Performance Solutions Business Plan

Prepared by

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July 01, 1989

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Summary

Performance Solutions is a new company which is developing an automotive performance product called The Digitune Performance Computer. This product will be used in commercial and consumer applications and has a potential market of over $6 million in sales over the next 5 years.

Performance Solutions will be profitable within the first year of operations and conservatively expects to achieve sales of almost $3 million by the end of the third year.

The company will be self-sustaining by the end of the first year.

The major markets for the new product are throughout North America and Europe.

An extensive market survey has revealed that no other product presently on the market compares with The Digitune Performance Computer in terms of features, benefits, potential applications and marketing program.

Full production can begin within 6 months after financing has been arranged and the first 100 production units will be available for sale within 9 months of financing.

Performance Solutions is prepared to offer equity in the Company in return for the investment. The Company will also consider other arrangements to obtain the necessary finances.

Performance Solutions
July 01, 1989

Introduction

This business plan has been prepared for the purpose of raising financing for the completion of product development, manufacturing setup and distribution of a new electronic product which has wide spread commercial and consumer automotive applications.

The new product, which is called The Digitune Performance Computer, will increase the power of modern computer controlled vehicle engines by allowing precise control over the engine and optional performance accessories.

In addition to providing an increase in engine power, vehicle safety and reliability will be enhanced through the use of built-in rev limiting, anti theft, and diagnostics features. This product will be adaptable to many popular performance vehicles which competitive products do not function with and will offer many new, desirable features.

The idea of the product was conceived by Derek Spratt as a result of discussions with numerous automotive performance market vendors who were looking for such a product to sell. The initial concepts have been refined over the past 4 years with substantial input from the performance industry as it has evolved during this period.

The product concept has been considerably refined with input from Mike Lukas and Geoff Yue. The concept has proceeded to a stage where there are detailed schematics, assembly drawings and demonstration software. A full technical feasibility study has also been completed. An article a local automotive magazine has given a very positive review of the Digitune Performance Computer and suggests that it could revolutionize the automotive performance industry.

A substantial marketing research effort has identified the market size and segments, competitors, and consumer & retailer interest. It is a new market with significant growth potential. The Digitune Performance Computer is well positioned to gain a substantial market share.

$80,000 is required to complete the development of the product, to set up manufacturing and to establish a sales and marketing program. This will be supplemented by revenue generated from sales of the product to cover the total financial requirements for the first year of operation. The business will be self-sustaining by the end of its first year.

Performance Solutions is prepared to offer common (voting) shares in return for the investment. The Company is also prepared to consider other forms of financing such as debentures or other arrangements.

The Company

Performance Solutions is planning to be incorporated in the Province of British Columbia by August 01, 1989. It is currently registered in British Columbia as a partnership. The Company's business address is:

Performance Solutions
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Performance Solutions was established to develop and manufacture an automotive performance computer product, the Digitune Performance Computer, which is still under development.

At present, the Company does not have any full time employees. The Company is presently operating out the residence of one of the principals. The three principals of the company are:

Derek Spratt, President and original developer of the product

Mike Lukas, Director of Product Development and Manufacturing

Geoff Yue, Director of Marketing and Sales

The ownership of Performance Solutions is as follows: Derek Spratt 40%, Mike Lukas 40%, and Geoff Yue 20%.

Management

The current members of the management group are the principals of Performance Solutions. The management team consists of Derek Spratt, Mike Lukas and Geoff Yue. Industry professionals in sales and general business management are currently being sought to assist current management in the development and expansion of the company.

The following is a brief biographical sketch on each member of the current management team.

Derek Spratt, P.Eng

A Queens University graduate in Electrical Engineering, Mr. Spratt has worked for a number of firms in the electronics development business on a diverse range of projects including: business telecommunications switches, industrial control equipment, semiconductor gate array & standard cell designs, and commercial & consumer electronics products.

Currently, Mr. Spratt works as a Project Manager for the Portable Data Terminal group at Mobile Data International, Inc. Previous to that, he spent five years with Integra Systems, Inc., a Point Of Sale Terminal manufacturer, as a Design Engineer, Production Engineer and Customer Service Manager.

Mr. Spratt is also the proprietor of DWS Electronics which develops construction test equipment now used by numerous construction and engineering companies in North America, Europe and Asia. He brings a wide range of experience to Performance Solutions in the areas of project management, product development, manufacturing, distribution and service.

Mike Lukas

A graduate in Computer Engineering from Simon Fraser University, Mr. Lukas has worked on the design and development of computer equipment used in industrial and commercial applications including: building access control systems, industrial production control systems, and commercial electronics funds transfer and Point of Sale systems.

Currently, Mr. Lukas is the Hardware Development and Production Manager for Integra Systems, Inc. and previously worked for Computrol Systems, Inc. as a Design Engineer.

Mr. Lukas has the necessary experience and talents to provide the proper direction to Performance Solution's Product Development and Manufacturing Departments.

