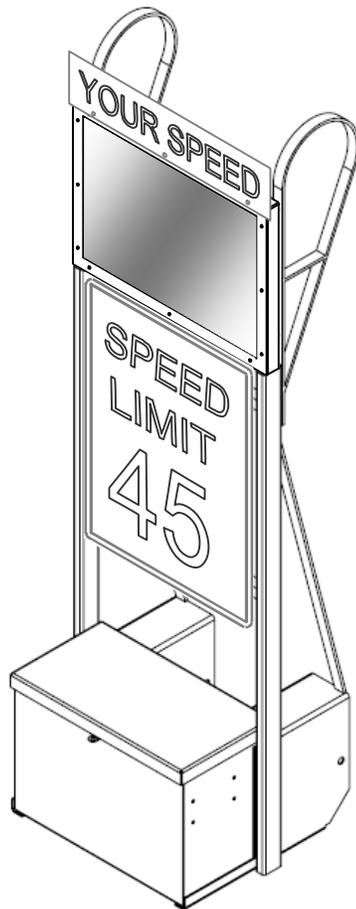# Congratulations

You are the proud owner of the TransPort Radar Speed Sign. The speed sign was designed for Special Events, Neighborhood Associations, Law Enforcement, designed to be used anywhere you want to increase driver awareness. Please read the manual before using this product.

If you have any questions or experience any difficulty operating your SR Products product, contact SR Products Inc. directly.

All warranty information is located at our offices; therefore it is important that you contact us, not your retailer. SR Products, signs are thoroughly tested and inspected prior to shipment, and most issues can be resolved with a phone call. However mishaps do occur, so be sure to fill out and return the warranty card, as any product return is subject to verification of proper return authorization. Information and authorization number may be obtained by writing or calling our offices.

TransPort Speed Sign Users manual

For use with model numbers SC12, SC12S, SC18, SC18S

Your TransPort radar speed sign is designed with simplicity, durability and ease of deployment in mind.
These instructions provide the necessary information to set up and deploy the TransPort sign.

Table of contents

Un-Pack and check

The Transport Signs are shipped in a rigid container to protect from shipping damage.
Remove the transport speed sign from the crating and stand it up.
Inspect for any physical damage and report any damage immediately (i.e. bent frame parts or broken lens, etc).

Open the battery box and inspect. The battery should be securely strapped in place.
The handheld Manual Control box should be intact in it's holder, and all cabling and connections should be secure.

Turn the display on: The display should show 88, and a number which represents the current battery voltage. For S models that have the SLOW DOWN text, this will also be displayed on power up.
Check that all characters display properly (i.e. all LED's are working).

Move your hand towards the display (at least 5 mph at about 4 feet away) the display should show 5 or more (the faster you move your hand, the higher the speed) the default units are MPH.

Install the message sign (shown with SCHOOL) by removing the 3 screws at the top front of the Speed sign with a #2 Phillips screwdriver. Align the 3 holes in the message sign and reinstall the 3 screws.

If you have any problem with this initial check, notify us immediately.

Charging the batteries

Only charge the battery when the temperature is between -4°F (-20°C) to 122°F (50°C).
Open the battery box if necessary to maintain the safe charging temperature range.
The TransPort signs contain a smart charger that can be plugged into any standard 110V power outlet, or extension cable if needed. Access to the TransPort Speed Sign charging cord is provided in the water resistant outlet box on the back of the battery compartment. **Keep contents in the battery box dry, as components located inside the battery box could become a shock hazard if they get wet.**

The Charging time will vary based on the depth of charge needed and the model being charged:

Model	typical Charge time
SC12 and SC12S	2 to 5 hrs
SC18 and SC18S	4 to 10 hrs

The Smart charger is located in the battery compartment and has an indicator LED that indicates the charging status: Rapid blinking indicates charging in process, slow blinking almost full charge, and steady means full charge is achieved. We recommend un-plugging the charger upon a full charge, however the Smart Charger can charge the battery and then maintain a float voltage indefinitely.

SET UP.

