

ALL TRAFFIC SOLUTIONS



ATS Mobile for Android

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ATS Mobile for Android

Quick Start - Create a Message with ATS Mobile for Android

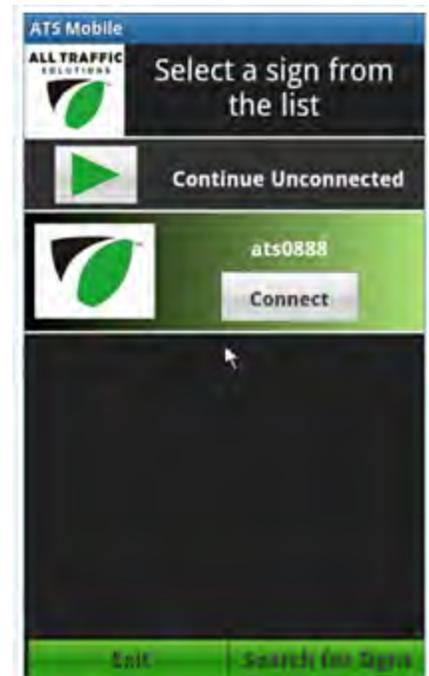
Log In

Type in the email address and password associated with the mobile device account, then tap *Login*. This email and password has been emailed from All Traffic Solutions. Contact ATS if you do not have a login and password. The initial log-in must be performed while the Android device has WiFi or cellular access to the internet. Once the initial log-in is successful, a wireless internet connection will not be necessary for subsequent log-ins within 30 days as long as you check the box to *remember username for 30 days*.



Connect to a Sign

After logging in, the next screen is the connection screen. Tap the *Search for Signs* button in the lower right corner to find all the signs within bluetooth range of the PDA. Once the list of available signs is populated, select the sign to connect to and tap *Connect*. Once connected, you will see the home screen with the available main functions for the connected sign.



Create and Display a Message

To create messages and manage messages on an instALERT or SpeedAlert, touch the *Messages* button on the home screen.

To create a new message, touch the *Create Messages* button. Within each screen, select the type of message you want - 3 lines, 2 lines, 1 line, mixed lines, graphics, Your Speed, Speed Limit or clock. Type the desired text into the white text boxes. Set the duration and blink rate for each screen with the drop down list of selections. You can justify the text with the justification icons.

Once you have completed the first screen, tap on screens 2 and 3 to add additional screens and create these screens in the same manner. To remove screens tap on the X icons on the screen tab. Once you have completed the message, save it with the *Save* button. You can preview the message with the *Preview* button. From the preview screen, you can send the message to the connected message sign with the *Display Now on Sign* button. You can also display the message on the sign from the main creation screen by tapping the *Display Message Now* button.

To edit the current message displaying on the sign, tap the *Get Current Message* button.

The screen power graphic shows how much power each screen will use. If battery life is a concern then make sure that the majority of screens in each message fall somewhere in the green area. Using a blink rate is an easy way to lower the power usage.



Now Showing

The *Now Showing* button on the home screen allows you to scroll up and down through the list of messages stored in the sign's memory. Once you scroll to a message that you would like to display tap the *Display Now on Sign* button. The messages on the sign are added using the Manage Messages button. See the ATS Mobile instructions for more information.



ATS Mobile - Logging in and Connecting to Sign, Mode Selection

All units can be controlled locally with optional Bluetooth management and a wireless Android mobile device.

To begin, turn on the Android Device and sign. Open the ATS Mobile App from the list of available applications on the Android device.

