

SpeedCheck® speedcheck manager mobile app guide

For the SPEEDCHECK-12/15/18



89806_GUIDE_SpeedCheck-Manager-Mobile_RevF



SPEEDCHECK MANAGER MOBILE APP GUIDE 1.0 INTRODUCTION

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1.0 Introduction

1.1 About the App

SpeedCheck Manager mobile app is used to wirelessly communicate with your SPEEDCHECK-12/15/18 radar speed sign for programming, configuration and diagnostics. It utilizes the Bluetooth connection between your mobile device and the applicable radar speed sign. Once you download the app, no cellular or Wi-Fi connection is required while onsite to communicate with the radar speed sign.

The mobile app allows for quick adjustments to key settings, verification of system parameters, firmware updates, password management, and the ability to perform local diagnostics without needing to access the interior of the radar speed sign.

SpeedCheck Manager mobile app is available free of charge on the Apple App Store and Google Play Store for compatible mobile devices.



NOTE

To download the SPEEDCHECK-12/15/18 user manuals, please visit <u>support.carmanah.com</u>. You can also view the digital versions from within the app via Manuals in the bottom ribbon.

NOTE

The images and descriptions in this document feature the iOS version of the app. The iPadOS and Android versions will be very similar but may look and/or perform differently.



This document focuses on the mobile version of SpeedCheck Manager. The PC software version of SpeedCheck Manager is available at <u>support.carmanah.com</u>. See <u>Section 4.0</u> for more information.



1.2 App Installation

Download and install SpeedCheck Manager mobile app from the Apple App Store or Google Play Store:



The following are the minimum device requirements to download and use the app:

iPhone (iOS [®])	iPad (iPadOS [®])	Android
Device Requirements	Device Requirements	Device Requirements
 iPhone 8 or newer iOS version 13 or newer 	 iPad 5th generation or newer (including iPad Mini 4, iPad Air 2, and iPad Pro 2nd generation) iPadOS 13 or newer 	Android 9 or newer

NOTE

Mobile devices require Bluetooth Low Energy (BLE). Older hardware and/or software than listed above may be compatible but are not officially supported or tested by Carmanah.

2.0 Initial Setup

Carmanah assigns default programming to each sign using the following parameters:

Model	Integrated Strobe	Unit of Speed	Minimum Speed	Speed Limit	Violation Alert Speed	Slow Down Speed	Strobe Speed	High Speed Cutoff
SPEEDCHECK -12	On	mph or kph	25	30	31	N/A	35	50
SPEEDCHECK -15/18	N/A	mph or kph	25	30	31	35	N/A	50

Based on your application, you may need to change these settings and/or other system parameters using the SpeedCheck Manager mobile app. Unit of speed will be preset based on your installation location.

Before connecting to your SPEEDCHECK-12/15/18 radar speed sign, navigate to the app store on your mobile device to confirm you are running the latest version available. Firmware updates are tied to the version of the app you have installed on your mobile device.



For MUTCD compliance, the strobe should be turned off for SPEEDCHECK-12 systems. See Section 2.4 for more information.



2.1 Connecting to the SPEEDCHECK-12/15/18

Opening the SpeedCheck Manager mobile app will take you to the Signs screen. On this screen, the app will automatically scan and detect any nearby SPEEDCHECK-12/15/18 signs (up to approximately 100' or 30 m away). To scan manually, tap the refresh button in the top right or swipe down on the screen.

For best performance, stand in front of the sign when connecting.



Nearby signs will be represented on this screen with the following information:

- Each sign will be uniquely named as SPEEDCHECK-XXXXXX.
- Each sign detected on the Signs screen will have an icon to the left that represents the Bluetooth signal strength and, therefore, system proximity.
- The nearest sign detectable with the highest signal strength will be at the top of the list.
- A designation (SC12 or SC15/18) will denote the model of system that is detected.

Tapping on a sign and logging in will establish a connection and display the current system parameters. Once connected, the radar display will blink for a few seconds to denote which system you are connected to.



If a sign already has an established connection via SpeedCheck Manager (mobile or PC), it will no longer be available on the Signs screen. You may need to tap on the refresh button or swipe down on the center of the screen to check for new systems.



When opening the app for the first time, you will be prompted to agree with Carmanah's software license agreement and privacy policy. Read the documents and tap Continue.



2.2 Logging In and Default Password

After connecting to your sign for the first time, you will be prompted to log in.

For SPEEDCHECK-12/15/18 systems enter the default password "*speedcheck*" (all lowercase and without quotations) and tap Login. The app will advise you to change this password to one of your own choosing. See <u>Section 3.7</u> to change the default password.



Tapping on the "eye" icon will reveal the password being entered. See <u>Section 3.10</u> for more information on saving system passwords.

NOTE

Starting in 2023, all SPEEDCHECK-12/15/18 systems will require the use of the default password. You can change this password as shown in <u>Section 3.7</u>.



SPEEDCHECK MANAGER MOBILE APP GUIDE 2.0 INITIAL SETUP

2.3 Firmware Update

Once on the Settings screen the app will display an icon if there is an update available next to the firmware version in the upper read-only status area. Whenever a firmware update is available it is recommended to install it on each system you connect to. See Section 3.8 for more information.

12:54			12:54	— •		12	:54	•
× Sett	tings •	··· <	F	irmware		<	Firm	ware
YOUR SPEED	1ST AVE SB	This Vers	SpeedCheck Sig ion 1.09 is availab	n is running versio le.	on 1.03.	This Si Version	beedCheck Sign is n 1.09 is available.	running version 1.03.
	SPEEDCHECK-12		SpeedCheck-	12_App_1_09.he	ex	Ð	SpeedCheck-12	_App_1_09.hex
System Voltage	12.69V	Та	ap to upload.			Тар	to upload.	
Power Status	Good							
Operating Method	Continuous							
Firmware	1.0 Update Available 3					3	Upgrade	Firmware
Bootloader	1.00						This will replace t	he firmware running k and requires about
System Status	Good						2 minutes. During	g this time you must
SpeedCheck Name	1ST AVE SB	>					connection an proximity to the s the process wil SpeedChee	d remain in close ign. Interfering with Il likely render the ck inoperable.
Date	Nov 21, 2022	>						
Time	12:54 PM	>					Cancel	Continue
Display	On 2	>						
Speed Limit	30	>						
Violation Alert Speed	31)	>						
High Speed Cutoff	50	>						
* ()			* 🕚	\mathcal{Q}	m	*	0	2 0
Signs Scheduler	Passwords Manuals	S	igns Schedule	er Passwords	Manuals	Sign	Scheduler	Passwords Manuals
							-	

To update the firmware follow this procedure:

- 1. Tap on the Update Available button and this will take you directly to the Firmware screen.
 - a. Alternatively you can access this screen from the Advanced Options screen.
- 2. You will be prompted with the current version you are running and the latest version that is available. This latest version is tied to the mobile app version you are running. Tap on the latest available version shown and then tap Continue.
- 3. Once the firmware has been updated you can tap the back button twice to navigate to the Settings screen and you should now see the new version installed. You will not be required to reconnect or login to the sign again as this will be done automatically for you.