There are 2 ways to set up the TransPort sign for your application, Manually, or using the supplied SpeedSign control program:

Manual control box:

The Manual control is located in the battery compartment.
This control provides ready access to the most commonly used settings:

Speed Limit, press the + or – buttons to select the desired speed
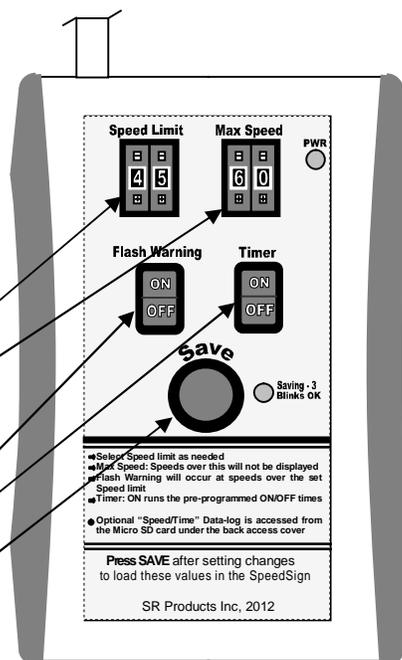
Maximum speed to display press the + or – buttons to select the desired speed

Flash warning on or off, set the switch as desired

Timer option enable/disable, set the switch as desired

Press the Save button after changing the settings
The light to the right of the Save button will Blink 3 times upon a successful save

PC control:

The PC control provides full access to all the TransPort Speed signs capabilities as described below.
Computer requirements: Windows with XP or later operating system.

Installing the Speed Sign Control program:

Insert the SpeedSign Control CD supplied with your TransPort in your computer. If the CD does not "auto-launch" in a few seconds, browse to your CD drive and open (double click) the file name "SpeedSignInstallerVx.x.exe".
The program install wizard will prompt you for installation on your computer.
We recommend you use the default settings for the program installation.
Once installed, you will see the SpeedSign Control program icon on your desktop.

Sign Control

First, you will need to connect the Speed Sign to your computer:

1. Locate the USB cable inside the battery compartment of your TransPort Sign
2. Connect the USB cable to your Windows Computer
3. Power up the Speed Sign (ON/OFF switch located in the battery compartment)
4. Double click on the sign control desktop icon.

The Program will open with all settings blank.

You will see a "Status" message at the top that provides messages to assist you and also information about the program status.

Click the Find button to allow the program to locate the connected Speed Sign.

NOTE: If you have the optional RF link the program will locate and list all Speed Signs within range.
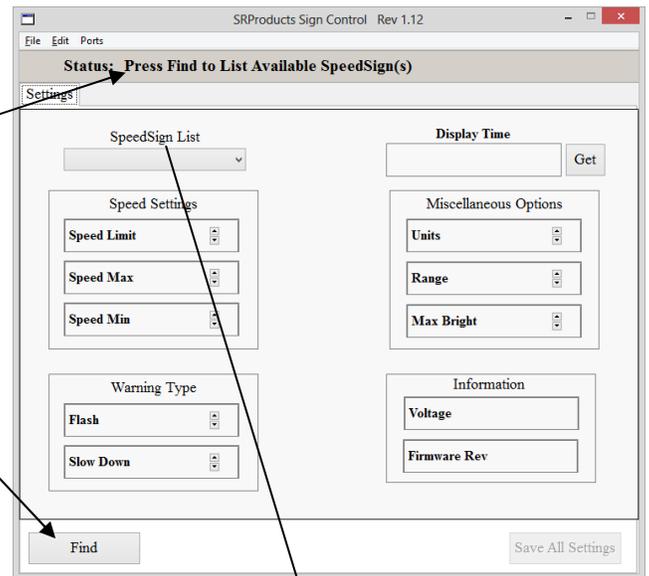
You will see the status of locating your speed sign and then prompt you to select the Speed Sign from the drop down list as shown to the right.
Click on the Speed Sign from the list that you want to set up.
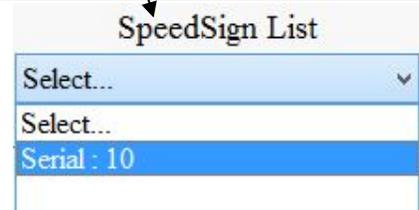
When you select the Speed Sign, the Status will show loading the current settings, and the program will then populate the screen with the current Speed Signs settings, and then show "Ready" Status.