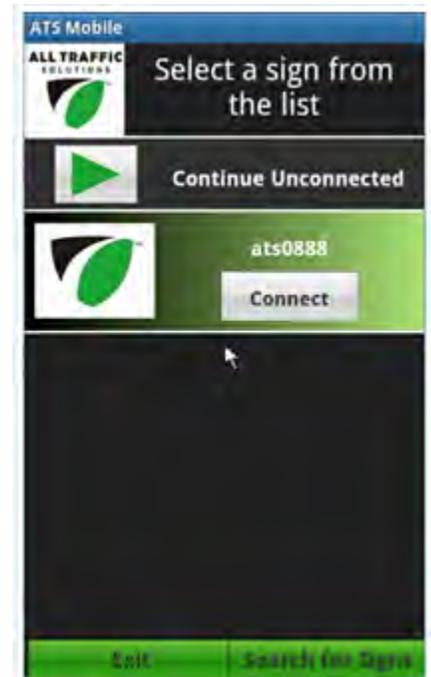
Log In

Type in the email address and password associated with the mobile device account, then tap *Login*. This email and password has been emailed from All Traffic Solutions. Contact ATS if you do not have a login and password. The initial log-in should be performed while the Android device has WiFi or cellular access to the internet for user verification. Once the initial log-in is successful, a wireless internet connection will not be necessary for subsequent log-ins.



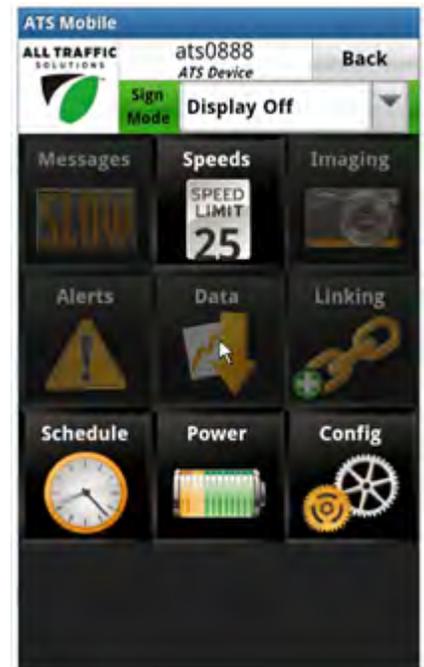
Connect to a Sign

After logging in, the next screen is the connection screen. Tap the *Search for Signs* button in the lower right corner to find all the signs within bluetooth range of the PDA. Once the list of available signs is populated, select the sign with which to be connected and tap *Connect*. Once connected, you will see the home screen with the available main functions for the connected sign.



Home Screen

The home screen on the Android device has all the functionality available for all ATS equipment. Only the functions applicable to the unit to which you are connected will be available, the non-available functions will be dimmed out. All available functions can be activated by tapping on the button.



Sign Mode

The Sign Mode selection at the top of the home screen shows the connected sign's current mode. To change the mode tap on the down arrow towards the right and a drop down list of modes will pop up. Scroll up and down to view all available modes; any unavaible mode will be dimmed out. Select the new mode by tapping on the radio button next to mode and then hit *Done*. A message will pop up asking for confirmation of the sign mode change. Tap *Confirm* and the sign will now be set to the new mode. You are now ready to change the settings for the connected sign in the selected mode.



ATS Mobile Functions for All Units

Power

To configure settings that affect power usage, touch the *Power* button on the home screen. The power screen shows options that can help you monitor the battery level on the sign or Android device. It also has options to make changes to sign settings that will affect power consumption.

The *Blink Sign* button allows blinking to be enabled. Enabling blinking for the LED display can greatly improve battery life.

The *Radar Settings* button will allow you to reduce the radar sensitivity to have the speed display pick up vehicles only when they are within visible range of the sign, which will also extend battery life.

Adjusting the brightness range for the sign, either locking it to one brightness level or adjusting the minimum and maximum brightness between which the unit's automatic dimming will operate, can also affect power consumption. Reducing the maximum brightness to 7 can make a significant reduction in power usage.



Config

The *Config* button on the home screen is used to configure settings applicable to the connected sign. The *Tools* button provides the option to identify the sign by displaying the start-up routine on the sign when the button is pressed. The other options on the *Tools* screen are useful for devices that are subscribed to SmartApps.

The *Config* screen also provides access to *Rename* the sign, set the *Clock* on the sign and get diagnostic information from the sign.