Do not interfere with the update process during the firmware upgrade procedure. Doing so may render the system inoperable.



2.4 Main System Settings

The Settings screen will allow you to program the main system settings for the SPEEDCHECK-12/15/18 radar speed sign.

Tap on the value you wish to change and a popup screen will appear for you to adjust the existing value. Once completed, tap the Save button.

× Setti SPEED System Voltage Operating Method Firmware Bootloader SpeedCheck Name	ngs HIGHSCHOO EB Your Speed 12.71V Continuous 10.15 1.00	L	S	C Ed iet the speed lin surrent location. Speed Limit 30	dit Speed Limit	for the sign
YOUR SPEED System Voltage Operating Method Firmware Bootloader SpeedCheck Name	HIGHSCHOO EB Your Speed 12.71V Continuous 10.15 1.00	L	S	Set the speed lim current location. Speed Limit 30	nit of the roadway	for the sign
System Voltage Operating Method Firmware Bootloader SpeedCheck Name	Your Speed 12.71V Continuous 10.15 1.00			Speed Limit 30		
System Voltage Operating Method Firmware Bootloader SpeedCheck Name	12.71V Continuous 10.15 1.00			30		
Operating Method Firmware Bootloader SpeedCheck Name	Continuous 10.15 1.00					
Firmware Bootloader SpeedCheck Name	10.15 1.00			Valid values are	e between 0 and 9	99.
Bootloader SpeedCheck Name	1.00					
SpeedCheck Name						
	HIGHSCHOOL EB	>				
Date	Nov 21, 2022	>				
Time	12:48 PM	>				
Display	On	>				r
Speed Limit	30	>				
Violation Alert Speed	31	>	-	1	2	3 DEF
Slow Down Speed	35	>		4 6н1	5 JKL	6 MNO
High Speed Cutoff	50	>		7 PORS	8 TUV	9
Minimum Speed	25	>		+ * #	0	\otimes
Signs Scheduler	Passwords Manu					

The default system settings may need to be adjusted based on your location and application. It is recommended to set your SPEEDCHECK-12 sign name to something unique based on the location and direction of traffic for future identification, e.g., **SCHOOLNAME EB, 1ST AVE SB**

There are various read-only status and system parameters that can be used for diagnostics purposes. See <u>Section 3.4</u> for more information.

NOTE

Settings screen will display different parameters based on SpeedCheck model and type.



Settings Screen User-Editable Settings

Setting	Setting Value Descri		Notes
SpeedCheck Name	Up to 24 alphanumeric characters	System name programmed.	 Rename your sign to something unique based on location or direction of traffic for future identification.
Date	MMM/DD/YYYY	Current date programmed.	
Time	HH:MM:XM	Current time programmed.	
Display	On/Off	Turn the display LEDs on or off.	 Vehicle data continues to be recorded with the display off.
Speed Limit	0 – 199	Set the speed limit of the roadway for the sign's current location.	• A value of 199 is only valid for Advisory Speed applications. See <u>Section 4.3</u> for more information.
Violation Alert Speed	0 – 199	Set the speed threshold when the display LEDs will start flashing the speed detected.	 It is recommended to set this speed just above the speed limit. A value of 199 is only valid for Variable Speed applications. See <u>Section 4.4</u> for more information.
Slow Down Speed ¹	0 – 99	Set the speed threshold when the display LEDs will start displaying "SLOW DOWN".	Slow Down message remain active above High Speed Cutoff value.
High Speed Cutoff	0 – 99	Set the speed threshold when the display LEDs stop displaying the speed detected.	 It is recommended to set this speed no higher than 20 mph/kph above the speed limit. The aim is to discourage excessive speeding against the sign.
Minimum Speed	0 – 198*	Set the speed threshold when the display LEDs will first show the speed detected.	 It is recommended to set this speed at or above 5 mph or 8 kph. *Setting this value to 198 puts the system into a demo mode and is for testing or demonstration purposes only.
Strobe ²	On/Off	Turn the integrated strobe on or off.	• To comply with MUTCD standards, the strobe should be turned off.
Strobe Speed ²	0 – 99	Set the speed threshold when the integrated strobe will start flashing.	 The strobe flash rate cannot be adjusted. Setting this value to zero (0) will flash the strobe continuously.
Output Configuration ³	On/Off	Set the behavior of external flashing beacons.	• See <u>Section 4.1</u> for more information.

¹For SPEEDCHECK-15/18 only with the Slow Down option enabled and turned on

²SPEEDCHECK-12 integrated strobe only

³For SPEEDCHECK-15/18 only with external beacon(s) option



2.5 Additional Settings and Options

Once you have adjusted the main system settings, tap on the ellipsis (\cdots) icon in the upper right to show additional settings and options.



- Advanced options opens a screen containing further features and settings. See <u>Section 3.5</u> for more information.
- **Run test sequence** starts testing the display LEDs and integrated strobe (SPEEDCHECK-12 only). Running this will confirm which system you are currently connected to.
- **Change password** opens a screen to change your current password. See <u>Section 3.7</u> for more information.
- **Reboot sign** resets the sign. This will require about 30 seconds and will disconnect you from the sign once completed.
- Cancel takes you back to the Settings screen.



2.6 Uploading a Schedule

NOTE

This section assumes a Schedule has already been created. See <u>Section 3.9</u> for more information.

Under the Advanced Options tap on Schedule. This will take you to the Current Schedule screen. Here you will have three options:

- DOWNLOAD SCHEDULE tap on this button to expose the details for the loaded Schedule (if applicable).
- SAVE TO SCHEDULE tap on this button to save the downloaded Schedule (if applicable) to your mobile device. Button is only active after tapping on DOWNLOAD SCHEDULE.
- UPLOAD SCHEDULE tap on this button to load a new Schedule (previously created) to the sign.

When ready to upload your Schedule, tap on the UPLOAD SCHEDULE button and choose the appropriate schedule.



NOTE

Ensure the Operating Method is set to Scheduler under the Advanced Options screen, otherwise the Schedule loaded will not be active. Under the Settings screen ensure the date and time are accurate for the sign.



3.0 Navigation

3.1 Signs Screen

The Signs screen will be the first to appear when opening the app and contains all detected and compatible SPEEDCHECK-12/15/18 radar speed signs available nearby. Each sign will be represented by its Bluetooth signal strength, system name, and model. The signs will be sorted by proximity, with the nearest system at the top of the list. Signs are automatically detected upon first entering this screen. The list can be refreshed manually by tapping the refresh button in the upper right or by swiping down on the screen.

At the bottom ribbon of the screen will be additional functions:

- Signs takes you back to the main screen to scan for available signs.
- Scheduler opens a screen to manage your Schedules. See <u>Section 3.9</u> for more information.
- Passwords opens a screen to manage your locally saved passwords. See <u>Section 3.10</u> for more information.
- Manuals opens a screen to access links to various manuals and live support. See <u>Section 3.11</u> for more information.



NOTE

A sign will not appear in the list if another device is connected to it.

