

Emergency Systems

“When disaster strikes, whether it’s in a single building or across a sprawling complex, we need to communicate with those affected quickly, efficiently and accurately.

Warning and Notification Systems from Edwards help us do just that.”



Product Index

Ideal for overcoming high levels of industrial noise, Edwards provides outdoor warning and communication systems that provide high intensity warning signals over a wide area. Offering industrial and commercial solutions for mass notification, Edwards Warning and Notification Systems are the premier signaling choice.

Warning and Notification Systems



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Warning and Notification Systems

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Warning and Notification Systems System Design Criteria

The Edwards Difference

Since 1872 Edwards has been dedicated to producing the finest Signaling Equipment available. Edwards Warning Systems are shaped by continuous quality, performance, durability and reliability. Each siren is hand built in the United States by signaling professionals and then tested to exacting standards. We use only American made, industrial quality, continuous duty motors, for the ultimate in reliability. Edwards sirens are rated by the Nuclear Regulatory Commission at 53 years of trouble free use.

Edwards decoders are field programmable and field serviceable and Edwards will work with your local service technicians to ensure any repairs are completed correctly. All siren parts are made from non-corrosive metals and are powder-coated to provide additional protection from the elements. Sound projection from all but one of Edwards sirens is Omni-Directional resulting in full decibel output in all directions at all times.

The OMNI-Directional Advantage

It is a common misconception to directly compare the dB rating of a rotating siren with that of an Omni-Directional siren. Because the siren rotates, it spends much of its on-time facing away from any given point, where the dB level has dropped. When a siren survey is done for a given area, the siren's output is considered, and a circle is drawn on a map to estimate the area that the siren should cover. However, with a rotating beam type siren, the area is covered only 25% of the on-time by the maximum beam output, and 75% of the on-time by a lesser beam output. Therefore, the rotating beam siren presents its maximum output to your ear only 1/4 of the time.

Furthermore, the survey map does not consider the effect that the rotation has on the sound of the signal to the human ear. The effect of the sound rotating toward, and then away from any given point causes a "peaking" and "ebbing" of the sound - and a potentially dangerous problem. Imagine for a moment that your town uses a series of signals to warn its populace: one steady blast for a tornado, and a warbling tone for "all clear." Now consider what the rotating siren's "steady" tone will sound like with its peaking and ebbing effect. The result can be a very confused populace and a resulting disastrous situation.

Edwards Omni-Directional sirens project the same decibel level in all directions simultaneously. They provide 360 degrees of coverage and, if you use multiple sirens, there will not be the distortion that occurs with a rotating siren.

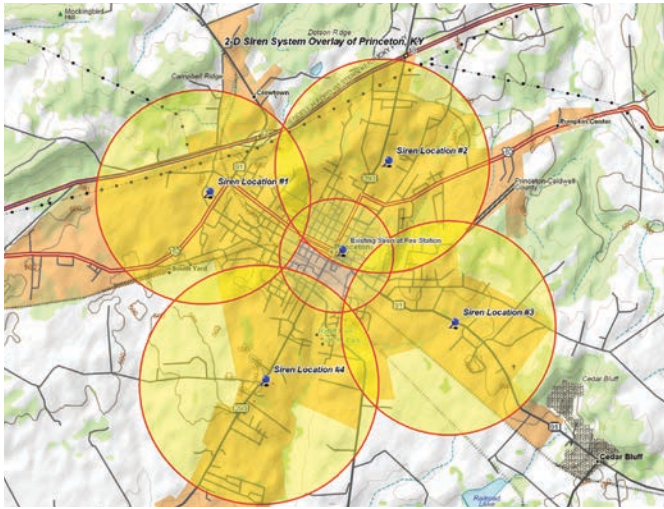
Custom Siren Survey

At Edwards, we specialize in designing custom siren systems to best fit any given project. Our no charge, no obligation Siren Survey will take away the guesswork. Just call and we will connect you to a site designer who will produce a scale, topographical map of your project, complete with suggested siren placement, siren models, activation equipment, and estimated costs. Let us know what you want to do and Edwards will help make your project a reality. See Map 1 and Map 2 on the following page for examples of 2-D and 3-D project maps.



Omni-Directional Warning Siren
8 Horn, Equal Length, Single Row
EWS-V3 and EWS-V10 Series

Siren Activation Systems



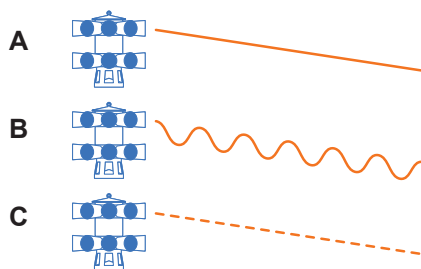
Map 1: 2-D Image for topographical study



Map 2: 3-D Image for topographical study

Examples Of Standard Siren Output Signals:

- A. Alert** (Civil Defense), Steady blast for three minutes
- B. Attack** (Civil Defense), Warbling signal for three minutes
- C. Fire** Typically 15 sec. on, 15 sec. off; bursts for three minutes but is field programmable
- D. Cancel** Stops all functions (all timing is adjustable)



Radio Activation:

VHF-Band Decoder (150-174 MHz)

UHF-Band Decoder (450-470 MHz)

Available with the following pre-programmed signal packages
(please see “Standard Siren Output Signals” above)

