ALL TRAFFIC



PRODUCT SPECIFICATIONS: SPEEDALERT 18 RADAR MESSAGING SIGN

SpeedAlert Radar Message Sign

- **SpeedAlert 18 (SA18):** 45.7 x 71.1 cm full matrix (SpeedAlert 24 (SA24) 61 x 152.4 cm full matrix also available – see separate SpeedAlert 24 Spec Sheet)
- Size and weight without battery
 - o 76.2 x 50.8 x 7 cm (without Your Speed sign), 13.2 kg
- Full matrix display
- Universal mounting system: Attach to pole, trailer or vehicle hitch mount
- Integral camera for awareness and alert triggered images: 640 x 480 pixel daylight images
- Internal K band radar with adjustable sensitivity
- 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
- **Dependent Message:** Display targeted messages based upon vehicle's speed, up to six screens per message
- Changeable speed limit sign
- Stealth or Display Off: Collect traffic speed and volume data with no LED display, 'YOUR SPEED' sign easily removed
- 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 mode and configuration when power applied

SpeedAlert Programming Methods

On-Board Programming (standard on all units)

- Select operation mode
- Set Speed Limit
- Select message from sign's memory

TraffiCloud[™] Web-based Remote Management Services:

Remote Management using integral cell modem (See Trafficloud specification for more information):

- Turnkey system. Remote connectivity functional upon ship. Unit connects to TraffiCloud Service when sign powered
- Fully hosted web-based management system
 - o Internet connected computer with browser provides anywhere access on all connected devices with browser
 - o No IT involvement or support necessary. System bypasses customer network eliminating access issues
 - o Cellular provided by All Traffic Solutions, no separate cellular charges
 - o Hosted database requires no setup or maintenance by customer

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
 - o PremierCare 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
- Connect to sign via USB or Bluetooth (optional)

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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 TraffiCloud Web-based Remote Management Service if subscribed
- All traffic data and messages saved for online management and backup
 - o Retrieve data and save to TraffiCloud at no cost, generate limited reports online from hosted data. Extended reports available with TraffiCloud subscription
 - o Create message and save to TraffiCloud library, messages available on all Android App or PC Sign Manager devices with TraffiCloud subscription

SpeedAlert Messages

- SA18: 1-2 line messages
 - o 1 line: 26.4 cm H x 14.6 cm W characters, four per line
 - o **2 lines:** 17.8 cm H x 10.2 cm W characters, six per 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 TraffiCloud 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

Configure the following parameters via TraffiCloud Web-based Management System, All Traffic Solutions Android app or PC Sign Manager

- Messages
 - o Create and load message using 'Display Now' feature
 - o Load 24 messages into sign's memory
 - o Scroll messages in sign's memory
 - Display signs stored in TraffiCloud Web,
 All Traffic Solutions 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)
 - **Speed limit sign operation:** Change speed limit up to 13 times per day schedule
 - o Metric capable display with hundreds digit
 - o Set time via PC, Android or sync with cell signal (TraffiCloud)
 - o Sign firmware field and remotely upgradeable

Speed Dependent Message System

- Different messages for each of five 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 SA18 messages, including:
 - o 'YOUR SPEED' screen, 45.7 cm speed display digits
 - o 'SPEED LIMIT' screen, 45.7 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
- Seven Day, Multiple Messages: Schedule different messages or modes for up to 13 different time periods in each 24 hour day for each of seven days, repeats in each seven day cycle; up to 50 different messages can be used over the seven day period

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- All messages and scheduling reside on the sign no external hardware necessary
- Program schedule via TraffiCloud 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 TraffiCloud Web-based Reporting app
- Collect data automatically with TraffiCloud 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 TraffiCloud 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:
 - Summary page with average and 85th percentile speed, average daily volume, 16 kph pace speed, high and low speed, display mode
 - o Traffic counts by speed range, full day and time of day over selected date range with 8 kph resolution
 - o Vehicle counts by time range per day by hour
- o Vehicle counts by speed range and time of day Reports, automatic data collection (TraffiCloud
- 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

Construction

- 'YOUR SPEED' sign
 - o High intensity prismatic reflective background
 - o 61 x 20.3 cm
 - o 8.9 cm high MUTCD 'C' letters
- LED Pixels: Amber 595nm, 0.5 rad viewing angle, 100,000 hours, black background, (MUTCD compliant)
- LED Density: 1.5 x 2.5 cm pitch, 18 x 48 pixel matrix
- **Radar:** K Band (24.15 GHz), FCC Certified, no license required, +-2 kph accuracy, 0.2 rad square pickup area, range: 457 m, 8-150 kph
- Conformal coating on all circuit boards
- Integral handle
- Weatherproof, NEMA 4, IP65 sealed
- 0.6 cm Tinted, non-glare, UV stabilized polycarbonate face
- Drip proof, vented battery compartments (2)
- Aluminium chassis, 14 ga, white powder coat finish, black powder coat front for maximum contrast for display visibility
- Tamper resistant mounting hardware system, hardware, controls and battery access 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: 12 VDC, 3 A max, 36 W max
- Power saving circuitry and automatic dimming for ambient light conditions with adjustable dimming range and manual display brightness override

SpeedAlert 18 Power Options:

- o 16Ah LFP battery with built-in short circuit and reverse polarity protection circuitry; 1.5A 12.8 VDC output, 120VAC input automatic charger; Capacity for up to 2 batteries in unit for extended portable use
- o Solar panel assist: 40W or 60W solar panel and bracket, Solar controller panel with 26Ah lead acid battery; 6A 120VAC automatic charger optional
- o 100-220VAC AC power supply (6A 12VDC) in external NEMA 4 enclosure