Demo Mode can be activated from this screen. If active you will see the ON indicator in the button and the DEMO indicator in the *Config* button on the home screen. The demo mode starts a series of speeds to be displayed on the screen when no cars are in range.



Schedule

To create edit and manage schedules tap the *Schedule* button on the home screen.

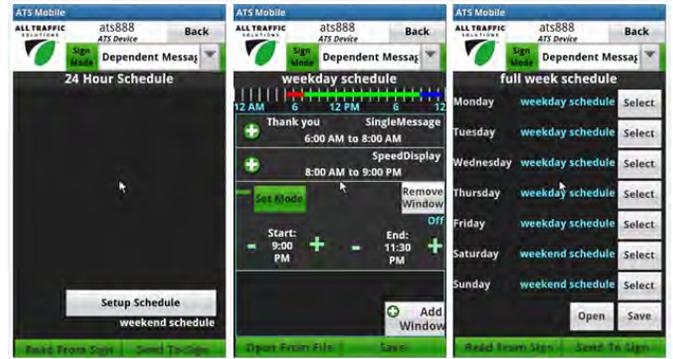
For a day schedule, tap the *24 Hour Schedule* button. On the next screen you can read the schedule from the sign, enter the schedule editing screen, or send the selected schedule to the sign. To enter the schedule editing screen tap the *Setup Schedule* button.

This editing screen allows you to construct a schedule that will run for a 24 hour period. You can also open an existing schedule and edit it by tapping the *Open from File* button. You can add up to six different time windows. For times when there are no time windows setup the sign will essentially be in stand-by mode where it will not display anything or record data. It will however still call in to the server at its normal frequency for SmartApps users.

For each time window first adjust the desired start and end times using the - and + buttons. Next set the sign mode for that time window by tapping the *Set Mode* button and selecting a mode from the list such as speed display, single message or dependent message mode. For *Single Message* and *Dependent Message* sign modes, you will need to select the active message during that window. Tap the *Set Message* button to select from the list of available messages.

Once the 24 hour schedule is set Save the schedule. To send it to the sign go back one screen and tap the *Send to Sign* button. You will be prompted whether or not to activate the schedule. If so the sign mode will change to *Day Schedule*.

For a weekly schedule go to the *7 Day Schedule*. From this screen you can either open an existing weekly schedule or create a new one by selecting a different previously saved 24 hour schedule for each day of the week. (These 24 hour scheduled must be created and saved before creating a 7 day schedule.) After creating a new weekly schedule Save it, and if you would like to send it to the sign tap the *Send to Sign* button. You will be prompted whether or not to activate the schedule. If so the sign mode will change to *Week Schedule*.



Imaging

For signs with the *Pictures* option enabled the different ways to trigger an image capture can be managed by tapping on the *Imaging* button on the home screen. For each of the triggers (High Speed, Congestion, Tamper and Awareness) the corresponding button allows you to enable the trigger, select the picture quality, and set the thresholds.

For the signs subscribed to the *Alerts SmartApp* the thresholds for each trigger will be the same for *Alerts* and *Imaging*.

The main *Imaging* screen will indicate which image triggers are turned OFF. For those that are enabled, it will indicate either the threshold speed, number of images taken for tamper, or frequency of awareness picture taken in minutes. For messaging only signs the *High Speed* and *Congestion* triggers will be inactive.

The *Download & Manage Images* button allows you to view how many images are on the sign and whether to download or erase them. You can also take a picture manually by tapping the *Take a Snapshot* button and then downloading the image after waiting a couple seconds.

To view each image tap on one of the rows under *Images on Device*. Here you can view the image and its details, choose whether to delete the image, or add comments that will be saved with the image.