First, set the Signs internal time clock to your local time by clicking the "Get" computer time button. Your local date and time should be displayed. Then right click on the date-time and select "Save this item only" to set the signs time to your local time. The Status will indicate successful loading of your current time and date.
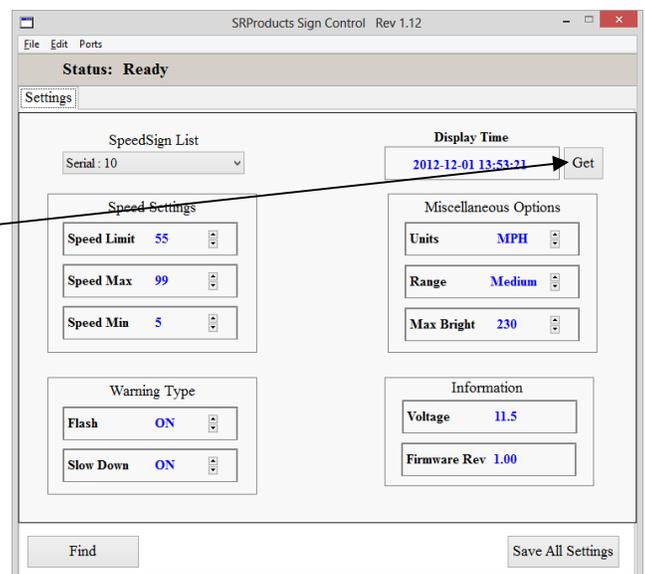
Then Use the ⬍ to the right of each setting to set your desired options as described below.

NOTE: You can load any specific item by right clicking and selecting "Save This Item Only". Or you may make all desired settings then click the Save All Settings button at the bottom right.

The Speed Settings:

Speed Limit: The speed at which the sign can flash a warning when exceeded. Typically this would be set to the posted speed limit.

Speed Max: Speeds above this setting will not be displayed. NOTE: Some states require speed signs to not display speeds that are over the posted limit by a certain amount. The Speed Max setting should be used in accordance with these regulations.

Speed Min: Speeds below this setting will not be displayed.

Warning Type

Flash: The sign will flash the exceeding speed on/off.

Slow Down: The text, SLOW DOWN is available on select models. For these models the sign will flash between the exceeding speed, and the text SLOW DOWN when Slow Down is turned ON.

NOTE: If both Flash and Slow Down are selected, and you have an S model sign, the warning type will display SLOW DOWN.

Miscellaneous Options:

Units: Selectable between MPH (Miles Per Hour) and KPH (Kilometers Per Hour)

Range: The distance from the Speed Sign that a moving vehicle's speed can be detected. Select the range setting from Short (about 100 feet), Medium (about 500 feet) and Long (up to 1000 feet)

NOTE: The actual detectable range will vary based on the target size; large vehicles like trucks can be detected at longer distances than small vehicles like motorcycles.

Max Bright: This is a battery saver feature where you can limit the maximum display brightness (and also it's maximum battery power usage). The speed signs will automatically adjust it's light intensity from 0 (lowest brightness) to the Max Bright setting based on the ambient light. The Speed signs are capable of very high intensity light output and can easily be seen in direct sunlight that can "wash out" most other LED displays. The highest brightness setting (i.e. 250) is only needed when the display is located where drivers are exposed to direct sunlight; either behind the sign (the sun is "blinding" them) or directly in the signs face that can wash out the sign. In most cases the morning or evening sun location is temporary. The factory setting is well suited for most applications, and is the setting that was used to provide battery life specifications. Higher Max Bright settings will reduce the useful battery life, and lower Max Bright settings will extend it.

Information:

Firmware Rev: This displays the firmware revision of the display.

Voltage: This provides the current battery voltage.

Click the "Save All Settings" button at the bottom right to load these settings into the Speed Sign's memory.
NOTE: You may change any setting individually by right clicking on the setting and select "Save this Item only".

Some tips on settings:
The Speed Sign can be used in a "stealth mode" where speeds are not displayed but will be recorded with the Data Storage option. This can be useful if you want to evaluate the current traffic speeds without displaying speeds. To do this, set the Speed limit and the Max Speed both to 5 and turn Flash Warning off.

Battery saver Max Bright setting: If your application is slower speeds (i.e 35MPH or lower) you may consider a Max Bright setting of 150 or lower. This brightness is well visible at a few hundred feet and can extend the battery life by over 50%.

Deployment of your TransPort Speed sign.

Turn the sign on with the ON/OFF switch located in the battery compartment.

The TransPort sign will ignore traffic moving away from the face of the sign and only display speeds of on-coming traffic.
If cars are "grouped" the speed of the fastest car will be displayed when the group nears the sign.

