

# Intelligent Warning Systems & Directional LED Signs

Guiding the roadways of tomorrow.







**The next evolution in road signage.**

**Applications:** Stop Intersections • High Incident Intersections • Rural Roads • Dangerous Curves • High Accident Areas

**SignAlert™ GEN 2 LED Enhancement System**

The traffic industry has long recognized that many sign scenarios (placement, visibility, etc.) are more critically important than others. There has been a need in the industry for a simple and affordable way to retrofit existing signs with additional levels of warning for those situations that demand them - and to do this in such a way that the additional alert system can be motion activated to conserve power and extend the life of the LEDs.

- > LED rings field retrofit onto almost any existing sign
- > Very affordable
- > 100 Level auto-dimming
- > Solar or AC power options
- > Configuration app works on nearly any Wi-Fi phone, tablet, or PC
- > High intensity LEDs visible day or night (visible up to 2 miles at night)
- > Hassle-free installation. (No dirt moved means less permits, and streamlined implementation)
- > LED flashers face mount on existing signs with permanent bonding tape and/or mechanical fasteners
- > Scheduling functionality expands system versatility and performance
- > Field replaceable batteries
- > MUTCD Compliant

**Why TraffiCalm?**

- > ISO:9001 Certified USA based manufacturing facility
- > Vandal resistant designs
- > Industry leading turn-around from order to delivery
- > Unlimited tech support and customer service from the USA facility
- > Industry Pioneers in LED enhanced signage

**SignAlert™ Basic System**

Specifically engineered to enhance a single, standalone sign. Examples include speed zone reductions, advance warnings, and speed limit regulation.

**Feature Highlights:**

- > Affordable implementation, easy installation
- > Configuration app works on any Wi-Fi phone, tablet, or PC
- > Radar option adds real-time feedback to drivers
- > Battery and solar options for extreme performance
- > Dynamic scheduling function
- > Wide range of input trigger devices, including buttons and environmental sensors

**SignAlert™ Advanced System**

Today's pinnacle of sign enhancement. Designed to wirelessly unify signs and sensors to provide unparalleled flexibility of application and use. Examples include sequential chevrons, conflict intersection warning, pedestrian activation, and road condition warnings.

**All the benefits of the Basic System, plus:**

- > Radio collaboration between signs and input sensors
- > Configuration of complex scenarios made easy in app
- > Fastest implementation with intuitive wireless technology
- > Individual units easily field upgraded or replaced
- > Scheduling to warn drivers at just the right times
- > Audible push button compatibility

## SignAlert Stop Sign Enhancement Ring

### Illumination

- > LEDs configured around perimeter of sign, within border (fully MUTCD compliant design)
- > LED pitch: 1.9"
- > Red LEDs with 30 degree viewing angle
- > DG3 white reflective sheeting applied to ring face for natural appearance