NOTE

When connected to a system there will be a green dot next to the Signs icon in the bottom ribbon.



SPEEDCHECK MANAGER MOBILE APP GUIDE 3.0 NAVIGATION

3.2 Login Screen

The Login screen is accessed by tapping on an available sign on the Signs screen. If required enter the password for the sign and tap Login. Tapping on the CANCEL button will take you back to the Signs screen.

Tapping on the RESET PASSWORD button will provide you with instructions on resetting the sign password. See <u>Section 3.3</u>. for more information.

			Sp.	eeache	ck sign	1.					
Password:				asswore	:						
	0			speedc	heck						Ø
LOGIN							LOGIN	le			
CANCEL						,	CANCE	L			
RESET PASSWORD		L	pr	ocess be	10W.	RESET	PASSV	VORD			
			1			9 P	assw	ords			
			q	w	e	r t	t y	y l	1	ic	p
				a s	d	f	g	h	j	k	T
			ŵ	z	x	С	v	b	n	m	×
				2122			space	5		d	one

NOTE

For SPEEDCHECK-12 the default password is *speedcheck*. SPEEDCHECK-15/18 systems will not have a password enabled by default.



3.3 Reset Password Screen

The Reset Password screen is available by tapping on an available system while on the Signs screen. If you cannot remember your password, you can tap on the RESET PASSWORD button which will open the following menu:

Please enter a password to log in to your SpeedCheck sign.	It is possible to reset the password SpeedCheck sign if you are unable to login. To do so, simply power cycle the SpeedCheck sign and	It is possible to reset the password of your SpeedCheck sign if you are unable to login. To do so, simply power cycle the SpeedCheck sign and
Password:	you will have 4 minutes to connect and change the password.	you will have 4 minutes to connect and change the password.
	Step 1: Use the system key and power cycle your sign.	Step 1: Use the system key and power cycle your sign.
LOGIN CANCEL	Step 2: Wait for the sign to reboot and complete the start-up sequence, then tap the button below to reconnect. This can sometimes take up to a minute.	Step 2: Wait for the sign to reboot and complete the start-up sequence, then tap the button below to reconnect. This can sometimes take up to a minute.
If you cannot remember the password, contact your administrator, or follow the password reset process below.	TAP TO RECONNECT	TAP TO RECONNECT
RESET PASSWORD	Step 3: After the sign has rebooted you will have less than 4 minutes to change the password.	Step 3: After the sign has rebooted you will have less than 4 minutes to change the password.
	00:00	03:05
	CHANGE PASSWORD CHANGE PASSWORD Setechter Passwords Manuals	CHANGE PASSWORD

- 1. Gain access to the system and power cycle your sign. Wait for the system to boot and navigate back to the SpeedCheck Manager mobile app.
 - SPEEDCHECK-12 requires the system key
- 2. Select the TAP TO RECONNECT button once the system is powered up and completed its start-up sequence.
- 3. The CHANGE PASSWORD button will become active and you will have four minutes to set a new password.



SPEEDCHECK-12



SPEEDCHECK MANAGER MOBILE APP GUIDE 3.0 NAVIGATION

3.4 Settings Screen

The Settings screen is accessed by logging into an available sign and contains the main system settings and statuses. The editable settings can be adjusted by tapping on the current value. Other parameters are read-only. For a list of editable settings see Section 2.4.

12:49		50)	12:58		~ I		
Set	tings		×	Settings			
	HIGHSCHOO EB	L	YOU		100		
	Your Speed			Your Sp	eed		
ystem Voltage	12.71V		System Volt	age 12.69V			
perating Method	Continuous		Operating N	lethod Continuous			
irmware	10.15		Firmware	10.15			
ootloader	1.00		Bootloader	1.00			
peedCheck Name	HIGHSCHOOL EB	>	SpeedChec	k Name HIGHSCHOO	L EB		
ate	Nov 21, 2022	>	Date	Nov 21, 2022			
ne	12:48 PM	>	Time	12:57 PM			
splay	On	>		Options			
peed Limit	30	>		Advanced options			
iolation Alert Speed	31	>		Run test sequence			
low Down Speed	35	>		Change password			
ligh Speed Cutoff	50	>		enange pacentera			
linimum Speed	25	>		Reboot sign			
∦ (Ն	<i>P</i> _ []	ם		Cancel			
Signs Scheduler	Passwords Man	uals					

The ellipsis (···) icon in the upper right contains additional settings and features:

- Advanced options
- Run test sequence
- Change password
- Reboot sign
- Cancel

NOTE

Swipe down on screen to refresh the read-only values. Tap on the "x" button to disconnect from the system and exit back to the Signs screen.

NOTE

Reboot sign function will perform a soft reset on the sign. Doing so will disconnect you from the sign and bring you back to the Signs screen.



Settings Screen Read-Only Statuses/Parameters

Setting	Description	Notes
System Voltage	Battery or AC power supply voltage.	 Battery = 12 VDC nominal. AC power supply = 15 VDC nominal.
Power Status ¹	The input power status (AC or battery voltage).	 Good – the input power is in a good voltage range (>12.6 VDC). Charge – batteries require charging (<12.6 VDC). LVD – system is in low voltage disconnect (<11.7 VDC).
Operating Method	Current Operating Method selected.	 Continuous – standard Operating Method; radar and display active at all times. Scheduler – for programmed Schedules, typically for school zones. See <u>Section 4</u>.
Firmware	Current controller firmware version installed.	• See <u>Section 3.8</u> for more information.
Bootloader	Current bootloader version installed.	This is not field upgradeable.
System Status ¹	Main status parameter for the SPEEDCHECK-12 radar speed sign.	 Okay – system is not detecting any faults. Low Voltage – system is in low voltage disconnect (LVD). Faults – one or more detected: Radar Bluetooth Real-time clock Display LEDs Strobe

¹SPEEDCHECK-12 only



SPEEDCHECK-12



3.5 Advanced Options Screen

The Advanced Options screen is accessed from the Settings screen by tapping on the ellipsis icon (\dots) in the upper right and contains additional system settings and parameters.