The LED's used in the SpeedSign are best viewed within 30 degrees of the face of the sign which is also the best area for accurate speed detection. The below pictorial (not to scale) shows the "best practice" positioning.
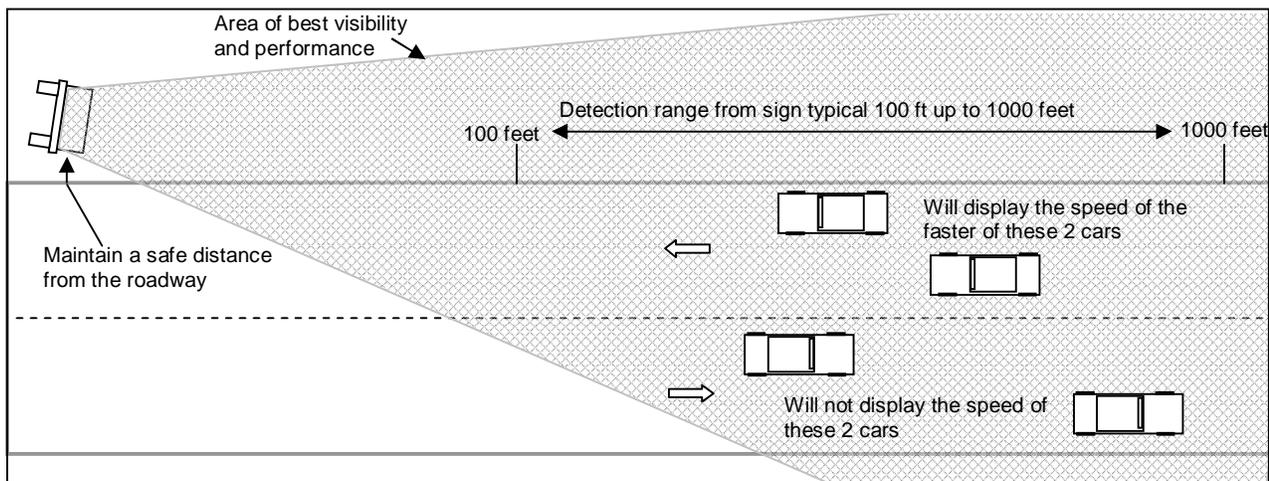
The SC12 series Speed Signs are best suited for speeds under 45MPH as the readable distance of the 12" speed characters is typically 600 feet. So a car traveling over 45 MPH could see the warning indication with about 8 seconds to react.
The SC18 series Speed Signs are best suited for higher speed limits and are readable from about 900 feet, where a car traveling at 65MPH could see the warning indication with about 9 seconds to react.

It is recommended that the Range be set based on the anticipated speed of the traffic. Slow speed limits (i.e under 25MPH) should have a short range setting so as not to display speeds/warnings of possible faster traffic before the imposed speed limit. Mid range setting should be used for speed limits in the 25 to 45MPH speeds, and Longer range setting should be selected when the speed limits are above 45 MPH so as to give maximum warning indication time for

violators of the speed limit. Table 1 provides some reaction times vs. speed / distances information to assist in selecting the range setting based on the anticipated vehicle speeds.

TABLE 1: Reaction times (in Seconds) based on vehicle speed and range.

	5 MPH	10 MPH	20 MPH	30 MPH	40 MPH	50 MPH	60 MPH	70 MPH
100 FT	13.6	6.8	3.4	2.3	1.7	1.4	1.1	1.0
500 FT	68.2	34.1	17.0	11.4	8.5	6.8	5.7	4.9
1000 FT	136.4	68.2	34.1	22.7	17.0	13.6	11.4	9.7

Specifications for the TransPort Speed Signs

LED Display				
Model	**SC12**	**SC12S**	**SC18**	**SC18S**
Speed Character size	12" tall x 6-1/2" width		18" tall x 10-1/2" width	
SLOW DOWN characters	N/A	2 line, 4.5" x 3.3" (typ)	N/A	2 line, 6-1/4" x 5" (typ)
Readable distance	600 feet		1000 ft	
Frame size	15-1/2" tall x 21" wide x 2" thick		26-1/2" wide x 21-1/2" tall x 2" thick	
Frame Construction	Sealed water resistant 090 Aluminum treated with glossy white heat cure powder coat finish			
Lens material	Ultra-violet treated ¼ inch thick impact resistant Lexan.			
Hardware	All screw/nuts/bolts are stainless steel, with tamper proof screws used where appropriate.			