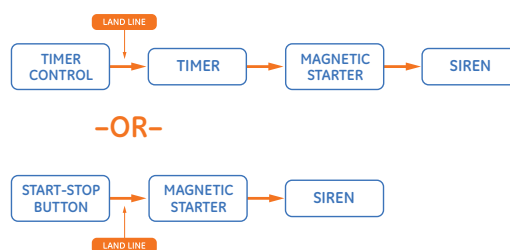
1. A, B, C, D
2. A, B, D
3. C, D



4. CHOOSE ONE ONLY—A, B, OR C

Land Line Activation (Used to Achieve Siren Timing Functions Without Radio Equipment)

GEN-1	Multi-function Push Button controller
Model EWS-SWM	Start button (momentary) (operator controlled)
Model EWS-SW	Start/Stop button (on & off functions only) (operator controlled)
Model EWS-CL	Clock. Use alone or in conjunction with another activation system. Allows (for example) a daily blast at noon, or blasts at 7 a.m., noon, and 5 p.m. Field programmable, activates magnetic starter directly, and acts independently from other activation systems.



Outdoor Warning Systems

Omni Directional

EWS Series

The EWS Series feature a non-corrosive, cast aluminum fan that is powered by a 5 Hp motor in your choice of single or three-phase power. All exposed siren components are made of zinc plated, steel construction, which are "powder coated" for a durable finish. The fan and housing are both made of non-corrosive cast aluminum.

The EWS-V2 Series uses projectors to distribute and organize sound. Rated at 109 dB, the EWS-V2 is an omni-directional siren that produces continuous 360° coverage.

Features and Specifications

- Omni-directional
- Continuous duty motor
- Port tone frequency 460 cps
- Skirted horn design - **EWS-V1 Series**
- 8 horn, equal length, single row - **EWS-V2 Series**
- Powder coated exterior
- 5 Hp single phase or three phase motor



EWS-V1



EWS-V2

Ordering Information

Description	Cat. No.	Operating Voltage ¹	Current		Estimated Sound Circle	dB at 100ft.
			Starting	Running		
Skirted Horn - Three Phase Motor	EWS-V1-3	208/230/460V AC	66 A ²	12 A ²	3200 ft. (975.4m) continuous	107
Skirted Horn - Single Phase Motor	EWS-V1	230V AC	127 A	23 A	3200 ft. (975.4m) continuous	107
8 Horn - Three Phase Motor	EWS-V2-3	208/230/460V AC	66 A ²	12 A ²	4000 ft. (1219.2m) continuous	109
8 Horn - Single Phase Motor	EWS-V2	230V AC	127 A	23 A	4000 ft. (1219.2m) continuous	109

¹ AC voltage frequency is 60 Hz

² Current measured at 208/230 volts



Outdoor Warning Systems

Omni Directional

EWS Series

Accessories	
Description	Cat. No.
Remote Magnetic Motor Starter - 3 Phase	EWS-MS-V1-3 (Discontinued Replaced by EWS-MS-V1-3-W)
Remote Magnetic Motor Starter - 3 Phase Weather Resistant	EWS-MS-V1-3-W
Remote Magnetic Motor Starter - 1 Phase	EWS-MS-V1 (Discontinued Replaced by EWS-MS-V1-W)
Remote Magnetic Motor Starter - 1 Phase Weather Resistant	EWS-MS-V1-W
Multi-function Push Button Controller	GEN-1
Multi-function Radio Controller	GEN-3
Clock Network, 100V AC Input	EWS-CL
Radio Control - Hand Held Encoder	EWS-ENC-H
Radio Control - Desk Mount Encoder	EWS-ENC-D
Utility Pole Mounting Bracket - Powder Coat Finish	EWS-PMB
Utility Pole Mounting Bracket - Stainless Steel Finish	EWS-PMB-SS

Weights and Dimensions				
Cat. No.	Approx. Shipping Weight (lb.)	Dimensions		
		Max. Diameter (in./cm.)	Max. Height (in./cm.)	Max. Mounting Base (in./cm.)
EWS-V1-3	350	34/86.4	34/86.4	19/48.3
EWS-V1	350	34/86.4	34/86.4	19/48.3
EWS-V2-3	350	34/86.4	34/86.4	19/48.3
EWS-V2	350	34/86.4	34/86.4	19/48.3

Outdoor Warning Systems

Omni Directional

EWS Series



The EWS-V3 is available in single phase or three phase and is a single tone siren, producing 460 cycles per second, for optimal sound penetration. All exposed siren components are of metal construction, which are "powder coated" for a durable finish. The fan and housing are made of non-corrosive cast aluminum.

The EWS-V3 is rated at 112 dB and is Omni-Directional. The EWS-V10 is a battery-powered version of the EWS-V3. The EWS-V10 includes a motor starter, charging system and battery box.

