



## PRODUCT SPECIFICATIONS:

# SPEEDALERT 24 RADAR MESSAGING SIGN

### SpeedAlert 24 Radar Message Sign

- SpeedAlert 24: (SA24): 61 x 152.4 cm full matrix
- (SpeedAlert 18 (SA18) 45.7 x 71.1 cm full matrix also available – See separate SpeedAlert 18 Spec Sheet)
  - Size, Weight without battery
  - Folds to fit in police cruiser trunk, SUV. 19.5 kg
  - **Open:** 71.1 x 152.4 x 4.1 cm
  - Folded dimensions: 71.1 x 76.2 x 8.3 cm
- Full matrix display
- Universal mounting system: attach to pole, trailer or vehicle hitch mount
- Integral camera for awareness and alert triggered images: 640x480 daylight images
- Internal K band radar with adjustable sensitivity
- Power saving circuitry and automatic dimming for ambient light conditions with adjustable dimming range and manual display brightness override
- Meets MUTCD Specifications

### SpeedAlert Operation Modes

- **Message Mode:** Display one message, up to 6 screens
- **All Messages:** Sequence all messages in sign memory
- **Speed Display:** Display approaching vehicle's speed with "YOUR SPEED" LED message
- **Dependent Message:** Display targeted messages based upon approaching vehicle's speed
- Changeable speed limit sign
- **Stealth or Display Off:** Collect traffic speed and volume data with no display
- **Schedule:** Change message and/or mode up to 13 times/day
- Collect vehicle volume by speed and time data in all modes
- Sign returns to last configuration when power applied

### SpeedAlert Messages

- SA24: 1-3 line messages
  - **1 line:** 61 cm H x 31.8 cm W characters, 4 per line
  - **2 lines:** 26 cm H x 14.6 cm W characters, 8 per line
  - **3 lines:** 17.8 cm H x 10.2 cm W characters, 12 per line
  - **2 lines:** (1) 17.8 cm char, 12/line, (1) 26 cm char, 8/line
- Up to 6 screens per message
- Full graphics capability, each LED individually controllable
- Variable display time, flash and reverse rates for each screen
- Scroll through 25 user defined onboard messages using selector buttons built into sign, no training necessary
- Ability to sequence messages for up to 144 screen animation
- Message power efficiency calculator in software
- Actual sign preview and unlimited message storage using TrafficCloud™ Web-based Remote Management Service, All Traffic Solutions PC Sign Manager or Android App
- Messages on sign retained when power removed
- Sign returns to last message when power applied
- Conditional Messaging – Accept local or remote data and dynamically display messages driven off data, and/or incorporate into messages

### SpeedAlert Programming Methods

#### *On-Board Programming (standard on all units)*

- Select message from sign's memory
- Select operation mode and speed limit
- Buttons time out to prevent tampering
- TrafficCloud Web-based Remote Management Services using integral cell modem for remote management (See TrafficCloud Specification for more information):

## 1. SpeedAlert 24 Folding

Engineered and manufactured in the United States of America



- Turnkey system. Remote connectivity functional upon ship. Unit connects to TrafficCloud Service when sign powered
- Fully hosted web-based management system
  - Internet connected computer with browser provides anywhere access on all connected devices with browser.
  - No IT involvement or support necessary. System bypasses customer network eliminating access issues
  - Cellular provided by All Traffic Solutions, no separate cellular charges.
  - Hosted database requires no setup or maintenance by customer
- Connect to sign via USB or Bluetooth(optional) **All Traffic Solutions Android App: Local Management (Optional):**
  - Android OS wireless Bluetooth control local to unit
  - Android device can be phone or WiFi device with Bluetooth

### Local Management Features: (PC and Android)

- Create and change messages, modes and settings
- Local data retrieval and management
- Local image retrieval and management from sign's internal camera
- Manage all unit settings, automatic sync with TrafficCloud Web Based Remote Management Service if subscribed
- All traffic data and messages saved for online management and backup with optional Traffic Suite
  - Retrieve data and save to TrafficCloud at no cost, generate limited reports online from hosted data. Extended reports available with TrafficCloud subscription
  - Create message and save to TrafficCloud library, messages available on all All Traffic Solutions Android App or PC Sign Manager devices with TrafficCloud™ subscription

## Apps

All apps included in Traffic Suite:

- **Equipment Management:** Online sign management - Change messages and settings remotely
- **Reporting:** Online data retrieval, management and analysis, Enhanced report generation
- **Image Management:** Online image retrieval and management of images from sign's internal camera
- **Alerts:** Notifications for low battery and tampering, high speed and congestion; Alerts can include images
- **Mapping:** Visually manage equipment and data
- Premier Care Perpetual Warranty

## All Traffic Solutions PC Sign Manager

Local Management using PC with USB connection standard with all signs, Bluetooth optional

- PC based client software

## SpeedAlert Programming

Configure the following parameters via TrafficCloud Web-Based Management System, All Traffic Solutions Android App or PC Sign Manager

- **Messages**
  - Create and load message using "Display Now" feature
  - Load 24 messages into sign's memory
  - Scroll messages in sign's memory

- o Display signs stored in TrafficCloud Web, Android App or PC Sign Manager
- **Speeds**
  - o Speed limit
  - o Maximum speed displayed
  - o Display on/off/specific mph activation
  - o Radar sensitivity (range)
  - o **Speed limit sign operation:** Change speed limit up to 13 times per day schedule
  - o Metric capable display with hundreds digit
- Set time via PC, Android or sync with cell signal (TrafficCloud)
- Sign firmware field and remotely upgradeable

### Speed Dependent Message System

- Different messages for each of 5 speed ranges
  - o No cars
  - o Cars <= speed limit
  - o Cars > Speed Limit, < x
  - o Cars > x < upper speed
  - o Cars > upper speed
- Ranges dependent on speed limit setting only, so simple speed limit change adjusts all dependent message ranges
- Independent Maximum Speed Displayed setting
- Speed Dependent Messages can be any SA24 messages, including
  - o "YOUR SPEED" screen with 61 cm speed display digits
  - o "SPEED LIMIT" screen with 61 cm speed limit display digits

### Scheduling

- All days, multiple messages: schedule up to 50 different messages or modes for up to 13 different time periods in a 24 hour day, repeats in each 24 hour cycle
- 7 day, multiple messages: schedule different messages or modes for up to 13 different time periods in each 24 hour day for each of 7 days, repeats in each 7 day cycle; up to 50 different messages can be used over the 7 day period
- All messages and scheduling reside on the sign – no external hardware necessary
- Program schedule via TrafficCloud Web, All Traffic Solutions Android App or PC Sign Manager, Save to load onto multiple signs

- Camera activation controlled in schedule windows
- Internal real time clock, time and schedule maintained with power disconnected

### SpeedAlert Data Logging Option

- Traffic reports generated using TrafficCloud Web-based Reporting App
- Collect data automatically with TrafficCloud Remote Management or locally with All Traffic Solutions Android App or PC Sign Manager
- Reports include tables and charts to address all constituents with the most applicable data presentation
- All reports exportable to excel, csv and pdf
- Automatic Data Collection – TrafficCloud Web
  - o Data retrieval every 15 minutes – near real time reporting, memory never full
  - o All data in one database for analysis filtered by location, date and time
  - o Access reports from interactive map view by location
- **Local Data Collection:** All Traffic Solutions Android App or PC Sign Manager
  - o All data hosted in online database for anywhere access
  - o Download traffic data from sign with USB or Bluetooth connection
  - o 30 days of high volume data minimum storage on sign, Data collection rolls over when memory reaches capacity
- **Reports, local data collection:**
  - o Summary page with average and 85th percentile speed, average daily volume, 16 KPH pace speed, high and low speed, display mode

Traffic counts by speed range, full day and time of day over selected date range with 8 KPH resolution

Vehicle counts by time range per day by hour

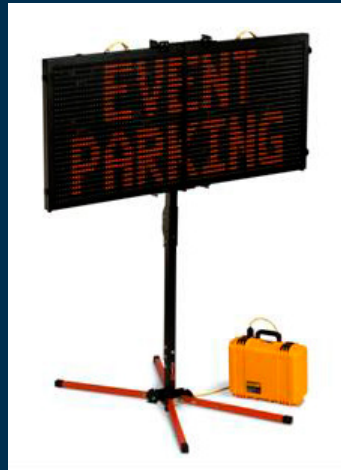
Vehicle counts by speed range and time of day

- **Reports, automatic data collection** (TrafficCloud Web based Management Services)
  - o Enhanced Summary with detail charts and graphs
  - o Compliance by speed range with 3 ranges
  - o Enforcement report showing highest speed and volume violators over selected locations
  - o Effectiveness report showing program performance