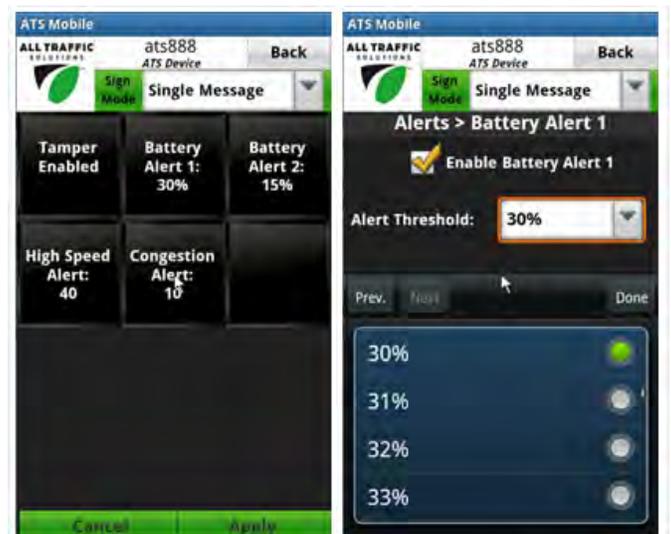
Alerts

The *Alerts* button on the home screen will only be active for signs subscribed to the *Alert Notification SmartApp*.

The functionality is very similar to the *Imaging* function. In the Alerts screen you can manage each alert trigger by tapping on the corresponding button. There you can enable the alert, and set the threshold.

If *Alerts* and *Imaging* are both subscribed on a speed display sign, changing the threshold values of the *High Speed* and *Congestion* alert triggers will automatically change the thresholds for the corresponding image trigger and vice versa, because the thresholds must be the same for each particular alert and image trigger.

The two battery alerts are meant to warn you when the batteries get low and when they get very low. They do not monitor two separate batteries.



ATS Mobile Speed Display Functions and Data Management - Shield, SpeedSentry and SpeedAlert

Speeds

To set parameters associated with the speed limit, tap the *Speeds* icon. This will take you to the *Speed Settings* screen. Set the speed limit by clicking the *Speed Limit* icon. This brings up the *Speed Limit* screen. Set the speed limit with the slider.

If the violator strobe option was purchased, the *Strobe Above* icon will allow you to set the speed above which the strobe will activate.

The *Display Above* icon brings up the *Display Settings* where you set whether the display is on or off (Stealth mode where data can still be collected), the speed value above which vehicle speeds will be displayed, and the maximum speed displayed. Above the maximum speed displayed the sign's LED display will go dark so that drivers cannot "race the sign".

The *Blink Sign* button allows you to blink the LED display which will greatly extend battery life. The *Radar Settings* allows you to adjust the radar sensitivity from 1 to 10 (1 being the least, 10 being the most sensitive or longest range). This is important for adjusting the vehicle detection range and can also have a significant impact on battery life.



Data Collection, Downloading and Sync to Server

To set parameters associated with the Data recording functions, touch the *Data* button on the home screen. All units with the Traffic Data Collection option are collecting data anytime the unit is on; this is indicated on the left of the screen.

To download the data on the sign press the *Download* button in the center. Once in the *Download* screen you will see how full the data storage is on the actual sign. To begin downloading the data to the Android device press *Download Now*. The download will begin and a progress bar will indicate the status. For signs that are very full of data this process will take considerably longer. It is recommended to **download the data frequently** to avoid the long waiting times when downloading large amounts of data. Once the



download has finished, you will have the option to erase the data on the sign, which is recommended to avoid generating duplicate data values on future downloads which will extend the download times unnecessarily.

The data transfer process is not fully complete until you sync the data to the server that will generate the reports. Syncing the data requires a wireless internet connection to the Android device. To sync the data file, tap on the file and a list of locations will show up that you have setup in SmartApps. Select the location where the data was collected to sync the data to. If there are no locations or the correct location is not in the list you will have to use the SmartApps website to enter the correct location before syncing. For instructions on how to do this go to the *SmartApps: Setup* section of the online instruction manual and select *Setup SmartApps Locations, Fixed and Mobile Locations*. Once the data has been synced successfully to the correct location it is highly recommended to delete the file on the device and erase the data from the sign. If this is not done, data values can be duplicated on future downloads and cause erroneous reporting values.

Once the data has been synced, it is available for reporting online. See the *SmartApps: Reporting* section of the online manual for detailed instructions on reporting.