Geoff Yue

A Western Washington University Graduate with a B.Sc. in Visual Communications and a B.C.I.T. degree in Public Relations, Mr. Yue began his career by working with a variety of graphics arts, print production and commercial photography companies, gaining experience in the marketing and sales areas.

Mr. Yue has worked for Baker Lovick Advertising Ltd. as a Media Buyer and is currently the Media and Production Coordinator for Dome Advertising B.C. Ltd.

Mr. Yue brings a wide range of talents to Performance Solutions that will help guide the Marketing & Sales and Public Relations Departments.

Detailed resumes of the management team members are available.

The Product

Description

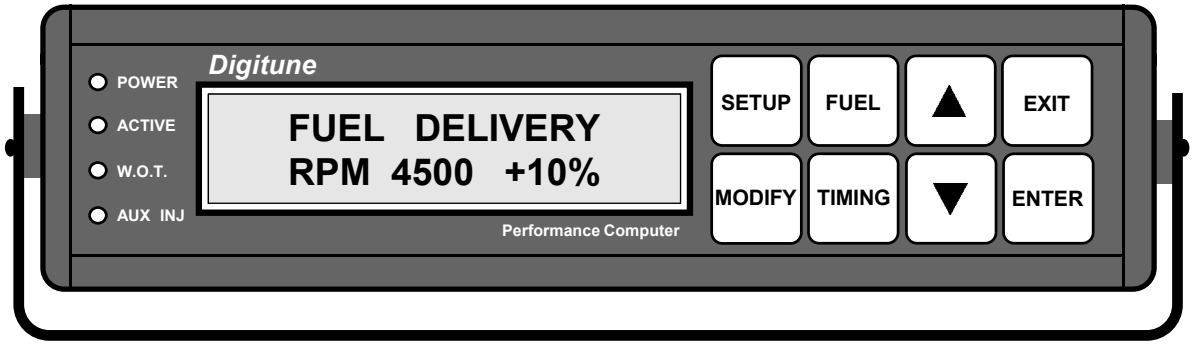
The Digitune Performance Computer is a device which provides the automotive enthusiast with the ability to tune any stock or modified computer controlled vehicle. With the Digitune Performance Computer, both ignition timing and fuel delivery curves can be adjusted to achieve maximum performance under Wide Open Throttle (WOT) conditions. Factory engine management computers do not provide the facility for modification of engine control parameters. Instead, the vehicle must operate according to the conservative set of parameters developed by the automobile manufacturer.

The Digitune Performance Computer does not replace the factory engine management computer. Rather, it modifies the signals entering and exiting the factory computer. The Digitune Performance Computer remains passive, passing signals through unaltered, until a WOT condition is sensed. At this point the Digitune Performance Computer begins to alter signals using the modified parameters that the user has provided. Because the Digitune Performance Computer only works under WOT conditions, part throttle fuel economy and driveability are not compromised. In addition, the Digitune Performance Computer allows the retention and proper operation of all factory emissions control equipment.

Using a Digitune Performance Computer with an otherwise unmodified vehicle, a 10 to 15% increase in performance can be achieved. This is possible due to the conservative nature of the factory control parameters. Where the Digitune Performance Computer will be particularly useful, is in applications where modifications to the stock engine have been made. The Digitune Performance Computer will allow the engine to be tuned to match or accommodate the completed modifications.

In addition to the primary function of providing adjustment for ignition timing and fuel mixture, the Digitune Performance Computer possesses many other features and capabilities. In turbocharged applications, it will allow control of the turbocharger boost. Other programmable inputs and outputs will be available for connection to devices such as auxiliary fuel injectors, nitrous oxide systems, knock sensors and the g-Analyst.

The Digitune Performance Computer will also provide a user adjustable RPM limit. When the engine RPM reaches the user set limit, the fuel injectors will be shut off, preventing damage to the engine from excessive RPM.