## Compatible with these All Traffic Solutions Products

Engineered and manufactured in the United States of America

1. SpeedAlert 24 on Portable Post
2. SpeedAlert 24 on Hitch Mount



### Construction

- **LED pixels:** Amber 595nm, 0.5 rad viewing angle, 100,000 hrs, black background, (MUTCD compliant)
- **LED Density:** 1.5 x 2.5 cm pitch, 26 x 96 pixel matrix
- **Radar:** K Band (24.15 GHz), FCC Certified, no license req'd, +-2 kph accuracy, 0.21 rad square pickup area, range: 610+ m., 8-150 kph
- Conformal coating on all circuit boards
- Integral handles, two heights
- Weatherproof, NEMA 4, IP65 sealed
- 0.3 cm Tinted, non-glare, UV stabilized polycarbonate face
- Aluminum chassis, 12 ga, black powder coat finish
- Tamper resistant mounting hardware system, hardware secured behind enclosure lock
- -40° to 71°C operating temperature range, 95% humidity non-condensing (-29°C for Bluetooth communication, -15°C for internal camera)

### SpeedAlert Power

- **Power Input, Max:**
  - o 12VDC, 8A max, 96 W max; 4A, 48W typical
- Power saving circuitry and automatic dimming for ambient light conditions with adjustable dimming range and manual display brightness override
- **SpeedAlert 24 Power:**
  - o 12VDC locking plug, 30A capacity: Compatible power supplies include:
  - o Vehicles' power port, with optional adapter
  - o Trailer wiring adapter for hitch mount
  - o POWERcase portable power supply, PC26 or PC36

- o 120 or 220 VAC Power supply in NEMA 4 enclosure
- o ATS 5 Trailer (batteries with optional solar assist: 235 or 470 Ah, 60W solar option)
- o Pole battery box: 156Ah battery with solar assist
- Battery level indicator on sign, All Traffic Solutions Android App, PC Sign Manager or TrafficCloud Remote Management.
- Auto recovery for battery with solar
- Power cable customer replaceable, gold plated connector contacts, high visibility yellow cable

### Standard SpeedAlert System Components

- SpeedAlert Radar Message Sign SA24
- PC Sign Manger software with USB cable
- On-Board Controls
- Optional SpeedAlert Components and Features
- TrafficCloud Web-Based Remote Management Service
- Android App, Bluetooth connectivity
- Padded carrying case with accessory pockets, shoulder strap
- **Mounting bracket:**
  - o mounts to pole or any surface using any hardware, no tools required
  - o tamper resistant hardware compartment
  - o rotate bracket for additional 30.5 cm of mounting height
  - o aluminum with black powder coat
  - o sign can be locked into bracket
  - o bolt sign to mounting bracket for additional security
  - o Mounting hardware supplied



- **Speed activated relay closure**
  - o 7A, 30VDC or 7A 120VAC max, 100mA 5VDC min, no power supplied, simply a contact closure
  - o Trigger relay at specified speed with configurable duration from 1 to 10 seconds per radar event
- Tamper alarm – ATS-5 or ATS-3 trailer

**SpeedAlert Mounting Options**

- ATS-5 Trailer (refer to ATS 5 specifications or more info)
- Vehicle Hitch mount
  - o Mounts sign 76.2 cm to bottom of sign from receiver tube (final height dependent on receiver height)
  - o Fits 3.2 or 5.1 cm receiver, adapter included, 1.3 cm hitch pin
  - o Locking rotation adjustment on 0.3 rad increments over 3.14 rad, +/- 0.1 rad tilt
  - o White powder coat finish with rear reflector

