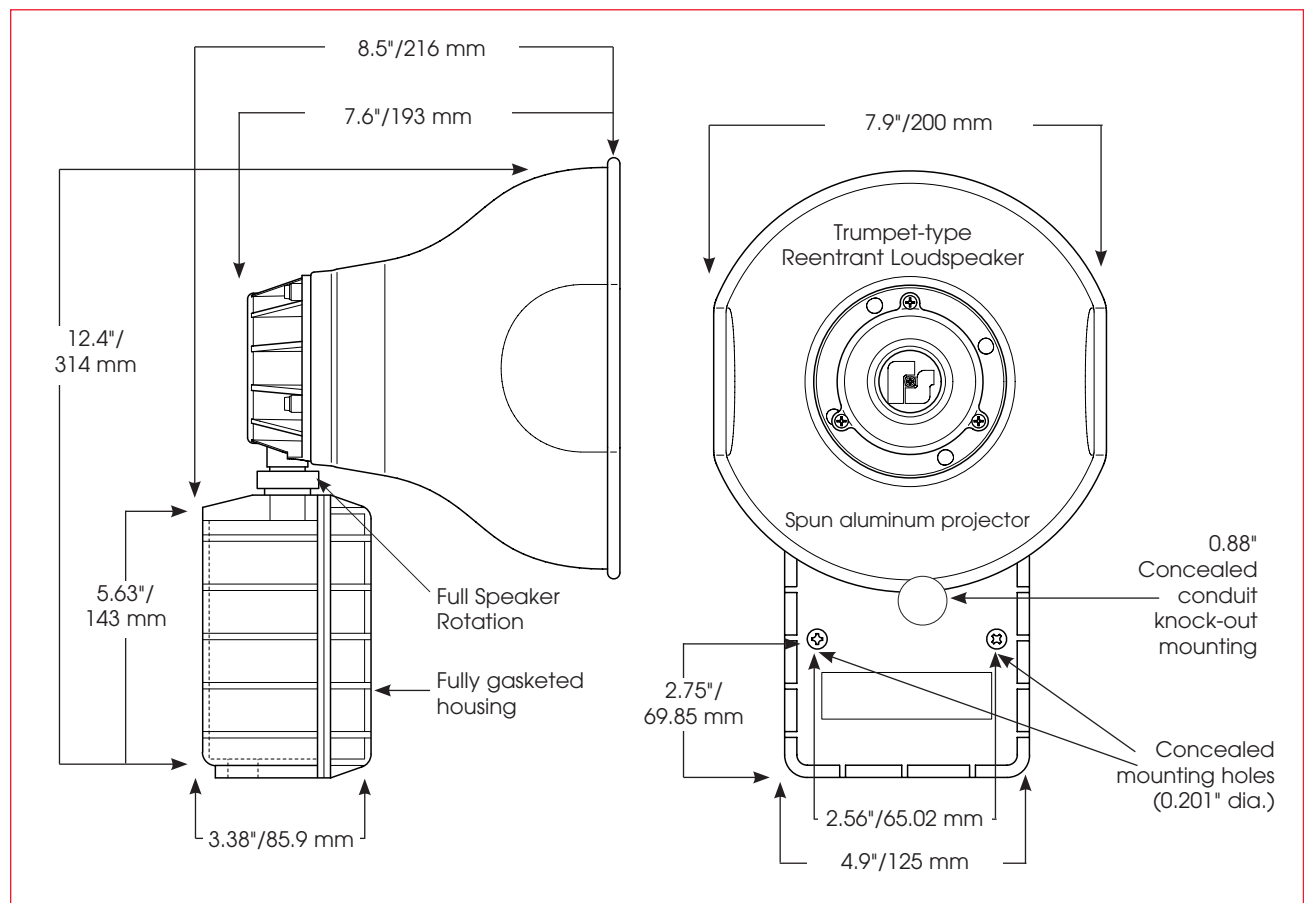
The Model UTM (Universal Tone Module) is used with this device to generate one of 32 tones. The Model 300 is designed to be used as a stand-alone, full output unit and cannot be used with a SelecTone Command Unit (public address is not possible).

Model 300 speaker/amplifiers are ideally suited for full output tone signaling where voice paging is not a requirement. Typical applications include emergency warning, start and dismissal, general alarm, smelters and cranes.

Model	Voltage	Operating Current	Standby Current	Decibels @	
				10'	1m
300-012	12VDC	1.25 amps	N/A	110	120
300-250	250VDC	0.72 amps	N/A	110	120



## SELECTONE® AUDIBLE SIGNALING DEVICE (300)



### SPECIFICATIONS

Operating Temperature:	-31°F to 161°F	-35°C to 72°C
Net Weight:	5.0 lbs.	2.3 kg
Shipping Weight:	6.1 lbs.	2.8 kg
Height:	12.4"	314.0 mm
Width:	7.9"	200.0 mm
Depth:	8.5"	216.0 mm

### HOW TO ORDER

- Specify model number and voltage
- Specify Tone Module (sold separately)  
Universal Tone Module (UTM)
- Please refer to Model Number Index  
300 beginning on page 375

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Amplifier, 12VDC	K200B467
Amplifier, 250VDC	K2001903B
Voice Coil	K8593035A
Speaker Assembly	K8593082A



# SelecTone® Audible Signaling Device

## Model 300GC

### PLANT-WIDE WARNING AND VOICE COMMUNICATION

- Available in 24VAC/DC, 120VAC and 240VAC
- Built-in gain control
- Produces 0dBa to 110dBa @ 10' (0dBa to 120dBa @ 1m)
- Type 3R, IP54 enclosure
- Digital signal amplification
- Fused input & output
- UL 1480 and CSFM Approved
- UL and cUL Listed

Federal Signal's Model 300GC SelecTone® Speaker Amplifier is designed to produce crisp, clear tones, digital voice messages and live public address in harsh environments with high ambient noise levels.

The rugged speaker cone and projector are constructed of spun aluminum. The internal circuitry, tone module, and gain control are contained in a housing constructed of die-cast aluminum. All surfaces are sealed with powder-coat paint. Dust- and moisture-proof gaskets provide protection from the elements.

The 300GC is UL Listed for indoor and outdoor use. It has been designed, tested and approved for use in Type 3R applications.

Internal gain control allows output adjustment from 0dBa to a maximum of 110dBa at 10 feet.

SelecTone Speaker Amplifiers are used individually or as part of a plant-wide emergency notification system. The Model UTM Universal Tone Module, with 32 tones, or the TM33 Custom Tone Module is plugged into a single SelecTone Speaker Amplifier for stand-alone use or into a SelecTone Command Unit for plant-wide signaling.

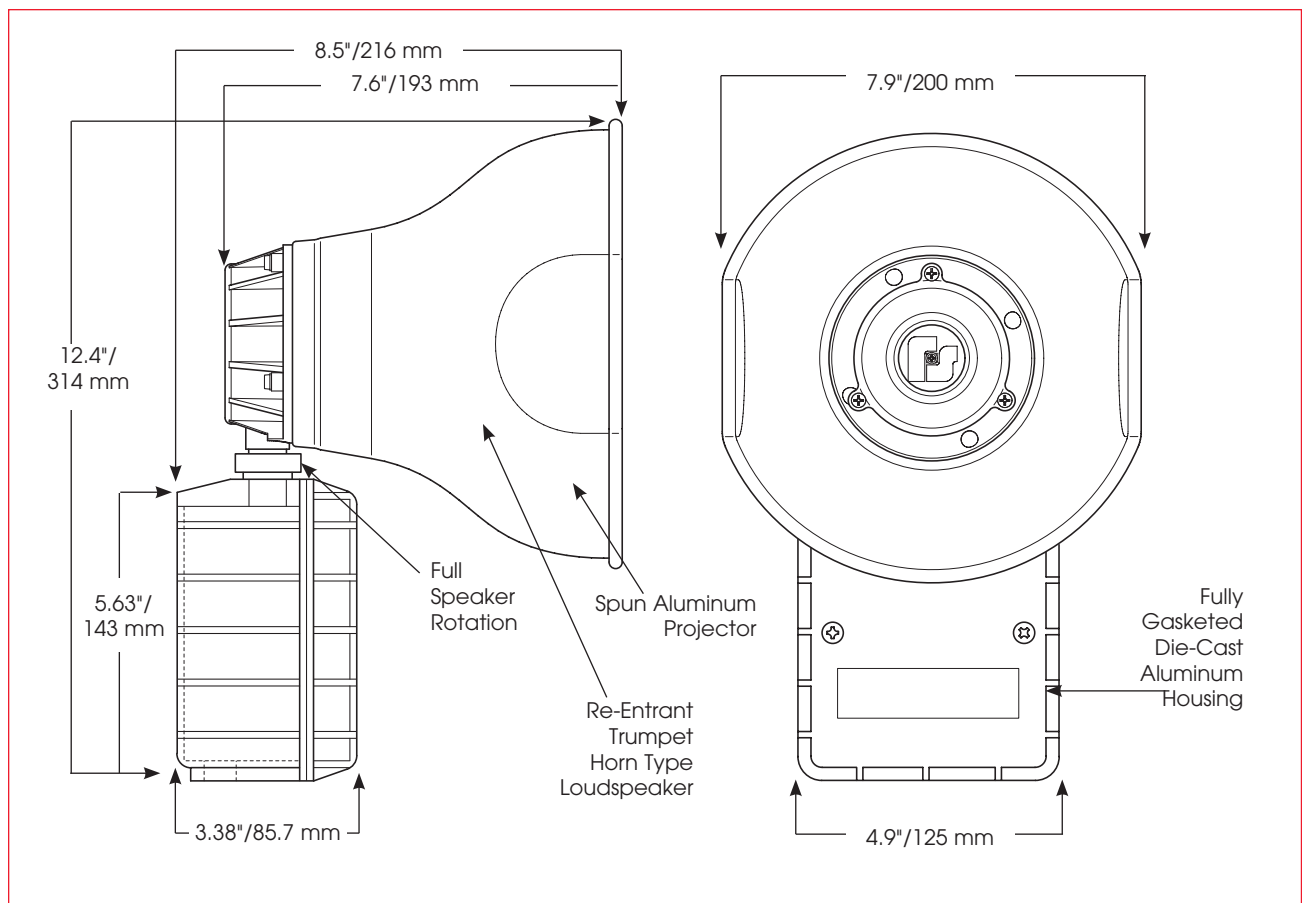
For plant-wide signaling, a Connector Kit is installed into each SelecTone Speaker Amplifier and wired to a central controller. SelecTone Command Units and CommCenter® Digital Message Centers broadcast tones, voice messages, melodies and live public address to an unlimited number of SelecTone Speaker Amplifiers.

Typical applications for SelecTone include emergency warning, plant evacuation, start and dismissal, public address, and process control signaling.

Model	Voltage	Operating Current	Standby Current	Decibels @	
				10'	1m
<b>300GC-024</b>	024VDC	0.67 amps	50mA	110	120
<b>300GC-024</b>	024VAC 50/60Hz	0.90 amps	100mA	110	120
<b>300GC-120</b>	120VAC 50/60Hz	0.20 amps	30mA	110	120
<b>300GC-240</b>	240VAC 50/60Hz	0.10 amps	15mA	110	120



## SELECTONE® AUDIBLE SIGNALING DEVICE (300GC)



### SPECIFICATIONS

Operating Temperature:	-67°F to 150°F	-55°C to 66°C
Net Weight:		
120/240VAC	5.5 lbs.	2.5 kg
Shipping Weight:		
120/240VAC	6.7 lbs.	3.0 kg
Height:	12.4"	314.0 mm
Width:	7.9"	200.0 mm
Depth:	8.5"	216.0 mm

### HOW TO ORDER

- Specify model number and voltage
- Specify Tone Module for stand alone operation
  - Universal Tone Module (UTM)
  - Custom Tone Module (TM33)
- Specify Connector Kit for use in systems (Call Factory for system design assistance)
  - 25 Vrms Connector Kit (AM25CK)
  - 70 Vrms Connector Kit (AM70CK)
- Please refer to Model Number Index 300GC beginning on page 375

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Amplifier Assembly, 24VAC/DC	K2005502A-04
Amplifier Assembly, 120/240VAC	K2005502A-04
Transformer, 120VAC	K120857A
Transformer, 240VAC	K120858A
Speaker Assembly	K8593082A
Voice Coil,	K8593035A





# SelectTone® Hazardous Location Audible Signaling Device

## Model 300GCX

### DESIGNED FOR USE IN HAZARDOUS LOCATIONS

- Available in 24VAC/DC, 120VAC and 240VAC
- Reliable, solid-state circuitry
- Digital signal amplification
- Built-in gain control
- Fused input and output
- Produces 0dBa to 110dBa @ 10' (0dBa to 120dBa @ 1m)
- Type 4X enclosure
- External mounting tabs
- Indoor/outdoor use
- UL 1480 and CSFM Approved
- UL and cUL Listed

Federal Signal's Model 300GCX SelectTone® Speaker Amplifier is designed to produce tones, digital voice messages and live public address in harsh environments with high ambient noise levels.

The rugged speaker cone and projector are constructed of spun aluminum. The amplification circuitry, tone module, and gain control are contained in a housing constructed of die-cast aluminum. All surfaces are sealed with powder-coat paint. Dust- and moisture-proof gaskets provide protection from the elements.

The 300GCX is UL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F & G, and Class III. It has been tested and approved for use in Type 4X applications.

Internal gain control allows output adjustment from 0dBa to a maximum of 110dBa at 10 feet.

SelectTone Speaker Amplifiers are used individually or as part of a plant-wide emergency notification system. The Model UTM Universal Tone Module, with 32 tones, or the TM33 Custom Tone Module is plugged into a single SelectTone Speaker Amplifier for stand-alone use or into a SelectTone Command Unit for plant-wide signaling.

For plant-wide signaling, a Connector Kit is installed into each SelectTone Speaker Amplifier and wired to a central controller, SelectTone Command Unit or CommCenter® Digital Message Center. Command Units and CommCenters broadcast tones, voice messages, melodies and live public address to an unlimited number of SelectTone Speaker Amplifiers.

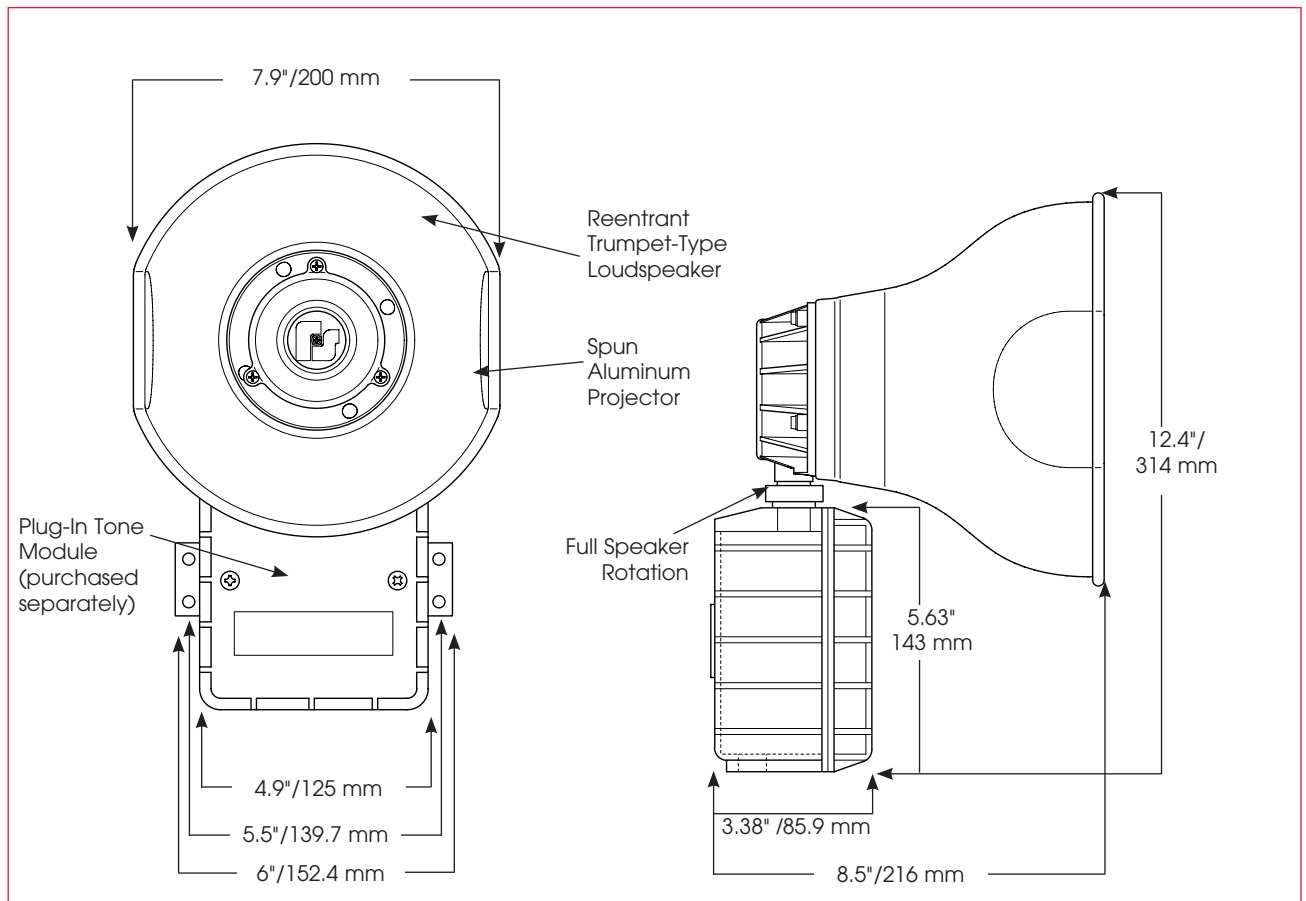
Applications for SelectTone include emergency warning, evacuation, start/dismissal, public address, and process control signaling.