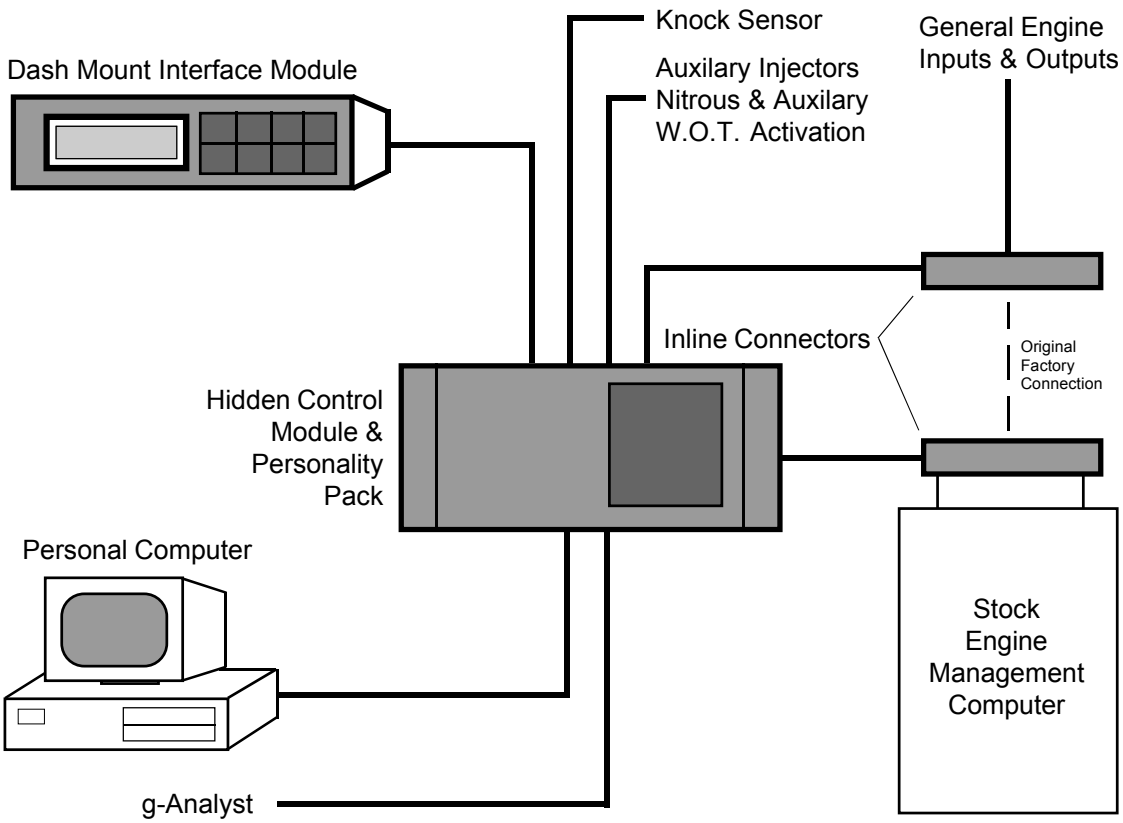
The Digitune Display/Keyboard Module (actual size)

In future releases of the product, an anti theft mechanism will be incorporated. With this system, until the user enters a pre-defined sequence of keys, the Digitune Performance Computer will not enable ignition timing or fuel injector activation.

An extensive engine diagnostic capability will also be included. All factory engine management systems have built in diagnostics. This feature allows the factory service technician to quickly and easily locate engine problems. The factory computer, under proper direction, will output a trouble code identifying the problem. The Digitune Performance Computer will allow the user to place the factory computer into a self-test mode. It will then interpret any trouble codes output and provide a descriptive message identifying the source of the problem. This feature will eliminate costly trips to a factory service outlet for engine diagnosis.

Four components make up the Digitune Performance Computer system. The user interacts with a dash mounted interface module. This module, approximately 2"x4"x2", contains a two line by 16 character liquid crystal display and an eight key keypad. The interface module software gives the user the ability to change engine control parameters, monitor engine functions and diagnose system problems. The large display allows descriptive messages which greatly simply the user interface.

The heart of the system is the hidden control module. This is the device which actively modifies the factory engine management computer's inputs and outputs. Access to the control module is not required after installation and thus the Digitune Performance Computer can be mounted out of sight. The unique design of the Digitune Performance Computer makes use of the latest available microcomputer technology. Until very recently,



Digitune System Interconnections

the available microcomputer hardware would not have allowed the design of a product such as the Digitune Performance Computer at a price the average automotive enthusiast would be willing to pay.

The remaining two components, the personality pack and the inline connector system, are the components which provide the interface to the factory engine management computer. These components will be different for each application. Since every application will use the same interface module and control module, development of new applications after the first will be accomplished in much less time and at a lower cost.

Installation of the Digitune Performance Computer is quite straight forward and can be completed by anyone with a reasonable level of mechanical ability. The first step is to mount the interface module to the dash. Then the factory computer must be located and disconnected from the wiring harness. The Digitune Performance Computer is then plugged between the wiring harness and the factory computer using the inline connected

system. Once the control module is mounted and connected to the interface module, the unit is ready for operation.

Performance Solutions has also developed a Digitune Interface Program which runs on an IBM PC compatible computer. This piece of software provides a user friendly graphical interface which simplifies the programming of the Digitune Performance Computer. A communication link between the PC and the Digitune Performance Computer allows parameters to be transferred in either direction. Parameters developed in the Digitune Performance Computer using the interface module can be transferred to the PC for storage on disk and parameters developed in the PC can be transferred back for operation. The Digitune Performance Computer can store up to 10 sets of parameters in its internal memory at one time. The user can change the active parameter set at any time. Any number of parameter sets can be stored in the PC. This program will also be useful as a marketing and demonstration tool.

The first application to be developed will be for the Ford Mustang. Once the Ford application is complete, other applications will be developed.

The Digitune Performance Computer is not patented. Performance Solutions plans to protect the product by copywriting the software and by securing an industrial patent for the look of the product.