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Compatible with these All Traffic Solutions Products

Engineered and manufactured in the United States of America

- 1+2. SpeedAlert 18 Pole Mount
- 3. SpeedAlert 18 on ATS-5 Trailer
- 4. SpeedAlert 18 with Full Wrap Your Speed Sign (White or Red)



- ATS-5 Trailer (batteries with optional solar assist: 235 or 470 Ah battery system, 40 or 60W solar option)
- o ATS-3 Trailer, 100Ah battery and 40W solar option
- Battery level indicator on sign, Android app, PC Sign Manager or TraffiCloud Remote Management
- Auto recovery for battery with solar

Standard SpeedAlert System Components

- SpeedAlert Radar Message Display SA18
- Tamper resistant mounting plate and hardware
- Key
- On-board controls
- ATS PC Sign Manger software with USB cable

Optional SpeedAlert Components and Features

- TraffiCloud Web-Based Remote Management Service
- All Traffic Solutions Android app, Bluetooth connectivity
- Padded carrying case
- Extra mounting brackets
- 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 1to 10 seconds per radar event
- Tamper Alarm: ATS-5 or ATS-3 trailer

SpeedAlert Mounting Options

- Pole mount standard with included bracket, hardware
- NCHRP 350 approved on 10.2 cm pole (Letter SS-135)
- ATS-5 Trailer (refer to ATS-5 specifications for more information)

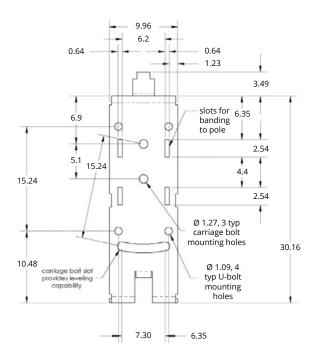
- ATS-3 Trailer (refer to ATS-3 specifications for more info)
- Vehicle Hitch Mount
 - o Mounts sign 76.2 cm to bottom of sign from receiver tube (final height dependent on receiver height)
 - Fits 3.2 or 5.1 cm receiver, adapter included,
 1.3 cm hitch pin
 - o Locking rotation adjustment on 0.3 rad 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 **IA18:** 152.4 x 185.4 cm to bottom, 203.2 x 236.2 cm to top of sign depending on leg positions
- Mounting provisions for permanent applications with 1/4-20 threaded holes

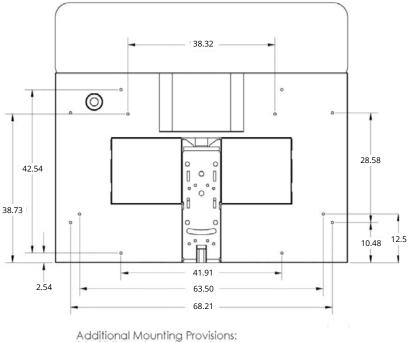
Warranty

- 1-year warranty (three months on Li-Ion batteries)
 Product software upgrades free
- PremierCare, included with TraffiCloud Web Subscription
 - o Perpetual warranty for the duration of subscription
 - o Accessories, vandalism and accidental damage (non-warranty) at 50% off list price

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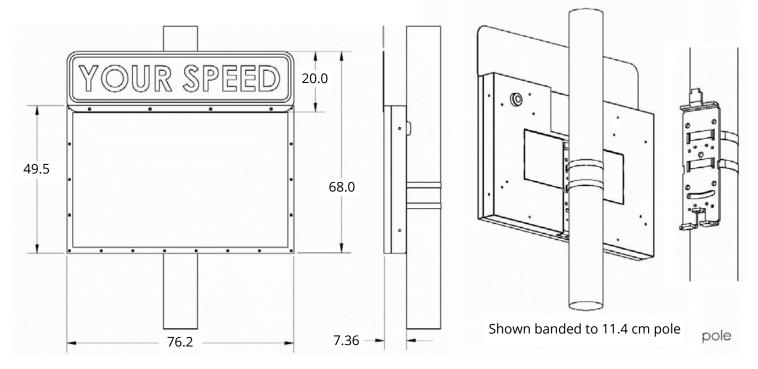
SpeedAlert 18 Mounting Bracket and Mounting Holes





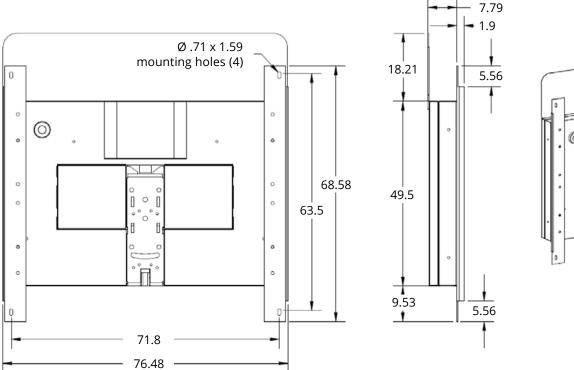
1/4-20 thread, captive nuts

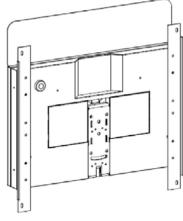
SpeedAlert 18 Dimensions



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SpeedAlert 18 with Trailer Mounting Brackets Installed – for Installation on Existing Trailers for Trade In





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