### Compatibility

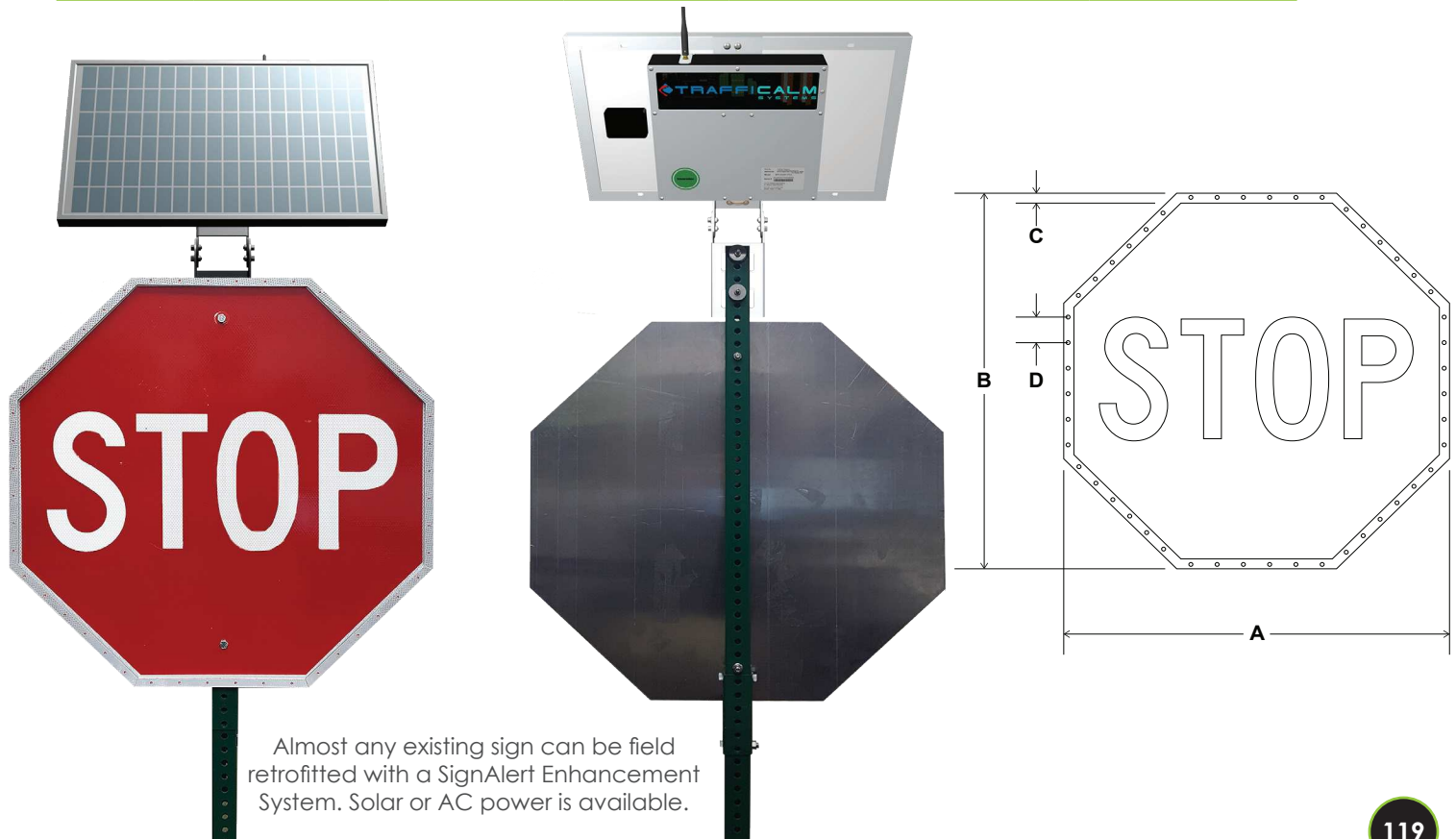
- > Integrates with all TraffiCalm SA300 controllers and collaborators and can be push button, speed (radar), time clock or sensor activated

### Physical Description

- > Available sizes: 24", 30", 36" or 48"
- > Retrofits to any existing Stop sign manufactured to MUTCD requirements
- > Mounting: all LED hardware mounted within the white border of the sign. Mounted either with adhesive backing or included self tapping screws. Rivets may be utilized to improve tamper resistance
- > MUTCD compliant LED placement and usage
- > 10 ft. single cable extension to reach controller or collaborator



MUTCD Sign Size	Part Number	Ring Width (A)	Ring Height (B)	Ring Width (C)	LED Count	Power (Watts)
24"	M75-R2424-WR01	24"/61cm	24"/61cm	.625"/1.6cm	40	3.20
30"	M75-R3030-WR01	30"/76cm	30"/76cm	.625"/1.6cm	48	3.84
36"	M75-R3636-WR01	36"/91cm	36"/91cm	.625"/1.6cm	48	3.84
48"	M75-R4848-WR01	48"/122cm	48"/122cm	.625"/1.6cm	48	3.84