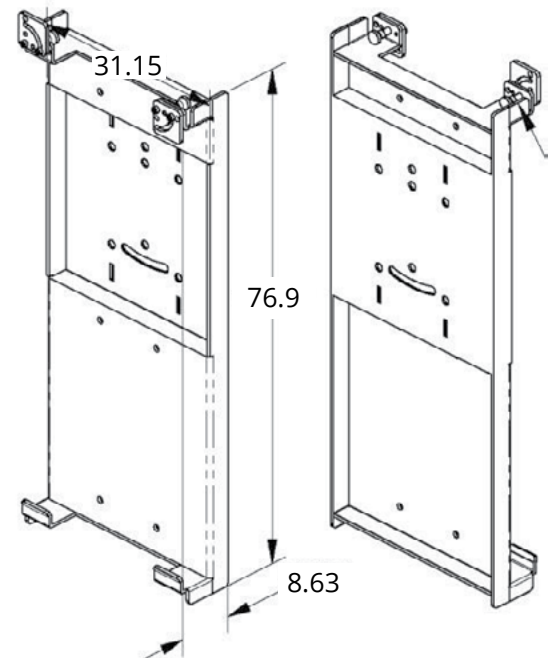
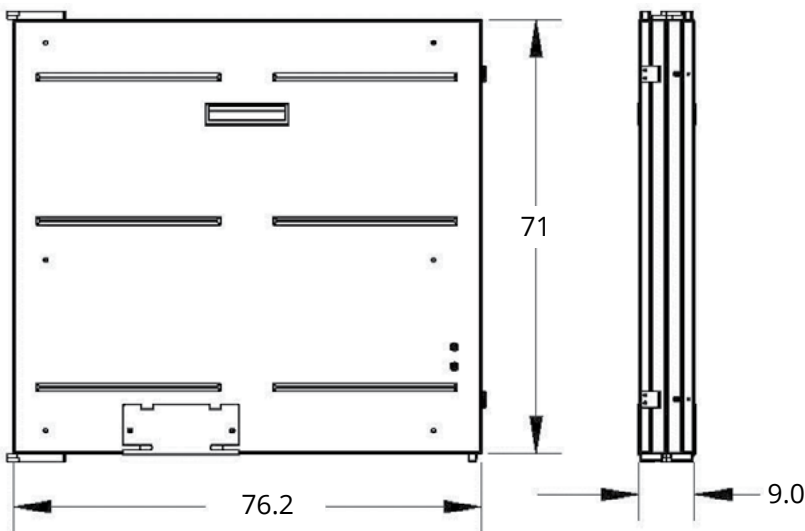
- **Standard Folding Portable Post**
  - o Folds for easy storage and portability
  - o 119.4 x 152.4 cm to bottom, 185.4 to 218.4 cm to top depending on leg positions; rotate bracket for additional 30.5 cm height
- Mounting provisions for permanent applications with ¼-20 threaded holes

**Warranty Options**

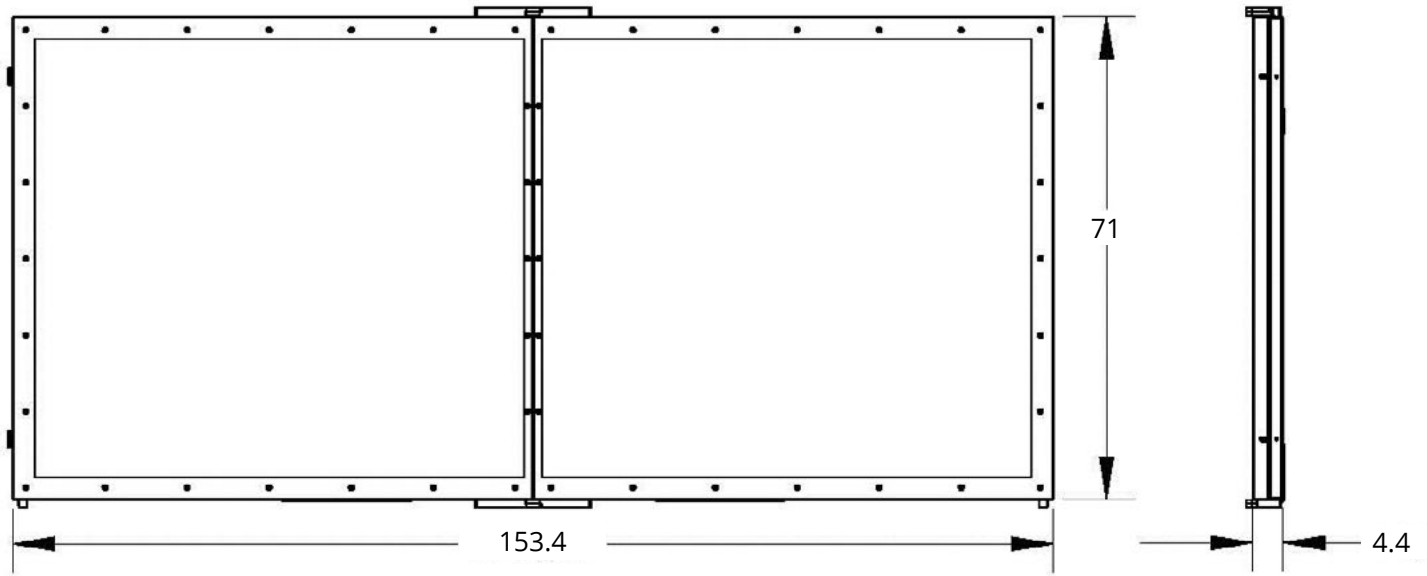
- **PremierCare Perpetual Warranty** available with current TrafficCloud subscription. Ask your ATS sales representative for details.
- **All Traffic Solutions 3-year Manufacturer’s Warranty** comes standard on all SpeedAlert radar speed displays purchased after January 1, 2019.

