



Race Features

Launch Control

Overview

The race distributor has a launch control feature to help the car launch and maintain traction. There is a dedicated blue wire for the launch trigger. This can be triggered by 12V from a clutch switch, trans brake, line-lock device or just a standalone switch. When the blue trigger wire is connected to 12V, the launch rev limiter is activated. When the 12V is disconnected, the launch rev limiter is released after the delay time has expired. Then, the launch retard curve is in effect for 2 seconds.

The image shows two screenshots of the 'Launch Control' app interface. The top screenshot displays a graph of Retard (degrees) vs. Seconds (0.0 to 2.0) with a curve defined by seven points. A callout points to the graph: 'Drag and drop the sliders to build your retard curve.' Another callout points to the data table: 'You can manually enter time and degrees if desired.' The bottom screenshot shows the 'Launch RPM' and 'Delay' settings. A callout points to the RPM selection: 'Select Launch Rev Limiter RPM and select soft limiting and soft zone size in RPM'. Another callout points to the delay selection: 'Select delay time'. A third callout points to the 'OK' button: 'Press to edit Launch Rev Limiter and Delay Time'. A fourth callout points to the 'ENABLED' button: 'Enable or disable the Launch Control features.'

Point	Time (Seconds)	Retard (Degrees)
1	0.00	20
2	0.28	18
3	0.68	16
4	1.05	14
5	1.40	9
6	1.73	5
7	2.00	0

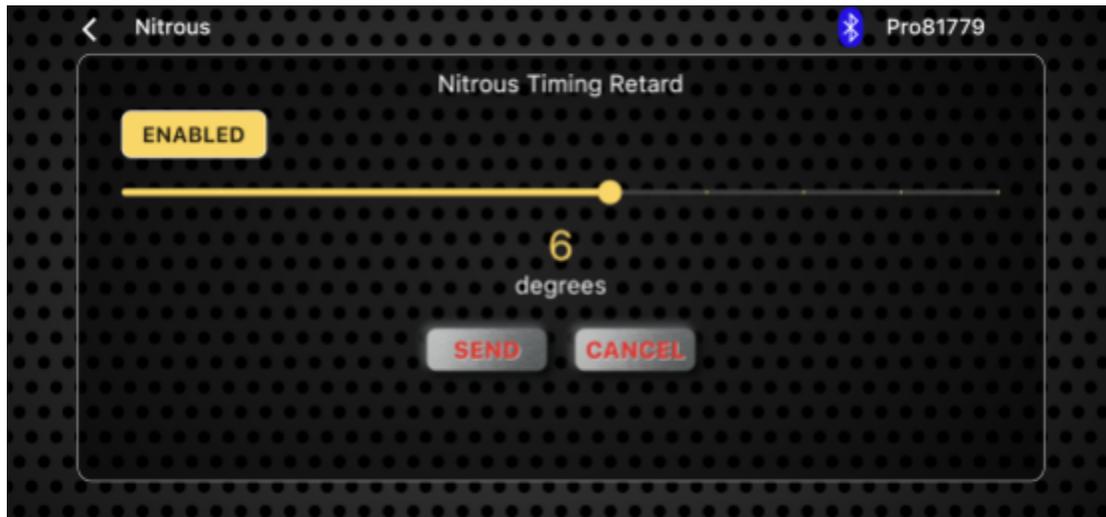
Launch RPM: 4000, Delay: 0.1

How to use the Launch Control

- 1. Access the Launch Control Screen** -by pressing the Active Table button and then pressing the corner menu button and pressing Launch. Also accessible when editing a newly generated table.
- 2. Launch RPM-** When 12V is applied to the blue wire, the launch rev limiter is activated. When 12V is removed from the blue wire, the launch rev limiter is released. Select the desired launch RPM. The standard launch rev limiter is a hard limiter. This simply means that when the RPM limit is exceeded, the spark is cut.
- 3. Soft Limiter-** If you want a soft touch launch rev limiter, check the Soft box. Then, select the size of the soft zone between 100 and 500 RPM. The soft touch rev limiter is a random progressive limiter. This means that when RPM enters the soft zone, spark will be cut randomly and if RPM continues to increase, the percentage of sparks that are cut will also increase until RPM hits the hard limit. For example, if you select Launch RPM of 4000 and soft zone of -200, when RPM crosses 3800, spark will randomly start cutting and the amount of cutting will increase until RPM hits 4000 and all sparks are cut. For the smoothest limiting, tune the soft zone so the engine doesn't hit the hard limit.
- 4. Delay-** You can add a delay time to the release of the launch rev limiter. When 12V is disconnected, the delay time must expire before the rev limiter will release. This allows you to synchronize the release of the limiter with the release of the trans brake or clutch etc.
- 5. Retard Curve-** Drag and drop the sliders to build your retard curve for the first 2 seconds after the launch rev limiter releases. The retard degrees will be combined with the nitrous retard and subtracted from the timing table. Keep in mind, actual timing will never be allowed to be less than 10 degrees. This is to keep the rotor in phase.
- 6. Enable Button-** Enable/Disable button must be enabled for launch control to work.
- 7. Send-** The Send button will send the timing table and Launch Control settings to the distributor. **You must also press Save if you want to permanently Save the settings in the distributor. Pressing Save also saves to phone memory.** If you don't press Save , the distributor will lose the settings when power is turned off.

