

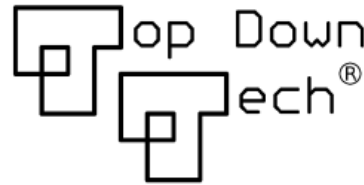


# Window Valet™ for C5

Box Contents:

- \* one (1) Window Valet™ module
- \* one (1) instructional document

Protected by US Patent #6,795,760.



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## Installation:



The Window Valet™ for C5 can be installed in seconds and no tools are necessary. It simply plugs into OBD-II connector located just passed the edge of the dash trim, below the steering column and above the driver's leg area.

**\*\* Moving power windows can be dangerous if someone or something were to become pinched or trapped. By installing this product, you agree to the Terms of Use, Warranty, and Liability Waiver. Never use the remote power window feature unless both windows are completely clear of obstructions.**

## TERMS OF USE, WARRANTY, AND LIABILITY WAIVER

Top Down Technologies Inc., a North Carolina Corporation, having its principal place of business in Raleigh, NC ("Top Down Tech") offers its Window Valet™ product (the "Product") to you (the "Buyer") with the terms, conditions and notices as follows:

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This agreement is governed by the laws of the Commonwealth of North Carolina, USA. You hereby consent to enter into arbitration all disputes arising out of or relating to the use of this Product. Arbitration will take place in Wake County, NC. Use of this Product is unauthorized in any jurisdiction that does not give effect to all provisions of these terms and conditions, including without limitation this paragraph.

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## 9. Additional Power Window Disclaimer.

By using the remote control power window feature of this Product, you indicate that you have read, understand, and fully agree to all the TERMS OF USE and that you accept all the risks of bodily harm and property damage and will hold Top Down Tech harmless of any future consequence. If you do not agree to this, do not use the product, instead see paragraph 1 to return the Product.

## Quick Start Window Configuration:

After you've read the disclaimer of liability and understand the dangers of power moving windows, you can configure the Window Valet™ for your C5.

Be sure both doors are closed. If you have a coupe or convertible, be sure the top is locked in place. Next, get the attention of the Window Valet™ by tapping unlock on the driver's door panel while holding the RESET button on the Driver's Instrument Center. Then enter 4, 1, 2, and the last four digits of the serial number (to be referred to as the PIN) into the Driver's Instrument Center buttons. The windows will lower and then raise and the Window Valet™ will be calibrated to your C5.

### Usage:

To lower the windows, simply press the stock remote fob 'unlock' button three times in rapid succession. If more than one second of time elapses between the unlock signals, the Window Valet will start the three-count over.

To raise the windows, press the remote fob 'lock' button three times. The windows will raise from the bottom to the fully up position.

### The sequence:

- 1) Get into configuration mode by holding 'reset' and pressing 'unlock.' You'll hear a triple chime and see the tach move to 1K RPM.
- 2) Press the '4' ('options' button). Tachometer goes to 2K RPM.
- 3) Press the '1' button. Tachometer goes to 3K RPM, speedometer goes to 10 MPH.

- 4) Press the '2' button. Tachometer goes to 6K RPM, speedometer goes to 40 MPH.
- 5) Enter the PIN number. (See the disclaimer.) Each time a digit is read, the speedometer needle will increase by about 10 MPH. If you press a digit and the needle doesn't move. Press it again, completely.

If all is accepted, the windows will drop to the bottom completely. The horn will toot to warn that the windows are about to go up. The windows will go up completely. Once everything is settled, you should be able to raise and lower the windows with three clicks of the remote (three 'locks' to raise; three 'unlocks' to lower).

## Features

There are two categories of features that the Window Valet™ provides: those accessed from the Configuration Menu, and those accessed by gestures.

### Features - Group I (Configuration Menu Accessible)

Configuration Menu features are only accessed when the user explicitly accesses the feature by selecting it from the Configuration Menu.

The Configuration Menu is accessed by holding down the reset button on the Driver's Information Center and pressing unlock on the driver's door. The Window Valet™ will indicate Configuration Mode by causing the Instrument Panel Cluster to chime three times and by causing the tachometer to read 1000 RPM. You should not attempt to access the Configuration Mode unless the key is absent from the ignition, or in the OFF position. Once in Configuration Mode, the following features can be directly accessed...