**SignAlert Warning Sign Enhancement Ring**

**Illumination**

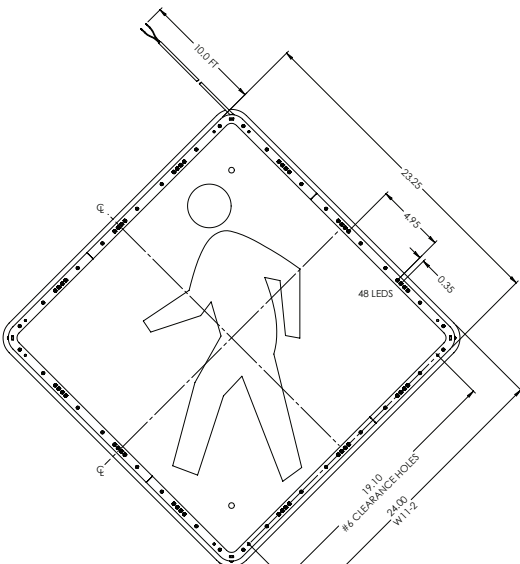
- > LEDs configured in clusters of four around perimeter of sign (fully MUTCD compliant design)
- > LED pitch: .35" within clusters
- > Cluster pitch: 6" (on center)
- > Amber LEDs with 15 degree viewing angle

**Compatibility**

- > Integrates with all TraffiCalm SA300 controllers and collaborators and can be push button, speed (radar), time clock or sensor activated

**Physical Description**

- > Available sizes: 24", 30", 36" or 48"
- > Retrofits to any existing Warning sign manufactured to MUTCD requirements
- > Mounting: all LED hardware mounted within the white border of the sign. Mounted either with adhesive backing or included self tapping screws. Rivets may be utilized to improve tamper resistance
- > MUTCD compliant LED placement and usage
- > 10 ft. single cable extension to reach controller or collaborator



MUTCD Sign Size	Part Number	Ring Width (A)	LED Group Offset (B)	LED Pitch in Group (C)	LED Count
24"	M75-R2424-BA47	23.3"/7.6cm	6"/15cm	.35"/.89cm	48
30"	M75-R3030-BA47	29"/73.7cm	6"/15cm	.35"/.89cm	64
36"	M75-R3636-BA47	34.8"/88.4cm	6"/15cm	.35"/.89cm	80
48"	M75-R4848-BA47	46.5"/118.1cm	6"/15cm	.35"/.89cm	112

Where sidestreets meet highways, collisions represent a common threat. With input-output logic definable, SignAlert provides the versatility to warn the right drivers at the right time.

Enhance stop and warning signs basd on real-time radar detetions from crossing traffic.







**Pedestrians have peace of mind with a safer crossing through the simple push of a button.**

**Applications: Pedestrian Crossings • School Crossings • Advanced Crosswalk Warnings**

Push 2 Cross is an MUTCD Compliant solution for controlled safe pedestrian crossings and is perfect for safe routes to school, complete streets or for mid-block pedestrian crossing applications. Configuration settings for Push 2 Cross is made easy through TC Connect, a secure WiFi connection platform developed by TraffiCalm, requiring NO internet connection, special apps or software! With any browser enabled device, the user can select from multiple options and settings.

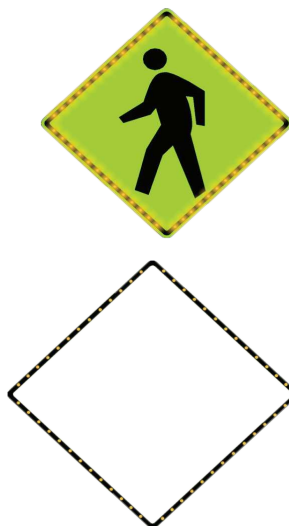
**SA328 RRFB**

- > 80 High intensity amber LEDs for redundancy and uniform light distribution
- > MUTCD approved RRFB flash pattern
- > Exceeds SAE J595 Class 1 Intensity
- > Meets SAE J578 for chromaticity
- > Each of the 80 LEDs have built in 15 degree UV resistant lens
- > Horizontal aiming adjustment
- > Side-mounted LEDs for a side visual confirmation
- > Dimensions: 24"x24"x.85"



**Edge-Lit Flasher Rings**

- > Fully assembled, one piece construction
- > Complete edge-lit illumination within the sign border
- > Hermetically potted and sealed
- > 3M VHB Tape and optional self-tapping mounting screws create secure adhesion to sign
- > High intensity LEDs rated for 100,000 hours
- > 24", 30", 36", 48" rings available



## Push2Cross

**Typical RRFB System:**

- > (1) P2C controller - 20W solar kit/12Ah AGM battery
- > (1) P2C collaborator - 20W solar kit/12Ah AGM battery
- > (4) SA328 RRFB
- > (2) ADA compliant push buttons
- > (2) 9"x12" push button frames
- > (2) 9"x12" "Push button to turn on warning lights" sign
- > (4) 24"x12" W16-7 (L-R) ARROW signs
- > (4) 30" W11-2 Ped Crossing Sign (Yellow or FYG)
- > (2) 14' pole kits
- > Mounting brackets
- > Manuals
- > TC connect software