× Se	ettings	••
YOUR SPEED	HIGHSCHOO EB	L
	Your Speed	
System Voltage	12.69V	
Operating Method	Continuous	
Firmware	10.15	
Bootloader	1.00	
SpeedCheck Name	HIGHSCHOOL EB	>
Date	Nov 21, 2022	>
Time	12:57 PM	>
c	ptions	
Advand	ced options	
Run tes	st sequence	
Change	e password	
Reb	oot sign	
C	ancel	

12:58	•	≈ 40
< Advanced	Options	
Operational Setting	S	
Unit of Speed	MPH	>
Operating Method	Continuous	>
Schedule		>
Slow Down Enabled	On	>
HS Cutoff Function	Blank Display	>
Violation Alert FPM	109	>
LED Drive Current	10 mA	>
Firmware	10.15	>
System Log		>
Data Collection		
Vehicle Data Collection	On	>
Vehicle Data	302 VEH (1%)	>
Circular Data Collection	On	>
		<u> </u>
Signs Scheduler	Passwords	Manuals

	1:09		•	? 4 3	
<		Edit Opera	ting Method		
Se mo set be	t the Op ode mea ttings. S haviour	erating Meth ns the sign v cheduler mo will alter at c	nod of the sign vill consistently de means the onfigured time	. Continuous y follow the sign's es.	
c	peratin	ıg Method			
		Con	itinuous		I
		Scl	heduler		
				~	
	X Signs	Scheduler	Passwords	Manuals	



Advanced Options Screen

Operational Settings

Setting	Value	Description	Notes
Unit of Speed	mph/kph	Set the radar unit of speed accordingly for your location.	 This value is set by Carmanah based on the destination country.
Operating Method	Continuous Scheduler	Set the method of operation for the sign.	 Continuous = 24 hour operation Scheduler = uses internal scheduling capabilities
Schedule	N/A	Download current Schedule, save current Schedule, or upload a new Schedule.	 Download Schedule = shows the parameters for the loaded Schedule (if applicable) Save to Scheduler = saves the loaded Schedule (if applicable) to your mobile device Upload Schedule = load a new Schedule (previously created) to the sign.
Slow Down Enbaled¹	On/Off	Turn the Slow Down message feature on or off.	 On = Slow Down message active at and above speed desired. Off = no Slow Down message option available.
HS Cutoff Function	Disable Blank Display Speed Limit	Set the function for what occurs when the High Speed Cutoff threshold has been met or exceeded.	 Disable = will display detected speeds up to 99 Blank Display = will stop displaying numerical speeds at and above High Speed Cutoff value Speed Limit = will display the Speed Limit value at and above High Speed Cutoff value
Violation Alert FPM	30 – 150 FPM	Set the Violation Alert flashes per minute (FPM).	Default value is 109 FPM.
LED Drive Current ¹	10 mA/20 mA	Set the LED display brightness setting.	 Default value is 10 mA. Only adjust to 20 mA when installing a new controller into a system with legacy LED display boards (Q1 2010 or older)
Firmware	XX.XX	Current controller firmware installed.	 A notification will be present on the Setting screen if an update is available.
System Log	N/A	Download a copy of the system log from the sign. This is only for diagnostics purposes only.	 Tap on DOWNLOAD LOG and then Share Log to send a copy of the event log as a TXT file to yourself via a variety of methods.

¹SPEEDCHECK-15/18 only



Data Collection

Setting	Value	Description	Notes
Vehicle Data Collection	On/Off	Enable or disable data collection of vehicle statistics.	
Vehicle Log	XX VEH (%)	Number of vehicles detected and logged by the radar system. Vehicle statistics can be reset by tapping on RESET LOG and then RESET to clear the memory.	 Tap on DOWNLOAD LOG and then SHARE LOG to send a copy of the vehicle data log as a CSV file to yourself via a variety of methods. Import this CSV file into SpeedCheck Traffic Analyzer (PC) for further statistical analysis.
Circular Data Collection	On/Off	Prevent the memory from completely filling to a point where it stops collecting new data.	 On = system will nearly fill the memory and then the oldest data will start to be overwritten to continue collecting new data. Off = system fills the memory and then stops recording new data.

Factory Settings

Setting	Value	Description	Notes
Reset Factory Defaults	N/A	Reset the system back to factory defaults.	 This function does not reset or change everything, such as a loaded calendar in the system.
Sign Type¹	Advisory Speed Limit Variable Speed Limit Your Speed	Set the core system type for your radar speed sign	Default setting is "Your Speed". Changing this value will drastically affect system settings and performance. Only change if required. Most installations will use "Your Speed" for radar feedback purposes
Slow Down Installed ¹	On/Off	Enable the Slow Down function to be used for systems that are equipped with this option.	Turning this value on does not turn on the Slow Down option. You must also turn on Slow Down Enabled under Operational Settings. Only enable this if your system has this feature equipped.

¹SPEEDCHECK-15/18 only



3.6 Downloading Vehicle Speed Data

Vehicle data can be downloaded from the Advanced Options screen:

- 1. Tap on Vehicle Data and then DOWNLOAD LOG. The app will give an estimated download time based on the size of vehicle data in the memory.
- 2. Tap on SHARE LOG to send the CSV file to yourself or another user.
- 3. Tap on RESET LOG and then RESET to clear memory. Only do so once you have the vehicle data log exported.
- 4. Import CSV file into SpeedCheck Traffic Analyzer on your PC for analysis and data filtering.



NOTE

The information you see on screen will be three columns of data – date, time, and speed. The first row will typically show no date or time (value of zero) and is a reference for the data with the Speed Limit value for the sign.

NOTE

Examining vehicle speed data requires SpeedCheck Traffic Analyzer. Visit <u>support.carmanah.com</u> to download the latest version as part of the installation package for SpeedCheck Manager PC.



3.7 Change Password Screen

The Change Password screen is accessed from the Settings screen by tapping on the ellipsis icon (…) in the upper right and allows for changing existing sign passwords. Enter your new password and tap Save. The password is restricted to the following parameters:

- Must be between 4 12 characters in length
- Allowable alphanumeric values: 0-9, a-z, A-Z
- Allowable special characters: ~, !, @, #, \$, %, ^, &, *, -, _, +, =



If the Remember Passwords toggle is enabled, the password will be updated and retained. All passwords are stored locally on your mobile device. For more information, please see Passwords in <u>Section 3.10</u>.

NOTE

The password is case sensitive and cannot contain spaces. You cannot use "speedcheck" anywhere in the new password.



SPEEDCHECK MANAGER MOBILE APP GUIDE 3.0 NAVIGATION

3.8 Firmware Screen

The Firmware screen is accessed from the Advanced Options screen and allows for examining the version installed to verify if there is a firmware update available.

Tap on the new version available to proceed with the firmware update procedure if your system is running and an older version than shown.



CAUTION

The latest firmware available is bundled with the version of software. Ensure you are running the latest version of software available from your app store.

During the firmware upgrade procedure, do not do any of the following:

- Move away from the sign
- Power down the sign
- Minimize or close the app
- Power down your mobile device
- Turn off Bluetooth on your mobile device

Interfering with the update process may render the system inoperable.





3.9 Scheduler Screen

The Scheduler screen is accessed by tapping on the Scheduler button in the bottom ribbon and contains access to the following features:

- Operating Modes selection of system settings and speed thresholds at which various options are triggered.
- Timetables selection of Operating Modes to be used at predetermined times throughout the day
- Schedules selection of Timetables to be used for each day of the week.
- Exceptions used to supersede specific dates and run a different Timetable in your Schedule for holidays, special events, or a range of dates such as school closures.

Unique Schedules for each system can be created, managed, and saved for future use using this screen. Schedules can be created in advance without being connected to a system. They will be saved locally to your device.

