

# **VR VICTOR RACING**

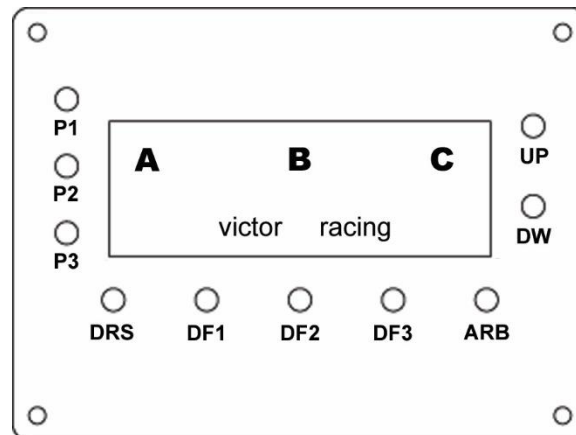
## TRK1 PROGRAMMING QUICK START GUIDE

### FEATURES AND FUNCTIONS:

The TRK1 Controller and Electronics Package can be programmed in the following manner. It has the following features and functions:

- 1.) Three (3) PRESETS, each with Five (5) programmable POSITIONS including: DRS, Downforce1, Downforce2, Downforce3, and Aerobrake.
- 2.) Each of the Five (5) POSITIONS can be programmed with a specific attack angle.
- 3.) The Downforce1, Downforce2, and Downforce 3 positions can be programmed to be activated at a user selected speed (MPH). Aerobraking can be programmed to be activated at a user selected amount of G-Force ranging from 0.3G to 5.0G in 0.1G increments.
- 4.) The TRK1 main computer board allows for the addition of the optional steering wheel controller as well as the standard main controller. An additional port is available for future upgrades.

### THE MAIN CONTROLLER:



P1 = PRESET 1

P2 = PRESET 2

P3 = PRESET 3

DRS = Drag Reduction System

DF1 = Downforce 1

DF2 = Downforce 2

DF3 = Downforce 3

ARB = Aerobrake

UP = Attack Angle Up

DW = Attack Angle Down

A = MPH (Real Time)

B = Mode (Demo, Normal, and Manual)

C = Status (PRESET/POSITION)

## SETTING UP:

- 1.) Disconnect the power cables from your car to your battery to turn all power off in your car.
- 2.) Locate the power wires from the TRK1 electronics and mechanical enclosure and connect to a 12v accessories terminal in your car with at least 20amps. The use of an in-line fuse is recommended.
- 3.) Plug the Controller Cable into the Main Controller Box and the port on the Main Board located inside of the TRK1 electronics and mechanical enclosure. The correct one is mark for installation.
- 4.) Locate the GPS antenna and place it where it can have an unobstructed view of the sky.
- 5.) Reconnect the power cables to your car.
- 6.) Enable accessories power or start your car.
- 7.) The BLUE LED DISPLAY on the TRK1's Main Controller will light up and show text.
- 8.) Set up is now complete.

## PROGRAMMING PRESETS:

- 1.) **PLEASE NOTE:** Generally, the attack angles for downforce ranges between 0 and 25 degrees. Aerobraking is above 25 degrees and dependent on your car, setup, and driving condition. It is important you start at the lower end of these ranges so that you can properly determine the exact amount of downforce you need. Too much downforce will slow the car down and cause additional stress to the wing and other components. Aerobraking is a feature that should also be tuned properly. Too high of an angle will result in producing ONLY DRAG AND NO DOWNFORCE, which can severely disrupt the handling of the car! Proper adjustment of the attack angle for Aerobraking is essential. NEVER adjust Aerobraking to extreme angles, IT WILL CAUSE DAMAGE to the wing, smart active system, and your car.

**WE ARE NOT RESPONSIBLE FOR ANY DAMAGE OR INJURY THAT IS A RESULT OF IMPROPER AND OR EXCESSIVE DOWNFORCE AND AEROBRAKING SETTINGS. YOU ARE FULLY RESPONSIBLE FOR DETERMINING WHAT IS APPROPRIATE AND SAFE FOR YOUR SPECIFIC VEHICLE.**

- 2.) Select the PRESET you would like to program. Options are: P1, P2, or P3.
  - a. Hold the button down for Four (4) seconds to enter "EDIT" mode.
- 3.) Press the DRS button and the wing will move into the previous DRS position. Use the UP and DW buttons to adjust the wing to the desired angle
  - a. Please note there is a number displayed on the LCD as a reference. It is not an indication of the angle. As the mounting position of the wing will vary from car to car, it was not

possible to indicate actual angle in degrees. The number however, can be used as a reference for your specific application / car.

- b. If you are not able to mount the wing perfectly flat mechanically, you can use this feature to set the wing at the flat DRS angle and the computer will move the wing into position the moment the system is started.
- 4.) Press the DF1 button and the wing will move into the previous DF1 position. Use the UP and DW buttons to adjust the wing to the desired angle. Press the DF1 button again and the display will change and show "MPH". Use the UP and DW buttons to set the MPH at which the wing will move to this position.
  - 5.) REPEAT for DF2, and DF3.
  - 6.) Press the ARB button and the wing will move into the previous ARB position. Use the UP and DW buttons to adjust amount of G-Force the sensors must detect before aerobrake is initiated. The range is 0.3G to 5.0G in 0.1G increments.
    - a. This feature is important because you do not want the wing to flip up for aerobraking if you are gently applying your brakes to gain better control around a corner or to gradually slow down. A sudden increase in G-Force that is a distinct indication of your need to stop rapidly is when you want the wing to tilt up for aerobraking. This allows you to set that threshold for each of the Three (3) PRESETS, that can be calibrated for street use, highway use, or multiple specific race tracks.
  - 7.) When you are done programming the PRESET, press the P1 button again and it will store the settings.
    - a. PLEASE NOTE the display will indicate the process of storing the new settings. It may take up to a minute to do so. When it is done, it will go back to displaying the normal display text. DO NOT INTERRUPT THE SETTING SAVING PROCESS. IF YOU DO YOU WILL HAVE TO RESET ALL THE PARAMETERS AGAIN.