## Push2Cross

**Typical Flasher Ring System:**

- > (1) P2C controller - 20W solar kit/12Ah AGM battery
- > (1) P2C collaborator - 20W solar kit/12Ah AGM battery
- > (2) 30" amber LED flasher ring
- > (2) ADA compliant push buttons
- > (2) 9"x12" push button frames
- > (2) 9"x12" "Push button to turn on warning lights" sign
- > (2) 24"x12" W16-7 (L-R) ARROW signs
- > (2) 30" W11-2 Ped Crossing Sign (Yellow or FYG)
- > (2) 14' pole kits
- > Mounting brackets
- > Manuals
- > TC connect software



ADA Compliant  
PushButton and Frame  
with sign



Detection/Activation Unit	
Weight with battery	20 Watts = 25 lbs (11.3 Kg) 30 Watt = 28 lbs (12.7 Kg) excluding poles
Power Requirements	
Voltage	11VDC to 15VDC
Charger	Smart solar charger 14.6VDC, 30W temperature protected
Communications	Wireless Meshnet integration(device 2 device, +1,000ft range, repeatable signal, 4 channels available, configurable network ID, AES-128 encryption security, DSSS transmissions on selectable channels)
Battery Reserve	28 days @ standard load (standard load = 25% activations per day with a single flasher ring) with no sunlight
Isolation Required	2 hours of good sunlight each day @ standard load
Panel Supplied	20W, 17.2V MMPV, 21.6V open circuit
Mounting	Universal pole mount included (optional top of pole & side of pole extensions mounts available)
Flush Mount LED Flasher Rings	
Size	24", 30", 36", 48" x .625" sizes available
Mounting	Outdoor rated mounting tape and provisions for self drilling/tapping screws
LEDs	Red (626nm); 30 degree cone of view, rated 100,000 hours; auto dimming employed
	Amber (590nm); 30 degree cone of view, rated 100,000 hours; auto dimming employed
	White (cool white); 30 degree cone of view, rated 100,000 hours; auto dimming employed
	Blue (470nm); 30 degree cone of view, rated 100,000 hours; auto dimming employed
Power	10V to 18V
Flash Patterns	50-60 flashes per minute; 50% duty cycle. Additional alternative flash patterns available and are user programmable
Dimming	100 levels of autodimming
SA328 RRFB	
Size	24"x4"x.85 (60.96x10.16x2.16cm)

## SA328 Rectangular Rapid Flashing Beacon

### Human Interface

Installers will easily make all configurations through TC Connect, a WiFi platform developed by TraffiCalm that requires NO internet connection! With any browser enabled device, the installer can easily log in and select from multiple options and settings including flash duration, LED brightness and dimming control. The available traffic data can also be retrieved.



### Durability and Reliability

Roadside signage and the like, attract all forms of vandalism. Through our multi-string LED configuration design and permanently sealed electronics, the SA328 will maintain MUTCD standards for brightness even if 1 or 2 vertical LED strings are damaged through vandalism.

### Power Sources

Each system relies on either solar power or an available AC option.

SOLAR: Stemming from either standard 20W solar panel or an available 60W upgrade, the collected power from these efficient panels are stored by a standard 10Ah lithium iron phosphate battery (LifeO04), which has been proven to be a safer and more stable power storage option. This battery is designed to sustain a minimum 20 year life. All of which, including the supporting electronics are hermetically "Potted & Sealed".