Features and Specifications

- Omni-directional
- Continuous duty motor
- Port tone frequency 460 cps
- 8 horn, equal length, single row
- Powder coated exterior
- 7.5 Hp single phase or three phase motor

Ordering Information

Description	Cat. No.	Operating Voltage ¹	Current		Estimated Sound Circle	dB at 100ft.
			Starting	Running		
8 Horn Outdoor Warning Siren - Three Phase Motor	EWS-V3-3	208/230/460V AC	105 A ²	19 A ²	5000 ft. (1524m) continuous	112
8 Horn Outdoor Warning Siren - Single Phase Motor	EWS-V3	230V AC	204 A	37 A	5000 ft. (1524m) continuous	112
8 Horn Outdoor Warning Siren - Battery Powered	EWS-V10	N/A	N/A	N/A	7000 ft. (2133.6m) continuous	118

¹ AC voltage frequency is 60 Hz

² Current measured at 208/230 volts

Accessories

Description	Cat. No.
Remote Magnetic Motor Starter - 3 Phase	EWS-MS-V3-3 (Discontinued Replaced by EWS-MS-V3-3-W)
Remote Magnetic Motor Starter - 3 Phase, Weather Resistant	EWS-MS-V3-3-W
Remote Magnetic Motor Starter - 1 Phase	EWS-MS-V3 (Discontinued Replaced by EWS-MS-V3-W)
Remote Magnetic Motor Starter - 1 Phase, Weather Resistant	EWS-MS-V3-W
Multi-function Push Button Controller	GEN-1
Multi-function Radio Controller	GEN-3
Clock Network, 100V AC Input	EWS-CL

Accessories

Continued

Description	Cat. No.
Radio Control - Hand Held Encoder	EWS-ENC-H
Radio Control - Desk Mount Encoder	EWS-ENC-D
Utility Pole Mounting Bracket - Powder Coat Finish	EWS-PMB
Utility Pole Mounting Bracket - Stainless Steel Finish	EWS-PMB-SS

Weights and Dimensions

Cat. No.	Approx. Shipping Weight (lb.)	Dimensions		
		Max. Diameter (in./cm.)	Max. Height (in./cm.)	Max. Mounting Base (in./cm.)
EWS-V3-3	400	56/142.2	41/104.1	19/48.3
EWS-V3	400	56/142.2	41/104.1	19/48.3
EWS-V10	400	56/142.2	41/104.1	19/48.3



Outdoor Warning Systems

Omni Directional

EWS Series



The EWS-V4 Series is an omni-directional siren which produces continuous 360° coverage. Staged horn projectors help organize sound for even distribution over a large radius.

The EWS-V4 is available in either single or three phase power and is a single tone siren, producing 460 cycles per second. All exposed siren components are of metal construction, which are "powder coated" for a durable finish. The fan and housing are made of non-corrosive cast aluminum.

Features and Specifications

- Omni-directional
- Continuous duty motor
- Port tone frequency 460 cps
- 8 horn, equal length, single row
- Powder coated exterior
- 10 Hp single phase or three phase motor

Ordering Information

Description	Cat. No.	Operating Voltage ¹	Current		Estimated Sound Circle	dB at 100ft.
			Starting	Running		
Omni Directional Siren - Three Phase	EWS-V4-3	208/230/460V AC	132 A ²	24 A ²	6000 ft. (1828.8m) continuous	115
Omni Directional Siren - Single Phase	EWS-V4	230V AC	258 A	47 A	6000 ft. (1828.8m) continuous	115

¹ AC voltage frequency is 60 Hz

² Current measured at 208/230 volts

Accessories

Description	Cat. No.
Remote Magnetic Motor Starter - 3 Phase	EWS-MS-V4-3 (Discontinued Replaced by EWS-MS-V4-3-W)
Remote Magnetic Motor Starter - 3 Phase, Weather Resistant	EWS-MS-V4-3-W
Remote Magnetic Motor Starter - 1 Phase	EWS-MS-V4 (Discontinued Replaced by EWS-MS-V4-W)
Remote Magnetic Motor Starter - 1 Phase, Weather Resistant	EWS-MS-V4-W
Multi-function Push Button Controller	GEN-1
Multi-function Radio Controller	GEN-3
Clock Network, 100V AC Input	EWS-CL
Radio Control - Hand Held Encoder	EWS-ENC-H
Radio Control - Desk Mount Encoder	EWS-ENC-D

Accessories

Description	Cat. No.
Utility Pole Mounting Bracket - Powder Coat Finish	EWS-PMB
Utility Pole Mounting Bracket - Stainless Steel Finish	EWS-PMB-SS

Weights and Dimensions

Cat. No.	Approx. Shipping Weight (lb.)	Dimensions		
		Max. Diameter (in./cm.)	Max. Height (in./cm.)	Max. Mounting Base (in./cm.)
EWS-V4-3	480	78/198.1	56/142.2	19/48.3
EWS-V4	480	78/198.1	56/142.2	19/48.3



Outdoor Warning Systems

Omni Directional

EWS Series

The EWS-V6 is an omni-directional siren that produces continuous 360° coverage. The EWS-V9 is a battery-powered version of the EWS-V6. The EWS-V9 includes a motor starter, charging system and battery box.

The EWS-V6 is available in either single or three phase power. Both the EWS-V6 and EWS-V9 are dual tone sirens, employing two rotors with different numbers of ports to produce a greater range of frequency. One rotor produces 460 cycles per second, and the other produces 920 cycles per second. All exposed siren components are of metal construction, which are "powder coated" for a durable finish. The fan and housing are made of non-corrosive cast aluminum.