Additional Scheduler related functions are found within the Advanced Options screen (<u>See Section 3.5</u>). This includes:

- Download current Schedule to review (if applicable)
- Save current Schedule to device (if applicable)
- Upload new Schedule to sign



NOTE

Operating Method (in Advanced Options) must be set to "Scheduler" for the radar speed sign to utilize the Schedule loaded into its memory. It is imperative that the sign's date/time is accurate when in Scheduler mode. Once in Scheduler mode you will notice the Settings screen will have items greyed out as they are not applicable in this mode.

NOTE

Deleting the mobile app will delete your locally saved Schedules.



Operating Modes

Choose the type of SpeedCheck system you are building your Schedule for. This will expose or limit various settings based on your system type:

- Your Speed For SPEEDCHECK-15/18; radar speed sign or driver feedback
- Advisory Speed Limit For SPEEDCHECK-15/18; advisory speed sign or static speed limit
- Variable Speed Limit For SPEEDCHECK-15/18; variable speed sign or adjustable speed limit
- SPEEDCHECK-12 For SPEEDCHECK-12's only

Refer to <u>Section 2.4</u> for the various system settings. Name each Operating Mode succinctly for future reference. Tap on Save when finished building each Operating Mode. Tapping on the "trash" icon will delete the Operating Mode. Mode.

1:11	48	11:12		10:10	•	? 95
C Operating Modes		< Operating Modes		К Е	dit Operating Mode	👕 Save
Define the Operating Modes.		Define the Operating Modes.		Settings for	SPEEDCHECK-12	
All Off	>	All Off	>	Name	High School - In Sessio	n
High School - In Session	>	High School - In Session	>			
High School - No Session	>	High School - No Session	>	Display		
Unused	>	Unused	>	Speed	20	
Unused	>	Unused	>	Limit	20	
Unused	>	Unused	>	Violation Speed	21	
Unused	>	SpeedCheck Type		Limits		
Unused	>	Advisory Speed Limit		HS Cutoff	40	
Unused	>	Variable Speed Limit		Min Display	15	
Unused	>	Your Speed		Strobe		
Unused	>	SPEEDCHECK-12		Enabled		
Signs Scheduler Passwords M	Aanuals	Cancel		* Signs	Scheduler Passwords	Manuals

Using the ALL OFF Operating Mode puts the system into "stealth mode" but does not collect vehicle data. You can create a new mode which turns the display off while still collecting vehicle data.

NOTE

You will typically want a minimum of two Operating Modes per application or installation. For example, one for in school hours (or lower speed enforcement) and one for out of school hours (or higher speed enforcement).



Timetables

Create a sequence of Operating Modes that will be followed during a 24-hour period.

- Name description of Timetable
- Time the time at which a Timetable will enter the selected Operating Mode
- Mode the Operating Mode previously created

By default the Timetable will start at 00:01 (12:01 AM) in the ALL OFF mode. This means the system will be in stealth mode until your first scheduled in session time. You may also change the mode to something other than ALL OFF. Your last Time and Mode setting will operate for the rest of the day.

Name each Timetable succinctly for future reference. Tap on Save when finished building each Timetable. Tapping on the "trash" icon will delete the Timetable.

11:14		11:14		
Timetables		<	Edit Tim	netables
fine the Timetables.		Create a so	equence of 4-hour perio	Modes that will be follo
All Off	>	Name	Weekda	ay Schedule
Weekday Schedule	>		Time	Mode
Inused	>		00:01	ALL OFF
nused	>		07:30	HIGH SCSESSI
nused	>		09:00	HIGH SCSESSI
used	>		14:30	HIGH SCSESSI
used	>		16:00	HIGH SCSESSI
used	>		00:00	ALL OFF
used	>		00:00	ALL OFF
used	>		00:00	ALL OFF
lused	>		00:00	ALL OFF
Signs Schodular Passwords	s Manuals	Signs	Schedule	Passwords M

NOTE

You will typically want a minimum of two Timetables per application or installation. For example, one normal for weekday use, one for special recurring days (for example, your Schedule changes one day per week), and/or one for weekend use (such as All Off).



Schedules

Assemble Timetables into weekly Schedules.

- Name description of Schedule
- Start Date date on which the Schedule comes into effect
- Monday Sunday Timetable loaded for each day

Tap on the "plus" icon in the top right to start building your Schedule(s). Name each Schedule succinctly for future reference. Tap on Save when finished building each Schedule. Tapping on the "trash" icon will delete the Schedule.

6	- •		11:24	—• .
	Schedules	+	<	Edit Schedule
Schedul	les.		Assign Timeta	bles to days of the week
ool		>	Name	High School
			Start Date	2022-10-11
			Monday	WEEKDAY SCHEDUL
			Tuesday	WEEKDAY SCHEDUL
			Wednesday	WEEKDAY SCHEDUL
			Thursday	WEEKDAY SCHEDUL
			Friday	WEEKDAY SCHEDUL
			Saturday	ALL OFF
			Sunday	ALL OFF
			Exceptions	

NOTE

Exceptions can only be loaded if they have already been previously created.



Exceptions

Create lists of Exceptions which me be used in any Schedule.

- Name description of Exception List
- Add Exception choose the date to override the Operating Mode loaded for a given Schedule. For example: holidays, special events, summer holidays, etc.

Tap on the "plus" icon in the top right to start building your Exception List(s). Name each Exception List succinctly for future reference. Tap on Save when finished building each Exception List. Tapping on the "trash" icon will delete the individual Exception date or the Exception List.

Once you have created your Exception List(s), navigate back to Schedule. Choose the Schedule you wish to add your Exception List to. Tap on Load Exceptions and choose the appropriate list. Your Exception dates will now be listed. Tap on Save when completed loading your Exception List.

1:16	—•	÷ 47.	11:22	_	-•	? 94	11:26	
<	Exception Lists	+	<	Edit Except	ions	Save	< E	dit Schedule 👕 Save
Define the Exc	eptions.		Add except	tions, such as h	olidays and spec	ial	Assign Timetab	les to days of the week
2022		>	Name	2022	schedule.		Name	High School
			D	ate	Timetable		Start Date	2022-10-11
			2022	-11-24	ALL OFF	1 -	Monday	WEEKDAY SCHEDULE
			2022	-11-25	ALL OFF	• •	Tuesday	WEEKDAY SCHEDULE
			2022	-11-27	ALL OFF	Ť	Wednesday	WEEKDAY SCHEDULE
			2022	-12-17	ALL OFF	Ŧ	Thursday	WEEKDAY SCHEDULE
			2022	-12-18	ALL OFF	1 -	Friday	WEEKDAY SCHEDULE
			2022	-12-19	ALL OFF		Saturday	ALL OFF
			2022	-12-21	ALL OFF	Ť	Sunday	ALL OFF Exceptions Lists
			2022	-12-22	ALL OFF	î		2022
Signs	Scheduler Passwords	Manuals	Signs	Scheduler	Passwords	Anuals		Cancel

NOTE

You may need to create a new Timetable for your Exception date.

NOTE

Adjusting your Exceptions on this screen will need to be manually loaded again onto the specific Schedule .



3.10 Passwords Screen

The Passwords screen is accessed by tapping on the Passwords button in the bottom ribbon and contains a repository of all saved system passwords in a list view. On this screen, you can view all signs you have saved a password for on your mobile device. When finished, tap the Signs button to exit back to the main screen.