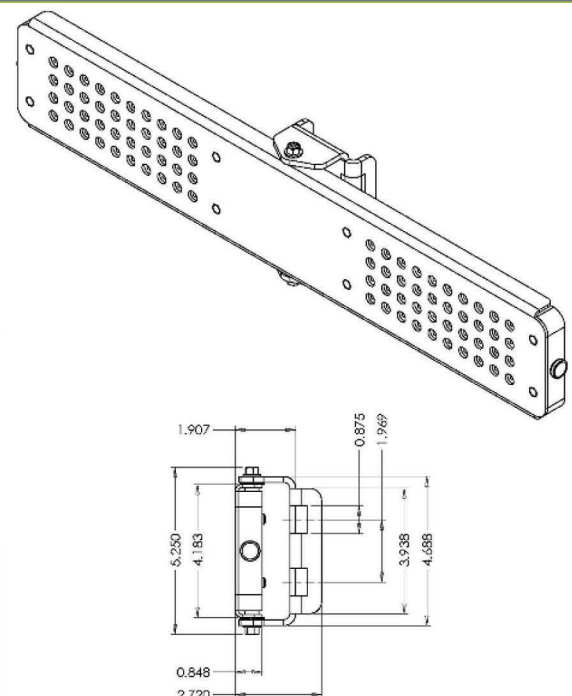
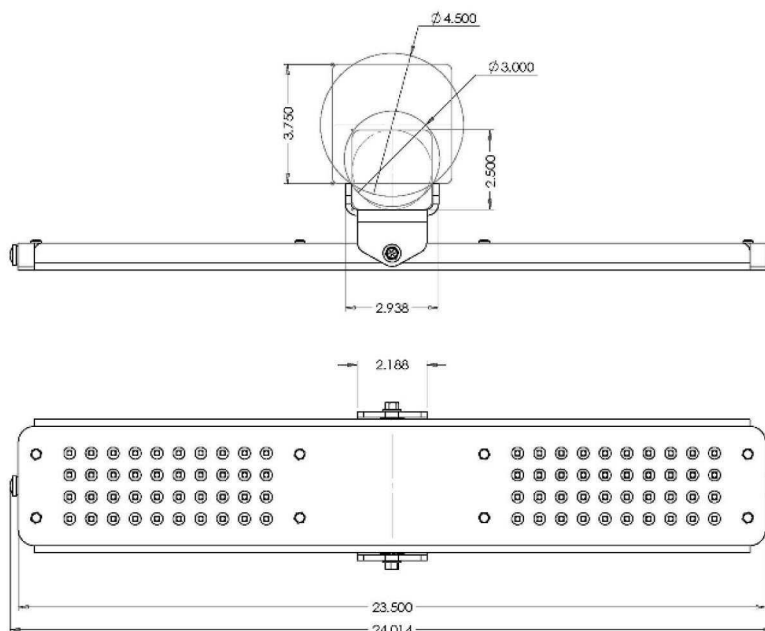