Features and Specifications

- Omni-directional
- Dual tone sirens
- Port tone frequency 460 cps and 920 cps
- Continuous duty motor
- 8 horn, equal length, dual row
- Powder coated exterior
- 15 Hp three phase motor
- Two 7.5 Hp 230 volt single phase motors



Ordering Information						
Description	Cat. No.	Operating Voltage ¹	Current		Estimated Sound Circle	dB at 100ft.
			Starting	Running		
Omni Directional Siren - Three Phase Motor	EWS-V6-3	208/230/460V AC	198 A	36 A	9400 ft. (2865.1 m) continuous	122
Omni Directional Siren - Single Phase Motor	EWS-V6	230V AC	204 A	37 A	9400 ft. (2865.1 m) continuous	122
Omni Directional Siren - DC Motor	EWS-V9	72V DC	310 A	93 A	11,000 ft. (3352.8 m) continuous	125

¹ AC voltage frequency is 60 Hz

Accessories	
Description	Cat. No.
Remote Magnetic Motor Starter - 3 Phase	EWS-MS-V6-3 (Discontinued Replaced by EWS-MS-V6-3-W)
Remote Magnetic Motor Starter - 3 Phase, Weather Resistant	EWS-MS-V6-3-W
Remote Magnetic Motor Starter - 1 Phase	EWS-MS-V6 (Discontinued Replaced by EWS-MS-V6-W)
Remote Magnetic Motor Starter - 1 Phase, Weather Resistant	EWS-MS-V6-W
Multi-function Push Button Controller	GEN-1
Multi-function Radio Controller	GEN-3
Clock Network, 100V AC Input	EWS-CL
Radio Control - Hand Held Encoder	EWS-ENC-H
Radio Control - Desk Mount Encoder	EWS-ENC-D
Utility Pole Mounting Bracket - Powder Coat Finish	EWS-PMB
Utility Pole Mounting Bracket - Stainless Steel Finish	EWS-PMB-SS



Outdoor Warning Systems

Omni Directional

EWS Series

Weights and Dimensions				
Cat. No.	Approx. Shipping Weight (lb.)	Dimensions		
		Max. Diameter (in./cm.)	Max. Height (in./cm.)	Max. Mounting Base (in./cm.)
EWS-V6-3	750	78/198.1	65/165.1	19/48.3
EWS-V6	800	78/198.1	65/165.1	19/48.3
EWS-V9	660	78/198.1	65/165.1	19/48.3

Outdoor Warning Systems

Omni Directional

EWS Series

The EWS-V7 is an omni-directional siren which produces continuous 360° coverage

The EWS-V7 is available in either single or three phase power, and is a dual tone siren, employing two rotors with different numbers of ports to produce a greater range of frequency. One rotor produces 460 cycles per second, and the other produces 920 cycles per second. All exposed siren components are of metal construction, which are "powder coated" for a durable finish. The fan and housing are made of non-corrosive cast aluminum.

Features and Specifications

- Omni-directional
- Continuous duty motor
- Dual tone sirens
- 8 horn, equal length, dual row
- Powder coated exterior
- Port tone frequency 460 cps and 920 cps
- 20 Hp three phase motor
- Two 10 Hp 230 volt single phase motors



Ordering Information

Description	Cat. No.	Operating Voltage ¹	Current		Estimated Sound Circle	dB at 100ft.
			Starting	Running		
Omni Directional Siren - Three Phase Motor	EWS-V7-3	208/230/460V AC	258 A ²	47 A ²	10,500 ft. (3200.4 m) continuous	124
Omni Directional Siren - Single Phase Motor	EWS-V7	230V AC	510 A	94 A	10,500 ft. (3200.4 m) continuous	124

¹ AC voltage frequency is 60 Hz

² Current measured at 208/230 volts

Accessories

Description	Cat. No.
Remote Magnetic Motor Starter - 3 Phase	EWS-MS-V7-3 (Discontinued Replaced by EWS-MS-V7-3-W)
Remote Magnetic Motor Starter - 3 Phase, Weather Resistant	EWS-MS-V7-3-W
Remote Magnetic Motor Starter - 1 Phase	EWS-MS-V7 (Discontinued Replaced by EWS-MS-V7-W)
Remote Magnetic Motor Starter - 1 Phase, Weather Resistant	EWS-MS-V7-W
Multi-function Push Button Controller	GEN-1
Multi-function Radio Controller	GEN-3
Clock Network, 100V AC Input	EWS-CL

Accessories

Description	Cat. No.
Radio Control - Hand Held Encoder	EWS-ENC-H
Radio Control - Desk Mount Encoder	EWS-ENC-D
Utility Pole Mounting Bracket - Powder Coat Finish	EWS-PMB
Utility Pole Mounting Bracket - Stainless Steel Finish	EWS-PMB-SS

Weights and Dimensions

Cat. No.	Approx. Shipping Weight (lb.)	Dimensions		
		Max. Diameter (in./cm.)	Max. Height (in./cm.)	Max. Mounting Base (in./cm.)
EWS-V7-3	800	78/198.1	56/142.2	19/48.3
EWS-V7	800	78/198.1	56/142.2	19/48.3



Outdoor Warning Systems

Omni Directional

EWS Series

The EWS-V8-3 produces continuous 360° coverage. The EWS-V8-3 is available in three phase power only, and is a dual tone siren, employing two rotors with different numbers of ports to produce a greater range of frequency. One rotor produces 600 cycles per second, and the other produces 850 cycles per second.

All exposed siren components are of galvanized steel construction, which are powder coated for a durable finish. The fan and housing are made of non-corrosive cast aluminum.