- To reveal a specific system password in plain text, tap on the "eye" icon.
- To copy a specific system password into your mobile device's clipboard, tap on the "paper" icon.
- To delete a specific system password from your mobile device, tap on the "trash" icon. Your mobile device will no longer retain the password for that system. If needed, use the Reset Password feature if you cannot remember the system password (see <u>Section 3.3</u>).
- The Remember Passwords toggle will enable or disable the ability to retain new, update existing or
 populate saved passwords for each system on the Login screen. Once a password has been saved, the
 app will automatically fill in the specific password on next connection and you will not be required to enter
 it.





SPEEDCHECK MANAGER MOBILE APP GUIDE 3.0 NAVIGATION

3.11 Manuals Screen

The Manuals screen is accessed by tapping on the Manuals button in the bottom ribbon and contains access to the following:

- SPEEDCHECK-12 User Manual
- SPEEDCHECK-15/18 User Manual
- SpeedCheck Manager User Manual (mobile app)
- FAQs and Live Support access to Carmanah's Product Support Center for manuals, support articles, videos, and live chat
- Version currently installed version of the app



NOTE

The items above contain links to the Carmanah website and will require an Internet connection.

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4.0 Additional SPEEDCHECK-15/18 Operational Settings

4.1 External Beacons

External beacons are controlled with the Output Configuration function on the Settings screen. This is turned off by default. Beacons may be utilized in the Continuous or Scheduler Operating Method. When in Scheduler mode you can have the beacons come on at specific speeds or be on constantly during designated scheduled times.

11:30		93
	Settings	
IS	EB	
	Your Speed	
System Voltage	12.56V	
Operating Method	Continuous	
Bootloader	1.00	
SpeedCheck Nam	e HIGHSCHOOL EB	>
Date	Nov 22, 2022	>
Time	11:29 AM	>
Display	On	>
Speed Limit	30	>
Violation Alert Sp	eed 31	>
Slow Down Speed	35	>
High Speed Cuto	f 50	>
Minimum Speed	25	>
Output Configura	tion On	>
Signs Schedu	ler Passwords Man	D uals

Tapping on Output Configuration will expose the following option for Output A (beacon A) and Output B (beacon B):

- Output A/B:
 - Off = turns off the output to beacon A or beacon B
 - Continuous = provides a constant 12 VDC output to the beacon
 - Standard Flash = provides a 50% duty cycle 12 VDC signal (0.5s on, 0.5s off)
 - Variable Flash = provides a 12 VDC output which follows the display digit flashing rate
 - Strobe = provides a 12 VDC pulsed output
- Output A/B Speed = beacon A or beacon B speed threshold. Beacon will come on at and above this value.
- Output Synchronization:
 - Off = beacons will not flash in unison
 - On = beacons will flash in unison. Requires both Output A/B set to the same value other than Off.



Typical beacon installations will use the Standard Flash setting. Setting Output A/B speed value to zero (0) will cause the beacons to flash continuously. This is useful when using the Scheduler function for beacons to be on continuously during designated times.



Only for SPEEDCHECK-15/18 systems, which use beacons that accept a 12 VDC input and require an internal driver.



SPEEDCHECK MANAGER MOBILE APP GUIDE 4.0 ADDITIONAL SPEEDCHECK-15/18 OPERATIONAL SETTINGS

4.2 Your Speed (Radar Feedback) Sign Type

The Your Speed Sign Type is a Factory Setting that can be found under the Advanced Options screen. This is preset for you based on your application. This is also the default Sign Type and will be used for most applications.

The purpose of this Sign Type is to provide drivers feedback about what their current speed is and whether they are exceeding a predefined speed threshold.