**High Speed Mode:** This feature will recall the highest speed that the Corvette was driven since the high speed was last cleared. Speeds are recorded in the Window Valet™ while the car is being driven. For speeds over 100 MPH at the track, the tachometer will read 1000 RPM to indicate that 100 MPH should be added to the speed displayed on the speedometer. For example, if the high speed is 137 MPH, the speedometer will display 37 MPH and the tachometer will display 1000 RPM. For a high speed of 65 MPH, the speedometer will display 65 MPH and the tachometer will display 0 RPM. To access the High Speed Mode feature, press '2' on the Driver's Information Center when in Configuration Mode. Press 'reset' to escape, or press '1' to clear the high speed and escape. Speeds in excess of 255km/h (or 158 MPH) may not be recorded properly and have not been tested.

The export version of the Corvette has a speedometer that reads from 0 to 300, while the US version reads from 0 to 200. While the high speed is on the display, the needle position may be scaled to match the appropriate display. Press '2' to scale the

speed to a 200-unit display in MPH, or press '3' to scale the speed to a 300-unit display in km/h. The Window Valet™ initially defaults to a US-style speedometer gauge, but will remember which option was last selected, even after the unit has been unplugged.

**RAP On Demand:** RAP is Retained Accessory Power. This feature will enable accessory power even when the key is absent. When accessory power is enabled by the Window Valet™, power to the stock radio is maintained, even when the doors are opened. In the case that both doors are closed, the power window controls on the door are also functional. This is an invaluable feature for when the driver must take the keys and leave a passenger in the car. To activate RAP On Demand, enter Configuration Mode and press the '3' key on the Driver's Information Center. 'Reset' will cut power, or the timer will automatically shut it off later. Pressing 'lock' or 'unlock' on the remote key FOB will also shut off the power.

The RAP time-out delay for 'RAP On Demand' or for the 'RAP On Triple Unlock' feature is programmable. It can be set for 30 seconds, 5 minutes, or 15 minutes. See the Configuration Menu on page 6 for details.

### Features - Group II (Gesture Sensitive Features)

The second group of features are activated by gestures. A gesture is a subtle action similar to what one would normally do, but distinct enough to cause a special reaction. For example, to lock the doors, a user would normally press 'lock' on the remote key FOB. However, by pressing 'lock' three times in succession, a special function can be invoked while not interfering with the normal door locking process. Since gestures are subtle and can be invoked easily or accidentally, it is very important that each user be aware of which gesture sensitive features are enabled for his or her Window Valet™. And because of this, the Window Valet™ ships with only one gesture sensitive feature enabled by default, RAP on Triple Unlock.

**Remote Control Power Window Control:** If the Remote Power Window Control feature is enabled, then anytime the user presses 'unlock' three times in rapid succession on the remote key FOB, the Window Valet™ will lower both the driver's and passenger's windows to their fully lowered positions. If more than one second of time separates any of the three 'unlock' clicks, then the window control will not activate. The windows can also be raised. Pressing 'lock' three times on the remote key FOB will cause the windows to raise to the top. A fourth 'lock' or 'unlock' click should cause the window motion to abort.

\*\*\*\* It is very important to watch the window upward motion for several reasons: 1) To be sure the windows are clear of any obstructions prior to window motion. 2) To be sure that no one or no thing gets into the windows' paths while the windows are in

motion. 3) To be sure that the windows stay up when they are instructed to raise, because...

The Window Valet™ makes an attempt to detect obstructions in the windows' paths. If its safety mechanism decides an obstruction was encountered, both windows will immediately lower. The top window seal is an obstruction. When it is reached, the Window Valet™ tries to determine if the top seal was reached, or if a foreign object was encountered. Because of this, both windows must be fully lowered before the window up feature can be expected to operate properly, otherwise, the top seal will be encountered before it's expected and thus determined to be a safety fault. To test this, let the windows partially up prior to activating the Window Valet™ window-up feature. Do not obstruct the power moving window. Re-read the legal disclaimers.

**Passenger Door Unlock Assist:** The Window Valet™ can be programmed to unlock the doors to make it easy for the passenger to exit the car. Placing an automatic transmission in park or setting the hand brake are the two gestures that can be selectively enabled to control the door unlocking feature. Select one, the other, both, or neither. Neither is the factory default.