Model	Voltage	Operating Current	Standby Current	Decibels @		T-Code <sup>1</sup>
				10'	1m	
300GCX-024	24VDC	0.67 amps	50mA	110	120	T2B
300GCX-024	24VAC 50/60Hz	0.90 amps	100mA	110	120	T2B
300GCX-120	120VAC 50/60Hz	0.20 amps	30mA	110	120	T2B
300GCX-240	240VAC 50/60Hz	0.10 amps	15mA	110	120	T2B

<sup>1</sup> T-Code in Class 1 Division 2 A,B,C,D



## HAZARDOUS LOCATION AUDIBLE SIGNALING DEVICE (300GCX)



### SPECIFICATIONS

Operating Temperature:	-67°F to 150°F	-55°C to 66°C
Net Weight:		
24VDC	4.9 lbs.	2.20 kg
120/240VAC	5.9 lbs.	2.70 kg
Shipping Weight:		
24VDC	6.1 lbs.	2.8 kg
120/240VAC	7.1 lbs.	3.2 kg
Height:	12.4"	314.0 mm
Width:	7.9"	200.0 mm
Depth:	8.5"	216.0 mm

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Amplifier Assembly, 24VAC/DC	K2005502A-04
Amplifier Assembly, 120/240VAC	K2005502A-04
Voice Coil	K8593035A
Transformer, 120VAC	K120857A
Transformer, 240VAC	K120858A
Speaker Assembly	K8593082A

### HOW TO ORDER

- Specify model number and voltage
- Specify Tone Module for stand alone operation
  - Universal Tone Module (UTM)
  - Custom Tone Module (TM33)
- Specify Connector Kit for use in systems (Call factory for system design assistance)
  - 25 Vrms Connector Kit (AM25CK)
  - 70 Vrms Connector Kit (AM70CK)
- Please refer to Model Number Index 300GCX beginning on page 375





## DESIGNED FOR EXPLOSION-PROOF ENVIRONMENTS

- Available in 24VAC/DC and 120/240VAC
- Digital Signal Amplification
- Fused input and output
- Built-in gain control
- Produces 0dBa to 110dBa @ 10' (0dBa to 120dBa @ 1m)
- Type 4X, IP66 enclosure
- UL 1480 and CSFM Approved
- UL and cUL Listed

# SelectTone® Explosion-Proof Audible Signaling Device

## Model 300X

Federal Signal's Model 300X SelectTone® Speaker Amplifier is designed to meet UL 1480 intelligibility requirements producing crisp, clear tones, digital voice messages and live public address in harsh environments with high ambient noise levels.

The rugged speaker cone and projector are constructed of spun aluminum. The all new internal circuitry, tone module, and gain control are contained in a housing constructed of cast aluminum. All surfaces are sealed with powder-coat paint and assembled with stainless steel hardware. Dust- and moisture-proof gaskets provide protection from the elements. This housing incorporates a tool-less rear cover design, eliminating the need for torque specific hardware and solves the problem of missing or lost fasteners.

The 300X is UL Listed for Class 1, Division 1, Groups B, C & D.

Internal gain control allows output adjustment from 0dBa to a maximum of 110dBa at 10 feet.

SelectTone Speaker Amplifiers are used individually or as part of a plant-wide emergency notification system. The Model UTM Universal Tone Module, with 32 tones, or the TM33 Custom Tone Module is plugged into a single SelectTone Speaker Amplifier for stand-alone use or into a SelectTone Command Unit for plant-wide signaling.

For plant-wide signaling, a Connector Kit is required for each SelectTone Speaker Amplifier and wired to a central controller. SelectTone Command Units and CommCenter® Digital Message Centers broadcast tones, voice messages, melodies and live public address to an unlimited number of SelectTone Speaker Amplifiers.

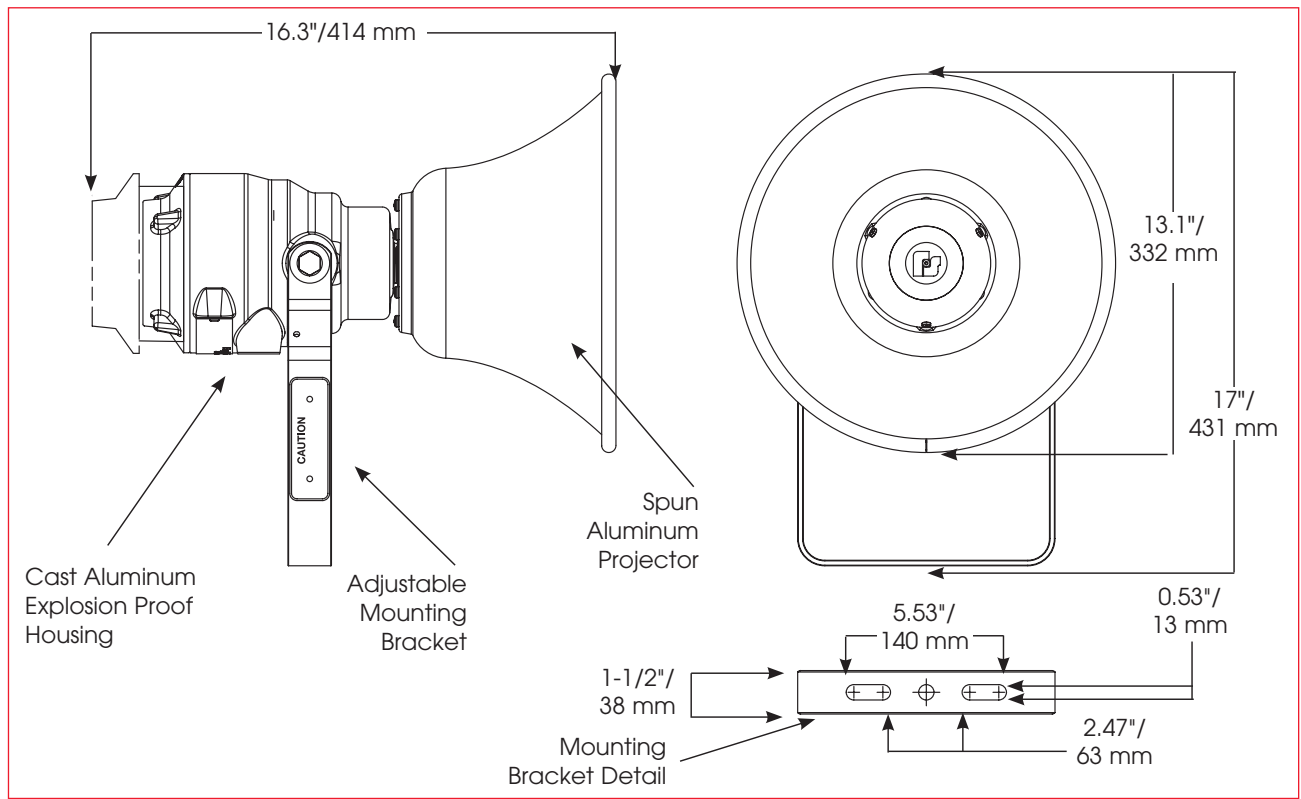
Applications for SelectTone include emergency warning, plant evacuation, start and dismissal, public address, and process control.

Model	Voltage	Operating Current	Standby Current	Decibels @		T-Code <sup>1</sup>
				10'	1m	
300X-024	24VDC	0.76 amps	.127mA	110	120	T6
300X-024	24VAC 50/60Hz	1.1 amps	305mA	110	120	T6
300X-120	120VAC 50/60Hz	0.22 amps	80mA	110	120	T6
300X-240	240VAC 50/60Hz	0.11 amps	40mA	110	120	T6

<sup>1</sup> T-Code in Class 1 Division 1 B, C, D @ 66°C Ambient



## EXPLOSION-PROOF AUDIBLE SIGNALING DEVICE (300X)



### SPECIFICATIONS

Operating Temperature:	-67°F to 151°F	-55°C to 66°C
Net Weight:		
24VAC	15.4 lbs.	7.0 kg
120/240VAC	16.3 lbs.	7.4 kg
Shipping Weight:		
24VAC	22.8 lbs.	10.4 kg
120/240VAC	23.8 lbs.	10.8 kg
Height:	17.0"	431.80 mm
Width:	13.1"	332.74 mm
Depth:	16.3"	414.02 mm
Ingress Protection:	IP65 and NEMA 4X Approved	

### HOW TO ORDER

- Specify model number and voltage
- Specify Tone Module for stand alone operation
  - Universal Tone Module (UTM)
  - Custom Tone Module (TM33)
- Specify Connector Kit for use in systems (Call Factory for system design assistance)
  - 25 Vrms Connector Kit (AM25CK)
  - 70 Vrms Connector Kit (AM70CK)
- Please refer to Model Number Index 300X beginning on page 375

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Amplifier Assembly, 24VAC/DC	K2005618A-03
Amplifier Assembly, 120/240VAC	K2005618A-05
Driver Assembly	K8593097A
Projector Assembly	K8593100A
Cover Assembly	K8593098A
Mounting Bracket Assembly	K8593071A



# **SelectTone® Audible Signaling Device**

Model 302GC

## **EXTRA OUTPUT POWER FOR PLANT EVACUATION**

- Available in 24VAC/DC, 120VAC and 240VAC
- Built-in gain control
- Produces 0dBa to 114dBa @ 10' (100dBa to 124dBa @ 1m)
- Type 3R, IP54 enclosure
- Digital signal amplification
- Fused input and output
- Indoor/outdoor use
- UL 1480 and CSFM Approved
- UL and cUL Listed

Federal Signal's Model 302GC SelectTone® Speaker Amplifier is designed to produce crisp, clear tones, digital voice messages and live public address in harsh environments with high ambient noise levels.

The rugged speaker cone and projector are constructed of spun aluminum. The internal circuitry, tone module, and gain control are contained in a housing constructed of die-cast aluminum. All surfaces are sealed with powder-coat paint. Dust- and moisture-proof gaskets provide protection from the elements.

The 302GC is UL Listed for indoor and outdoor use. It has been designed, tested and approved for use in Type 3R applications.

Internal gain control allows output adjustment from 0dBa to a maximum of 114dBa at 10 feet.

SelectTone Speaker Amplifiers are used individually or as part of a plant-wide emergency notification system. The Model UTM Universal Tone Module, with 32 tones, or the TM33 Custom Tone Module is plugged into a single SelectTone Speaker Amplifier for stand-alone use or into a SelectTone Command Unit for plant-wide signaling.

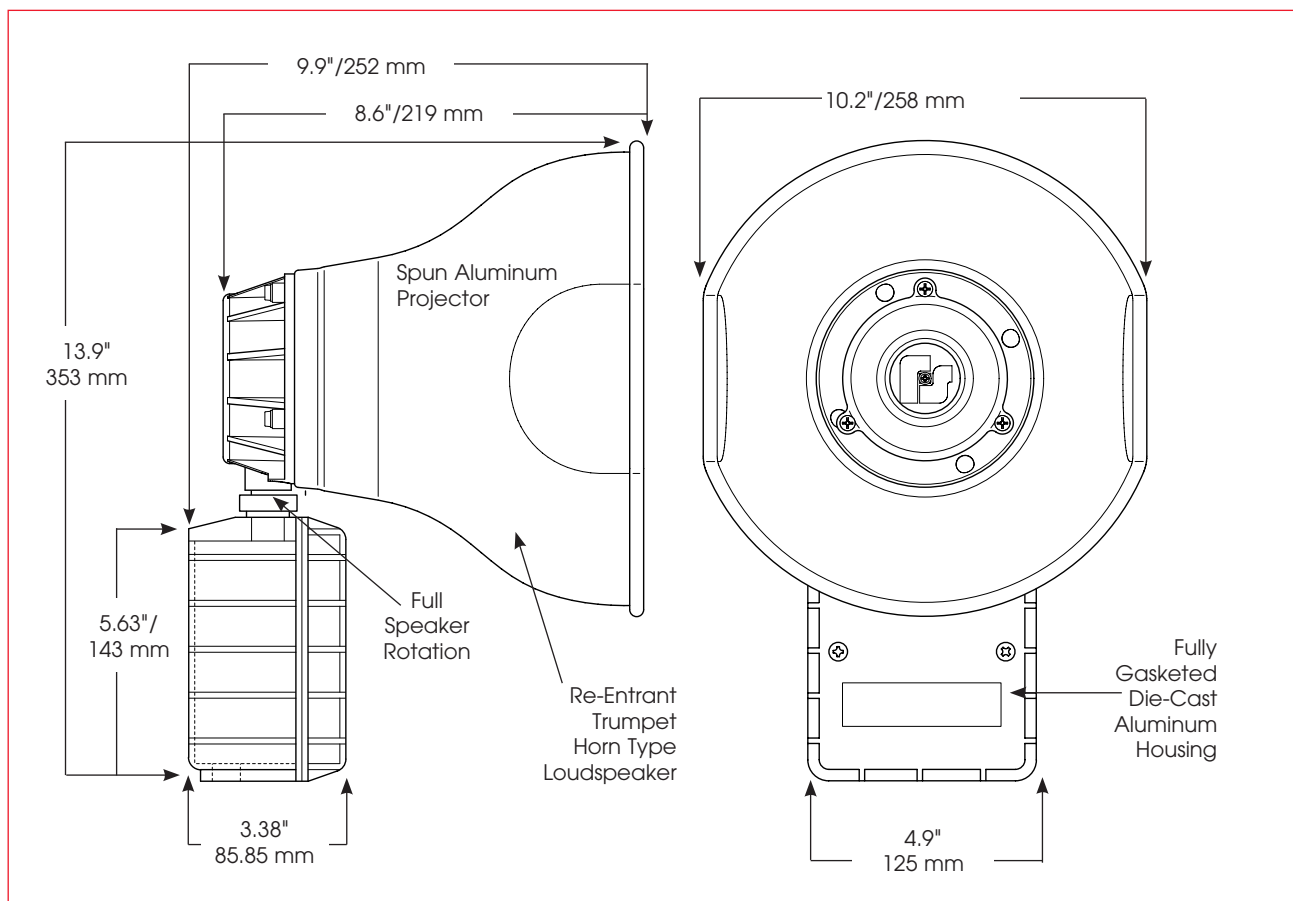
For plant-wide signaling, a Connector Kit is installed into each SelectTone Speaker Amplifier and wired to a central controller. SelectTone Command Units and CommCenter® Digital Message Centers broadcast tones, voice messages, melodies and live public address to an unlimited number of SelectTone Speaker Amplifiers.

Typical applications for SelectTone include emergency warning, plant evacuation, start and dismissal, public address, and process control signaling.

Model	Voltage	Operating Current	Standby Current	Decibels @	
				10'	1m
302GC-024	24VDC	1.00 amps	50mA	114	124
302GC-024	24VAC 50/60Hz	1.40 amps	100mA	114	124
302GC-120	120VAC 50/60Hz	0.30 amps	50mA	114	124
302GC-240	240VAC 50/60Hz	0.15 amps	35mA	114	124



## SELECTONE® AUDIBLE SIGNALING DEVICE (302GC)



### SPECIFICATIONS

Operating Temperature:	-67°F to 150°F	-55°C to 66°C
Net Weight:		
120/240VAC	7.5 lbs.	3.4 kg
Shipping Weight:		
120/240VAC	8.9 lbs.	4.0 kg
Height:	13.9"	353.0 mm
Width:	10.2"	258.0 mm
Depth:	9.9"	252.0 mm

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Amplifier Assembly, 24VAC/DC	K2005502A-02
Amplifier Assembly, 120/240VAC	K2005502A-02
Speaker Assembly	K8590246A
Transformer, 120VAC	K120846A
Transformer, 240VAC	K120856A
Voice Coil, Series C	K8590246A

### HOW TO ORDER

- Specify model number and voltage
- Specify Tone Module for stand alone operation
  - Universal Tone Module (UTM)
  - Custom Tone Module (TM33)
- Specify Connector Kit for use in systems (Call Factory for system design assistance)
  - 25 Vrms Connector Kit (AM25CK)
  - 70 Vrms Connector Kit (AM70CK)
- Please refer to Model Number Index 302GC beginning on page 375



## DESIGNED FOR USE IN HAZARDOUS LOCATIONS

- Available in 24VAC/DC, 120VAC and 240VAC
- Reliable, solid-state circuitry
- Digital signal amplification
- Built-in gain control
- Fused input and output
- Produces 0dBa to 114dBa @ 10' (0dBa to 124dBa @ 1m)
- Type 4X enclosure
- External mounting tabs
- Indoor/outdoor use
- UL 1480 and CSFM Approved
- UL and cUL Listed

# SelecTone® Hazardous Location Audible Signaling Device

## Model 302GCX

Federal Signal's Model 302GCX SelecTone® Speaker Amplifier is designed to produce tones, digital voice messages and live public address in harsh environments with high ambient noise levels.

The rugged speaker cone and projector are constructed of spun aluminum. The amplification circuitry, tone module, and gain control are contained in a housing constructed of die-cast aluminum. All surfaces are sealed with powder-coat paint. Dust- and moisture-proof gaskets provide protection from the elements.

The 302GCX is UL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F & G, and Class III. It has been tested and approved for use in Type 4X applications.

Internal gain control allows output adjustment from 0dBa to a maximum of 114dBa at 10 feet.

SelecTone Speaker Amplifiers are used individually or as part of a plant-wide emergency notification system. The Model UTM Universal Tone Module, with 32 tones, or the TM33 Custom Tone Module is plugged into a single SelecTone Speaker Amplifier for stand-alone use or into a SelecTone Command Unit for plant-wide signaling.

For plant-wide signaling, a Connector Kit is installed into each SelecTone Speaker Amplifier and wired to a central controller, SelecTone Command Unit or CommCenter® Digital Message Center. Command Units and CommCenters broadcast tones, voice messages, melodies and live public address to an unlimited number of SelecTone Speaker Amplifiers.