Advanced Options X Settings Slow Down Enabled On > HS Cutoff Function Blank Display > Violation Alert FPM 109 > LED Drive Current 10 mA Firmware 10.15 System Log > Data Collection On Vehicle Data 302 VEH (1%) Circular Data Collection On > Factory Settings Your Speed Reset Factory Defaults Caution Sign Type Your Speed Slow Down Installed On	Advanced Options X Settings Slow Down Enabled On > HS Cutoff Function Blank Display > Violation Alert FPM 109 > LED Drive Current 10 mA > Firmware 10.15 > System Log > > Data Collection On > Vehicle Data Collection On > Vehicle Data Collection On > Factory Settings Your Speed Sign Type Your Speed Minimum Speed 25	Advance	Options	
Slow Down Enabled On > HS Cutoff Function Blank Display > Violation Alert FPM 109 > LED Drive Current 10 mA > Firmware 10.15 > System Log > Data Collection On > Vehicle Data Collection On > Circular Data Collection On > Factory Settings Caution A Sign Type Your Speed 31 Slow Down Installed On > Michael Current On > Mathematical Collection On > Reset Factory Defaults Caution A Slow Down Installed On > Michael Current On > Sign Type Your Speed A Slow Down Installed On >	Slow Down Enabled On > HS Cutoff Function Blank Display > Violation Alert FPM 109 > LED Drive Current 10 mA > Firmware 10.15 > System Log > > Data Collection On > Vehicle Data Collection On > Vehicle Data Collection On > Factory Settings Caution A Sign Type Your Speed 31 Slow Down Installed On > Sign Type Your Speed A Stow Down Installed On >			
HS Cutoff Function Blank Display > Violation Alert FPM 109 > LED Drive Current 10 mA > Firmware 10.15 > System Log > > Data Collection > > Vehicle Data 302 VEH (1%) > Circular Data Collection On > Factory Settings Caution A Sign Type Your Speed A Slow Down Installed On >	HS Cutoff Function Blank Display > Violation Alert FPM 109 > LED Drive Current 10 mA > Firmware 10.15 > System Log > > Data Collection > > Vehicle Data Collection On > Vehicle Data Collection On > Factory Settings Continuo A Sign Type Your Speed A Siow Down Installed On > Minimum Speed 25 Schedular	low Down Enabled	On	>
Violation Alert FPM 109 > LED Drive Current 10 mA > Firmware 10.15 > System Log > > Data Collection On > Vehicle Data Collection On > Vehicle Data Collection On > Factory Settings Continuous Reset Factory Defaults Caution Sign Type Your Speed Slow Down Installed On On >	Violation Alert FPM 109 > LED Drive Current 10 mA > Firmware 10.15 > System Log > > Data Collection > > Vehicle Data Collection On > Vehicle Data Collection On > Vehicle Data Collection On > Factory Settings Court Speed 30 Reset Factory Defaults Caution A Sign Type Your Speed A Siow Down Installed On > Minimum Speed 25 Scheduler Passwords	IS Cutoff Function	Blank Display	>
LED Drive Current 10 mA > Firmware 10.15 > System Log > > Data Collection > > Vehicle Data Collection On > Vehicle Data 302 VEH (1%) > Circular Data Collection On > Factory Settings	LED Drive Current 10 mA > Firmware 10.15 > System Log > Data Collection > Vehicle Data Collection On Vehicle Data Collection On Vehicle Data Collection On Sign Type Your Speed Sign Type Your Speed Stow Down Installed On On > Vehicle Data Collection On > Factory Settings Caution Sign Type Your Speed Stow Down Installed On On > Minimum Speed 25	iolation Alert FPM	109	>
Firmware 10.15 System Log > Data Collection > Wehicle Data 302 VEH (1%) Vehicle Data 302 VEH (1%) Circular Data Collection On > Factory Settings Reset Factory Defaults Caution Sign Type Your Speed Slow Down Installed On State Could on the speed 25	Firmware 10.15 System Log > Data Collection > Wehicle Data 302 VEH (1%) Scheck Patter 12:48 PM Display On Sign Type Your Speed Slow Down Installed On Sign Type Your Speed Stow Down Installed On Stow Down Installed On Stow Down Installed On Your Speed Manualis	ED Drive Current	10 mA	>
immware 10.15 > bystem Log > bystem Log > brata Collection > rehicle Data 302 VEH (1%) rehicle Data 302 VEH (1%) actory Settings reset Factory Defaults Caution ign Type Your Speed low Down Installed On	irmware 10.15 > bystem Log > bystem Log > brata Collection > rehicle Data Collection bride Data Collection cehicle Data Collection			
System Log > Data Collection > Zehicle Data Collection On Zehicle Data 302 VEH (1%) Zehicle Data 302 VEH (1%) Scactory Settings On Stactory Settings Violation Alert Speed Silow Down Installed On Silow Down Installed On	System Log > SpeedCheck Name HIGHSCHOOL EB Data Collection On > Zehicle Data 302 VEH (1%) > Scheduler Nov 21, 2022 Time 12:48 PM Display On Speed Limit 30 Violation Alert Speed 31 Sign Type Your Speed A Slow Down Installed On > Stor Data On > Stor Data On > Stor Data On > Stor Data Passwords Manuals	irmware	10.15	>
Pata Collection Time Paticle Data Collection On Paticle Data 302 VEH (1%) Strular Data Collection On Speed Limit 30 Violation Alert Speed Mign Type Your Speed Alwo Down Installed On	Pata Collection Tehicle Data Collection On Time 12:48 PM Display Display On Speed Limit 30 Violation Alert Speed 131 Slow Down Installed On Schedder Passwords	ystem Log		>
ehicle Data Collection On > ehicle Data 302 VEH (1%) ircular Data Collection On > actory Settings On eset Factory Defaults Caution ign Type Your Speed Now Down Installed On On >	ehicle Data Collection On > ehicle Data 302 VEH (1%) ircular Data Collection On > actory Settings eset Factory Defaults Caution ign Type Your Speed Now Down Installed On Scheduler Passwords Minimum Speed 25	ata Collection		
Archicle Data 302 VEH (1%) Sircular Data Collection On Stactory Settings Violation Alert Speed Sign Type Your Speed Alight Speed Cutoff Stow Down Installed On	Archicle Data 302 VEH (1%) Sincular Data Collection On Stactory Settings Wield E Factory Defaults Caution Sign Type Your Speed Silow Down Installed On On Stow Down Speed Silow Down Installed On Stow Down Installed On Stow Down Installed On Stow Down Speed 25	ehicle Data Collectio	n On	>
Actory Settings ign Type Your Speed Now Down Installed On	Actory Settings actory Settings teset Factory Defaults Caution ign Type Your Speed Now Down Installed On Stress Scheduler Passwords Manuals	ehicle Data	302 VEH (1%)	>
actory Settings Speed Limit 30 reset Factory Defaults Caution ▲ sign Type Your Speed ▲ High Speed Cutoff 50 Minimum Speed 25	speed Limit 30 Speed Limit 30 Violation Alert Speed 31 Slow Down Speed 35 High Speed Cutoff 50 Minimum Speed 25 Minimum Speed 25	ircular Data Collectio	n On	>
Reset Factory Defaults Caution Sign Type Your Speed Slow Down Installed On Wieldition Alert Speed 31 Slow Down Speed 35 High Speed Cutoff Minimum Speed 25	Reset Factory Defaults Caution Image: Caution Alert Speed 31 Sign Type Your Speed Image: Caution Alert Speed 35 Silow Down Installed On Image: Caution Alert Speed 35 Silow Down Installed On Image: Caution Alert Speed 35 Silow Down Installed On Image: Caution Alert Speed 35 Silow Down Installed On Image: Caution Alert Speed 25 Image: Caution Alert Speed Image: Caution Alert Speed 25 Image: Caution Alert Speed Image: Caution Alert Speed 25	actory Settings		
Slow Down Speed 35 High Speed Cutoff 50 Minimum Speed 25	Sign Type Your Speed Slow Down Installed On Slow Down Installed On Stars Scheduler Passwords Manuals	locat Factory Default	Coution	•
Sign Type Your Speed A High Speed Cutoff 5low Down Installed On V On	Sign Type Your Speed Slow Down Installed On Slow Down Installed On Stars Scheduler Passwords Manuals	eset Factory Default	Caution	44
Slow Down Installed On > Minimum Speed 25	Slow Down Installed On > Minimum Speed 25 Stars Scheduler Passwords Manuals Scheduler Passwords Ma	ign Type	Your Speed	
	Scheduler Passwords Manuals	low Down Installed	On	>
	Signs Scheduler Passwords Manuals Signs Scheduler Passwords Ma	* 0		m_

This setting will only need to be altered if you change to a different sign application where displaying numerical vehicle speeds is not required. Check your settings are adjust as required after a Sign Type change.

NOTE

If you change to or from this Sign Type ensure your system's static sign matches the application it is being used for. Contact Carmanah for more information.





SPEEDCHECK MANAGER MOBILE APP GUIDE 4.0 ADDITIONAL SPEEDCHECK-15/18 OPERATIONAL SETTINGS

4.3 Advisory Speed Limit Sign Type

The Advisory Speed Limit Sign Type is a Factory Setting that can be found under the Advanced Options screen. This is preset for you based on your application.

The purpose of this Sign Type is to alert drivers of what the speed limit is for this stretch of roadway. The sign will typically display a static speed limit continuously or only during scheduled times.

Advanced	Options		×	Settings
Schedule		>	YOUR	ніснясно
Slow Down Enabled	On	>	SPEED	EB
Violation Alert FPM	109	>		Advisory Spee
ED Drive Current	10 mA	>	System Voltage	12.59V
rmwara	10.15		Operating Method	d Continuous
irmware	10.15		Firmware	10.15
System Log		>	Bootloader	1.00
Data Collection			SpeedCheck Nan	HIGHSCHOOL EB
/ehicle Data Collection	On	>	Date	Nov 23, 2022
ehicle Data	302 VEH (1%)	>	Time	9:44 AM
ircular Data Collection	On	>	Display	On
actory Settings			Speed Limit	30
eset Factory Defaults	Caution		Violation Alert Sp	eed 31
Sign Type	Advisory		Slow Down Speed	d 35
	Speed Limit	_	Output Configura	ition Off
Slow Down Installed	On	>		
* ①	0	m		
Sims Scheduler	Passwords Ma		Signs Schedu	ا مرکی (iler Passwords Mi

NOTE

Changing to this Sign Type will alter the way the system operates. It will also limit certain options and features. You will be required to reconnect to your system after changing to Advisory Speed Limit.

