TECHNO VERSIONS

TachMatch Voltage Boost Module (V-Boost) Instructions

Thank you for your purchase of the TachMatch-Boost Model V-Boost from TechnoVersions LLC. The TachMatch Boost has been designed to:

- accept various tachometer input signals (e.g., TachMatch TM-02/03, ECU, MSD),
- amplify the trigger signal for hard-to-drive tachometers

Common tachometers have been designed to work from the signal developed at the coil. In most cases, these tachometers can also be driven with a 12V signal, such as that produced by TachMatch and MSD 6 tachometer signals.

However, some tachometers require a larger drive spike than 12V. They have either deteriorated, becoming less sensitive, or they are relying on the coil signal having amplitude greater than 12V, which is caused by the large inductive spike that the coil develops.

The TachMatch Voltage Boost Module has been designed to amplify a lower level tachometer signal, developing a generous voltage spike, enough to drive most tachometers. It can be triggered by a TachMatch TM-02 or TM-03 (if you need frequency conversion), most ECU signals, MSD 6 tachometer output and others.

It is not designed to be triggered by the coil signal – if you have that you shouldn't need the TachMatch Boost. It is also not designed to operate current-driven tachometers, please refer to the TachMatch I-Drive configuration for that application.

Note: This Instruction Manual is also available on-line at <u>www.TechnoVersions.com</u> if you wish to refer to it on-line, or print it out full-sized.

Wiring Overview



Locating the TachMatch Voltage Boost

The first installation step is to locate a position for TachMatch Voltage Boost. It should be mounted either inside the car (best), or if in the engine compartment, away from hot items such the exhaust and radiator, and in a position away from dirt and water.

Wiring the TachMatch

Inside the TachMatch Voltage Boost, you will find a terminal strip with four positions. It accommodates wire sizes from #14 AWG to #22 AWG. #18 AWG is a good size for most applications.

There are only four wires for the TachMatch module:

Pin	Wire Color	Use	Connection
1	Red	Switched +12 V	This is power to the TachMatch Voltage Boost module. It should be connected to a source of +12V when the vehicle ignition switch is turned on, and with no voltage if the vehicle is turned off. It only requires a few mA of current so it can be added to most power circuits without changing the existing fuse of the circuit.
2	Black	Ground	Connect it to a good chassis ground. The ground wire is important for the TachMatch Boost to work properly.
3	Orange	Tach output	This is the wire that connects to the tachometer.
4	White	Tach trigger input	 This wire tells the TachMatch how fast the motor is turning. It can be connected to one of several types of inputs. (1) If you are using an ECU signal, it should be connected to the tachometer drive signal from the ECU. (2) If you are using a multiple-spark or boosted ignition such as an MSD unit – <i>DO NOT</i> connect the TachMatch to the coil. It will not work because of the multiple spark signals, and is likely to damage the TachMatch Boost because of the high voltages present. For these types of ignition systems, connect to their tachometer output signal. On the MSD 6, this is the white wire. (3) If you are using a TachMatch Model TM-02 or TM-03 for cylinder-count conversion, it connects to the output terminal (see following wiring diagram).

Caution: do not touch the Boost Module tach output terminal or it's wiring when operating – it contains high-voltage spikes.



Connection Diagrams – With TachMatch TM-02

If in addition to the boosted signal, you also need to do cylinder conversion (the tach is designed for a different number of cylinders than the engine), the following diagram shows how the two TachMatch units are connected:



Completing the Installation

Once the TachMatch Boost has been wired, you should now be able to fire up the engine and see your tach work properly. After going through these steps, if you are not able to make your TachMatch Boost unit work properly, please contact us via email at <u>TachMatch@aol.com</u> for support.

Return Policy

If a TachMatch unit does not work properly in your application, and is not damaged, TechnoVersions will allow return for full refund of purchase cost, exclusive of any shipping charges. Claim for such must occur within 30 days of product shipment from TechnoVersions. Ship the unit back to TechnoVersions along with a description of the application and the PayPal payment date or transaction number. TechnoVersions will remit the refund via US Mail or PayPal refund (at TechnoVersions discretion) within 10 working days of product receipt.

Limited Warranty

TechnoVersions LLC provides a limited warranty for TachMatch. If a unit should fail within 180 days from time of shipment from TechnoVersions, it can be returned for repair or replacement at TechnoVersions discretion. Products subject to abuse (as determined by TechnoVersions) are excluded from this limited warranty. TechnoVersions LLC makes no other claims as to suitability and excludes any indirect or consequential damages. Exclusive remedy is limited to product replacement or repair. Cost of shipping the product to TechnoVersions is at the customer's expense, but the replacement/repaired TachMatch will be shipped to the customer via USPS or UPS ground at TechnoVersions expense, except for shipments out of the US, in which case shipping costs are limited to that of domestic shipments

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