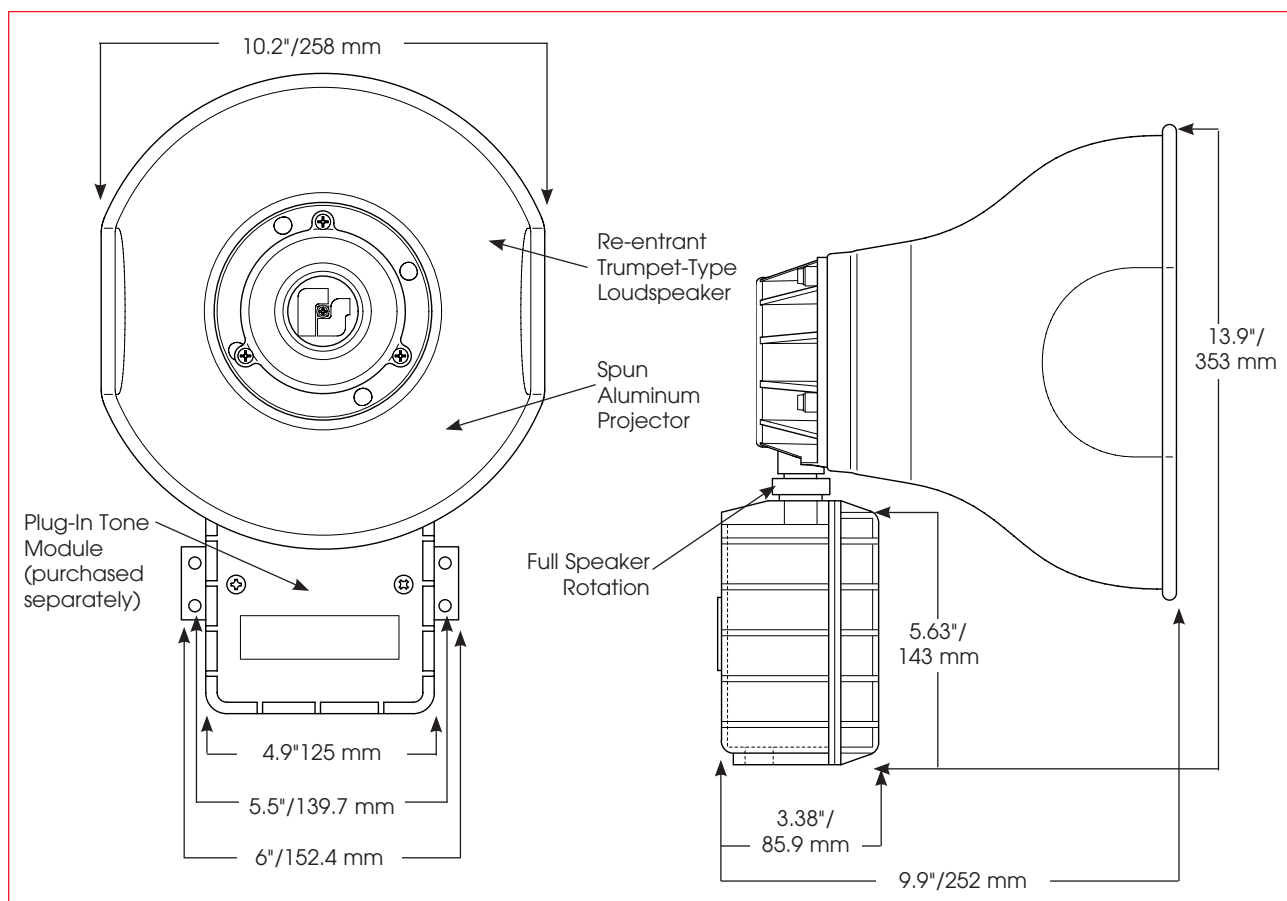
Applications for SelecTone include emergency warning, evacuation, start/dismissal, public address, and process control signaling.

Model	Voltage	Operating Current	Standby Current	Decibels @		T-Code <sup>1</sup>
				10'	1m	
302GCX-024	24VDC	1 amps	50mA	114	124	T6
302GCX-024	24VAC 50/60Hz	1.40 amps	100mA	114	124	T6
302GCX-120	120VAC 50/60Hz	0.30 amps	50mA	114	124	T6
302GCX-240	240VAC 50/60Hz	0.15 amps	35mA	114	124	T6

<sup>1</sup> T-Code in Class 1 Division 2 A,B,C,D



## HAZARDOUS LOCATION AUDIBLE SIGNALING DEVICE (302GCX)



### SPECIFICATIONS

Operating Temperature:	-67°F to 150°F	-55°C to 66°C
Net Weight:		
24VDC	6.5 lbs.	3.0 kg
120/240VAC	7.9 lbs.	3.6 kg
Shipping Weight:		
24VDC	7.9 lbs.	3.6 kg
120/240VAC	9.3 lbs.	4.2 kg
Height:	13.9"	353.0 mm
Width:	10.2"	258.0 mm
Depth:	9.9"	252.0 mm

### HOW TO ORDER

- Specify model number and voltage
- Specify Tone Module for stand alone operation  
    Universal Tone Module (UTM)  
    Custom Tone Module (TM33)
- Specify Connector Kit for use in systems (Call factory for system design assistance)  
    25 Vrms Connector Kit (AM25CK)  
    70 Vrms Connector Kit (AM70CK)
- Please refer to Model Number Index 302GCX beginning on page 375

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Amplifier Assembly, 24VAC/DC	K2005502A-02
Amplifier Assembly, 120/240VAC	K2005502A-02
Voice Coil	K8590246A
Speaker Assembly	K8593103A
Transformer, 120VAC	K120846A
Transformer, 240VAC	K120856A





# **SelectTone® Explosion-Proof Audible Signaling Device**

## **Model 302X**

### **DESIGNED FOR EXPLOSION- PROOF ENVIRONMENTS**

- Available in 24VAC/DC and 120/240VAC
- Digital Signal Amplification
- Fused input and output
- Built-in gain control
- Produces 0dBa to 114dBa @ 10' (0dBa to 124dBa @ 1m)
- Type 4X, IP66 enclosure
- UL 1480 and CSFM Approved
- UL and cUL Listed

Federal Signal's Model 302X SelectTone® Speaker Amplifier is designed to meet UL 1480 intelligibility requirements producing crisp, clear tones, digital voice messages and live public address in harsh environments with high ambient noise levels.

The rugged speaker cone and projector are constructed of spun aluminum. The all new internal circuitry, tone module, and gain control are contained in a housing constructed of cast aluminum. All surfaces are sealed with powder-coat paint and assembled with stainless steel hardware. Dust- and moisture-proof gaskets provide protection from the elements. This housing incorporates a tool-less rear cover design, eliminating the need for torque specific hardware and solves the problem of missing or lost fasteners.

The 302X is UL Listed for Class 1, Division 1, Groups B, C & D.

Internal gain control allows output adjustment from 0dBa to a maximum of 114dBa at 10 feet.

SelectTone Speaker Amplifiers are used individually or as part of a plant-wide emergency notification system. The Model UTM Universal Tone Module, with 32 tones, or the TM33 Custom Tone Module is plugged into a single SelectTone Speaker Amplifier for stand-alone use or into a SelectTone Command Unit for plant-wide signaling.

For plant-wide signaling, a Connector Kit is required for each SelectTone Speaker Amplifier and wired to a central controller. SelectTone Command Units and CommCenter® Digital Message Centers broadcast tones, voice messages, melodies and live public address to an unlimited number of SelectTone Speaker Amplifiers.

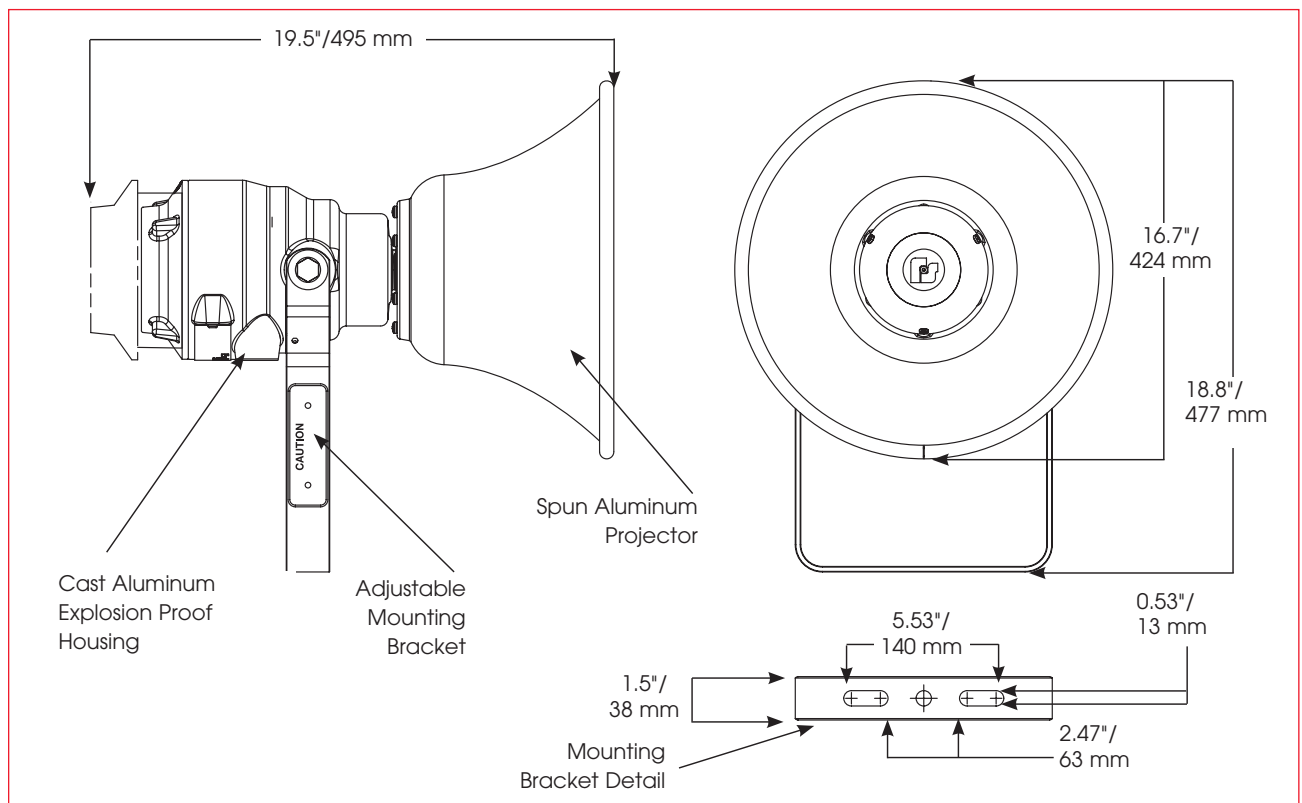
Applications for SelectTone include emergency warning, plant evacuation, start and dismissal, public address, and process control.

Model	Voltage	Operating Current	Standby Current	Decibels @		T-Code <sup>1</sup>
302X-024	24VDC	1.35 amps	0.13 amps	114	124	T6
302X-024	24VAC 50/60Hz	1.91 amps	0.31 amps	114	124	T6
302X-120	120VAC 50/60Hz	0.43 amps	0.26 amps	114	124	T6
302X-240	240VAC 50/60Hz	0.26 amps	0.13 amps	114	124	T6

<sup>1</sup> T-Code in Class 1 Division 1 B, C, D @ 66°C Ambient



## EXPLOSION-PROOF AUDIBLE SIGNALING DEVICE (302X)



### SPECIFICATIONS

Operating Temperature:	-67°F to 151°F	-55°C to 66°C
Net Weight:		
24VAC	16.4 lbs.	7.4 kg
120/240VAC	17.7 lbs.	8.0 kg
Shipping Weight:		
24VAC	32.4 lbs.	14.7 kg
120/240VAC	33.7 lbs.	15.3 kg
Height:	18.8"	477.52 mm
Width:	16.7"	424.17 mm
Depth:	19.5"	495.30 mm
Ingress Protection	IP65 and NEMA 4X Approved	

### HOW TO ORDER

- Specify model number and voltage
- Specify Tone Module for stand alone operation
  - Universal Tone Module (UTM)
  - Custom Tone Module (TM33)
- Specify Connector Kit for use in systems (Call Factory for system design assistance)
  - 25 Vrms Connector Kit (AM25CK)
  - 70 Vrms Connector Kit (AM70CK)
- Please refer to Model Number Index 302X beginning on page 375

### REPLACEMENT PARTS

<b>Description</b>	<b>Part Number</b>
Amplifier Assembly, 24VAC/VDC	K2005618A-04
Amplifier Assembly, 120/240VAC	K2005618A-06
Driver Assembly	K8593097A
Projector Assembly	K8593101A
Cover Assembly	K8593098A
Mounting Bracket Assembly	K8593071A





## DESIGNED FOR SELECTONE® SYSTEMS

- Multi-voltage design accepts 24VDC, 120VAC or 240VAC
- Produces four prioritized tones and public address
- Remote microphone input
- Desktop design
- Type 1 enclosure
- UL Listed and CSA Certified

# SelecTone® Command Unit

## Model 300VSC-1

The Federal Signal Model 300VSC-1 SelecTone® Command Unit generates up to four tones or voice communications in a SelecTone System. Four tones, auxiliary, test and cancel are controlled via an illuminated keypad. Voice transmission is activated by keying the optional desktop or hand-held microphone.

The Model 300VSC-1 is UL Listed and CSA Certified.

Select up to four plug-in tone modules, including the UTM Universal Tone Module and the TM33 Custom Tone Module.

Public address can be accessed from the local microphone or via the remote microphone input. Audio input allows background music to be played from any 1 volt-peak-to-peak source system. Public address has the highest priority followed by tones 1-4, remote microphone and auxiliary audio.

“Test” plays tones or voice messages through the monitor speaker only. “Cancel” interrupts any tone.

External switches can be wired into the command unit for automatic remote operation of the signal system.

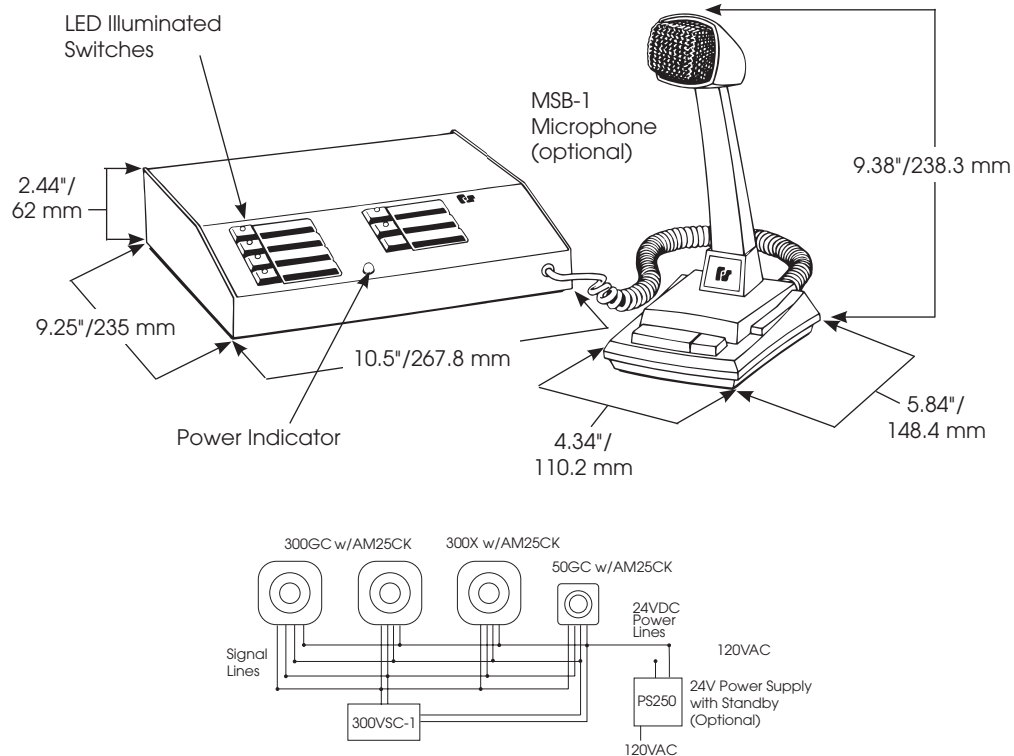
The 300VSC-1 SelecTone Command Unit is the basis for a simple, versatile general signaling system for weather warning, start and dismissal, general alarm, evacuation and paging.

Model	Voltage	Operating Current	Standby Current
300VSC-1	24VDC*	0.76 amps	0.09 amps
300VSC-1	120VAC	0.21 amps	0.03 amps
300VSC-1	240VAC	0.10 amps	0.02 amps

\* Allows emergency power back-up using PS250, PS600 or PS1000. See page 204.



## SELECTONE COMMAND UNIT (300VSC-1)



### SPECIFICATIONS

#### Tone Output Levels

Unbalanced Signal Line 10 Vrms (25 Ohm max.)

Balanced Signal Line (Recommended) 25 Vrms (40 Ohm max./15 Watt)

Signal to Noise Ratio (<1.5% THD) Chip Input 67dBa

Signal Frequency Response 250Hz to 4.5KHz (typical)

Net Weight: 3.1 lbs. 1.4 kg

Shipping Weight: 4.2 lbs. 1.9 kg

Height: 2.44" 62.0 mm

Width: 10.5" 266.7 mm

Depth: 9.25" 235.0 mm

### HOW TO ORDER

- Specify model
- Specify up to four Tone Modules:  
Universal Tone Module (UTM)  
Custom Tone Module (TM33)
- Specify Accessories:  
Handheld Microphone (MNC-1)  
Desktop Microphone (MSB-1)
- Please refer to Model Number Index  
300VSC-1 beginning on page 375

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>	<u>Description</u>	<u>Part Number</u>
<b>PC Board Assemblies</b>			
Mother Board	K2001154E	Connectors, 17 Position	K140A332A-17
Switch Board	K2001147A	Connectors, 16 Position	K140A332A-16
Tone Card Connector	K2001164A	Fuse 250V, 1 Amp	K148A155A-01
		Fuse 250V, 1/2 Amp	K148A155A



## DESIGNED FOR SELECTONE® SYSTEMS

- Multi-voltage design accepts 24VDC, 120VAC or 240VAC
- Produces four prioritized tones and public address
- Remote microphone input
- 19" rack mount
- Type 1 enclosure
- UL Listed and CSA Certified

# SelecTone® Rack-Mount Command Unit

Model 300VSC-1044SB

The Federal Signal Model 300VSC-1044SB SelecTone® Command Unit generates up to four tones or voice communications in a SelecTone system. The housing can be mounted in any standard 19" equipment rack. Four tones, auxiliary, test and cancel are controlled via an illuminated keypad. Voice transmission is activated by keying the optional desktop or hand-held microphone.