Features and Specifications

- Omni-directional
- Continuous duty motor
- 5 horn, equal length, dual row
- Powder coated exterior
- Port tone frequency 600 cps and 850 cps
- 40 Hp three phase motor



Ordering Information

Description	Cat. No.	Operating Voltage ¹	Current		Estimated Sound Circle	dB at 100ft.
			Starting	Running		
Omni Directional Siren - Three Phase Motor	EWS-V8-3	208/230/460V AC	500 A	96 A	12,800 ft. (3901.4 m) continuous	127

¹ AC voltage frequency is 60 Hz

Accessories

Description	Cat. No.
Remote Magnetic Motor Starter - 3 Phase	EWS-MS-V8-3-W
Multi-function Push Button Controller	GEN-1
Multi-function Radio Controller	GEN-3
Clock Network, 100V AC Input	EWS-CL
Radio Control - Hand Held Encoder	EWS-ENC-H
Radio Control - Desk Mount Encoder	EWS-ENC-D
Utility Pole Mounting Bracket - Powder Coat Finish	EWS-PMB
Utility Pole Mounting Bracket - Stainless Steel Finish	EWS-PMB-SS

Weights and Dimensions

Cat. No.	Approx. Shipping Weight (lb.)	Dimensions		
		Max. Diameter (in./cm.)	Max. Height (in./cm.)	Max. Mounting Base (in./cm.)
EWS-V8-3	1400	78/198.1	67/170.2	24/61.0



Outdoor Warning Systems

High Power Speaker Arrays

MN Series

The MN-GVD Series Directional High Power Speaker Arrays consist of a single or multiple 400 Watt speakers that can be aimed where sound energy is needed. These re-entrant speakers are suitable for outdoor applications and are made of durable, powder-coated spun aluminum. Units are available with 90, 180, 270 or a full 360-degree horizontal angle of dispersion.

All units operate on 24V DC, and can be charged from line power and/or solar arrays. The Electronic Control Cabinet (ECC) has a lockable, tamper-resistant NEMA 4X enclosure, and is powered from rechargeable batteries that are contained in a separate and lockable NEMA 4X enclosure.

Features and Specifications

- Suitable for outdoor applications
- Modular electronics
- Mounting options include pole-mount, roof-mount and wall-mount
- Electronic Control Cabinet is NEMA 4X rated
- Operating temperature range: -40°F to 140°F (-40°C to 60°C)



Ordering Information

Description	Cat. No.	Rating	Angle of Dispersion	No. of Horns	Operating Voltage	Current	Battery Charger Voltage	dB at 100ft.
Directional One Level	MN-GVD04	400 watts	90°	1	24V DC	18-144 A DC	120V AC	121
	MN-GVD08	800 watts	180°	2	24V DC	18-144 A DC	120V AC	121
	MN-GVD12	1200 watts	270°	3	24V DC	18-144 A DC	120V AC	121
	MN-GVD16	1600 watts	360°	4	24V DC	18-144 A DC	120V AC	121
Directional Two Level	MN-GVD32	3200 watts	360°	8	24V DC	18-144 A DC	120V AC	126

Accessories

Description	Cat. No.
EST3 interface kit (hard wire)	MN-GVZINTD4
Local Physical Ethernet Interface kit	MN-GVZINTLE
Wireless Encrypted Ethernet Interface kit	MN-GVZINTWE
Pole mount kit	MN-GVPMMD
Roof-mount apparatus	MN-GVRMAD
2-piece steel pole	MN-GVSP1
Wall-mount bracket	MN-GVWBD1
Wood pole	MN-GVWP1
400 Watt replacement amplifier	MN-GVAMP4
Stand-Alone Omni-directional antenna kit	MN-GVANT2
Extra battery cabinet (w/o batteries)	MN-GVBATEX
24V battery complement (2 12V batteries)	MN-GVBT1

Accessories

Description	Cat. No.
Battery heating system (requires 120 VAC)	MN-GVBTH1
Cabinet heating element (requires 120 VAC)	MN-GVHTR1
Replacement power supply and charger	MN-GVPS25
Solar charging array (under 1600 watt) with power equalizer and regulator	MN-GVSOL1
Solar charging array (over 1600 watt) with power equalizer and regulator	MN-GVSOL2
Replacement speaker circuit transient protector (4 circuits) 2 required for any system	MN-GVSPTP1
Cabinet high/low temperature sensor	MN-GVTST1
Wireless Ethernet antenna surge protector	MN-GVWASP1
Cabinet coax whip	MN-GVWTN18



Outdoor Warning Systems

High Power Speaker Arrays

MN Series

Weights and Dimensions											
Cat. No.	Speaker	Control	Dimensions								
	Approx. Shipping Weight (lb.)	Approx. Shipping Weight (lb.)	Siren			Control Cabinet			Battery Cabinet		
			Length (in./cm.)	Width (in./cm.)	Height (in./cm.)	Length (in./cm.)	Width (in./cm.)	Height (in./cm.)	Length (in./cm.)	Width (in./cm.)	Height (in./cm.)
MN-GVD04	100	180	22/55.9	22/55.9	22/55.9	8/20.3	48/121.9	24/70	24/61	24/61	8/20.3
MN-GVD08	150	200	53/134.6	22/55.9	22/55.9	8/20.3	48/121.9	24/70	24/61	24/61	8/20.3
MN-GVD12	200	220	53/134.6	22/55.9	22/55.9	8/20.3	48/121.9	24/70	24/61	24/61	8/20.3
MN-GVD16	315	200	64/162.6	64/162.6	20/50.8	24/61	24/61	8/20.3	24/61	24/61	8/20.3
MN-GVD32	570	220	64/162.6	64/162.6	20/50.8	36/91.4	24/61	8/20.3	24/61	24/61	8/20.3

Outdoor Warning Systems

High Power Speaker Arrays

MN Series

The MN-GVM Series Omni-directional High Power Speaker Arrays consist of single or multiple levels of omni-directional 800 watt speakers. These speakers are suitable for outdoor applications and are made of color-impregnated fiberglass.