**SpeedAlert Dimensions: Folded**

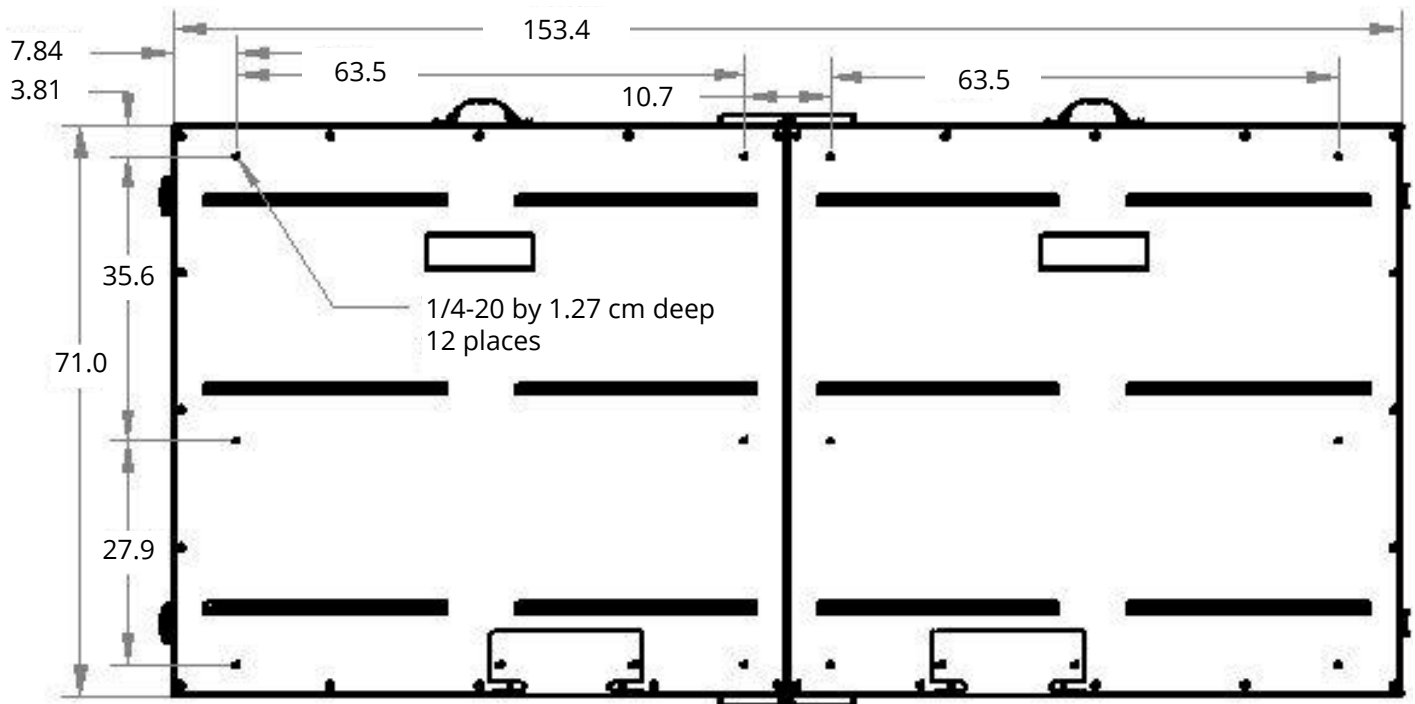
**Mounting Plate**



## SpeedAlert Dimensions: Open



## Mounting Hole Positions



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