### Warranty

5-Year warranty - including battery

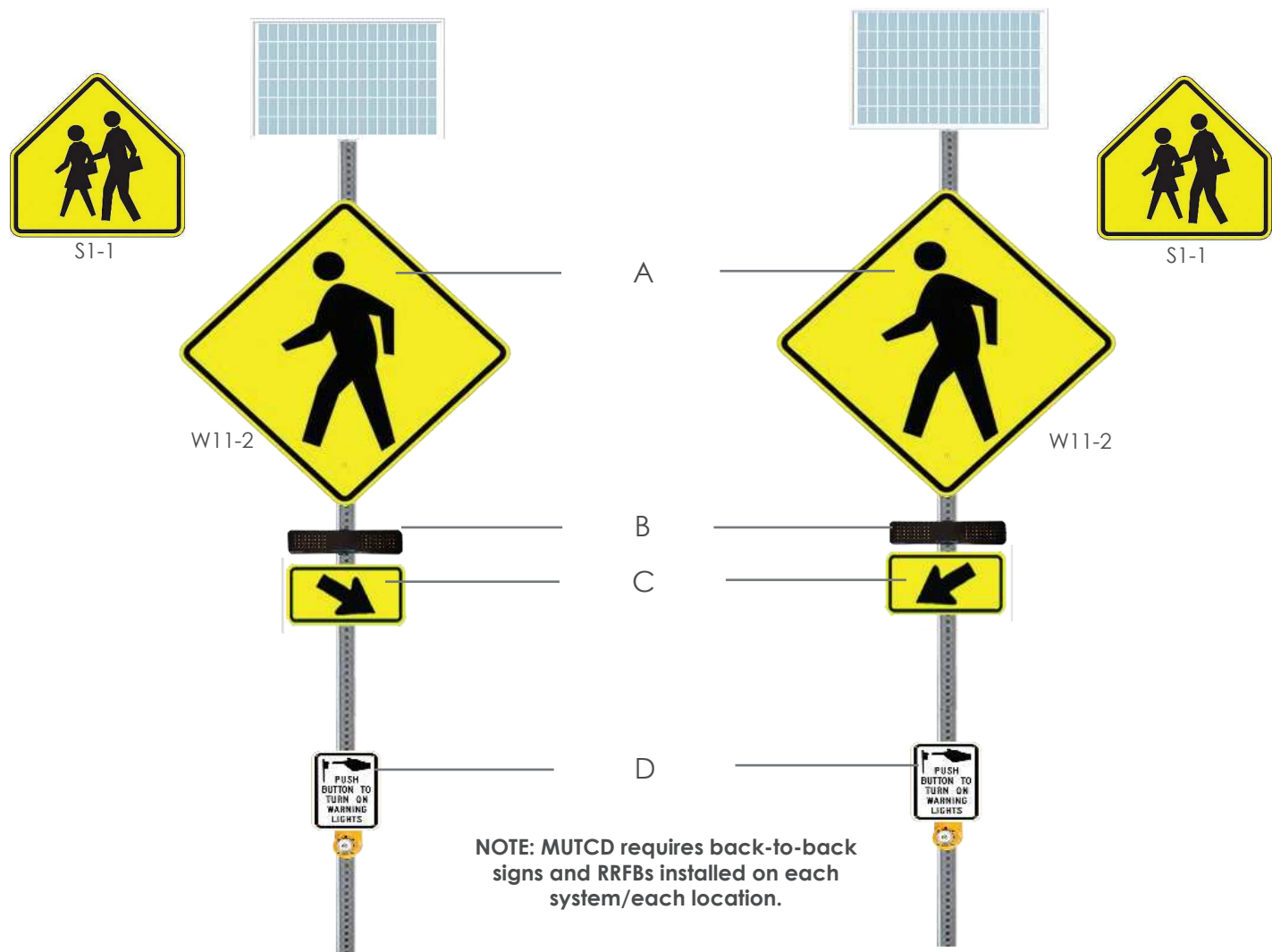


## Dimensions



**Build your Push 2 Cross using the SA328 RRFB**

Let's start by understanding the difference between a **Controller** and a **Collaborator**. It's simple, just remember that every Push 2 Cross System will require a minimum of (1) **Controller** and (1) **Collaborator** to create a basic, 2-sign Crosswalk System and form a complete communication network. However, if multiple signs are required for one location, **ONLY** additional **Collaborators** will be needed.



Push 2 Cross Controller	Push 2 Cross Collaborator
With 30W Solar and 10Ah Lithium Battery Order PN: TRAFCALMSA300CTL3 or With AC Power Supply Order PN: M75-SA300-XWKQ	With 30W Solar and 10Ah Lithium Battery Order PN: TRAFCALMSA300CLB3 or With AC Power Supply Order PN: M75-SA300-SQWA

SignAlert Controllers or Collaborators with selected power options above can be paired with Options A, B, C or D.