## **OPERATION:**

- 1.) Normal or Automatic Mode:
  - a. Press any PRESET and the LED display will show that "PRESET" being selected and the MODE as "nrml"
    - i. The TRK1 is now ready for use and will automatically control the wing per the programming for that specific PRESET.
    - ii. Select any other PRESET to change to the programming for that specific PRESET.
- 2.) Manual Mode:
  - a. Press any POSITION button and the wing will move to that position. It will stay at that position until you either press that POSITION button again, when it will go back to Normal or Automatic Mode, or you can press another POSITION button to change to that new position. The wing will stay at whichever position you set it to manually until

you press that POSITION button again to disable manual override and engage the Normal or Automatic mode again. The Main Controller LED will show: “manu”

3.) Demo Mode:

- a. To engage Demo Mode, where the wing will automatically move through the POSITIONS of any of the Three (3) PRESETS, select the PRESET you want to use and press and hold the DRS button for Four (4) seconds. The LED of the Main Controller will show: “demo”
- b. To disengage Demo Mode, press and hold the DRS button for Four (4) seconds.

**TROUBLESHOOTING:**

ISSUE	POSSIBLE SOLUTION
Main Controller LED Display not on.	<p>Check that power is connected and turned on for the system. You should see a red LED on the main circuit board inside the Mechanical and Electronics Enclosure.</p> <p>Make sure the connection cable is attached to the correct port on the main circuit board inside the Mechanical and Electronics Enclosure to the Main Remote Controller.</p>
No MPH reading.	<p>Check to be sure the GPS antenna is located with an un-obstructed view to the sky.</p> <p>Make sure that GPS has power and has acquired satellite signal. You should see a blinking green light on the main circuit board inside of the Mechanical and Electronics Enclosure.</p>
Wing not moving automatically.	<p>Confirm the Main Controller is set at: “nrml”.</p> <p>Confirm there is MPH displayed on the Main Controller.</p> <p>Review your setting to confirm the speed and angle the wing should be moving.</p> <p>Turn off power to the system and restart.</p>
System stops working.	<p>Turn off power to the system and restart.</p> <p>Call or email our support at: 512-717-7769 / Support@VictorRacing.com</p>

## LIMITED PRODUCT WARRANTY

All products manufactured by VICTOR RACING are fully warranted against defects in workmanship and materials for one (1) year from the time of purchase. If any product is suspected of being defective, the customer may elect to return the product to VICTOR RACING. VICTOR RACING will not accept any C.O.D. returns unless specified by a VICTOR RACING representative. Any item that is determined to be defective will be repaired or replaced. On any warranty claim, VICTOR RACING will be responsible for VICTOR RACING parts only. VICTOR RACING is not responsible for any labor or inconvenience charges incurred by the customer. Questions about the VICTOR RACING Limited Product Warranty policy may be directed toward a VICTOR RACING representative at [Sales@VictorRacing.com](mailto:Sales@VictorRacing.com)

### A. Warranty Policy

- i. If a product should fail due to manufacturer's defect within the stated warranty period, VICTOR RACING will repair or replace the failed product.
- ii. It is the responsibility of the customer/installer to verify the correct size and application of the parts before installation, and to ensure that proper installation is performed. Problems or failure caused by improper installation or use are not covered under the VICTOR RACING Limited Warranty.
- iii. Warranty claims shall be serviced by the applicable seller (VICTOR RACING or Authorized Dealer/Reseller).
- iv. If an item is returned and exhibits damage not covered by the VICTOR RACING Limited Warranty, a quote will be generated for repair or replacement, plus delivery to the owner. At that time, the owner will have a choice to either pay for the repair or replacement, or request that the item be returned without any action taken by VICTOR RACING. If Warranty requirements are met, the repaired or replaced item will be returned without charge and will continue to be covered for the balance of the original warranty period.
- v. All return shipments must be freight prepaid and insured (against loss or damage) with tracking number. No C.O.D. shipments will be accepted. If the warranty claim is fulfilled, the additional shipping expenses incurred will be compensated.
- vi. VICTOR RACING is not responsible for any labor or inconvenience charges incurred by the customer.

### B. Return Process for all Purchase and Warranty Returns

- i. Retail customers that purchased product from an Authorized Dealer/Reseller must contact their respective dealer/reseller to initiate the return process.
- ii. Retail customers that purchased product directly from VICTOR RACING may contact VICTOR RACING Customer Service at (512) 717-7769 or [Sales@VictorRacing.com](mailto:Sales@VictorRacing.com) to request for a Return Merchandise Authorization (RMA) number. When e-mailing for an RMA number, please include the following information: copy of the invoice, brief description of the problem, full name, return e-mail address (if different from the originating e-mail), shipping address, phone number and best time to call. Once an RMA number is received from VICTOR RACING, it should be clearly marked on the outside of the box. The following information must be included inside the box: A copy of the invoice, reason for return, name, phone number, and return address. Ship the return package to: VICTOR RACING, Inc., Attn: RMA Department, 3709 Promontory Point Dr. Suite 129, Austin, Texas 78744, USA.