Product Development

Performance Solutions has completed the PC interface program and the design of the Digitune Performance Computer. Schematic diagrams have been completed and the required printed circuit boards are ready to be designed. The next step will be to complete a working prototype which demonstrates full operation.

To this date, considerable effort has be expended on researching the operation of factory engine management systems. The information collected has allowed Performance Solutions to complete the design of the Digitune Performance Computer with a high level of confidence of its successful operation.

The only major concern remaining is in relation to access to the proprietary connector used on each automotive manufacturers engine management computer. If Performance Solutions is unable to secure access to the required connector, it will have to develop a suitable replacement at considerable expense. To address this concern, Performance Solutions has

contacted Ford Canada to discuss use of their connector for the Ford applications. In addition, Molex Canada has been contacted regarding the possible development of a mating connector.

The following is a list of additional engineering development work that is required before the product is ready for volume production. The man hours column is the estimated number of hours to complete each task.

Task	Man Hours
Completion of schematics	20
Printed circuit board layout	50
Prototype construction	50
Prototype testing and design refinements	300
Simulator design and construction	100
Interface and control module package design	200
Interface module software	100
Control module software	400
Digitune user's manual	50
PC interface user's manual	50
Assembly drawings, production documentation	50
Marketing model construction	20
10 engineering prototypes	100

Special engineering equipment will be required to complete development of the software and to conduct performance and reliability tests. The equipment will consist of an emulator, logic analyzer and an oscilloscope. The equipment will be rented, leased or purchased as financing dictates.

The simulator mentioned above will provide a test bed for prototype evaluation and software development. The simulator will completely emulate the operation of a running vehicle. In addition, Performance Solutions has access to a 1987 Ford Mustang for field testing.

The first prototype is scheduled to be completed and ready for testing by the end of the 1st. quarter. The simulator will also be completed to coincide with the start of prototype testing. The marketing models will be ready at that time and the remaining 10 engineering prototypes in the 2nd. quarter. Production is scheduled to begin in in the 3rd. quarter.

An engineer will be required to assist in prototype and simulator construction and testing starting part time at the beginning of the 1st. quarter. A Production Coordinator will be hired in the 3rd. quarter to oversee production.

Production

In an effort to reduce overhead, Performance Solutions will contract out as much of the assembly of the Digitune Performance Computer as possible. The manufacture of the printed circuit boards, assembly of the printed circuit boards and final assembly and testing of the product will be handled by local contractors. As well, the manufacture of the packages for the interface module and control unit will be handled by a local company.

Performance Solutions will be responsible for sourcing all electronic parts required to assemble the Digitune Performance Computer product. The parts will be sorted into kits by Performance Solutions and delivered to the contractor for assembly. Thus, Performance Solutions will maintain an inventory of parts required to build the product.

The assembled and tested units will be delivered back to the Performance Solutions facility where they will undergo a Quality Assurance (QA) inspection. The inspected units will then be configured for specific applications and undergo 24 hours of continuous testing. Tested units will then be subjected to a final inspection and then be packaged and prepared for shipment.

Special semi-automated equipment will be required for testing. This equipment will be developed by Performance Solutions.

Performance Solutions is currently searching for a local facility suitable to house the operation.

The first 100 production units will be ready for shipment by the end of the 3rd. quarter of the first year. Volume production of 500 units per quarter will begin the 4th. quarter and increase to 750 units per quarter in the second year of business.

Legal and Regulatory Issues

As people become more environmentally aware, the issue of automobile emissions controls is becoming increasingly important. All new vehicles sold in North America have been required to meet certain emissions levels since the early 1970's. The Provincial Government of B.C. has recently announced that it plans to introduce emissions testing to ensure that all vehicles licensed in B.C. meet the required emissions levels for each vehicle type. As well, almost all states in the U.S. have inspection and maintenance (I/M) tests which a vehicle must pass every two years. These tests include an inspection to ensure that all factory emissions equipment is installed and functioning. The state of California even goes so far as to test vehicles to ensure emissions compliance.

The Digitune Performance Computer allows the retention and proper operation of all factory emissions equipment. In addition, emissions test are conducted with the motor idling. Since the Digitune Performance Computer is only active during wide open throttle (WOT) conditions, the Digitune Performance Computer will not affect emissions test results.

In the U.S., the Bureau of Automotive Repair is the federal agency which runs and polices the I/M smog check program. The agency states that any aftermarket part designed for street use that accepts and retains all smog equipment in working order is allowed. Thus, there should be no problem in selling the Digitune Performance Computer in the U.S. in general.

The state of California, however, has its own agency for ensuring emissions compliance. The California Air Resources Board (CARB) requires that an aftermarket auto part be tested to prove that emissions outputs are not affected. The manufacturer of the part can, at his own expense, subject the part to a full federal test procedure and hope that the stock emissions are not altered. The data can then be submitted to CARB for scrutiny and possible approval. If approved, the part is given an Executive Order (EO) number, making it legal to sell in California. The federal test procedure is complicated, expensive and difficult to pass. Fees of $20,000 - $25,000 are usually incurred in the certification process. If a part passes, it will only be exempted for the specific application tested. Different applications require separate approval.