All units operate on 24V DC, and can be charged from line power and/or solar arrays. The Electronic Control Cabinet (ECC) has a lockable, tamper-resistant NEMA 4X enclosure, and is powered from rechargeable batteries that are contained in a separate and lockable NEMA 4X enclosure.

Features and Specifications

- Suitable for outdoor applications
- Modular electronics
- Mounting options include pole-mount, roof-mount and wall-mount
- Electronic Control Cabinet is NEMA 4X rated
- Operating temperature range: -40°F to 140°F (-40°C to 60°C)



Ordering Information

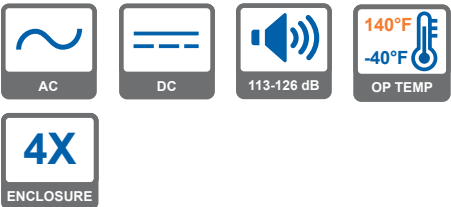
Description	Cat. No.	Rating	Operating Voltage	Current	Battery Charger Voltage	dB at 100ft.
Omni-directional	MN-GVM08	800 watts	24V DC	36-144 A DC	120V AC	113
	MN-GVM16	1600 watts	24V DC	36-144 A DC	120V AC	118
	MN-GVM24	2400 watts	24V DC	36-144 A DC	120V AC	121
	MN-GVM32	3200 watts	24V DC	36-144 A DC	120V AC	126

Accessories

Description	Cat. No.
EST3 interface kit (hard wire)	MN-GVZINTD4
Local Physical Ethernet Interface kit	MN-GVZINTLE
Wireless Encrypted Ethernet Interface kit	MN-GVZINTWE
Pole mount kit	MN-GVPMM
Roof-mount apparatus	MN-GVRMAM
2-piece steel pole	MN-GVSP1
Wall-mount bracket	MN-GVWBM1
Wood pole	MN-GVWP1
400 Watt replacement amplifier	MN-GVAMP4
Stand-Alone Omni-directional antenna kit	MN-GVANT1
Extra battery cabinet (w/o batteries)	MN-GVBATEX
24V battery compliment (2 12V batteries)	MN-GVBT1
Battery heating system (requires 120 VAC)	MN-GVBTH1

Accessories

Description	Cat. No.
Cabinet heating element (requires 120 VAC)	MN-GVHTR1
Replacement power supply and charger	MN-GVPS25
Solar charging array (under 1600 watt) with power equalizer and regulator	MN-GVSOL1
Solar charging array (over 1600 watt) with power equalizer and regulator	MN-GVSOL2
Replacement speaker circuit transient protector (4 circuits) 2 required for any system	MN-GVSPTP1
Cabinet high/low temperature sensor	MN-GVTST1
Wireless Ethernet antenna surge protector	MN-GVWASP1
Cabinet coax whip	MN-GVWTN18



Outdoor Warning Systems

High Power Speaker Arrays

MN Series

Weights and Dimensions										
Cat. No.	Speaker	Control	Dimensions							
	Approx. Shipping Weight (lb.)	Approx. Shipping Weight (lb.)	Siren		Control Cabinet			Battery Cabinet		
			Diameter (in./cm.)	Height (in./cm.)	Length (in./cm.)	Width (in./cm.)	Height (in./cm.)	Length (in./cm.)	Width (in./cm.)	Height (in./cm.)
MN-GVM08	340	200	52/132.1	40/101.6	8/20.3	48/121.9	24/70	24/61	24/61	8/20.3
MN-GVM16	490	200	53/134.6	56/142.2	24/61	24/61	8/20.3	24/61	24/61	8/20.3
MN-GVM24	640	360	52/132.1	72/182.9	8/20.3	60/152.4	24/70	24/61	24/61	8/20.3
MN-GVM32	790	220	53/134.6	88/223.5	36/91.4	24/61	8/20.3	24/61	24/61	8/20.3

Outdoor Warning Systems

Air Horns

KB Series



Photo Not Available

These units are available featuring our KMJ-4 air horn and consist of a motor directly connected to a rotary compressor. They are designed featuring a horizontal bell with horizontal diaphragm head so that water will drain away from the diaphragm seal.

KB Series air horns are cast in light weight corrosion-resistant aluminum. All fasteners are corrosion proof stainless steel. No adjustment to diaphragm is necessary.

They are compliant with collision regulation standards for sound signal appliances at sea (72 COLREGS). These models meet or exceed the current IMO / Coast Guard collision regulations for Class IV; vessel length less than 20m; and Class III vessel length 20m to 75m.