**RAP On Exit:** When enabled, the Window Valet™ will maintain accessory power to the stock stereo even after the key is removed and the doors are opened. Power is shutdown after a programmed delay, or as soon as the doors are either locked or unlocked with the remote key FOB, whichever happens first. This feature becomes active whenever the ignition key is turned from the ACC position to OFF and then the key is removed. If the doors are still closed when this happens, the Corvette maintains power on its own, once the doors are opened however, the Corvette will shut off the power and the Window Valet™ will immediately re-enable it. If the headlight switch is left in the on position, however, power will not be enabled so that the Instrument Panel Cluster's chime can be heard as a reminder that the lights are still on.

**RAP on Triple Unlock:** When approaching or entering the car, the remote key FOB can be used to give power to the stock radio by pressing 'unlock' three times. This is the same gesture that can be used to control the lowering of the power windows. This means that the Window Valet™ can be configured to (a) do nothing, (b) lower the windows, (c) turn on the radio, or (d) both lower the windows and turn on the radio in response to the triple unlock gesture. Pressing 'lock' or pressing 'unlock' a fourth time will disable the Retained Accessory Power.

### Configuration Menu Structure:

To enter Configuration Menu Mode: Hold the DIC 'reset' while pressing the door panel 'unlock.' Do not do this while driving or while the key is ON. Press 'reset' to exit and abort any incomplete changes.

- 2 - Display high speed
  - 1 - clear high speed from memory
  - \*2 - select US-style speedometer, 0-200 MPH
  - 3 - select export-style speedometer, 0-300 km/h
- 3 - Activate accessory power
- 4 - Enter configuration menu
  - 1 - configure windows
    - \*1 - disable
    - 2 - enable and calibrate windows [requires PIN]
    - 3 - window up safety trigger, normal [requires PIN]
    - 4 - window up safety trigger, less sensitive [requires PIN]
  - 2 - configure door locks
    - \*1 - disable
    - 2 - active on hand brake
    - 3 - active on transmission in PARK
    - 4 - active for both 2 and 3
  - 3 - configure accessory power
    - 1 - disable control
    - 2 - activate power on exit
    - \*3 - activate power on triple unlock via FOB
    - 4 - active for both 2 and 3
    - 5 - adjust accessory power timeout
      - 1 - 30 seconds
      - 2 - 5 minutes
      - \*3 - 15 minutes
  - 4 - factory defaults (factory defaults are marked with \*'s)
    - 1 - restore to factory defaults

### Configuration:

Please understand the gesture sensitive features before choosing which features to enable on the Window Valet™. The following example will show how the Configuration Menu Structure can be read from the outline above.

**How to Read the Configuration Menu Structure:** To enter configuration mode, press 'unlock' on the driver's door panel while holding 'reset' on the Driver's Information Center. It's best to do this with the key off and removed. Once in configuration mode, any feature can be activated or enabled by tracing through the Configuration

Menu Structure outline.

For example, to configure the doors to unlock when the hand brake is set, trace through to the 'active on hand brake' option by following through the Configuration Menu Structure. The top level has three options:

- 2-Display high speed
- 3-Activate accessory power
- 4-Enter configuration menu

\*\* You'll press '4' on the DIC to enter the configuration menu.

Under the '4' option, there's four more items:

- 1 - configure windows
- 2 - configure door locks
- 3 - configure accessory power
- 4 - restore factory defaults

\*\* You'll press '2' on the DIC to access the door locks configuration option.

Under the '2' option, there's four more items:

- 1 - disable
- 2 - active on hand brake
- 3 - active on transmission in PARK
- 4 - active for both 2 and 3

\*\* You'll press '2' on the DIC to select 'activate on hand brake.' Now, if the car is running and the hand brake is pulled, the doors should unlock. This makes it easy for a passenger to quickly exit.

Other gesture sensitive features (Group II features) are configured in the same way, by entering Configuration Mode and then choosing '4' from the top level menu and tracing through the outline to the appropriate goal. The Group I features are selected by choosing '2' or '3' from the top level and these choices have immediate results, such as displaying the high speed or enabling accessory power.

Thank you for choosing Top Down Technologies, Inc.

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