The Model 300VSC-1044SB is UL Listed and CSA Certified.

Select up to four plug-in tone modules, including the UTM Universal Tone Module or the TM33 Custom Tone Module.

Public address can be accessed from the optional local microphone or the remote microphone input. Audio input allows background music to be played from any 1 volt peak-to-peak audio source. Public address has the highest priority, followed by tones 1-4, remote microphone and audio.

"Test" plays tones or voice messages through the monitor speaker only. "Cancel" interrupts any tone.

External dry contact closures can be wired into the command unit for automatic remote operation of the signal system.

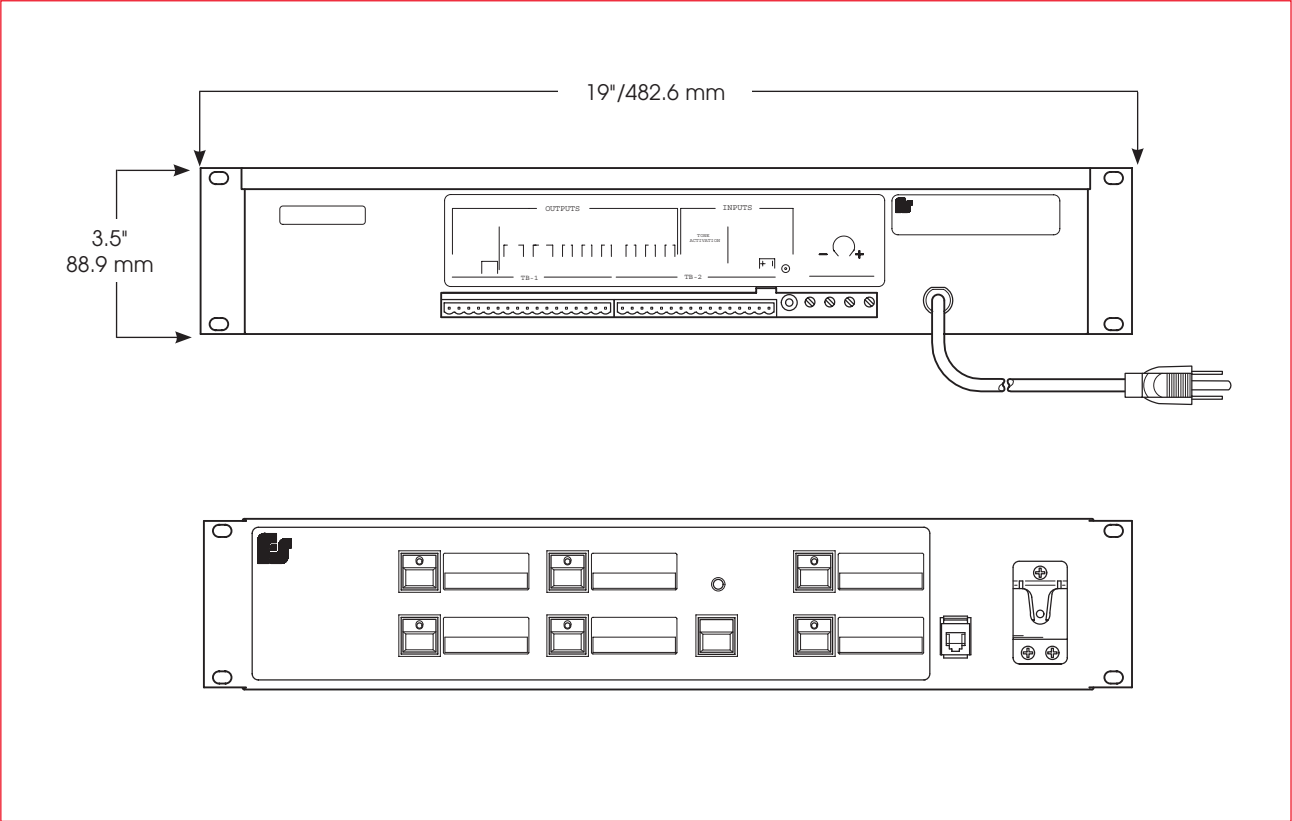
The 300VSC-1044SB SelecTone Command Unit is the basis for a simple, versatile general signaling system for weather warning, start and dismissal, general alarm, evacuation and paging.

Model	Voltage	Operating Current	Standby Current
300VSC-1044SB	24VDC*	0.76 amps	0.09 amps
300VSC-1044SB	120VAC 50/60Hz	0.2 amps	0.03 amps
300VSC-1044SB	240VAC	0.1 amps	0.02 amps

\* Allows emergency power back-up using PS250, PS600 or PS1000. See page 204.



SELECTONE® COMMAND UNIT (300VSC-1044SB)



SPECIFICATIONS

Tone Output Levels		
Unbalanced Signal Line		10 Vrms (25 Ohm max.)
Balanced Signal Line (Recommended)	25 Vrms (40 Ohm max./15 Watt)	
Signal to Noise Ratio	(<1.5% THD) Chip Input 67dBa	
Signal Frequency Response	250Hz to 4.5KHz (typical)	
Net Weight:	4.3 lbs.	1.95 kg
Shipping Weight:	7.9 lbs.	3.58 kg
Height:	3.5"	88.9 mm
Width:	19.0"	482.6 mm
Depth:	10.0"	254.0 mm

HOW TO ORDER

- Specify model
- Specify up to four Tone Modules:  
Universal Tone Module (UTM)  
Custom Tone Module (TM33)
- Specify Accessories:  
Handheld Microphone (MNC-1)
- Please refer to Model Number Index  
300VSC-1044SB beginning on  
page 375

REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>	<u>Description</u>	<u>Part Number</u>
<b>PC Board Assemblies</b>			
Mother Board	K2001154E	Connectors, 17 Position	K140A332A-17
Switch Board	K2001147A	Connectors, 16 Position	K140A332A-16
Tone Card Connector	K2001164A	Fuse 250V, 1 Amp	K148A155A-01
		Fuse 250V, 1/2 Amp	K148A155A



# **SelectTone® Wall Mounted Command Unit**

Model 300SCW-1

## **DESIGNED FOR SELECTONE® SYSTEMS**

- Multi-voltage design operates on 24VDC, 120VAC and 240VAC
- Produces four prioritized tone signals and public address
- Remote microphone input
- Wall mount
- Type 1 enclosure
- UL Listed and CSA Certified

The Federal Signal Model 300SCW-1 SelectTone® Command Unit generates up to four tones or voice communications through a SelectTone system.

Four tones, auxiliary, test and cancel are controlled via an illuminated keypad. Voice transmission is activated by keying the optional hand held microphone.

The Model 300SCW-1 is UL Listed and CSA Certified.

Choose four plug-in tone modules, including the UTM Universal Tone Module or the TM33 Custom Tone Module.

Public address can be accessed from the optional local microphone or via the remote microphone input. Public address has the highest priority, followed by tones 1-4, remote microphone and audio.

“Test” plays tones or voice messages through the monitor speaker only. “Cancel” interrupts any tone.

External dry contacts can be wired into the command unit for automatic remote operation of the signal system.

The Model 300SCW-1 SelectTone Command Unit is the basis for a simple, versatile general signaling system for weather warning, start and dismissal, general alarm, evacuation and paging.

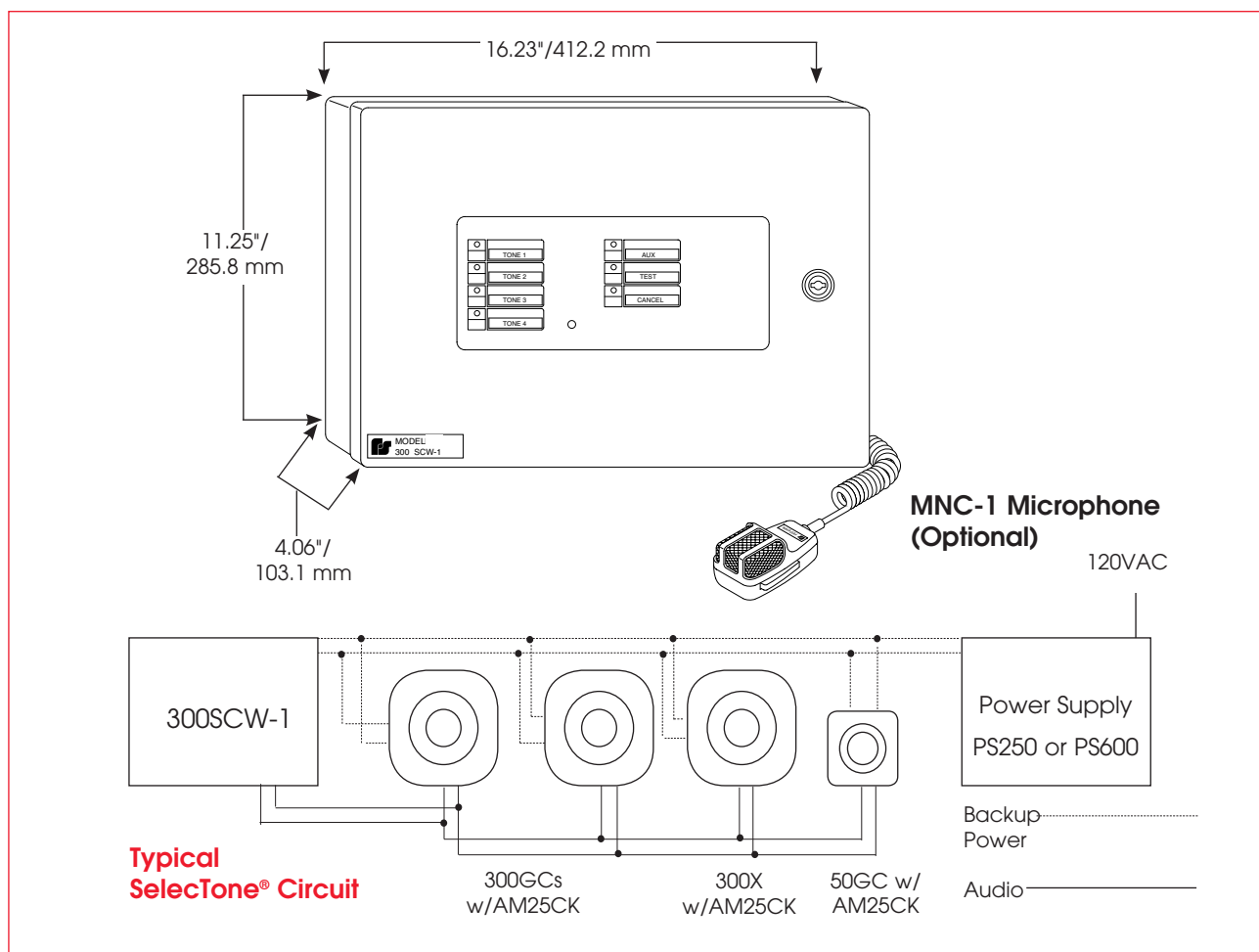
Federal Signal’s SelectTone Model 300SCW-1 Command Unit allows up to four tones and public address capability to be prioritized and broadcast through a SelectTone system.

Model	Voltage	Operating Current	Standby Current
300SCW-1	24VDC*	0.76 amps	0.09 amps
300SCW-1	120VAC 50/60Hz	0.2 amps	0.03 amps
300SCW-1	240VAC 50/60Hz	0.1 amps	0.02 amps

\* Allows emergency power back-up using PS250, PS600 or PS1000. See page 204.



## SELECTONE® COMMAND UNIT (300SCW-1)



### SPECIFICATIONS

#### Tone Output Levels

Unbalanced Signal Line 10 Vrms (25 Ohm max.)

Balanced Signal Line 25 Vrms (40 Ohm max./15 Watt)

Signal to Noise Ratio (<1.5% THD) Chip Input 67dBa

Signal Frequency Response 250Hz to 4.5KHz (typical)

Net Weight: 13.4 lbs. 6.1 kg

Shipping Weight: 15.0 lbs. 6.8 kg

Height: 11.25" 285.8 mm

Width: 16.23" 412.2 mm

Depth: 4.06" 103.1 mm

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
PC Board Assembly, Mother Board	K2001154E
PC Board Assembly, Switch Board	K2001147A
PC Board Assembly, Tone Card Connector	K2001164A
Connector, 17 Position	K140A332A-17
Connector, 16 Position	K140A332A-16
Fuse 250V, 1 Amp	K148A155A-01
Fuse 250V, 1/2 Amp	K148A155A

### HOW TO ORDER

- Specify model
- Specify up to four Tone Modules:  
Universal Tone Module (UTM)  
Custom Tone Module (TM33)
- Specify Accessories:  
Handheld Microphone (MNC-1)  
Desktop Microphone (MSB-1)
- Please refer to Model Number Index 300SCW-1 beginning on page 375



# SelectTone® Activated Relay

## Model 300TAR

### DETECTS AUDIO SIGNALS ON SPEAKER LINES FOR REMOTE CONTROL

- Available in 24VAC/VDC and 120/240VAC
- Detects tone signals and public address
- Eliminates the need for additional control wires
- Type 4X enclosure
- UL Listed

The Federal Signal Model 300TAR is activated by swept frequency tone signals from the SelectTone® Command Center. A relay switches power in order to control the operation of selected devices. The 300TAR can be used to activate such devices as emergency lights, lock and unlock doors and exhaust fans. Additional applications include the activation of other circuits such as automatic dialers, digital message centers or PLC inputs.

The tone activated relay is designed to detect emergency dedicated signals emitted by a SelectTone Command Center. Through a twin set of Form C contacts, each rated at 8 Amperes, the 300TAR can switch power to activate up to two devices, eliminating the need for dedicated control lines.

The 300TAR has two modes of operation. In one mode, the unit can be adjusted for specific audio frequencies. The other mode does not discriminate and activates upon any audio signal, including tones or voice.

The 300TAR accepts all connector cards (300CKS, AM25CK and AM70CK), allowing its use with today's most popular audio line voltages.

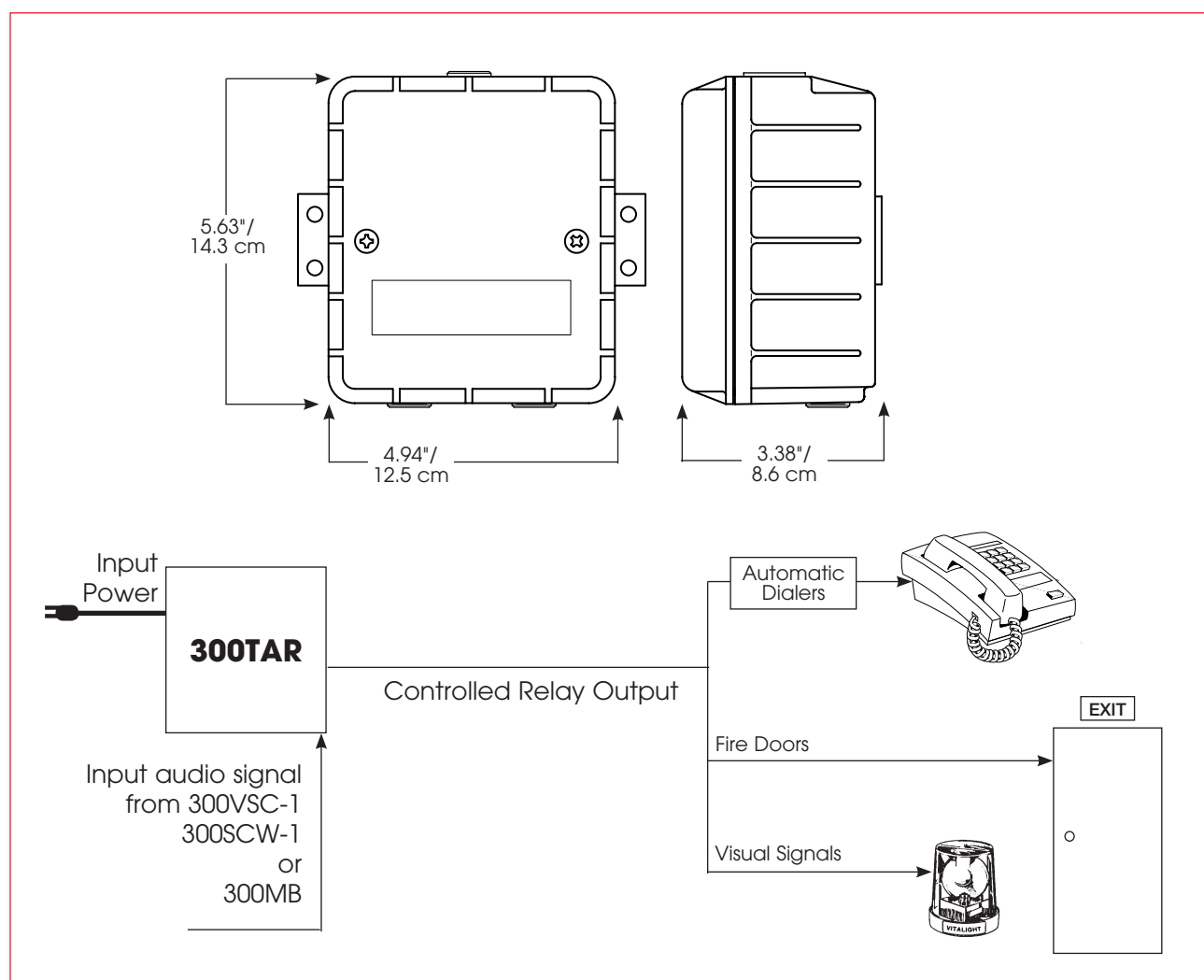
The 300TAR is encased in a sturdy, die cast aluminum, corrosion-resistant housing. The unit is UL Listed.