Features and Specifications

- Cast in light weight aluminum
- Corrosion resistant
- Stainless steel fasteners
- Effective range - 1/4 mile (.4km)¹
- Single tone frequency
- Operating range - 15 to 120 PSIG
- 1/2" (12mm) inlet NPT

Ordering Information

Description	Cat. No.	Frequency (Hz)	dB(c) at 100ft.	Air Consumption cu.ft./ sec (ltr./sec.)
Marine Rated Self-Contained	KMJ-4SC75120VAC	311	104	3.8 (108)
Air Horn	KMJ-4SC7524VDC	311	104	3.8 (108)

Weights and Dimensions

Cat. No.	Approx. Shipping Weight (lb.)	Dimensions
		Length (in./cm.)
KMJ-4SC75120VAC	55	31.75/80.6
KMJ-4SC7524VDC	55	29/73.6

¹ Subject to environmental and geographical conditions, these models have a typical effective range of 1/4 mile (.4 km) assuming an ambient background level of 60dB, a line pressure of 60 psi (7.03 kg/sq cm) and temperature of 60°F (15.6°C). Derated per FEMA guidelines @ 10 dB per distance doubled.



Outdoor Warning Systems

Air Horns

KB Series



Photo Not Available

The KB Series air horns generate sound by means of a vibrating diaphragm that modulates the flow of compressed air into a resonating projector. All horn shapes are mathematically calculated to amplify sound while closely retaining its fundamental frequency and natural harmonics. The signal is designed so that moisture naturally drains away from the diaphragm seat. Designed for mounting on air supply piping, supplying between 50 and 150 PSIG (3.5 and 10.5 kg/sqcm).

Features and Specifications

- Cast marine aluminum horns - primed and painted
- Stainless steel diaphragm
- Effective range - 1 1/4 mile (2 km)¹
- Single tone frequency
- Operating range - 50 to 150 PSIG (3.5 to 10.5 kg/sq cm)
- 3/4" (19mm) inlet NPT

Ordering Information				
Description	Cat. No.	Frequency (Hz)	dB(c) at 100ft.	Air Consumption cu.ft./sec (ltr./sec.)
Marine Rated Air Horn	KM-135	135	121	2.4 (67)
	KM-200	200	118	1.5 (43)
	KM-250	250	119	1.3 (38)

Weights and Dimensions		
Cat. No.	Approx. Shipping Weight (lb.)	Dimensions
		Length (in./cm.)
KM-135	45.0	42.13/107
KM-200	40.0	26.75/67.9
KM-250	33.0	21.38/54.3

¹ Subject to environmental and geographical conditions, these models have a typical effective range of 1 1/4 mile (2 km) assuming an ambient background level of 60dB, a line pressure of 100 psi (7.03 kg/sq cm) and temperature of 60°F (15.6°C). Derated per FEMA guidelines @ 10 dB per distance doubled.



118-121 dB

Outdoor Warning Systems

Air Horns

KB Series

The KB series generate sound by means of a vibrating diaphragm that modulates the flow of compressed air into a resonating projector. All horn shapes are mathematically calculated to amplify sound while closely retaining its fundamental frequency and natural harmonics.

These horns are suitable for indoor/outdoor applications and for hazardous location use. Volume is adjustable by regulating air pressure.

Designed for mounting on air supply piping, supplying between 50 and 150 PSIG (3.5 and 10.5 kg/sq cm).

Features and Specifications

- High strength aluminum body and projector
- Stainless steel diaphragm
- Machined or spun bell
- Effective range - 1/4 mile (.4 km)¹



K-1



K-12



K-25

Ordering Information

Description	Cat. No.	Frequency (Hz)	dB(c) at 100ft.	Air Consumption cu.ft./sec (ltr./sec.)
Single Tone Air Horn	K-1	311	114	0.50 (14)
	K-2	370	110	0.50 (14)
	K-3	470	113	0.50 (14)
	K-5	622	112	0.50 (14)
Dual Tone Air Horn	K-12	311/370	114	1 (28)
	K-25	370/622	115	1 (28)
Dual Tone Air Horn 180° Coverage	K-12R12	311/370	115	2 (56)
	K-25R25	370/622	116	2 (56)

Weights and Dimensions

Cat. No.	Approx. Shipping Weight (lb.)	Dimensions	
		Inlet NPT (in.)	Length (in./cm.)
K-1	9.00	1/2	16.5/41.9
K-2	8.00	1/2	12.88/32.7
K-3	7.00	1/2	10.25/26
K-5	7.00	1/2	7.5/19.1
K-12	18.00	1/2	16.5/41.9
K-25	15.00	1/2	12.88/32.7
K-12R12	30.00	3/4	16.5/41.9
K-25R25	60.00	3/4	12.88/32.7

¹Subject to environmental and geographical conditions, these models have a typical effective range of 1/4 mile (.4 km) assuming an ambient background level of 60dB, a line pressure of 100 psi (7.03 kg/sq cm) and temperature of 60°F (15.6°C). Derated per FEMA guidelines @ 10 dB per distance doubled.