In an Advisory Speed Limit application you will have access to the following settings:

- Display
- Speed Limit
- Violation Alert Speed
- Slow Down Speed (if applicable)
- Output Configuration (if applicable)

You can have the system operate in three unique ways:

- 1. Static speed limit + flashing digits
- 2. Static speed limit + Slow Down message
- 3. Blank display + Slow Down message





Static speed limit + flashing digits

This method will display a static Speed Limit value and then begin flashing once vehicles meet or exceed the Violation Alert speed.

- Display set to On to have the display active
- Speed Limit set to your applicable speed limit for the roadway
- Violation Alert Speed set to a value of 1 above your speed limit, or as desired to warn drivers they have exceeded the speed limit. This will cause the Speed Limit value to flash.
- Slow Down (not applicable) turn off in Advanced Options
- Output Configuration (if applicable) turn on as desired and set speed values if external beacons are
 present.

Static speed limit + Slow Down message

This method will display the Slow Down message value once vehicles meet or exceed the Slow Down speed threshold. The Slow Down message and Speed Limit speed will flash if vehicles also meet or exceed the Violation Alert speed threshold.

- Display set to On to have the display active
- Speed Limit set to your applicable speed limit for the roadway
- Violation Alert Speed set to a value of 1 above your speed limit, or as desired. This will cause the Speed Limit value and Slow Down message to flash.
- Slow Down Speed set to a value of 5 above your speed limit, or as desired to warn drivers they have exceeded the speed limit. This will cause the Slow Down message to turn and will flash if equal to or above the Violation Alert value. Turn on in Advanced Options if not already done.
- Output Configuration (if applicable) turn on as desired and set speed values if external beacons are present.

Blank display + Slow Down message

This method will have a blank display and will flash the Slow Down message value once vehicles meet or exceed the Violation Alert and Slow Down speeds.

- Display set to On to have the display active
- Speed Limit set to 199. This turns this function off and will never show a Speed Limit value.
- Violation Alert set to a value in relation to the Slow Down Speed. Will cause the Slow Down message to flash.
- Slow Down Speed set to a value of 5 above your speed limit, or as desired to warn drivers they have exceeded the speed limit. This will cause the Slow Down message to turn on and will flash if equal to or above the Violation Alert value. Turn on in Advanced Options if not already done
- Output Configuration (if applicable) turn on as desired and set speed values if external beacons are
 present.

NOTE

Vehicle data is still recorded in all of these modes.



SPEEDCHECK MANAGER MOBILE APP GUIDE 4.0 ADDITIONAL SPEEDCHECK-15/18 OPERATIONAL SETTINGS

4.4 Variable Speed Limit Sign Type

The Variable Speed Limit Sign Type is a Factory Setting that can be found under the Advanced Options screen. This is preset for your based on your application.

The purpose of this Sign Type is to alert drivers of what the speed limit is for this stretch of roadway. The sign will always display a static speed limit continuously and is programmable to other values during scheduled times.



NOTE

Changing to this Sign Type will alter the way the system operates. It will also limit certain options and features. You will be required to reconnect to your system after changing to Variable Speed Limit. This Sign Type requires white LEDs.

In a Variable Speed Limit application you will have access to the following settings:

- Display
- Speed Limit
- Output Configuration (if applicable)

You can have the system operate in one specific way:

1. Static speed limit





Static speed limit

This method will display the Speed Limit value at all times. This can be changed to be variable via the Scheduler Operating Method.

- Display set to On to have the display active
- Speed Limit set to your applicable speed limit for the roadway

With the Operating Method in Continuous the display will always show the Speed Limit value. Change to Scheduler to have this value changed based on the time of day.

NOTE

Vehicle data is still recorded in this mode.



5.0 SpeedCheck Manager (PC Version)

The PC version of SpeedCheck Manager is another platform that can be used to wirelessly communicate with your SPEEDCHECK-12 radar speed sign for programming, configuration and diagnostics. It utilizes the Bluetooth connection between your PC and the SPEEDCHECK-12/15/18 radar speed sign.

The main function of SpeedCheck Manager that the mobile version does not have feature wise is the bundled SpeedCheck Traffic Analyzer software. This is used to review the vehicle data log downloaded from your sign.

SpeedCheck Mana	ger			_		×
File View Tools	Help					
Connected To: SPEE	EDCHECK-12 EDCHECK-12 Con	tinuous	Close Connection	n Estat		ction
Device Setup System	Operating Modes	Data Collection				
Device Information		Comm	nunications			
Model:	SPEEDCHECK-12	O	Insite/Bluetooth	SPEEDCHE	CK-12	
Main Code:	1.09	00	able Port:	\sim		
Bootloader:	1.00	0	letwork Network	Connection	Setup	
Device Clock:	3/23/2022 11-04 A	м				
Power Status:	Good					
System Status:	Good					
Refresh Inform	ation from Device	Devic	ce System Controls	I		
Verify Device Settin	ngs	S	et Time & ID	Run Test S	equence	
Currently Cor	Up	Update Firmware Get Device Event Log				
All Netwo	ork Devices	R	eset Device	Set MPH	I/KPH	
Status: Commu	nication Success	ful				

NOTE

SpeedCheck Manager (PC) version 3.0.2.10 or newer is required for operation with SPEEDCHECK-12/15/18 radar speed signs. Download the latest version at support.caramanh.com.



For more information on these features, refer to the PC version of the SpeedCheck Manager configuration guide at <u>support.carmanah.com</u>.



The PC version of SpeedCheck Manager is no longer compatible with SPEEDCHECK-15/18 controllers, starting with revision E (RevE). This change has taken place in 2023 Q3. Please use the mobile app for these applicable systems.



6.0 Hardware Supported

6.1 SPEEDCHECK-12

The SpeedCheck Manager mobile app supports all SPEEDCHECK-12 systems and versions.



6.2 SPEEDCHECK-15/18

The SpeedCheck Manager mobile app supports all SPEEDCHECK-15/18 systems and with the updated programmable controller version RevD or newer that started shipping in 2023 Q1.





6.3 Mobile App vs PC Software

See the table below for a reference on PC software vs mobile app support:

Model	Controller Version	Release Date	Mobile App	PC Software
SPEEDCHECK-12	YOUR SPEED	2021 Q4 – current	Yes	Yes
		2022 Q4 or older	Νο	Yes
SPEEDCHECK-15/18		2023 Q1 – Q3*	Yes	Yes
		2023 Q3 – current (RevE or newer)	Yes	Νο

*Controllers that are RevD shipped prior to 2023 Q1 are not supported by the mobile app. These systems will not show up when scanning for devices in the mobile app.

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SPEEDCHECK MANAGER MOBILE APP GUIDE 6.0 HARDWARE SUPPORTED



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