The *Recent Stats* button on the right shows the last 40 seconds of readings and will update continuously when you are connected to a sign. To view all the readings scroll up and down on the screen.

Scheduling

The speed display sign can be scheduled for different sign modes up to 6 times over a 24 hour period, or to have a different 24 hour schedules applied to each of 7 days. Turning off the sign or even just the display during low traffic hours can greatly extend the battery life.

For more detailed instructions see the *Scheduling* section of *Android Device Functions for All Signs*.

ATS Mobile Message Sign Functions- InstALERT and SpeedAlert

Create and Display a Message

To create messages and manage messages on an instALERT or SpeedAlert, touch the *Messages* button on the home screen.

To create a new message, touch the *Create Messages* button. Within each screen, select the type of message you want - 3 lines, 2 lines, 1 line, mixed lines, graphics, Your Speed, Speed Limit or clock. Type the desired text into the white text boxes. Set the duration and blink rate for each screen with the drop down list of selections. You can justify the text with the justification icons.

Once you have completed the first screen, tap on screens 2 and 3 to add new screens and create these screens in the same manner. To remove screens tap on the X icons. Once you have completed the message, save it with the *Save* button.

You can preview the message with the *Preview* button. From the preview screen, you can send the message to the connected message sign with the *Display Now on Sign* button. You can also display the message on the sign from the main creation screen by tapping the *Display Message Now* button.

To edit the current message displaying on the sign, tap the *Get Current Message* button.

The screen power graphic shows how much power each screen will use. If battery life is a concern then you would want to make sure that the majority of screens in each message fall somewhere in the green area. Using a blinkrate is an easy way to lower the power usage.



Managing Messages on Sign and Account

To view the messages on the sign, tap the *Manage Messages* button. The Message List screen will come up and begin retrieving all the messages, up to 24 total, stored on the sign. Once this process is complete the list of messages will show all the messages on the account server with the checked messages being those that are currently stored on the sign. At any time the messages can be retrieved from the sign by tapping the *Read from Sign* button.

To change the list of stored messages on the sign, check the desired messages and uncheck the ones to be removed, then tap *Send to Sign*. The new list of messages will now be stored on the sign and selectable with the onboard controls.

To edit a particular message tap the *Edit* button next to the message. This will take you to the message creation screen where you can then make changes to the message and resave it.



Important Notes: All messages that are in the list for a particular account are stored externally on a server when the Android Device is connected to the internet. Even if there is no internet connection when changes are made to single messages or the message list, those changes will propagate to the server at log in once the Android Device is connected to the internet. To delete messages from the account list go to apps.alltrafficsolutions.com. For detailed instructions see the *SmartApps Message Management* section of the online manual. If there is no internet connection only the messages from the last time you were connected to the internet will show on the ATS Mobile message list.

Now Showing

The *Now Showing* button allows you to scroll up and down through the list of messages on the sign. Once you scroll to a message that you would like to display tap the *Display Now on Sign* button.



Speed Dependent Messages

Dependent Message Mode displays different messages depending upon the approaching vehicle's speed. To create dependent messages, click the *Dependent Message* button. In this screen, apply messages created and saved on the message creation screen (which must be created and saved first) to the speed conditions for approaching vehicles. Select one message for each speed condition. Preview each message to verify that it is the correct message. Modify the speed ranges with the drop down lists. Once the dependent message group is created, *Save* it.

To read back or modify the dependent message that is currently on the sign, tap the *Read from Sign* button and wait until the different messages populate the screen.

To send the dependent message to the sign tap *Send to Sign*. The messages will be available in the sign to display when the sign mode is set to *Dependent Message* and it receives speed inputs from the radar, or demo mode is active.



Scheduling Options

The message sign can be scheduled for one message on or off over a 24 hour period, to change messages up to 6 times over a 24 hour period, or to have a different 24 hour schedules applied to each of 7 days. For more detailed instructions see the *Scheduling* section of *Android Device Functions for All Signs*.