Model	Voltage	Operating Current	Standby Current
<b>300TAR-024</b>	24VAC, 50/60Hz	56mA	29mA
<b>300TAR-024</b>	24VDC	168/180mA	92/93mA
<b>300TAR-120</b>	120VAC, 50/60Hz	64/38mA	61/32mA
<b>300TAR-240</b>	240VAC, 50/60Hz	32/19mA	31/17mA





## TONE ACTIVATED RELAY (300TAR)



### SPECIFICATIONS

Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Input Signal:	1 Vrms	1 Vrms
Input Signal Frequency:	Tone PA	470Hz to 1300Hz +/-15% 60Hz to 5000Hz +/-15%
Net Weight:	2.75 lbs.	1.25 kg
Shipping Weight:	3.15 lbs.	1.43 kg
Height:	5.63"	14.3 cm
Width:	4.94"	12.5 cm
Depth:	3.38"	8.6 cm

### HOW TO ORDER

- Specify model and voltage
- Specify Connector Kit for use in systems (sold separately)
  - 25 Vrms Connector Kit (AM25CK)
  - 70 Vrms Connector Kit (AM70CK)
- Please refer to Model Number Index 300TAR beginning on page 375

### REPLACEMENT PARTS

Description	Part Number
Double Pole Relay	K131207A
PCB Assembly, 24VDC	K2001306B-01
PCB Assembly, 120/240VAC	K2001306B





# CommCenter® Digital Message Center

## Model 300MB

### USE WITH SELECTONE® AND PUBLIC ADDRESS SYSTEMS

- Multi-voltage design accepts 24VDC, 120VAC or 240VAC
- High-quality, non-volatile playback
- Stores up to six voice messages, melodies, tones and signals
- Messages can be up to 30 seconds in length (180 second total capacity)
- Expandable and prioritized
- Type 1 enclosure
- UL Listed and cUL Listed

The Federal Signal CommCenter® Model 300MB broadcasts pre-recorded voice messages, melodies, tones and signals over SelecTone® and public address systems. The 300MB replaces out-dated loop tape units with superior, high-quality audio playback. The 300MB is remotely activated via contact closures.

The CommCenter's housing holds the solid state digital control circuitry and up to six non-volatile, 30-second chips.

Melodies, voice messages, tones and signals are available, including the pre-recorded CommCenter Standard Library and optional custom recorded messages. Units can be interconnected for greater message capacity.

CommCenter's digital messaging capability is ideal for emergency evacuation announcements. Clear, concise, pre-determined instructions can be broadcast over a SelecTone or public address system. The CommCenter's pre-recorded melodies can convey the status of a process or machine without interrupting the flow of production in surrounding areas. Voice messages in any language can alert operators to emergency situations.

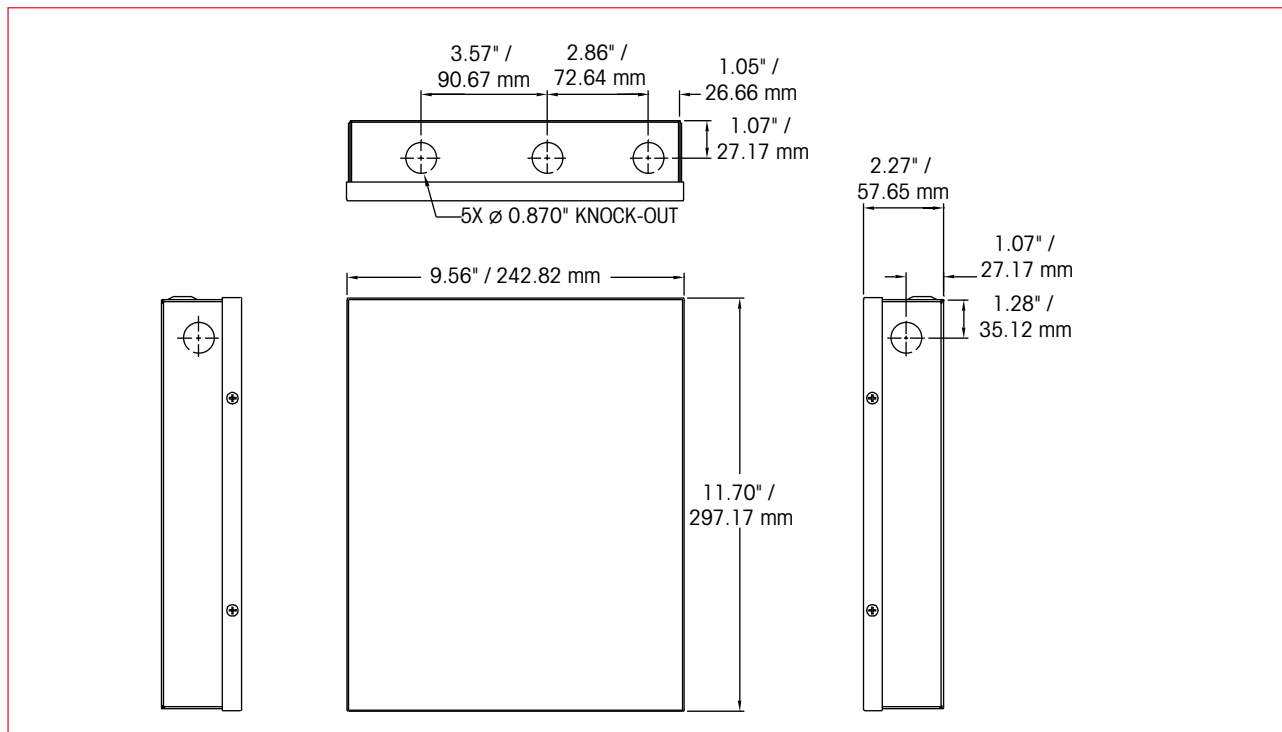
The CommCenter offers quality and versatility to public address systems that broadcast repetitive, prerecorded messages.

Model	Voltage	Operating Current	Standby Current
300MB- *SD024	24VDC	0.8 amps	0.09 amps
300MB- *SD120	120VAC 50/60Hz	0.2 amps	0.05 amps
300MB- *SD240	240VAC 50/60Hz	0.1 amps	0.02 amps

\* Indicate number of messages up to six.



## COMMCENTER® DIGITAL MESSAGE CENTER (300MB)



### SPECIFICATIONS

Ambient Operating Temperature:	32°F to 140°F	0°C to 60°C
Tone Output Levels Max. Load:		
Unbalanced Signal Line	10 Vrms (25 ohm max)	
Balanced Signal Line	25 Vrms (40 ohm max/15 Watt)	
Audio Input:		
Input Impedance	5K OHMS	
Input Voltage	1V P-P (max)	
Signal to Noise Ratio (<1.5% THD):	(chip input) 67dBa	
Signal Frequency Response:	250Hz to 3.4KHz	
Net Weight:	5.5 lbs.	2.5 kg
Shipping Weight:	6.6 lbs.	3.0 kg
Height:	11.57"	293.9 mm
Width:	9.41"	239.0 mm
Depth:	2.27"	57.7 mm

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
PC Board Assembly — Main	K200D1148F
Terminal Block, 17 Position	K140A332A-17
Terminal Block, 10 Position	K140A332A-10
Fuse 250V, 1 amp	K148A155A-01
Fuse 250V, 1/2 Amp	K148A155A
Blank Message Module	RMB9999SD
Pre-recorded Message Module (Please specify message)	RM1SD

### HOW TO ORDER

- Specify model number
- Specify number of messages (up to six)
- Choose message source(s):
  - a. Select from Standard Library (page 169)
  - b. Provide script to be recorded in studio (additional charge incurred)
  - c. Provide electronic file (additional charge incurred)
- Specify the priority of the messages
- Please refer to Model Number Index 300MB beginning on page 375



# **CommCenter® Field Programmer**

**Model 300FP**

## **PROGRAM CUSTOM DIGITAL MESSAGE MODULES**

- On-site, on-demand digital file transferring
- WAV & MP3 file format compatible
- Zero loss digital audio transfer
- Download and playback
- Self contained playback speaker
- Software and cables included

Federal Signal's Model 300FP Field Programmer is designed to transfer and program custom messages and tones on CommCenter message modules. The unit features an integrated playback speaker for review before the module is installed into any of the compatible devices, including; 300MB or TM33.

The model 300FP quickly and accurately transfers any standard WAV or MP3 file providing an opportunity for fully customizable tones and voice messages.

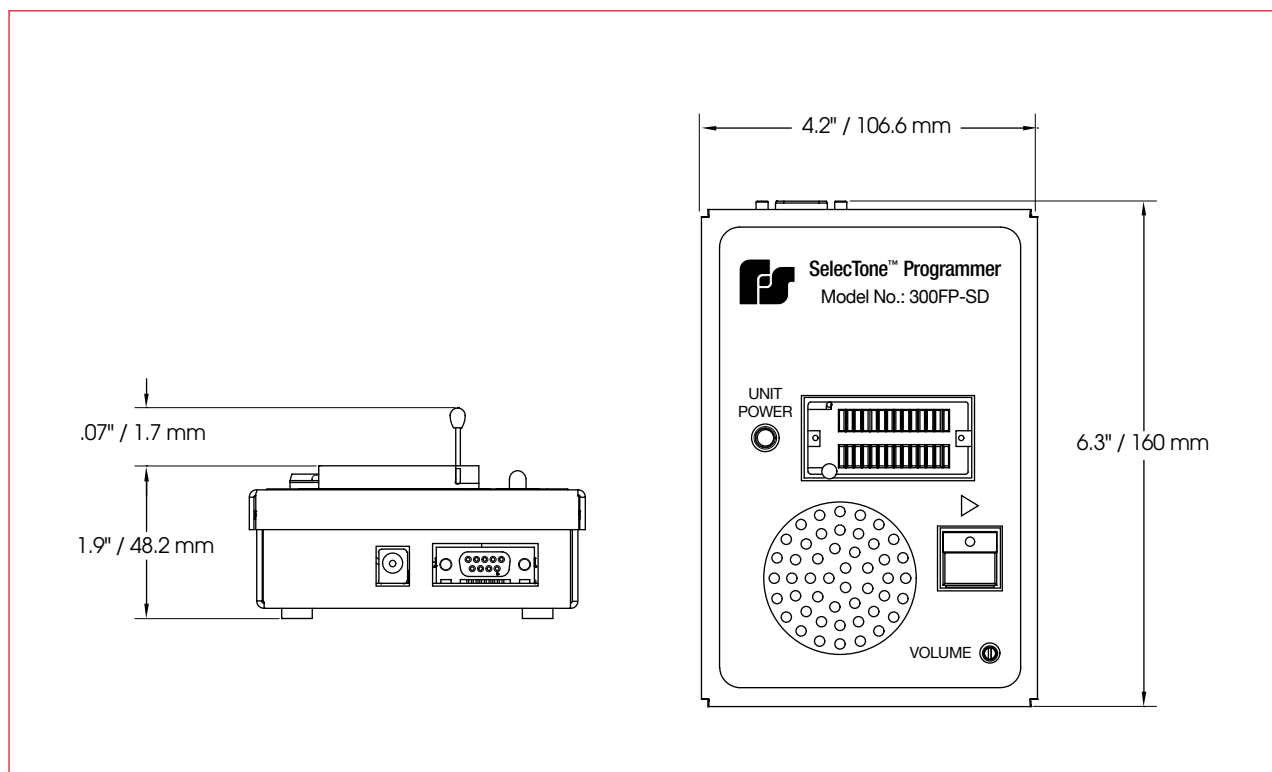
Lossless audio transfer is achieved through the use of proprietary file loading software supplied with the unit and/or downloadable from our website. Through user-friendly instructions, an end-user will simply program/transfer an audio file to the module. This is done by connecting a communications cable supplied with the unit between the PC and the 300FP Field Programmer. The end user then follows the on-screen instructions, selects a communications port on their PC and an audio file to be transferred. Once activated the software automatically programs the microprocessor. It's that easy. The transfer software is compatible with Windows XP, Vista and Windows 7.

Custom tones or voice messages can be created by simply recording the message directly to a PC or via a digital recording device, then saving or formatting to the standard WAV or MP3 file format and following the instructions listed above.

The heavy duty aluminum housing is finished in a black powder coat paint, easy to use push button and LED indicator light. The field programmer 300FP is ONLY compatible with the new PCB message module that is supplied with Series D products or the RMB9999SD and RM1SD.



## COMMCENTER® FIELD PROGRAMMER (300FP)



### SPECIFICATIONS

Operating voltage	120VAC	120VAC
Net weight	0.875 lbs	0.39 kg
Shipping weight	1.75 lbs	0.79 kg
Height	2.63 inch	66.8 mm
Width	4.19 inch	106.4 mm
Depth	6.30 inch	160.0 mm

### HOW TO ORDER

- Specify model number
- Specify optional equipment; blank module RMB9999SD

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
Power adapter, 120VAC to 24VDC	K120834
Serial cable, RS-232	K1751156



## FOR PRIMARY AND EMERGENCY POWER

- Supplies 12VDC or 24VDC
- Integrated battery charger
- Choice of 7 or 12 amp-hour capacity
- Meets NFPA standards
- Type 1 enclosure
- UL Listed

# SelecTone® Standby Battery/Back-up Power Supplies

Models PS250, PS600 and PS1000

Federal Signal Power Supplies provide nominal 12VDC or 24VDC power that is switch selectable. The PS250, PS600 and PS1000 are designed for use as standby battery back-up during a power outage.

The steel enclosure is designed to mount on a wall or substantial vertical surface (indoor only). A key lock is provided to discourage unauthorized access – simple lock installation is required.

The power supply sub-assembly, which recharges the batteries, includes solid-state circuitry that provides DC operating voltage to units in a SelecTone® system, while maintaining a charge level on the batteries.

All of the units can also be used as a primary 12V or 24V power source for other devices/systems.

### Model PS250

The Model PS250 battery package includes two sealed lead-acid, gelled electrolyte batteries connected in series. Model PS250 is rated for seven amp-hours of capacity at 2.5 ampere. The PS250 is UL Listed.

### Model PS600

The Model PS600 includes two 12-volt sealed, lead-acid, gelled electrolyte batteries, connected in series. Model PS600 batteries are rated for 12 amp-hours. This unit has a six ampere capacity. Model PS600 is UL Listed.

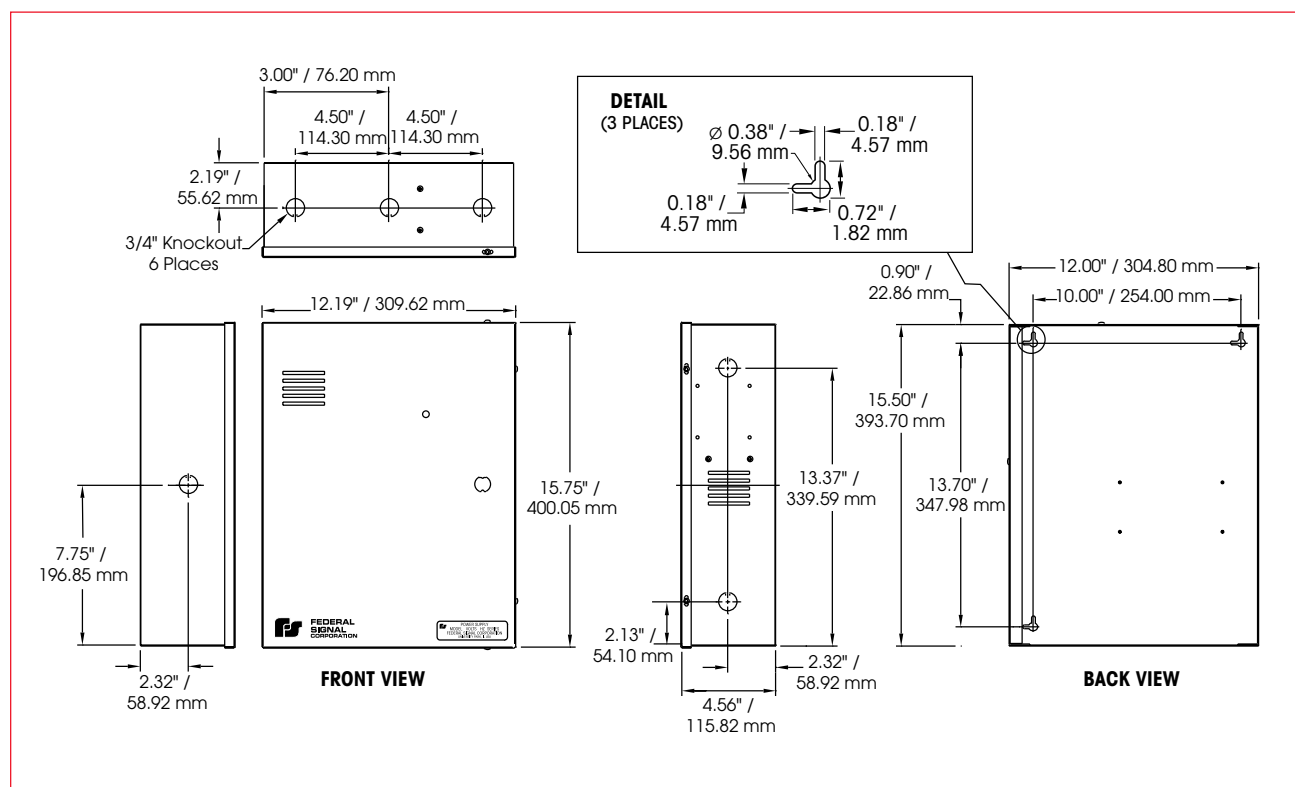
### Model PS1000

The model PS1000 includes two 12-volt sealed, lead acid, gelled electrolyte batteries connected in series. The PS1000 is rated for 12 amp-hours capacity at 10 ampere. Model PS1000 is UL Listed.



