First, decide on your setup options as follows:

    a. **High speed (20 Mph/Kph to 200 Mph/Kph) or Low speed (2 Mph/Kph to 20 Mph/Kph) monitoring range.**

    b. **Input signal type, RS or VSS (explained below).**

    c. **Six-digit Security Code number. We suggest selection of an important date to you, example 04 29 55.**

    d. **Vehicle speed always displayed (auxiliary Speedometer and speed monitor mode) when vehicle is in motion.**

    e. **Over speed (Maximum allowed speed) limit.**

    f. **The length of time (1 to 20 seconds) of over speed violation before it is logged in. Default is set for 5 seconds.**

    g. **Use of the V-Count II for MONITORING speed only. (Please see SPEED ONLY MONITORING note)**

(1) The V-Count II setup and control is accomplished by use of 2 tactile switches (Black Mode and Red Enter) located on the right side panel of the enclosure and 2 seven segment displays on the front panel.

(2) Press the Mode and Enter switches simultaneously until you hear 2 "Beeps" and see P0 displayed.

(3) With P0 (the 0 will be flashing) displayed, you must enter the 6 digit Security Code (a default of 00 00 00 is entered by the manufacturer). Initially, you MUST use the default Security Code of 00 00 00 to get access to the set-up process. With P0 displayed, press the Enter switch 6 times, there will be 2 Beeps and the symbol of 3 horizontal lines is displayed with a flashing 1. At this point, we suggest that you go to mode 7 and change to your desired (we recommend that you NOT retain the 00 00 00 Security Code!) new Security Code.

You do this by pressing the Mode switch until the number P7 is displayed. Press Enter and P0 is displayed, if the first digit of your new pass code is 0, press Enter then press the Mode switch until the next digit of your Security Code is displayed, for example 4, press enter. Follow the SAME procedure for each of the digits of your Security Code.

(4) To ensure that the correct Security Code is entered, it MUST be entered 2 times when changing to a new pass code. We highly recommend that your Security Code be written down and placed in a secure location. If an incorrect Security Code is entered, the letters Er is displayed.

If the Security Code is lost or forgotten, the V-Count II must be sent to APEXS, Inc. shipping cost prepaid plus $25.00 to have the default Security Code of 00 00 00 restored. Please remember that the setup mode cannot be entered until a CORRECT Security Code is entered.

(5) When the V-Count II is first connected to the vehicle electrical power it will immediately display a flashing Tamper light. This is NORMAL any time the V-Count II has been disconnected for longer than 15 seconds and is re-connected.

After you have changed or entered your Security Code, the V-Count II will enter the set-up mode (3 horizontal lines and flashing 1 displayed), press Mode switch to display the flashing number 3 and then press Enter. This will extinguish the flashing Tamper and/or Overspeed light(s) and re-set/clear the Tamper/Overspeed memory latches. This will also re-set the violations counter to Zero (00)

(6) To set to High or Low speed mode, press Mode switch to display 4 and press Enter. Either Hi or Lo will be displayed. Each time Mode is pressed, the display will "Toggle" to opposite Mode so you can select Hi or Lo speed range. For example, if you want to do high (20Mph/Kph to 200Mph/Kph) speed range monitoring, you would select Hi and press Enter. This will result in the 3 horizontal line symbol and a flashing 4 being displayed again. You are now set up for high speed monitoring and ready to calibrate.

(7) To calibrate*, press Mode to display 5 and press the Enter switch, the letters CA will be displayed. Drive the vehicle at 40Kph or 40Mph while another person doing the calibration watches the vehicle speedometer. When the speedometer indicates 40Kph or 40Mph the red Enter button is pressed a "Beep" will be heard. This completes the calibration for high speed range monitoring.

Note: The V-COUNT calibration process automatically adapts to monitoring speed in either Miles Per Hour (Mph) or Kilometers Per Hour (Kph)

The same procedure is used for low speed range monitoring except that Lo mode is selected and the vehicle is driven at a calibration speed of 4Kph or 4Mph.

(8) The V-Count II can accept 2 types of input signals** RS or VSS. Default is set for VSS and there is no need for you to change anything if your vehicle provides a VSS (most motor vehicles year later than 1992 do supply VSS).

If your vehicle does not have VSS, then you must press Mode switch until the number 8 is displayed then press the Enter switch. Either On or oF will be displayed. Each time the Mode switch is pressed, the display will "Toggle" between On or oF. For RS signal input select On and press the Enter switch.