For these reasons, Performance Solutions has decided to market the Digitune Performance Computer in California for ''off road use only''. Performance Solutions will be required to print a disclaimer on the product stating that the product is not legal for use on a public highway in California.

Another legal issue which should be addressed is that of manufacturer's warranties. While Performance Solutions has not contacted any automotive manufacturers to determine if installation of the Digitune Performance Computer would void the warranty, Performance Solutions is going to assume that the warranty would be voided and include an appropriate note in the user's manual.

Finally, there is the issue of product liability. Although Performance Solutions has taken every effort to ensure the design of a safe operating product, there is always the possibility that some situation may arise in which Performance Solutions may be found liable. Before production and delivery of the Digitune Performance Computer, adequate product liability insurance will be purchased.

Market

The Market Place

The primary markets for Performance Solutions at this time which provide the greatest sales potential in a relatively short period are in Canada and the United States. Consumer and commercial users are all prospective customers for the product.

The major potential market in the consumer sector will be accessed through direct mail order sales and automotive performance parts retailers such as:

- Motorsport Divisions of Automotive Manufacturers (i.e. Ford Motorsport)
- Performance Automotive Retailers
- Performance Automotive Mail Order Houses

The major potential market in the commercial sector will be the performance oriented automotive service and repair outlets.

These target markets are accessible and identifiable.

Interest in the Digitune Performance Computer has already been expressed by the following organizations:

- Brown Bros. Ford (Motorsport Division), Vancouver
- Eurotech Motor Cars, Vancouver
- Weissach Performance, Vancouver
- Rainbow Automotive, Vancouver
- Racer Walsh, Florida
- Autotech Sport Tuning, California
- Numerous Automotive Publications, Canada & U.S.

All of the above feel there will be strong demand for the Digitune Performance Computer because there is currently no other product which provides its unique features. They are primarily interested in a product that will have a retail selling price of less than $750 Cdn.

Market Size

The electronic product sales in the automotive aftermarket industry is in its infancy. This $1 Billion market has traditionally been dominated by mechanical component sales and is now rapidly gearing up for a technological revolution. The first major electronics product sales have been the computer ‘‘chips’’ which provide a fixed re-programming of the stock vehicle computer. Many firms currently offer such products for sale (see *Competitive Analysis*).

As next generation products like the Digitune Performance Computer become available, it is anticipated that their market size will initially be $7 million a year. This market is expected to grow at an annual rate of 25% over the next five years to a level of $21 Million per year. Performance Solutions conservatively expects to capture a 10% market share, or $2.1 Million in retail sales per year.

The net selling price of the Digitune Performance Computer to retailers will be $420. Cdn. with the net selling price via direct mail orders being $695. (suggested retail price). With an estimated 70%/30% ratio of Retailer to Mail Order Sales, the average selling price will be $503. Cdn.

Performance Solutions plans to sell a total of 12,100 units in the first 5 years of business. This amounts to a total sales revenue over this period of $6,212,050. Cdn.

Sales Plan

The Performance Solutions sales program will start in the 2nd. quarter of the first business year. For the first 3 months it will concentrate on developing the Vancouver area market place. The U.S. sales program will commence immediately after the product is available on the Canadian market with the European sales program commencing in the 1st. quarter of the second year of business.

The sales will be divided into 2 main areas: Retailer Distribution and Direct Mail Order. A significant increase in gross margins will be obtained with direct mail order sales in comparison to Retailer sales.

Initially, the Digitune Performance Computer will be available for Ford applications only. The Ford product line was chosen because of its high volume sales of late model performance cars such as the 5.0L Mustang, Thunderbird, Taurus SHO and Probe cars. Ford

currently has a very high profile with performance minded consumers and few compatible aftermarket products are currently offered for sale. Applications for other vehicle makes will be developed and marketed at a rate of 2 per year.

A simple but effective advertising campaign will be implemented to support the sales efforts. Consumer advertising will consist of staggered monthly advertisements in publications such as Motorsport West, Hot Rod, and Automobile Magazine, while Retailers will be contacted by phone and in person sales calls. A full time Marketing & Sales Manager will be hired in the 4th. quarter.

Publicity has already begun with a positive local editorial and shall be followed up with other newspaper, national magazine, radio, and automotive television program editorials.

Performance Solutions will focus on becoming a ‘‘niche’’ market provider, offering a quality product with unique, desirable features at good profit margins.

Research Results

In addition to the companies listed in *The Market Place* section, numerous other industry contacts were solicited for advice and opinions on the direction of the performance after market and the type of product and features that would be most desirable. All of this information has been used to help determine the optimum product design and features of the Digitune Performance Computer.

A questionnaire was left on approximately 40 late model cars parked throughout the Vancouver lower mainland. Ten (25%) questionnaires were returned. Eight out of ten were positive to our project objectives. In general, this is a very good return rate. The comments received indicated a strong level of enthusiasm for the Digitune Performance Computer.