Model	Voltage	Output Current	Output Voltage
PS250	120/240VAC	2.50 amps	12/24VDC
PS600	120/240VAC	6.00 amps	12/24VDC
PS1000	120VAC	10 amps	24VDC

## SELECTONE® BACK-UP POWER SUPPLIES (PS250/PS600/PS1000)



### SPECIFICATIONS

Operating Temperature:	32°F to 120°F	0°C to 49°C
Net Weight:		
PS250	10.25 lbs.	4.65 kg
PS600	12.65 lbs.	5.74 kg
PS1000	12.65 lbs.	5.74 kg
Shipping Weight:		
PS250	12.1 lbs.	5.49 kg
PS600	14.5 lbs.	6.58 kg
PS1000	14.5 lbs.	6.58 kg
Height:	15.5"	394.0 mm
Width:	12.5"	318.0 mm
Depth:	4.5"	115.0 mm

### HOW TO ORDER

- Specify model number
- Please refer to Model Number Index PS250 / PS600 / PS1000 beginning on page 375

### REPLACEMENT PARTS

<u>Description</u>	<u>Part Number</u>
12-volt, 12 amp-hour Battery (Model PS600)	K155190A
12-volt, 7 amp-hour Battery (Model PS250)	K155189A
PC Board (Model PS600)	K2001312A
PC Board (Model PS250)	K2001313A
120/240VAC Transformer	K120819A
PC Board (Model PS1000)	K2002013A



# VEHICULAR BACK-UP ALARMS

Models EBA and EPBA

## STATE OF THE ART, BACK-UP ALARMS

- Single and dual function models
- Dual function feature for selectable tone (EPBA)
- Impact resistance housing
- Universal mounting bracket included
- Low amp draw
- Sealed against moisture and contaminants
- Protected against voltage spikes
- State of the art technology and components

The Evacuator® back-up alarm offers superior reliability with exceptional warning power. Evacuator alarms utilize piezo-electric circuitry and solid-state components to minimize the effects of vibration and reduce amp draw. To seal out moisture and contaminants, the unique nickel-plated terminal inserts are hermetically sealed, and the housing is environmentally sealed.

The Evacuator Plus back-up alarm is the only alarm that includes a state-of-the-art dual function feature (patent pending). The dual function feature allows the alarm to produce two distinctly different tones by reversing the polarity of the wiring. Normal polarity produces a "Pulsed" tone, which is an intermittent signal that is primarily use for back-up warning. Reversed polarity produces a "Constant-On" tone, which is a continuous signal that can be used to signal motion such as the lifting of a truck platform or gate.

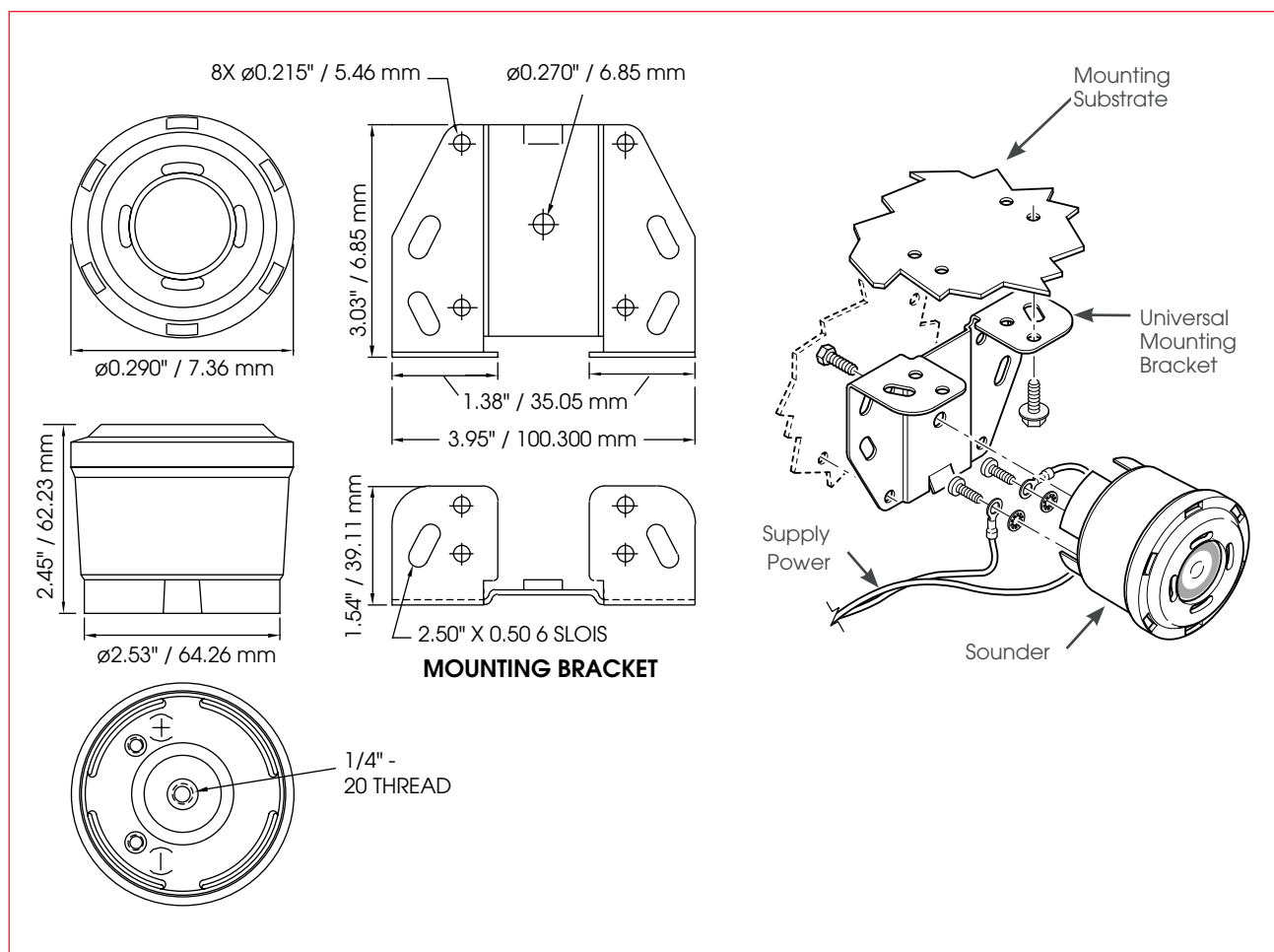
The alarm is designed for multi-volt operation and meets SAE and OSHA requirements for motor vehicles and material handling equipment. All models include a universal mounting bracket.

Motage	Voltage	Operating Current	Sound Output	Sound Frequency
EBA	12-24VDC	0.04 amps	97dB	2.35kHz
EPBA	9-48VDC	0.03 amps	97dB	2.4kHz





## VEHICULAR BACK-UP ALARMS (EBA/EPBA)



### SPECIFICATIONS

Operating Temperature:	-40°F to 165°F	-40°C to 74°C
Length:	2.9"	73.0 mm
Width:	2.9"	73.0 mm
Height:	2.4"	62.0 mm
Weight:	0.6 lbs.	0.3 kg
Shipping Weight:		
EBA	0.6 lbs.	0.3 kg
EPBA	0.6 lbs.	0.3 kg

### HOW TO ORDER

- Specify model
- Please refer to Model Number Index EBA/EPBA beginning on page 376





# Vehicular Back-up Alarm

## Model 252

### SIGNALS WHEN A VEHICLE IS BACKING-UP

- Operates within the 12VDC-48VDC range used in most vehicles
- Rugged weatherproof housing
- Solid-state, epoxy-sealed electronics
- Produces 97dB @ 4' (109dB @ 1m)
- Universal mounting
- Conforms to SAE J994 sound level Type C requirements
- Type 4X enclosure

Federal Signal's Model 252 back-up alarm is a solid state audible warning device enclosed in a weatherproof housing. The alarm produces a horn tone of 97dB at four feet (109dB at 1m) and sounds at approximately 60 times per minute with equal on and off pulses. Model 252 conforms to SAE (Society of Automotive Engineers) J994 Sound Level Type C.

Federal Signal's Model 252 housing is constructed of black glass-reinforced plastic and comes equipped with universal mountings for easy installation. When properly installed, this unit is weather-proof, dust-proof and not adversely affected by the steam cleaning of vehicles.

This rugged device is polarity protected and will operate within a range of 12VDC-48VDC.

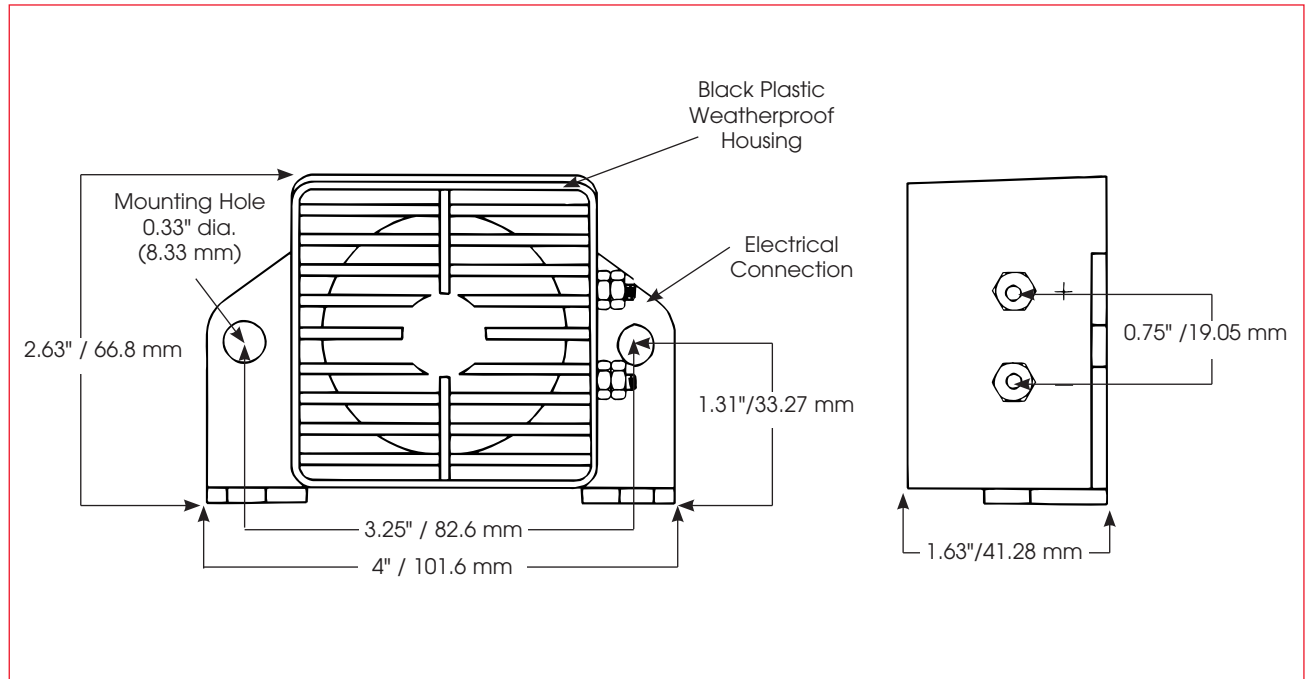
Model 252 is designed for use in a wide variety of vehicles that operate in populated areas — both indoors and out. This alarm is ideal for use on forklifts, tractors, waste disposal vehicles, dump trucks, earth moving equipment or any other vehicle that operates near people.

Federal Signal's Model 252 Vehicular Back-up Alarm is an economical life-safety device designed to prevent accidents.

Model	Voltage	Operating Current	Decibels @	
			4'	1m
252	12VDC-48VDC	0.20 amps	97	109



## BACK-UP ALARM (252)

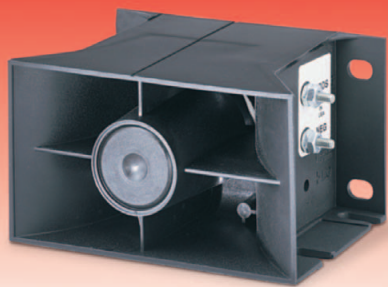


### SPECIFICATIONS

Operating Temperature:	-40°F to 167°F	-40°C to 75°C
Net Weight:	0.3 lbs.	7.62 kg
Shipping Weight:	0.4 lbs.	10.16 kg
Height:	2.63"	66.8 mm
Width:	4.0"	101.6 mm
Depth:	1.63"	41.28 mm

### HOW TO ORDER

- Specify model number and voltage
- Please refer to Model Number Index 252 beginning on page 376



# Vehicular Back-up Alarm

## Model 253

### AUTOMATICALLY ADJUSTS TO AMBIENT NOISE

- Operates on 12-48VDC power
- Universal mounting
- Produces 82dB - 107dB @ 4' (92dB - 120dB @ 1m)
- Type 4X enclosure
- UL Listed

Federal Signal's Model 253 is a unique backup alarm that samples the ambient noise levels surrounding the vehicle and adjusts its sound output automatically. The decibel output can vary from 82dB to 107dB @ 4 feet (92dB to 120dB @ 1m) when activated.

By "listening" to the surrounding sound levels, model 253 will continuously adjust the output to provide 10dB ( $\pm 4$ ) over ambient noise levels.

This self-adjusting vehicular alarm provides just the right level of audible signal required to warn employees of an approaching fork lift or tow motor.

This solid state device operates on 12-48VDC vehicle system voltage. The Model 253 emits sound at 80 pulses per minute. It is polarity protected and will not operate when incorrectly wired.

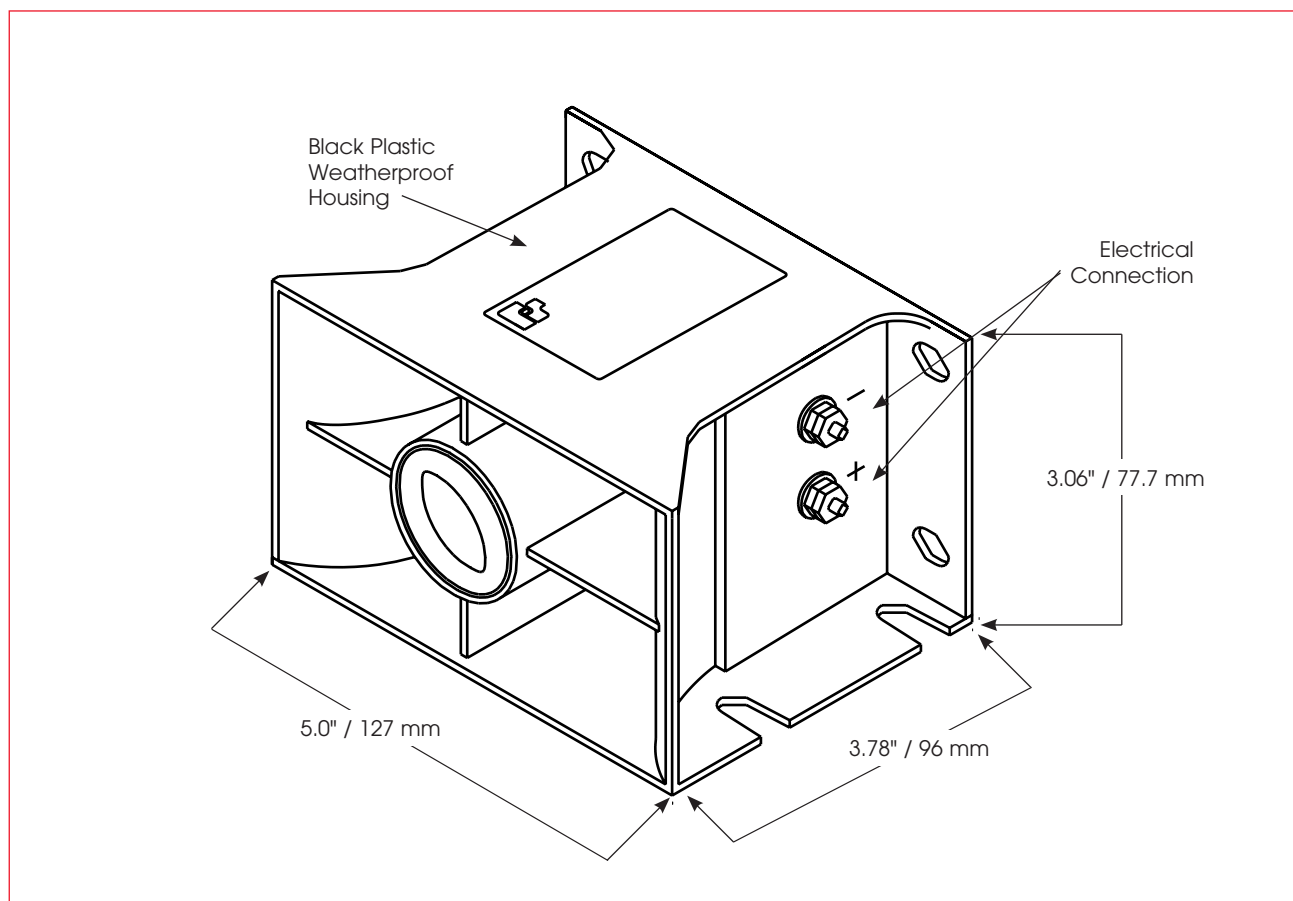
This backup alarm is completely sealed in a Type 4X housing. It complies with UL 583, recognized for use on Battery-Powered Industrial Trucks.

Federal Signal's Model 253 Backup Alarm operates as a "Smart" device, self-adjusting its sound output level to the decibel level necessary to be heard above current ambient noise levels.