(9) The over speed limit (maximum speed at which the vehicle is allowed to be driven) is set by selecting mode 6. Pressing Enter will cause 2 flashing digits to be displayed. This indicates the current allowed maximum speed. To change the maximum allowed speed, press Mode until the desired speed is displayed then press Enter. The same procedure is followed for both low speed and high speed options.

For speeds beyond 99 Mph/Kph, the right hand decimal point is illuminated and serves as a times 10 multiplier. The speed is displayed in increments of 10. For example: 10. =100, 11. =110, 12. =120, 13. =130, 14. =140, etc.

(10) By default, the auxiliary Speedometer is not displayed. To select the auxiliary Speedometer and speed monitor option, you must press Mode switch until the number 9 is displayed. Press Enter and either On or oF will be displayed. Each time the Mode switch is pressed, the display will toggle between On or oF.

If you want to have the vehicle speed (auxiliary Speedometer) always displayed, press the Mode switch to display On and press the Enter switch. Even in the vehicle speed display mode the V-Count II continues to monitor for speed violations.

(11) To view the Over Speed violations (Counter), select Mode 2 and press Enter. The number of Over Speed violations will be displayed for as long as the Enter switch is depressed.

(12) The time in seconds of an Over Speed violation before a violation is logged can be set in the range of 1 to 20 seconds. The default setting is 5 seconds. To change to another value, select Mode Zero (0) and press the Enter switch. You will see displayed the current setting and can press the Mode switch until you see displayed the new value (1 to 20 seconds) that you wish to select. By pressing the Enter switch, the new value will be selected.

To Set-up for the MONITOR only mode (Buzzer stays on for 8 seconds and shuts off), select Mode Zero (0) and press the Enter switch. Press the Mode switch until you have Zero Zero (00) displayed. Press the Enter switch. In This mode of operation, the V-Count II buzzer will warn the driver for a period of only 8 seconds and then shut off. This will repeat each time the vehicle speed drops below the maximum set speed limit and then is again exceeded. The total number of violations is still recorded.

(13) By pressing both the Mode and the Enter switches together while in the setup mode, The V-Count II will return to the normal run mode. If Mode 1 is selected and Enter is pressed, the normal run mode will be entered. Also, if there is no setup activity for a period of 5 minutes normal run mode will be automatically entered. So, there are three ways to return the V-Count II back to the normal run mode.

Notes: *For safety reasons it is recommended that the driver concentrate on driving the vehicle and a second person perform the calibration.

The calibration only needs to be done one time unless the vehicle wheel or tire size or drive train is changed.

For applications requiring very low speed (2 to 20Mph/Kph) and/or high accuracy, we recommend the use of a small handheld GPS (available from www.apexvalue.com for $115.00) receiver for the speed reference. The GPS receiver is the size of a small cell phone and is very useful for calibrating vehicles with no functioning or inaccurate speedometers.

*The V-Count II must be calibrated for each motor vehicle in which it is installed. Calibration is only required one time unless the vehicle tire/wheel size or drive train is changed. Changing to a different Over Speed limit monitor value does NOT require re-calibration.

**For motor vehicles that do not produce a Vehicle Speed Signal (VSS), we offer the Reed Switch (RS) installation kit at a cost of $75.00 for General Duty vehicles and $95.00 for Heavy Duty vehicles. These kits will generate the VSS required by the V-Count II

V-Count II Function/Set-up Menu

MODE	FUNCTION	SET-UP #
Set-up	Initialize Set-up procedure	(2)
0	Over Speed Time-out	(12)
1	Run mode	(13)
2	Display violations count	(11)
3	Clear violations count and Tamper	(5)
4	Select High or Low speed mode	(6)
5	Calibration	(7)
6	Set/Display max. speed	(9)
7	Change Security Code	(3)(4)
8	Input signal selection	(8)
9	Auxiliary Speedometer	(10)

NOTE:
SPEED ONLY MONITORING mode:

This is a mode of operation where the driver might wish to just have a warning buzzer for a short time (say 8 seconds) while driving around town when a set maximum speed limit (example 45 MPH) is exceeded. And then when driving on the expressway and driving at for example, 70 Mph, the buzzer will come on at 45 Mph but will stay on for only 8 seconds. In contrast, when the maximum set speed is exceeded in the **ENFORCEMENT** mode, the buzzer would stay on continuously to get the driver's attention to reduce speed below the maximum allowed speed.

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