Competitive Analysis

Currently there are no products which posses all the capabilities of the Digitune Performance Computer. There are, however, many companies which market products designed to increase performance by altering the ignition timing or fuel delivery of a computer controlled vehicle. These products can be divided into two categories. The first category contains all the products which are replacement ‘‘chips’’ for the factory engine management computer. The second category contains the products which use an aftermarket computer

to control either ignition timing or fuel mixture, but not both. Each class of product will be described below, along with the major competitors in each category.

The factory engine management computer works by monitoring a number of engine sensors and then looking in a table to determine the values for the control parameters required for the current engine state. The table used is contained in a chip referred to as a Programmable Read Only Memory (PROM). By modifying the control parameter values stored in the table, the operation of the engine can be altered. There are several companies which have invested considerable money into reverse engineering the format and values of the data stored in these tables. These companies then determined their own values for the tables which would result in an increase in performance. Typically, a 10 to 15% increase in performance can be achieved with an otherwise stock vehicle. These companies are taking advantage of the conservative nature of the factory programming.

Recently there has been some negative press regarding the companies who manufacture replacement chips. It seems that some companies have chosen to bypass the expensive R&D stage and just sell blank chips or chips that are copies of the original. If a blank chip, one with no programming, is installed, the factory computer will enter a limp mode and advance the timing and enrich the fuel mixture. This will result in an increase in performance at wide open throttle but will compromise fuel economy, part throttle driveability, emissions levels and may result in engine damage. The public may become hesitant to purchase these products for fear of buying a bogus device.

The largest manufacturer of replacement chips is Hypertec Inc. This company is the pioneer in the chip market and has an extensive R&D program which has resulted in proven products. Hypertec, located in Memphis, has a wide product offering covering almost all General Motors vehicles. The price of a Hypertec chip ranges from $200 - $400 U.S.

Another company with a solid R&D program which markets a proven performance increasing chip is Modified Research Products. Based in New Jersey, MRP sells chips only for General Motors applications. As well as chips, MRP also has a replacement fuel injection system which will increase performance even further. Cost of their complete system, including fuel injection, is in the $2500 U.S. price range.

In an effort to prevent alteration of the factory engine management computer, automotive manufacturers have adopted a practise of making their PROM chip non removable. This will definitely have an impact on the sales of replacement chips. It is also worth pointing

out that the design of the Ford engine management computer is such that a replacement chip is not practical. Consequently, there are no companies marketing products for Ford applications.

The other drawback of replacement chips is that they are not adjustable. Where the Digitune Performance Computer gives the user the ability to adjust engine control parameters, with a replacement chip, the user is stuck with what the chip manufacturer provides. Other engine modifications may be accommodated with the Digitune Performance Computer.

The other category of products makes use of some sort of aftermarket computer. Edelbrock corporation has just announced a device which will improve the ignition timing on LG-4 carb. equipped 305 GM engines. This device also only works under WOT conditions and has received its CARB executive order status. Edelbrock does not have a version for Ford applications. Again, this device does not give the user the capability to adjust ignition timing.

Air Sensors of Seattle offers an electronic control unit which gives the user the ability to control fuel mixture. However, this control unit only works with the company's fuel injection system. Currently, Air Sensors only offers systems for Chevrolet engines. Prices range from $1000 - $3000 U.S.

Currently there are no electronic performance products, that Performance Solutions is aware of, for Ford applications. This fact, coupled with the increasing interest in high performance Ford vehicles, should ensure the successful introduction of the Digitune Performance Computer. When Performance Solutions develops applications for GM vehicles, the superior performance, features and price of the Digitune Performance Computer will help guarantee the success of the product.

Sales Forecast

The following sales forecast is considered conservative. Additional sales can be anticipated with increased market penetration and product recognition.

	Unit Sales	Selling Price	Total Sales ($Cdn.)
Year 1	600	503.00	301,800.
Year 2	2500	503.00	1,257,500.
Year 3	3000	503.00	1,509,000.
Year 4	3000	503.00	1,509,000.
Year 5	3000	503.00	1,509,000.

Year 1 will begin immediately after financing has been arranged.

Finances

History

Performance Solutions was registered as a partnership on June 20, 1989. All expenses relating to various aspects of the development of the company and its product and services have been funded by the principals of the company.

Product Costs

The following is the projected production costs for one Digitune Performance Computer, based on a purchase volume of 1000 units:

Materials

Semiconductors	22.
LCD	19.
LED's	1.
Logic	5.
Discretes	5.
Passives	3.
Connectors	3.
PC Boards	20.
Keyboard/Display Bezel	10.
Additional Artwork Overlays	2.
Extruded Aluminum Housing	5.
Stamped Metal Housings (Painted)	5.
Hardware	2.
Automotive Connectors & Cables	30.
Packaging	2.
Manuals	1.
Total Materials	132.

