



Edwards Warning 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.

D-04



Map 1: 2-D Image for topographical study

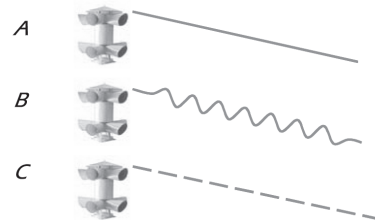


Map 2: 3-D Image for topographical study

Siren Activation Systems

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)

Model EWS-T1 — Timer, Single output, (A,B, or C above, plus cancel)

Model EWS-CDP — Timer, 2 output (Any two of A,B, or C above, plus cancel)

Model EWS-CDP-3 — Timer, 3 output (A,B, & C above, plus cancel)

Model EWS-SW — Start button (momentary) (operator controlled)

Model EWS-SWM — 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.