Model	Voltage	Operating Current	Decibels @	
			4'	1m
253	12VDC-48VDC	0.25 amps	82-107	92-120



## BACK-UP ALARM (253)



### SPECIFICATIONS

Operating Temperature:	-40°F to 185°F	-40°C to 85°C
Net Weight:	1.44 lbs.	0.65 kg
Shipping Weight:	1.54 lbs.	0.7 kg
Height:	3.06"	77.7 mm
Width:	5.0"	127.0 mm
Depth:	3.78"	96.0 mm

### HOW TO ORDER

- Specify model number and voltage
- Please refer to Model Number Index 253 beginning on page 376



## ELECTRONIC SOUNDERS AND POWERED LOUDSPEAKERS FOR USE IN ATEX HAZARDOUS AREAS

- 8 watt, 104dBa output
- 15 watt, 107dBa output
- 25 watt, 116dBa output
- On-board choice of 15 tones
- Remote tone selection
- Dual cable entries
- Integrated DC and AC voltages
- Short horn version (8W)
- Approved for Zone 1 IIB and IIC
- Watertight to IP66/IP67

# Hazardous Area Sounder and Powered Loudspeaker

## Model ES Series Sounders and Powered Loudspeakers

Federal Signal's Model ES Series Sounders and Powered Loudspeakers are designed for rugged industrial applications where ATEX certification is required. The ES Series is comprised of two separate products that serve a variety of applications. First is a sounder that includes fifteen standard tones with a common power input that accepts an AC or DC power source. Once power is applied, a single tone may be selected through the use of a remote contact input, or all fifteen tones may be accessed independently by providing a binary string of information, specific to each tone. This allows a certain sound to match a specific alarm condition.

The second version of the ES Series is a powered loudspeaker. Once an AC or DC power source is applied, the powered loudspeaker is capable of amplifying a low-level audio signal, and reproducing it at 8, 15 or 25 watts, depending on the model selected. ES Series powered loudspeakers are the perfect option for ECHO Intercom systems, where ATEX approval is required.

The Model ES Series sounders and powered loudspeakers are available in three different configurations, from 8 watt to 25 watt, to provide an appropriate amount of sound for the ambient environment. To fine tune the product for each application, an internal volume adjustment potentiometer is provided.

Mounting is provided by a stainless-steel ratcheted mounting bracket that locks the sounder in position at a specific angle without slipping. The bottom surface of the mounting bracket also contains three mounting holes, to adapt to a variety of surfaces.

The ES Series is rated for IP66/67 through the use of a neoprene "O" ring seal. All exterior cast aluminum surfaces are finished in red powder coat paint and external hardware is manufactured from stainless steel to resist corrosion.

**ATEX**  

Model	Voltage	Operating Current	Equivalent Power
ES1-114 <sup>1</sup>	24VDC/120VAC/240VAC	950mA/210mA/125mA	8 watt
ES1-112 <sup>1</sup>	24VDC/120VAC/240VAC	950mA/210mA/125mA	15 watt
ES4-120 <sup>1</sup>	24VDC/120VAC/240VAC	950mA/210mA/125mA	25 watt
ES1-114 <sup>2</sup>	24VDC/120VAC/240VAC	500mA/125mA/90mA	8 watt
ES1-112 <sup>2</sup>	24VDC/120VAC/240VAC	500mA/125mA/90mA	15 watt
ES5-120 <sup>2</sup>	24VDC	1200mA	25 watt
ES5-120 <sup>2</sup>	120VAC	400mA	25 watt
ES5-120 <sup>2</sup>	240VAC	210mA	25 watt

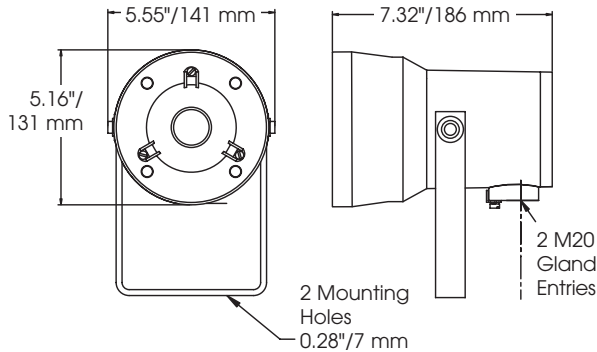
<sup>1</sup> ES-Series Sounder

<sup>2</sup> ES-Series Powered Loudspeaker

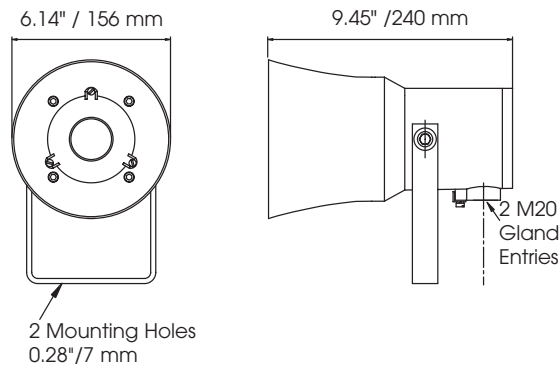


## HAZARDOUS AREA SOUNDERS AND POWERED LOUDSPEAKERS (ES)

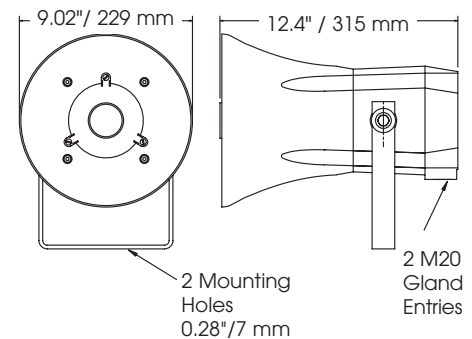
### 8W



### 15W



### 25W



## SPECIFICATIONS

Operating Voltages:	24VDC, 110/120VAC, 220/240VAC	Termination:	For 1.5mm <sup>2</sup> conductors
Factory Default Setting:	240VAC	Net Weight:	
Type:	8/15 Watt dual entry, 25 Watt dual entry	8W	3.0kg (6.6 lbs)
Material:	Aluminum Alloy LM6 (marine grade)	15W	3.2kg (7.1 lbs)
Colour:	Signal red 537 to BS381C (epoxy powder coated semi-gloss)	25W	6.4kg (14.1 lbs)
Mounting:	Stainless steel bracket (not painted)	Shipping Dimensions:	25 x 23 x 28cm <sup>(1)</sup> 32 x 30 x 37cm <sup>(2)</sup>
Output:		Certificate Number <sup>1</sup> :	
8W Short Horn Series IIB	104dBa @ 1m (1kHz)		Baseefa03ATEX0688X, II 2 G EExd IIB T4...T6
8W Short Horn Series IIC	100dBa @ 1m (1kHz)		Baseefa03ATEX0689X, II 2 G EExd IIC T4...T6
15W Series IIB	107dBa @ 1m (1kHz)	Ingress Protection <sup>1</sup> :	IP67
15W Series IIC	103dBa @ 1m (1kHz)	Ingress Protection <sup>2</sup> :	IP66 and IP67
25W Series	116dBa @ 1m (1kHz)	Certificate Number <sup>2</sup> :	
Cable Entries (bottom):	2 x M20		Nemko 05ATEX1036, II 2 G EExd IIB T4...T6
(Supplied with 1 x EEx stopping plug)			
Operating Temperature Range:	-20°C to +40°C (T6) -20°C to +55°C (T5) -20°C to +70°C (T4)		

<sup>1</sup> 8W/15W

<sup>2</sup> 25W

**Notes:** Audio input user selectable.  
Available inputs are 0.8V, 1.5V and 2.7V.

## HOW TO ORDER

- Contact Factory for Specification Assistance



## ELECTRONIC SOUNDERS AND POWERED LOUDSPEAKERS FOR USE IN MARINE AND INDUSTRIAL APPLICATIONS

- 8 watt, 114dBa @ 1m output
- 15 watt, 117dBa @ 1m output
- 25 watt, 123dBa @ 1m output
- On-board choice of 15 tones
- Remote tone selection
- Dual cable entries
- Integrated DC and AC voltages
- Short horn version (8W)
- Watertight to IP66/IP67

# Marine/Industrial Sounders

## Model MS Series Sounders and Powered Loudspeakers

Federal Signal's model MS Series Sounders and Powered Loudspeakers are designed for rugged industrial applications where CE certification is required. The MS Series is comprised of two separate products that serve a variety of applications. First is a sounder that includes fifteen standard tones with a common power input that accepts an AC or DC power source. Once power is applied, a single tone may be selected through the use of a remote contact input, or all fifteen tones may be accessed independently by providing a binary string of information, specific to each tone. This allows a certain sound to match a specific alarm condition.

The second version of the MS Series is a powered loudspeaker. Once an AC or DC power source is applied, the powered loudspeaker is capable of amplifying a low-level audio signal, and reproducing it at 8, 15 or 25 watts, depending on the model selected. MS Series Powered Loudspeakers are the perfect option for ECHO Intercom systems, where CE approval is required.

The Model MS Series sounders and powered loudspeakers are available in three different configurations, from 8 watt to 25 watt, to provide an appropriate amount of sound for the ambient environment. To fine tune the product for each application, an internal volume adjustment potentiometer is provided.

Mounting is provided by a stainless-steel ratcheted mounting bracket that locks the sounder in position at a specific angle without slipping. The bottom surface of the mounting bracket also contains three mounting holes, to adapt to a variety of surfaces.

The MS Series is rated for IP66/67 through the use of a neoprene "O" ring seal. All exterior cast aluminum surfaces are finished in gray powder coat paint and external hardware is manufactured from stainless steel to resist corrosion.



Model	Voltage	Operating Current	Equivalent Power
<b>MS1<sup>1</sup></b>	24VDC/120VAC/240VAC	950mA/210mA/125mA	8 watt
<b>MS1-112<sup>1</sup></b>	24VDC/120VAC/240VAC	950mA/210mA/125mA	15 watt
<b>MS4-120<sup>1</sup></b>	24VDC/120VAC/240VAC	950mA/210mA/125mA	25 watt
<b>MS1-114-14<sup>2</sup></b>	24VDC/120VAC/240VAC	500mA/125mA/90mA	8 watt
<b>MS1-112-14<sup>2</sup></b>	24VDC/120VAC/240VAC	500mA/125mA/90mA	15 watt
<b>MS5-120-EB<sup>2</sup></b>	24VDC	1200mA	25 watt
<b>MS5-120-EL<sup>2</sup></b>	120VAC	400mA	25 watt
<b>MS5-120-EM<sup>2</sup></b>	240VAC	210mA	25 watt

<sup>1</sup> MS-Series Sounder

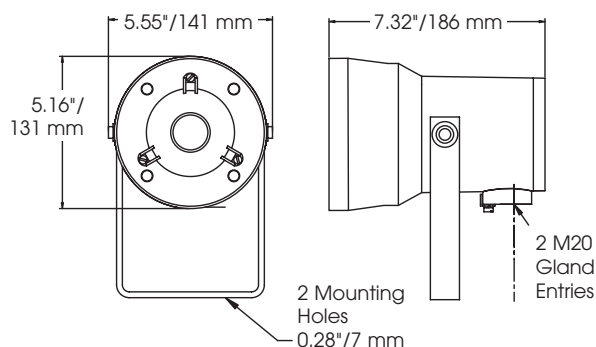
<sup>2</sup> MS-Series Powered Loudspeaker



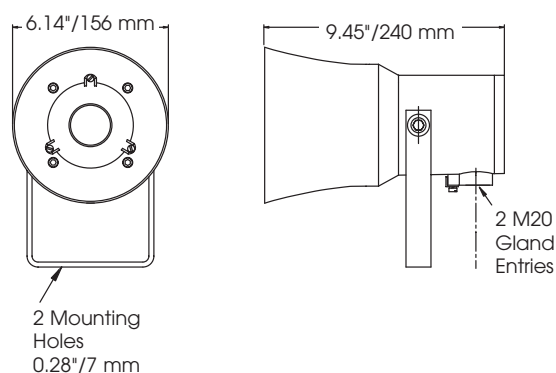


## HAZARDOUS AREA SOUNDERS AND POWERED LOUDSPEAKERS (MS)

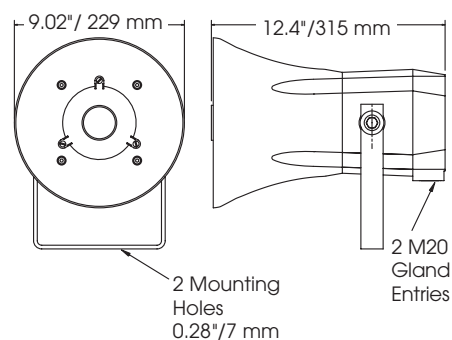
### 8W



### 15W



### 25W



## SPECIFICATIONS

Operating Voltages:	24VDC, 110/120VAC, 220/240VAC	Termination:	For 1.5mm² conductors	
Factory Default Setting:	240VAC	Net Weight:		
Type:	8/15 Watt dual entry, 25 Watt dual entry	8W	6.6 lbs.	3.0kg
Material:	Aluminum Alloy LM6 (marine grade)	15W	7.1 lbs.	3.2kg
Color:	Grey to RAL7035	25W	14.1 lbs.	6.4kg
	(epoxy powder coated semi-gloss)	Shipping Dimensions:		
Mounting:	Stainless steel bracket (not painted)	8W	25 x 23 x 28cm	
Output:		25W	32 x 30 x 37cm	
8W Short Horn	114dBa @ 1m (1kHz)	Ingress Protection¹:	IP67	
15W	117dBa @ 1m (1kHz)	Ingress Protection²:	IP66 and IP67	
25W	123dBa @1m (1kHz)			
Cable Entries (bottom):	2 x M20			
(Supplied with 1 x EEx stopping plug)		¹ 8W/15W		
Operating Temperature Range:	-20°C to 70°C	² 25W		

<sup>1</sup> 8W/15W

<sup>2</sup> 25W

**Notes:** Audio input user selectable.  
Available inputs are 0.8V, 1.5V and 2.7V.

## HOW TO ORDER

- Contact Factory for Specification Assistance



# Intrinsically Safe LED Visual Status Indicator

## Model WVL-IS

### FEATURES:

- Input overload and reverse current protection
- Fresnel lens optimizes LED effectiveness

Model WVL-IS is a compact status indicator with an array of six high output LED's. Approvals include ATEX and IECEx for Zone 0 applications and FM approval for Class I Division 1 and Class I Zone 0 applications.

The WVL-IS is suitable for all intrinsically safe signalling applications including fire, security and process control.

### APPROVALS:

- ATEX certificate: Sira10ATEX2102X  
EN 60079-0 : 2006      EN 60079-11 : 2007  
EN 60079-26 : 2007
- IECEx certificate: IECEx SIR 10.0046X  
IEC 60079-0 : 2007      IEC 60079-11 : 2006  
IEC 60079-26 : 2006
- FM approved  
Class 3600 1998      Class 3610 1999  
Class 3810 2005

Model	Voltage	Voltage Range	Operating Current
WVL-IS	24VDC	16-28VDC	25mA

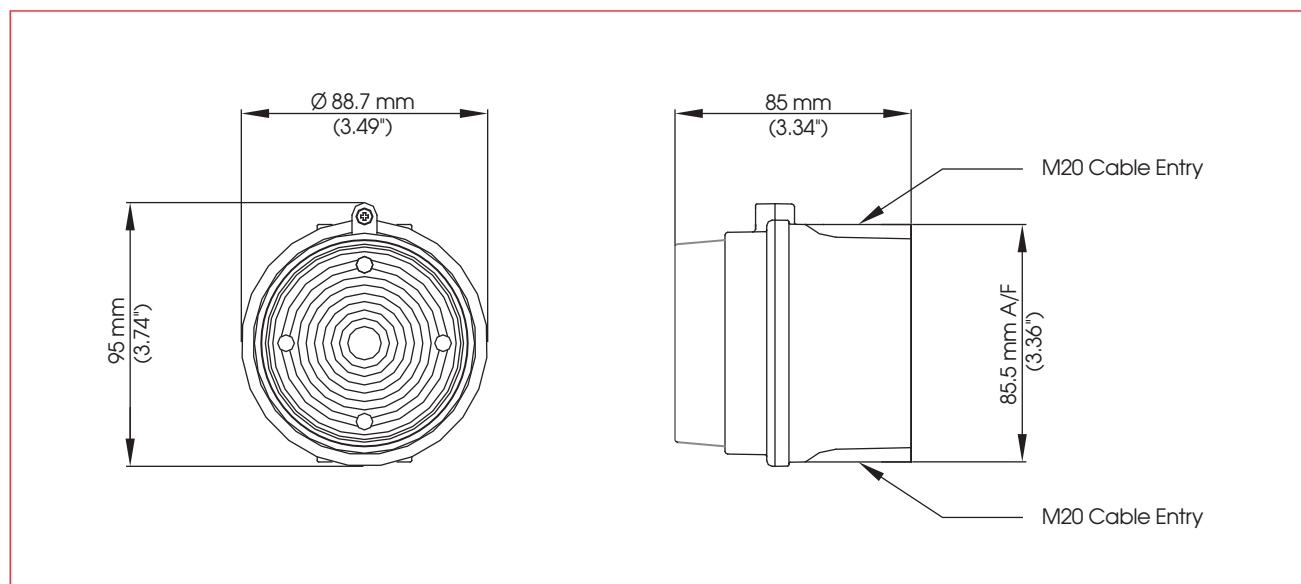
### HOW TO ORDER

#### WVL-IS - A

MODEL NUMBER	LENS COLOR
<b>WVL-IS</b> Intrinsically Safe LED Visual Status Indicator	<b>A</b> - Amber <b>B</b> - Blue <b>C</b> - Clear <b>G</b> - Green <b>R</b> - Red



## INTRINSICALLY SAFE LED VISUAL STATUS INDICATOR (WVL-IS)



### SPECIFICATIONS

ATEX / IECEx / FM:	II 1G Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +60°C) IS Class I, Zone 0, AEx ia IIC T4 IS Class I, Division 1, Groups A, B, C, D	
Light source:	Array of 6 high intensity LEDs	
LED colors:	Amber, Blue, Clear, Green & Red	
Flash modes:	Double flash at 2Hz and 1Hz	
Voltage:	16-28VDC via Zener barrier or galvanic isolator	
Current:	25mA typical when powered from 24V supply via 28V 300 Ohm Zener barrier	
Ingress protection:	IP65	
Rating:	Continuous	
Housing material:	UL94V0 & 5VA FR ABS & PC	
Housing color:	RAL3000 Red	
Fixings:	Stainless Steel	
Cable entries:	2 x M20 clearance gland knockouts. Custom configurations also available.	
Terminals:	0.001 to 0.098"	0.5 to 2.5mm <sup>2</sup>
Operating temp:	-104°F to +140°F	-40°C to +60°C
Storage temp:	-104°F to +158°F	-40°C to +70°C
Relative humidity:	90% at 68°F	90% at 20°C
Product weight:	0.20Kg	
Shipping weight:	0.35Kg	



Also available as a combined alarm sounder and LED beacon the WAV-IS unit.

