

## Flashing ALERT Signs

AEL/SEL 03OE-03-SIGN

### For Speed Limits below 60 MPH

Ultra-visible from more than 1000 feet – even in daytime – Flashing ALERT Signs grab attention with their bright embedded flashing LED beacons. Communities, military bases and industry often use the signs in conjunction with Information Radio Stations to announce urgent message broadcasts. But the signs may also be used independently, for example, to announce detour routes and emergency actions when beacons are activated.

Flashing ALERT Sign Systems may be custom designed for each application, with varying power and control methods, sign text, colors and mounting styles and may be installed apart from electrical power services, which keeps installation costs low.

System operators trigger beacons to flash via one of a number of wireless control methods, including UHF, VHF, paging, SMS/cellular, wireless modem. Bright, amber LEDs command immediate attention when activated. When beacons are off, bright blue and white portions of the signs remind motorists 24 hours a day, 365 days a year.

Flashing ALERT Signs store enough flash-power to run 4 to 10 days even with no sun. With as little as 1.5 average sun hours per day, each sign's backup battery system remains fully charged around the clock.

Within each sign location, up to four Flashing ALERT Signs may be connected to and controlled by a single Remote Control Power Unit via wire line; *e.g.*, two Flashing ALERT Signs could be placed on a busy thoroughfare, one facing each traffic direction; another pair could be placed on two busy streets that intersect that thoroughfare.



**Flash patterns & sign colors comply with the *Department of Transportation Federal Highway Administration Manual on Uniform Traffic Control Devices (2004, Regulation 2A.08)*. Check with local authorities to coordinate signs in your area.**

## Technical Specifications

### Sign Panel

#### Face

- Typical size: 44" high by 24" wide, customizable (price relates to size).
- Composition: natural aluminum, standard 1/16" gauge reflective black/ yellow/blue, high intensity prismatic sheeting; customizable black/white, 2" and 3" high lettering.
- Mount: universal L-bracket for banding, bolting to existing poles or posts.

#### Sign Electrical

- LED beacons: 2, amber, weatherproof LED beacons; 41 diodes each; 4.25" diameter embedded reflectors.
- Current draw: 100 milliamps.
- Flash controller: 8A, 50/60 fpm, waterproof.
- Duty cycle: 50% flash.
- Operation time: 2-4 day flash via solar power without sunlight.

### Remote Control & Power Unit Cabinet

- Size: 20" high x 16" wide x 10" deep.
- Construction: NEMA4X, natural aluminum, single-hinge door, hasp-lock-in closure; weatherproof external antenna connector, wiring, ports.
- Mounts: external tabs for universal mounting to existing poles or posts.

#### Electrical

- Solar panel: typical 40-watt, 2.40-amp at 12-volt DC, 38.38"x12.13".
- Solar panel mount: side-of-pole, band or bolt-on.
- Solar controller: 6-amp current capacity, LED charge indications.
- Low voltage disconnect circuitry.
- Battery: 55AH, AGM, sealed type.

#### Controller

- Capacity: up to 4 flashing signs.
- Control wiring: #14 AWG, each a maximum of 1000 feet from the controller.
- Receive frequencies/ranges: 33-50 MHz (VHF low), 150-170 MHz (VHF high) and 450-470 MHz (UHF).
- Control codes: up to 6 simultaneous codes.
- Code formats: DTMF (up to 12 digits); 2-tone sequential, single-tone 0.3-3.0 kHz.
- Programming output: SPDT relay with programmable timer; laptop programming via RS232 port and Windows-based software.
- Indicators: "ALERT received" LED indicator.
- Speaker: 4" integral.
- Test diagnostics: built in with LED indicators.
- External antenna: 50-ohm BNC connector.
- Alternate control methods: commercial paging (POCSAG/FLEX); LAN/WAN; WIFI; 27 MHz (unlicensed), SMS (text).

## Custom Versions

Customized Flashing ALERT Signs may retrofit existing warning/evacuation signs to notify drivers when an event is imminent.

Applications:

- Hurricane.
- Volcanic.
- Nuclear.
- Tsunami Evacuation.
- Fog.
- Flood.
- Lightning/Storm/Tornado Warning.



Evacuation signs tend to blend into local environments – especially for residents and regular commuters – but get noticed when their beacons begin to flash. [See the unusual story of how the custom sign, above, came to be.](#)

## Control Methods Comparison Chart

Method	3rd-Party Carrier	Requires Existing Infrastructure	Controls Signs Individually or in Subgroups	Controls Signs via Web GUI	Status Feedback Is Provided	Added Hardware Costs
UHF/VHF Using DTMF 2-Tone	No	Yes, Requires UHF/VHF Coverage at Sign Locations on Available Frequency	Yes	No	No	No
Commercial Paging	Yes, Flat Monthly	No	Yes	With Additional Software	No	No
Cellular SMS	Yes, per Location	No	Yes	Yes	Yes	No
Network LAN or Wireless	Yes, only if 3rd-Party LAN or Wireless Provider Is Used	Yes, Network Must Be Accessible at All Sign Locations	Yes	Yes	Yes	Yes, if Wireless
Cellular DTMF	Yes, per Location	No	No	No	No	Yes