Labour

PC Boards (sub contract)	10.
Final Assembly	5.
Test	2.
Package and Ship	1.
Total Labour	18.
Total Product Cost (per unit)	151.

Gross Profit

The suggested retail list price for the Digitune Performance Computer will be $695.00 Cdn ($545.00 U.S.) excluding all taxes.

The typical discount required by major retail outlets for the consumer market are between 40 and 50% off the list price. A 40% discount has been used here for purposes of determining the retail sales gross profit.

The selling price to the commercial installer/jobber will be the same as the retail outlets and will be established at 40% below the retail list price.

Net selling price via Retailers	420.00 Cdn
Cost of Sales (Product Cost) per unit	151.00
Gross Profit per unit	269.00
Gross Profit Margin	64%

Performance Solutions will also sell direct to the consumer via Mail Order.

Net selling price via Mail Order	695.00 Cdn
Cost of Sales (Product Cost) per unit	151.00
Gross Profit per unit	544.00
Gross Profit Margin	78%

A 70%/30% ratio of Retailer to Mail Order sales has been used for purposes of determining the average gross profit.

Average Selling price	503.00
Average Gross Profit per unit	352.00
Average Gross Profit Margin	70%

Financial Requirements

Refer to the *Pro Forma Income Statements* and *Cash Flow Projection*s.

The design of the Digitune Performance Computer has been completely financed to date from the personal resources of the principals of Performance Solutions. Additional financing in the amount of $80,000 is required to complete the product development, to set up production and establish a marketing program.

The following is a summary of the projected first year total costs:

Product Development Costs	43,450.
Production (including inventory)	131,900.
Sales and Marketing Expenses	19,200.
Administration and Overhead	21,000.
Total Financial Requirements for first year	215,550.

The above costs include all operating expenses, manufacturing labour, materials and capital equipment for engineering and production.

The difference of $135,550. between the total costs ($215,550.) and the additional financing required ($80,000.) will be covered by the revenue generated from the first year product sales.

The Performance Solutions manufacturing operations will be self-sustaining by the end of the first year.

Pro Forma Income Statements

	Year 1	Year 2	Year 3
Sales (Revenue)	301,800.	1,383,250.	1,509,000.
Cost of Sales	90,600.	415,250.	453,000.
Gross Profit	211,200.	968,000.	1,056,000.
Sales Expenses	19,200.	44,000.	44,000.
Administration and Overhead	21,000.	98,000.	138,000.
Engineering Expenses	43,450.	41,250.	36,000.
Production Expenses	41,300.	42,000.	42,000.
Net Profit	**86,250.**	**742,750.**	**796,000.**

Cash Flow Projection

The following cash flow tables are based on no additional investment; i.e. it assumes that there is no initial cash on hand. The $80,000 investment will cover the first year's cash requirements in addition to the cash which will be generated from the product sales which are projected to start in the third quarter.

The Revenue and Closing Balance figures are calculated from the projected Invoiced Sales figures as follows:

- 1/2 of Invoiced Sales will be received in the current quarter
- The other 1/2 will will received in the following quarter

This method of Sales Revenue calculation accounts for the difference in time to profitability between the *Pro Forma Income Statements* and the *Cash Flow Projections*.

Cash Flow Projections - Year 1

	1st. Quarter	2nd. Quarter	3rd. Quarter	4th. Quarter
Invoiced Sales	0	0	50,300	251,500
Revenue	0	0	25,150	150,900
Expenses	8,550	13,250	74,400	119,350
Opening Balance	0	(8,550)	(21,800)	(71,050)
Closing Balance	(8,550)	(21,800)	(71,050)	(39,500)

Expense Summary

Inventory	0	0	15,100	75,500
Engineering	5,850	9,750	17,500	10,350
Production	0	0	33,300	8,000
Marketing & Sales	2,700	3,500	2,000	11,000
Administration	0	0	6,500	14,500

Summary of Quarterly Activity

1st. Quarter

An engineering prototype for the Ford application will be developed. A Ford vehicle simulator platform will also be constructed for testing purposes. A demostration model will be fabricated for marketing and advertizing copy development. An engineer will be hired (part time) to assist in these tasks. An advertizing brouchure will be created.

2nd. Quarter

In-vehicle testing will be performed. Magazines will be invited to test drive the project Ford Mustang. Full performance testing results will be used to promote the product. Magazine Advertizing copy and editorial information packages will be sent out in time for the January 1990 issues. 10 pre-production prototype units will be manufactured. The Marketing Department will attend the SEMA trade show. Distribution agreements will be obtained. The engineer will be working full-time.

3rd. Quarter

Production Setup will commence. An initial production run of 100 units will be built. Monthly advertizing will continue. The Marketing & Sales Departments will continue to seek press coverage and distribution agreements. A secretary and a Production Corrdinator will be hired. An office will be opened.

4th. Quarter

The Production Department will increase volume to 500 units per quarter. The Engineering Department will commence work on a prototype and vehicle simulator for the next application. An Office Administrator/ Accountant and a Marketing & Sales Manager will be hired.