110-116 dB

Outdoor Warning Systems

Air Horns

KB Series

The KB series units are designed for general signaling services and generate sound by means of vibrating diaphragms that modulate the flow of compressed air into resonating projectors. All horn shapes are mathematically calculated to amplify sound while closely retaining its fundamental frequency and natural harmonics. These horns are suitable for indoor/outdoor applications and for hazardous location use. Volume is adjustable by regulating air pressure. Designed for mounting on air supply piping, supplying between 50 and 150 PSIG (3.5 and 10.5 kg/sq cm)

Features and Specifications

- High strength aluminum body and projector
- Adjust volume via air pressure
- Stainless steel diaphragm
- Provides complete signaling coverage
- Single or dual tone models
- Effect. range - 3/4 mile (1.2 km)¹
- Operating range - 50 to 150 PSIG (3.5 to 10.5 kg/sq cm)
- 1 1/4" (32mm) NPT inlet



K4-25

Ordering Information

Description	Cat. No.	Frequency (Hz)	dB(c) at 100ft.	Air Consumption cu.ft./sec (ltr./sec.)
Single Tone Air Horn	K4-1	311	115	2 (56)
Dual Tone Air Horn	K4-12	311/370	116	4 (112)
	K4-25	370/622	116	4 (112)

Weights and Dimensions

Cat. No.	Approx. Shipping Weight (lb.)	Dimensions	
		Length (in./cm.)	Width (in./cm.)
K4-1	46.0	27/68.5	27/68.5
K4-12	68.0	27/68.5	27/68.5
K4-25	60.0	23/58.4	23/58.4

¹Subject to environmental and geographical conditions, these models have a typical effective range of 1/4 mile (.4 km) assuming an ambient background level of 60dB, a line pressure of 100 psi (7.03 kg/sq cm) and temperature of 60°F (15.6°C). Derated per FEMA guidelines @ 10 dB per distance doubled.



115-116 dB

Outdoor Warning Systems

Air Horns

CA Series

These air horns are for general signaling services. They generate sound by means of a vibrating diaphragm that modulates the flow of compressed air into a resonating projector. All horn shapes are mathematically calculated to amplify sound while closely retaining its fundamental frequency and natural harmonics. All horn frequencies are designed to give balance to any combination of horn tones.

These horns are suitable for indoor/outdoor applications, hazardous location use, and individual equipment and plant warnings. Volume is adjustable by regulating air pressure.

Designed for mounting on air supply piping, supplying between 50 and 150 PSIG (3.5 and 10.5 kg/sq cm). May be bracket mounted using the AC30106 post bracket.

Features and Specifications

- Corrosion resistant cast bronze body
- Stainless steel diaphragm
- Machined or spun bell
- Effective range - 1/4 mile (.4 km)¹



CA

Ordering Information

Description	Cat. No.	Frequency (Hz)	dB(c) at 100ft.	Air Consumption cu.ft./sec (ltr./sec.)	Air Pressure PSI (Kg/Sq Cm)
Single Tone Machined Horn	CA	745	104	0.25 (7.1)	50-150 (5.3-10.5)
Omni-directional 4 Model CA Horn	CA-4	745	104	1 (28.4)	50-150 (5.3-10.5)

Accessories

Description	Cat. No.
Post Bracket for Air Horn Cat. No. CA	AC30106

Weights and Dimensions

Cat. No.	Approx. Shipping Weight (lb.)	Dimensions	
		Inlet NPT (in.)	Length (in./cm.)
CA	4.0	3/8	4.75/12
CA-4	19.0	1/2	11.25/28.6

¹Subject to environmental and geographical conditions, these models have a typical effective range of 1/4 mile (.4 km) assuming an ambient background level of 60dB, a line pressure of 100 psi (7.03 kg/sq cm) and temperature of 60°F (15.6°C). Derated per FEMA guidelines @ 10 dB per distance doubled.



104 dB

Outdoor Warning Systems

Control Valves

KB Series



Solenoid and combination solenoid/manual control valves are designed for use with Edwards Airchime air horns.

Features and Specifications

Solenoid Valves

- Local or remote operation
- Class 1, Div. 1, Groups C and D; Class II, Div. 1, Groups E, F and G approvals

Combination Valves

- Manual and solenoid control
- Class 1, Div. 1, Groups C and D; Class II, Div. 1, Groups E, F and G approvals
- Provides for operation in the event of a power failure

Ordering Information			
Description	Cat. No.	Operating Voltage	Pipe Thread (in.)
Solenoid Valve	10746-N5	120V AC	3/8
	10748-N5	120V AC	1/2
	10750-N5	120V AC	3/4
	10754-N5	120V AC	1 1/4
	10746-G1	24V DC	3/8
	10748-G1	24V DC	1/2
	10750-G1	24V DC	3/4
	10754-G1	24V DC	1 1/4
Solenoid/Manual Valve	10775-N5	120V AC	3/8
	10776-N5	120V AC	1/2
	10777-N5	120V AC	3/4
	10778-N5	120V AC	1 1/4
	10775-G1	24V DC	3/8
	10776-G1	24V DC	1/2
	10777-G1	24V DC	3/4
	10778-G1	24V DC	1 1/4



Outdoor Warning Systems

Control Valves

KB Series

Weights and Dimensions	
Cat. No.	Approx. Shipping Weight (lb.)
10746-N5	2.1
10748-N5	2.1
10750-N5	2.1
10754-N5	2.1
10746-G1	2.1
10748-G1	2.1
10750-G1	2.1
10754-G1	2.1
10775-N5	2.1
10776-N5	2.1
10777-N5	2.1
10778-N5	2.1
10775-G1	2.1
10776-G1	2.1
10777-G1	2.1
10778-G1	2.1