May be powered from any certified Zener barrier or galvanic isolator whose output parameters do not exceed:

U<sub>o</sub>: 28VDC

I<sub>o</sub>: 660mA

P<sub>o</sub>: 1.2W



# Intrinsically Safe LED Audible Visual Status Indicator

## Model WAV-IS

### FEATURES:

- Input overload and reverse current protection
- Auto synchronised sound output
- Fresnel lens optimizes LED effectiveness
- Available with custom tone configurations and frequencies

Model WAV-IS is a compact combined 100dB(A) alarm sounder and LED beacon - only one Zener barrier or galvanic isolator required to run both sounder & beacon or alternatively the unit can be operated as individual signals.

Approvals include ATEX and IECEx for Zone 0 applications and FM approval for Class I Division 1 and Class I Zone 0 applications.

### APPROVALS:

- ATEX certificate: Sira10ATEX2102X  
EN 60079-0 : 2006      EN 60079-11 : 2007  
EN 60079-26 : 2007
- IECEx certificate: IECEx SIR 06.0046X  
IEC 60079-0 : 2007      IEC 60079-11 : 2006  
IEC 60079-26 : 2006
- FM approved:  
Class 3600 1998      Class 3610 1999  
Class 3810 2005

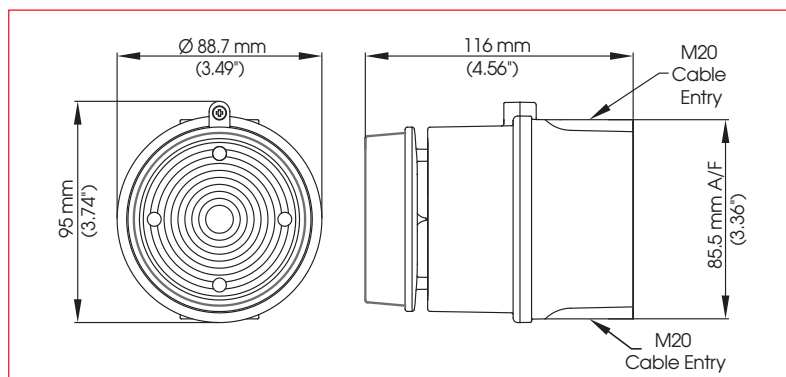
Model	Voltage	Voltage Range	Operating Current
WAV-IS	24VDC	16-28VDC	30mA

### HOW TO ORDER

WAV-IS - A	
MODEL	LENS COLOR
WAV-IS Intrinsically Safe LED Audible Visual Status Indicator	A - Amber B - Blue C - Clear G - Green R - Red



## INTRINSICALLY SAFE LED AUDIBLE VISUAL STATUS INDICATOR (WAV-IS)



Installation (Combined or Sounder only): Zener barrier or galvanic isolator with output parameters not exceeding: Uo: 28vdc Io: 93mA Po: 660mW

Installation (Beacon only): Zener barrier or galvanic isolator with output parameters not exceeding: Uo: 28vdc Io: 660mA Po: 1.2W

### SPECIFICATIONS

ATEX / IECEx / FM: II 1G Ex ia IIC T4 Ga  
 (-40°C ≤ Ta ≤ +60°C)  
 IS Class I, Division 1, Groups A, B, C, D  
 IS Class I, Zone 0, AEx ia IIC T4

#### ALARM SOUNDER:

Nominal output: 100dB(A) @ 1m +/- 3dB - Tone 2\*  
 No. of tones: 49 (UK00A/PFEER compliant)  
 No. of stages: 3  
 Volume control: Max. 100dB(A);  
 Min. 90dB(A) - Tone 2

#### LED BEACON:

Light source: Array of 6 high intensity LEDs  
 LED colors: Amber, Blue, Clear, Green & Red  
 Flash modes: Double flash at 2Hz and 1Hz

#### GENERAL:

Voltage: 16-28VDC via Zener barrier or galvanic isolator  
 Combined current: Approx: 30mA typical when powered from 24v supply via 28v 300 Ohm Zener barrier.  
 Ingress protection: IP65  
 Rating: Continuous  
 Housing material: UL94V0 & 5VA FR ABS & PC  
 Housing color: RAL3000 Red  
 Fixings: Stainless Steel  
 Cable entries: 2 x M20 clearance gland knockouts. Custom configurations also available.  
 Terminals: 0.001 to 0.098" 0.5 to 2.5mm²  
 Operating temp: -104°F to +140°F -40°C to +60°C  
 Storage temp: -104°F to +158°F -40°C to +70°C  
 Relative humidity: 90% at 68°F 90% at 20°C  
 Product weight: 0.30Kg  
 Shipping weight: 0.45Kg

### TONES

Stage	Frequency Description	Stage 2	Stage 3
Tone 1	340 Hz Continuous	Tone 2	Tone 5
Tone 2	800/1000Hz @ 0.25 sec Alternating - BS5839 Alarm tone	Tone 17	Tone 5
Tone 3	500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop - NEN 2575:2000	Tone 2	Tone 5
Tone 4	800/1000Hz @ 1Hz Sweeping	Tone 6	Tone 5
Tone 5	2400Hz Continuous	Tone 3	Tone 20
Tone 6	2400/2900Hz @ 7Hz Sweeping	Tone 7	Tone 5
Tone 7	2400/2900Hz @ 1Hz Sweeping	Tone 10	Tone 5
Tone 8	500/1200/500Hz @ 0.3Hz Sweeping	Tone 2	Tone 5
Tone 9	1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P.	Tone 15	Tone 2
Tone 10	2400/2900Hz @ 2Hz Alternating	Tone 7	Tone 5
Tone 11	1000Hz @ 1Hz Intermittent	Tone 2	Tone 5
Tone 12	800/1000Hz @ 0.875Hz Alternating	Tone 4	Tone 5
Tone 13	2400Hz @ 1Hz Intermittent	Tone 15	Tone 5
Tone 14	800Hz 0.25sec on, 1 sec off Intermittent	Tone 4	Tone 5
Tone 15	800Hz Continuous	Tone 2	Tone 5
Tone 16	660Hz 150mS on, 150mS off Intermittent	Tone 18	Tone 5
Tone 17	544Hz (100mS)/440Hz (400mS) - AFNOR NF S 32-001	Tone 2	Tone 27
Tone 18	660Hz 1.8sec on, 1.8sec off Intermittent	Tone 2	Tone 5
Tone 19	1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - AFNOR NFC48-265	Tone 2	Tone 5
Tone 20	660Hz Continuous	Tone 2	Tone 5
Tone 21	554Hz/440Hz @ 1Hz Alternating	Tone 2	Tone 5
Tone 22	544Hz @ 0.875 sec. Intermittent	Tone 2	Tone 5
Tone 23	800Hz @ 2Hz Intermittent	Tone 6	Tone 5
Tone 24	800/1000Hz @ 50Hz Sweeping	Tone 29	Tone 5
Tone 25	2400/2900Hz @ 50Hz Sweeping	Tone 29	Tone 5
Tone 26	Bell	Tone 2	Tone 15
Tone 27	554Hz Continuous	Tone 26	Tone 5
Tone 28	440Hz Continuous	Tone 2	Tone 5
Tone 29	800/1000Hz @ 7Hz Sweeping	Tone 7	Tone 5
Tone 30	300Hz Continuous	Tone 2	Tone 5
Tone 31	660/1200Hz @ 1Hz Sweeping	Tone 26	Tone 5
Tone 32	Two tone chime.	Tone 26	Tone 15
Tone 33	745Hz @ 1Hz Intermittent	Tone 2	Tone 5
Tone 34	1000 & 2000Hz @ 0.5 sec Alternating - Singapore	Tone 38	Tone 45
Tone 35	420Hz @ 0.625 sec Australian Alert	Tone 36	Tone 5
Tone 36	500-1200Hz 3.75sec /0.25sec. Australian Evac.	Tone 35	Tone 5
Tone 37	1000Hz Continuous - PFEER Toxic Gas	Tone 9	Tone 45
Tone 38	2000Hz Continuous	Tone 34	Tone 45
Tone 39	800Hz 0.25sec on, 1 sec off Intermittent	Tone 23	Tone 17
Tone 40	544Hz (100mS)/440Hz (400mS) - NF S 32-001	Tone 31	Tone 17
Tone 41	Motor Siren - slow rise to 1200 Hz	Tone 2	Tone 5
Tone 42	Motor Siren - slow rise to 800 Hz	Tone 2	Tone 5
Tone 43	1200 Hz Continuous	Tone 2	Tone 5
Tone 44	Motor Siren - slow rise to 2400 Hz	Tone 2	Tone 5
Tone 45	1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm	Tone 38	Tone 34
Tone 46	1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P.	Tone 47	Tone 37
Tone 47	1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm	Tone 46	Tone 37
Tone 48	420Hz @ 0.625 sec Australian Alert	Tone 49	Tone 5
Tone 49	500-1200Hz 3.75sec /0.25sec. Australian Evac.	Tone 26	Tone 37



# Intrinsically Safe Sounder

## Model WAS-IS

### FEATURES:

- Input overload and reverse current protection
- Auto synchronised sound output
- Available with custom tone configurations and frequencies.

Model WAS-IS is a compact, 100dB(A) alarm sounder. Approvals include ATEX and IECEx for Zone 0 applications and FM approval for Class I Division 1 and Class I Zone 0 applications.

The WAS-IS is suitable for all intrinsically safe signalling applications including fire, security and process control.

### APPROVALS:

- ATEX certificate: Sira10ATEX2102X  
EN 60079-0 : 2006      EN 60079-11 : 2007  
EN 60079-26 : 2007
- IECEx certificate: IECEx SIR 10.0046X  
IEC 60079-0 : 2007      IEC 60079-11 : 2006  
IEC 60079-26 : 2006
- FM approved  
Class 3600 1998      Class 3610 1999  
Class 3810 2005
- VdS approved to EN54-3 (CPD 89/106/EEC).

Model	Voltage	Voltage Range	Operating Current
WAS-IS	24VDC	16-28VDC	25mA

### HOW TO ORDER

#### WAS-IS

#### MODEL

**WAS-IS**  
Intrinsically  
Safe  
Sounder

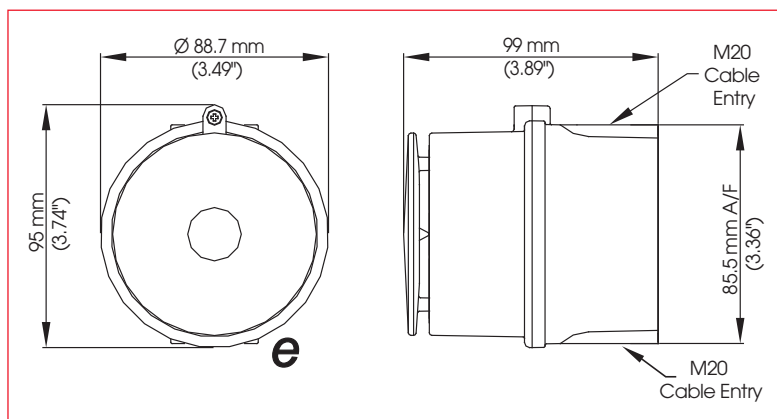


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G207130



## INTRINSICALLY SAFE SOUNDER (WAS-IS)



May be powered from any certified Zener barrier or galvanic isolator whose output parameters do not exceed:

Uo: 28VDC

Io: 93mA

Po: 660mW

Also available as a combined alarm sounder and LED beacon the WAV-IS unit.



### SPECIFICATIONS

ATEX / IECEx / FM: II 1G Ex ia IIC T4 Ga  
(-40°C ≤ Ta ≤ +60°C)  
IS Class I, Zone 0, AEx ia IIC T4  
IS Class I, Division 1, Groups A, B, C, D

Nominal output: 100dB(A) @ 1m +/- 3dB - Tone 2\*

No. of tones: 49 (UK00A/PFEER compliant)

No. of stages: 3

Volume control: Max. 100dB(A); Min. 90dB(A) - Tone 2

Voltage: 16-28vdc via Zener barrier or galvanic isolator

Current: 25mA typical when powered from 24V supply via 28v 300 Ohm Zener barrier

Ingress protection: IP65

Rating: Continuous

Housing material: UL94V0 & 5VA FR ABS

Housing color: RAL3000 Red

Fixings: Stainless Steel

Cable entries: 2 x M20 clearance gland knockouts. Custom configurations also available.

Terminals: 0.001 to 0.098" 0.5 to 2.5mm²

Operating temp: -104°F to +140°F -40°C to +60°C

Storage temp: -104°F to +158°F -40°C to +70°C

Relative humidity: 90% at 68°F 90% at 20°C

Product weight: 0.23 Kg

Shipping weight: 0.38 Kg

### TONES

Stage	Frequency Description	Stage 2	Stage 3
Tone 1	340 Hz Continuous	Tone 2	Tone 5
Tone 2	800/1000Hz @ 0.25 sec Alternating - BS5839 Alarm tone	Tone 17	Tone 5
Tone 3	500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop - NEN 2575:2000	Tone 2	Tone 5
Tone 4	800/1000Hz @ 1Hz Sweeping	Tone 6	Tone 5
Tone 5	2400Hz Continuous	Tone 3	Tone 20
Tone 6	2400/2900Hz @ 7Hz Sweeping	Tone 7	Tone 5
Tone 7	2400/2900Hz @ 1Hz Sweeping	Tone 10	Tone 5
Tone 8	500/1200/500Hz @ 0.3Hz Sweeping	Tone 2	Tone 5
Tone 9	1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P.	Tone 15	Tone 2
Tone 10	2400/2900Hz @ 2Hz Alternating	Tone 7	Tone 5
Tone 11	1000Hz @ 1Hz Intermittent	Tone 2	Tone 5
Tone 12	800/1000Hz @ 0.875Hz Alternating	Tone 4	Tone 5
Tone 13	2400Hz @ 1Hz Intermittent	Tone 15	Tone 5
Tone 14	800Hz 0.25sec on, 1 sec off Intermittent	Tone 4	Tone 5
Tone 15	800Hz Continuous	Tone 2	Tone 5
Tone 16	660Hz 150mS on, 150mS off Intermittent	Tone 18	Tone 5
Tone 17	544Hz (100mS)/440Hz (400mS) - AFNOR NF S 32-001	Tone 2	Tone 27
Tone 18	660Hz 1.8sec on, 1.8sec off Intermittent	Tone 2	Tone 5
Tone 19	1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - AFNOR NFC48-265	Tone 2	Tone 5
Tone 20	660Hz Continuous	Tone 2	Tone 5
Tone 21	554Hz/440Hz @ 1Hz Alternating	Tone 2	Tone 5
Tone 22	544Hz @ 0.875 sec. Intermittent	Tone 2	Tone 5
Tone 23	800Hz @ 2Hz Intermittent	Tone 6	Tone 5
Tone 24	800/1000Hz @ 50Hz Sweeping	Tone 29	Tone 5
Tone 25	2400/2900Hz @ 50Hz Sweeping	Tone 29	Tone 5
Tone 26	Bell	Tone 2	Tone 15
Tone 27	554Hz Continuous	Tone 26	Tone 5
Tone 28	440Hz Continuous	Tone 2	Tone 5
Tone 29	800/1000Hz @ 7Hz Sweeping	Tone 7	Tone 5
Tone 30	300Hz Continuous	Tone 2	Tone 5
Tone 31	660/1200Hz @ 1Hz Sweeping	Tone 26	Tone 5
Tone 32	Two tone chime.	Tone 26	Tone 15
Tone 33	745Hz @ 1Hz Intermittent	Tone 2	Tone 5
Tone 34	1000 & 2000Hz @ 0.5 sec Alternating - Singapore	Tone 38	Tone 45
Tone 35	420Hz @ 0.625 sec Australian Alert	Tone 36	Tone 5
Tone 36	500-1200Hz 3.75sec /0.25sec. Australian Evac.	Tone 35	Tone 5
Tone 37	1000Hz Continuous - PFEER Toxic Gas	Tone 9	Tone 45
Tone 38	2000Hz Continuous	Tone 34	Tone 45
Tone 39	800Hz 0.25sec on, 1 sec off Intermittent	Tone 23	Tone 17
Tone 40	544Hz (100mS)/440Hz (400mS) - NF S 32-001	Tone 31	Tone 17
Tone 41	Motor Siren - slow rise to 1200 Hz	Tone 2	Tone 5
Tone 42	Motor Siren - slow rise to 800 Hz	Tone 2	Tone 5
Tone 43	1200 Hz Continuous	Tone 2	Tone 5
Tone 44	Motor Siren - slow rise to 2400 Hz	Tone 2	Tone 5
Tone 45	1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm	Tone 38	Tone 34
Tone 46	1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P.	Tone 47	Tone 37
Tone 47	1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm	Tone 46	Tone 37
Tone 48	420Hz @ 0.625 sec Australian Alert	Tone 49	Tone 5
Tone 49	500-1200Hz 3.75sec /0.25sec. Australian Evac.	Tone 26	Tone 37

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