Cart construction				
Model	**SC12**	**SC12S**	**SC18**	**SC18S**
Overall dimensions	21-1/2" W x 65" H x 23" D (W/O YOUR SPEED sign)		26-1/2 W x70" H x 23" D (W/O YOUR SPEED sign)	
Structural Frame material	2"x1"x1/8" rectangular Aluminum tube			
Wheel brackets	10 gauge Aluminum			
Battery Box	1/8" Aluminum with Stainless steel lid hinges includes a lock hasp with keyed lock.			
Misc support brackets	All Aluminum: 1" x ¼ inch flat bar; 1 x 1 x1/8" angle and 12 gauge speed limit sign mounting bracket			
Finish	All aluminum frame parts are treated with glossy white heat cure powder coat finish.			

Electronics				
Model	**SC12**	**SC12S**	**SC18**	**SC18S**
Battery	Rechargeable 55 Amp/Hr Sealed led acid		Rechargeable 100 Amp/Hr Sealed led acid	
Battery Charger	10 amp smart charger, (Batteries can be continuously charged)			
Battery recharge times	5 hours typical		10 hours typical	
Bat Recharge method	110VAC cord and plug supplied to connect to any standard 110V household outlet or any standard extension cable from a 110VAC outlet			
Battery life on full charge	7 days typical. Tested with Max Bright set at 230 and simulated traffic by displaying speeds 90% of the time for 12 hours to simulate typical day time traffic and displaying speeds 30% of the time for 12 hours to simulate typical night traffic.			
Power switch	An ON/OFF switch is provided in the battery box. (Battery charging may be applied in either ON or OFF switch positions)			
Radar	K band, dual mixer with planar antenna, beam width: 12 degrees vertical x 24 degrees horizontal			
Control circuit	Microcontroller with, FFT Digital Signal Processing			
PC interface	USB cable is supplied in the battery box that connects directly to a PC or laptop. (Optional RF Link for wireless data downloading or programming, sit in your car and stay out of the weather). Battery box must remain closed during incremental weather.			
Manual control	Provided with a handheld Control box located in the battery compartment.			

Optional Accessories:

Field interchangeable items:

Part# SL-xx	Speed Limit signs, select from xx= 05 to 75 in 5MPH increments. (KPH available on special order)
Part# SM-xx	Custom message sign 8" x 24". (Replacement for YOUR SPEED or SCHOOL signs)
Part# BT-55	Replacement or secondary Battery 55 A/h (or SC12 and SC12S models only)
Part# BT-100	Battery upgrade to a 100 A/h battery (or SC12 and SC12S models only) or Replacement or secondary battery for SC18 & SC18S models.
Part# SRDL-1050	RF data link for programming signs (requires PC or Laptop with USB port).
Part# DS-01	Data Storage: Can store over 10 years of date and time stamped speed data to a micro SD card.

Factory installed items*

Part# SP-45	45 Watt solar panel extends time between battery recharging.
Part# SSTM-01	Programmable ON/OFF timer (not available on some models)

- *These optional accessories are not field upgradable and should be included in initial purchase when needed.

Precautions:

When charging batteries make sure to keep the electrical cord out of the water and use only a three prong grounded extension cord and outlet. Keep the battery box closed if it is outside and raining.

Limited One Year Warranty

The TransPort Radar Speed Sign comes with a factory one-year warranty on all parts and labor for workmanship and premature component failure. Warranty shipment costs are not pre-paid. This warranty does not include repair of physical damage from misuse or vandalism. This product is warranted to be free of manufacturing defects for a 1-year period from the original date of purchase. The warranty does not include damage to the product resulting from accident, misuse, improper installation, operation, or unauthorized repair or alteration. Opening the product case will void this warranty. If the product should become defective within the warranty period, SR Products Inc., will repair or replace it at our option, free of charge. You must fill out and return the product registration to ensure warranty coverage failure to fill out registration form may void warranty. To obtain warranty service, first contact SR Products warranty repair department, then upon approval send the unit at purchaser's cost to:

SR Products Inc., 7397 S. Suncoast Blvd. Homosassa, FL 34446
Return shipping to purchaser will be at SR Products Inc.'s, cost inside the 48 continental United States, international shipping is the sole responsibility of the purchaser.
The consumer's sole remedy shall be such repair or replacement as is expressly provided above, and we shall in no event be liable for any incidental or consequential damages arising out of the use or inability to use this product for any purpose whatsoever. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific rights. You may also have other rights, which vary, from state to state. Unauthorized returns will be refused.