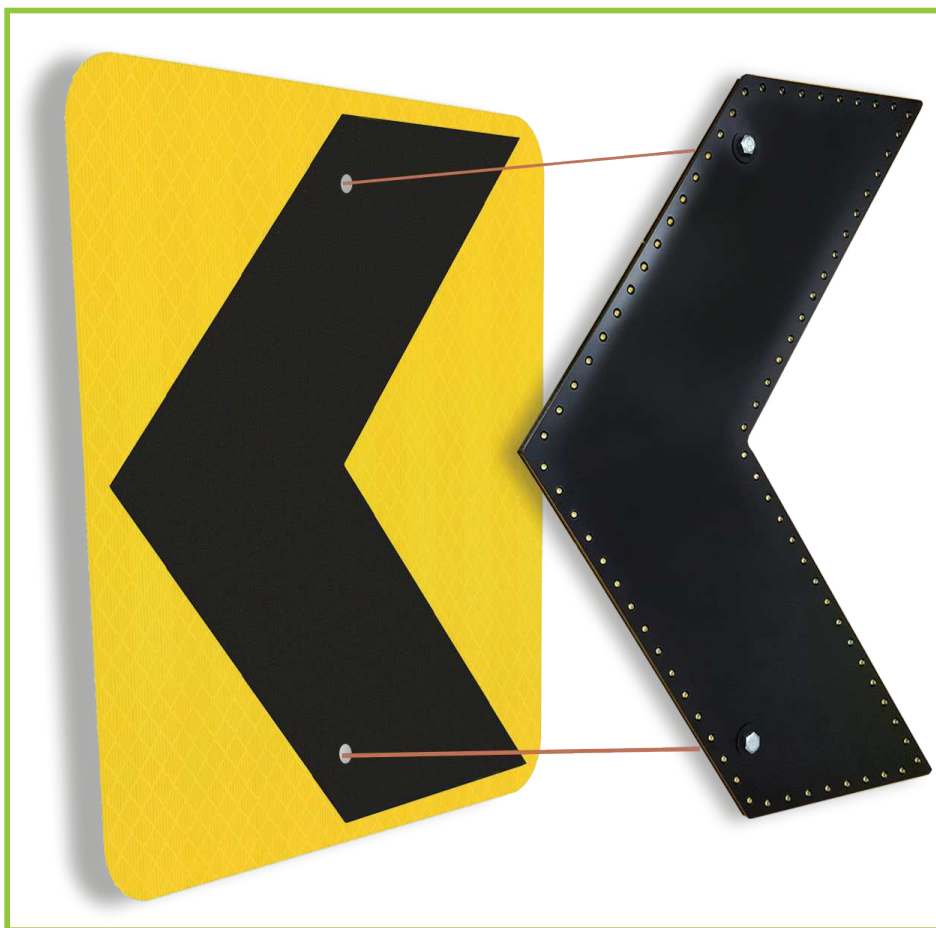
Part Number	Description
A	
W11-2F1130DI080FYG	30" W11-2 Pedestrian Sign
W11-2F1136DI080FYG	36" W11-2 Pedestrian Sign
S1-1F1130PE080FYG	30" S1-1 School Pentagon Sign
S1-1F1136PE080FYG	36" S1-1 School Pentagon Sign
B	TRAFCALMRRFBSA328 Rectangular Rapid Flashing Beacon
C	
W16-7PLF112412080FYG	24"x12" W16-7R Arrow Right Sign
W16-7PRF112412080FYG	24"x12" W16-7L Arrow Left Sign
D	TRAFCALMBDL3400NS BDL3-Y BullDog III Push Button w/ PBF9X12-X Push Button Frame; 9"x12" "Push To Turn On Warning Lights" Sign





### Guiding drivers through dangerous curves with a true-to-shape Chevron Sign.

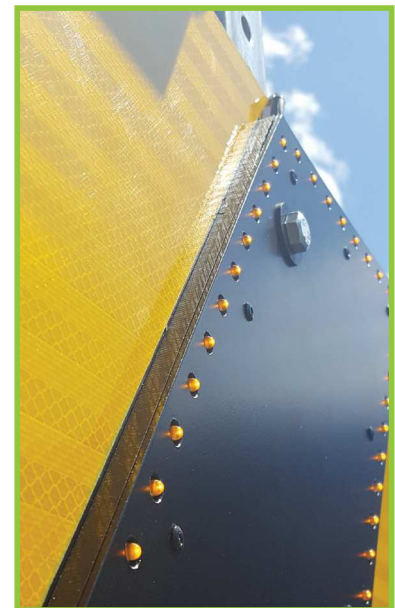
SignAlert™ Chevron Solution is designed to give drivers an elevated level of visual guidance when approaching curves. TraffiCalm's SignAlert™ Chevrons are ideal for use on today's highways that have high potential for vehicle lane departures. The sign retrofit features a high visibility display that outlines the Chevron legend with either 80 to 128 high intensity amber LEDs (depending on sign size) and boasts an effective angularity of 150°. Multiple Chevrons in a single location are configured as a single network and flash sequentially in the direction of traffic.



One Piece-Potted and sealed LED enclosure provides the most protection against the elements.

- > .080 gauge 5052 aluminum
- > Black powder coated for surface durability

All Sequential Chevron components are designed to easily adapt and retrofit to existing signs!