Nitrous Retard

The race distributor has a nitrous retard feature that is triggered by applying 12V to the pink wire. When 12V is removed from the pink wire, the retard will stay in effect for half a second to allow any remaining nitrous to cycle through the engine. Select the amount of retard on the Nitrous Screen.

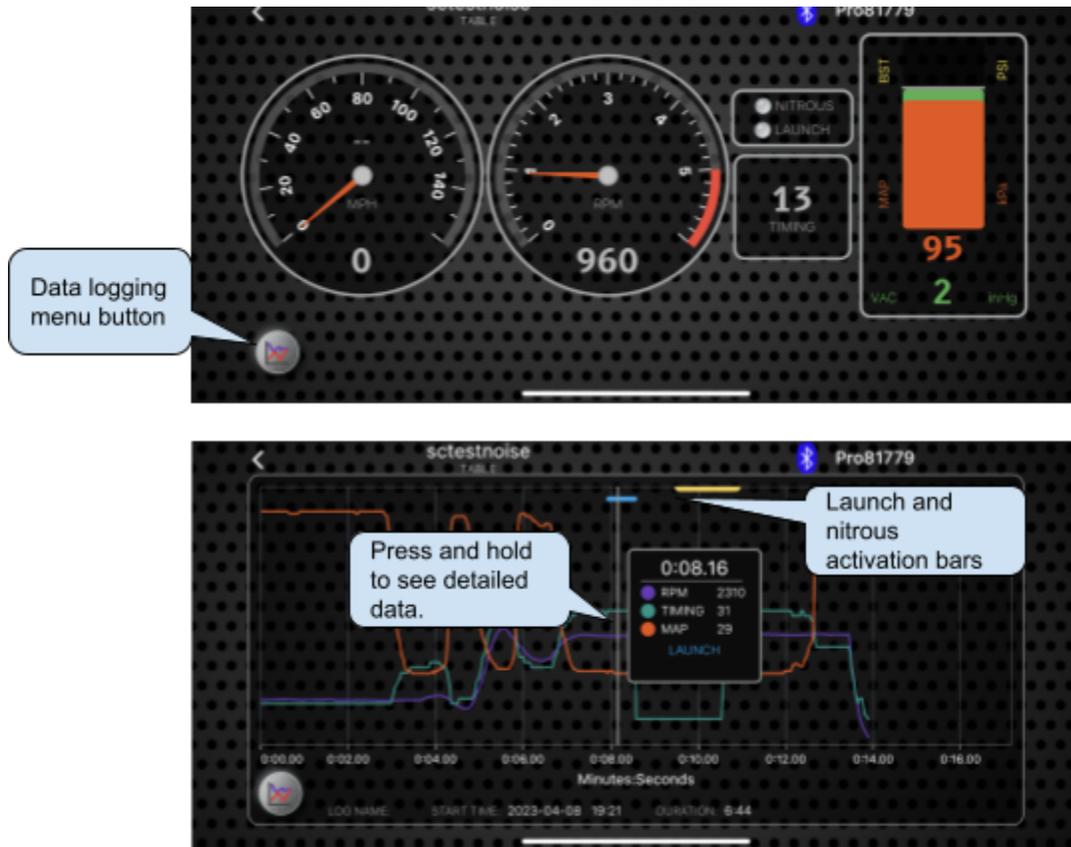


How to use the Nitrous Retard

- 1. Access the Nitrous Retard Screen** -by pressing the Active Table button and then pressing the corner menu button and pressing Launch. Also accessible when editing a newly generated table.
- 2. Nitrous Timing Retard-** Drag the slider to the desired amount of retard. When the pink wire receives 12V, the nitrous retard will be subtracted from the timing table. If launch retard is also active, Nitrous retard will be combined with it and subtracted from the timing table. Keep in mind, actual timing will never be allowed to be less than 10 degrees. This is to keep the rotor in phase. When 12V is removed, nitrous retard will stay in effect for half a second to allow any nitrous remaining in the lines to clear the engine.
- 3. Enable Button-** Enable/Disable button must be enabled for nitrous retard to work.
- 4. Send-** The Send button will send the timing table and nitrous retard settings to the distributor. **You must also press Save if you want to permanently Save the settings in the distributor. Pressing Save also saves to phone memory.** If you don't press Save , the distributor will lose the settings when power is turned off.

Data logging

The race distributor app has data logging capability. It will record the following data- time, RPM, Manifold pressure, ignition timing, launch 12v and nitrous 12v triggers.



How to use Data Logging

- 1. Access the Data Logging Screen** -by pressing the Gauges button and then pressing the data logging menu button.
- 2. Start-** activates the logging. The app must stay on the logging viewer or Gauges screen or else logging will stop. There is a 30 minute limit to the logs.
- 3. Stop-** Press to deactivate logging.
- 4. View-** Press to view the current log. You can zoom in and out using pinch movement and pressing and holding will bring up the detailed data for that section.
- 5. Load-** Press to load a saved log into the viewer.
- 6. Save-** Press to save the current log into phone storage. Logs are stored on the phone only and are not backed up to the cloud.

Wiring

- **Blue wire-** This is the trigger input for the launch RPM rev limiter. When 12V is connected, the Launch RPM rev limiter is activated. Connect this wire to the same 12V source that operates the trans brake or line lock.
- **Pink wire-** This is the trigger input for the nitrous retard. When 12V is connected, the nitrous retard is activated. Connect this wire to the same 12V source that operates the nitrous solenoids.
- **Gray wire-** optional 12V square wave tach output. Connect to a tachometer or other accessory that requires a tach signal.