- > LEDs are rated for 100,000 hours
- > 1,000,000 millicandela sign output (nominal daylight maximum)
- > LEDs per sign:
  - > 18"x24" - 80 LEDs
  - > 24"x30" - 112 LEDs
  - > 30"x36" - 128 LEDs
  - > 36"x48" - 160 LEDs
- > Thin LED assemblies are mounted using accommodations (holes) for bolt-mounting directly to sign and post
- > LEDs are wired in strings to activate simultaneously per MUTCD sign
- > All LEDs will continue to flash in the event of an individual LED failure
- > All assemblies are manufactured in an ISO 9001:2015 Facility



### Traffic control begins at the fire station

SA-FR 1184 is a sign enhancement device utilized by fire stations to engage and forewarn drivers prior to the first responders call-to-action and departure for an emergency response. The device initiates an immediate activation of LED enhanced flashers permanently mounted and networked together on Fixed Warning Signs at or near the ingress / egress to the Fire Station.

- > SA-FR operates within a wireless network
- > Easy installation
- > Remote connectivity
- > TC Connect WiFi compatible
- > 20W solar kit included
- > A/C option available
- > Retrofit existing signs and infrastructure
- > Warning signs available
- > 30" or 36" LED Flasher Rings included
- > 5-Year warranty
- > Flasher Rings and flash rates are MUTCD compliant
- > Flasher Ring confirmation LED located on remote and wall mounted activator

#### (2) SA-FR 1184 Activation options available:

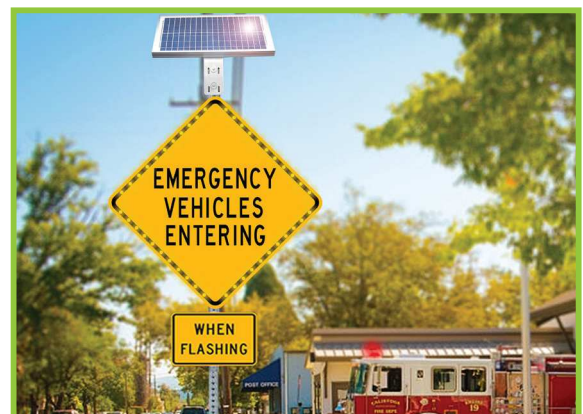
- > Sequencer Remote
- > Portable Remote
- > Wall-Mounted Activator



Requires NO Hot Spot  
or Internet Connection  
Requires NO software  
or apps  
Works on any platform  
or mobile device  
Operates within a  
secure environment  
NO Charges – recurring  
or otherwise



The activated system prompts an immediate roadside alert with a visible "Motorist Call to Action" to yield during first responder deployment and return to the fire station.







### Wet roads, they're not always wet.

SignAlert™ Ice Detection is an Advanced Warning System utilizing Surface Temperature that is measured by an accurate, non-contact infrared temperature sensor. Air temperature is also measured achieving higher levels of detection accuracy and driver notification.

The system alerts vehicle operators or pedestrians of hazardous icy road conditions by locally or wirelessly flashing SignAlert Warning Signs. It measures a wide cross section of actual road surface temperature to activate live notifications. It can be used to trigger other signs within a configured network.

- > System alerts vehicle operators or pedestrians of hazardous icy road conditions by locally or remotely flashing SignAlert Warning Signs
- > Provides surface temperature and air temperature measurements that will collectively be used to maximize detection accuracy
- > SignAlert Systems are triggered directly from a Non-Invasive Road Surface Condition Sensor
- > Can be used to trigger other signs within a configured network.



### Configuration Options

#### Network System

A deployable Surface Temperature Sensor is placed at the ingress to a bridge deck or over pass, communicating road surface conditions to a network sign placed up to 1000 feet away. This notification triggers an LED Enhanced Advanced Warning Sign, advising drivers of icy road conditions ahead.

- > (1) Surface Temperature Sensor
- > (1) SignAlert Controller w/ 20W Solar Kit
- > (1) SignAlert Collaborator w/ 20W Solar Kit
- > (1) SignAlert Amber LED Ring

#### Single Sign and Sensor

A Single Sign and Surface Temperature Sensor is placed at the ingress to a bridge deck, over pass or any location where advance notification is required. This notification triggers an LED Enhanced Advanced Warning Sign advising drivers of icy roads.

- > (1) Surface Temperature Sensor
- > (1) SignAlert Controller w/ 20W Solar Kit
- > (1) SignAlert Amber LED Ring