Cash Flow Projections - Year 2

	1st. Quarter	2nd. Quarter	3rd. Quarter	4th. Quarter
Invoiced Sales	251,500	377,250	377,250	377,250
Revenue	251,500	314,375	377,250	377,250
Expenses	133,750	166,500	171,500	168,750
Opening Balance	(39,500)	78,250	226,125	431,875
Closing Balance	78,250	226,125	431,875	640,375

Expense Summary

Inventory	75,500	113,250	113,250	113,250
Engineering	9,750	9,750	9,750	12,000
Production	13,000	8,000	13,000	8,000
Marketing & Sales	11,000	11,000	11,000	11,000
Administration	24,500	24,500	24,500	24,500

Summary of Quarterly Activity

1st. Quarter

A new advertizing brouchure will be created for the next application. In-vehicle testing will be performed for the new application. Magazines will be invited to test drive the project car. New distribution agreements will be obtained.

2nd. Quarter

The Production Department will increase volume to 750 units per quarter.The Engineering Department will commence work on a prototype and vehicle simulator for the next application.

3rd. Quarter

A new advertizing brouchure will be created for the next application. In-vehicle testing will be performed for the new application. Magazines will be invited to test drive the project car. New distribution agreements will be obtained.

4th. Quarter

The Engineering Department will commence work on a prototype and vehicle simulator for the next application.

Cash Flow Projections - Year 3

	1st. Quarter	2nd. Quarter	3rd. Quarter	4th. Quarter
Invoiced Sales	377,250	377,250	377,250	377,250
Revenue	377,250	377,250	377,250	377,250
Expenses	180,750	175,750	180,750	175,750
Opening Balance	640,375	836,875	1,038,375	1,234,875
Closing Balance	836,875	1,038,375	1,234,875	1,436,375

Expense Summary

Inventory	113,250	113,250	113,250	113,250
Engineering	9,000	9,000	9,000	9,000
Production	13,000	8,000	13,000	8,000
Marketing & Sales	11,000	11,000	11,000	11,000
Administration	34,500	34,500	34,500	34,500

Summary of Quarterly Activity

1st. Quarter

A new advertizing brouchure will be created for the next application. In-vehicle testing will be performed for the new application. Magazines will be invited to test drive the project car. New distribution agreements will be obtained.

2nd. Quarter

The Engineering Department will commence work on a prototype and vehicle simulator for the next application.

3rd. Quarter

A new advertizing brouchure will be created for the next application. In-vehicle testing will be performed for the new application. Magazines will be invited to test drive the project car. New distribution agreements will be obtained.

4th. Quarter

The Engineering Department will commence work on a prototype and vehicle simulator for the next application.

Cash Flow Projections - Year 4

	1st. Quarter	2nd. Quarter	3rd. Quarter	4th. Quarter
Invoiced Sales	377,250	377,250	377,250	377,250
Revenue	377,250	377,250	377,250	377,250
Expenses	180,750	175,750	180,750	175,750
Opening Balance	1,436,375	1,632,875	1,834,375	2,030,875
Closing Balance	1,632,875	1,834,375	2,030,875	2,232,375

Expense Summary

Inventory	113,250	113,250	113,250	113,250
Engineering	9,000	9,000	9,000	9,000
Production	13,000	8,000	13,000	8,000
Marketing & Sales	11,000	11,000	11,000	11,000
Administration	34,500	34,500	34,500	34,500

Summary of Quarterly Activity

1st. Quarter

A new advertizing brouchure will be created for the next application. In-vehicle testing will be performed for the new application. Magazines will be invited to test drive the project car. New distribution agreements will be obtained.

2nd. Quarter

The Engineering Department will commence work on a prototype and vehicle simulator for the next application.

3rd. Quarter

A new advertizing brouchure will be created for the next application. In-vehicle testing will be performed for the new application. Magazines will be invited to test drive the project car. New distribution agreements will be obtained.

4th. Quarter

The Engineering Department will commence work on a prototype and vehicle simulator for the next application.

Cash Flow Projections - Year 5

	1st. Quarter	2nd. Quarter	3rd. Quarter	4th. Quarter
Invoiced Sales	377,250	377,250	377,250	377,250
Revenue	377,250	377,250	377,250	377,250
Expenses	180,750	175,750	180,750	175,750
Opening Balance	2,232,375	2,428,875	2,630,375	2,826,875
Closing Balance	2,428,875	2,630,375	2,826,875	3,028,375

Expense Summary

Inventory	113,250	113,250	113,250	113,250
Engineering	9,000	9,000	9,000	9,000
Production	13,000	8,000	13,000	8,000
Marketing & Sales	11,000	11,000	11,000	11,000
Administration	34,500	34,500	34,500	34,500

Summary of Quarterly Activity

1st. Quarter

A new advertizing brouchure will be created for the next application. In-vehicle testing will be performed for the new application. Magazines will be invited to test drive the project car. New distribution agreements will be obtained.

2nd. Quarter

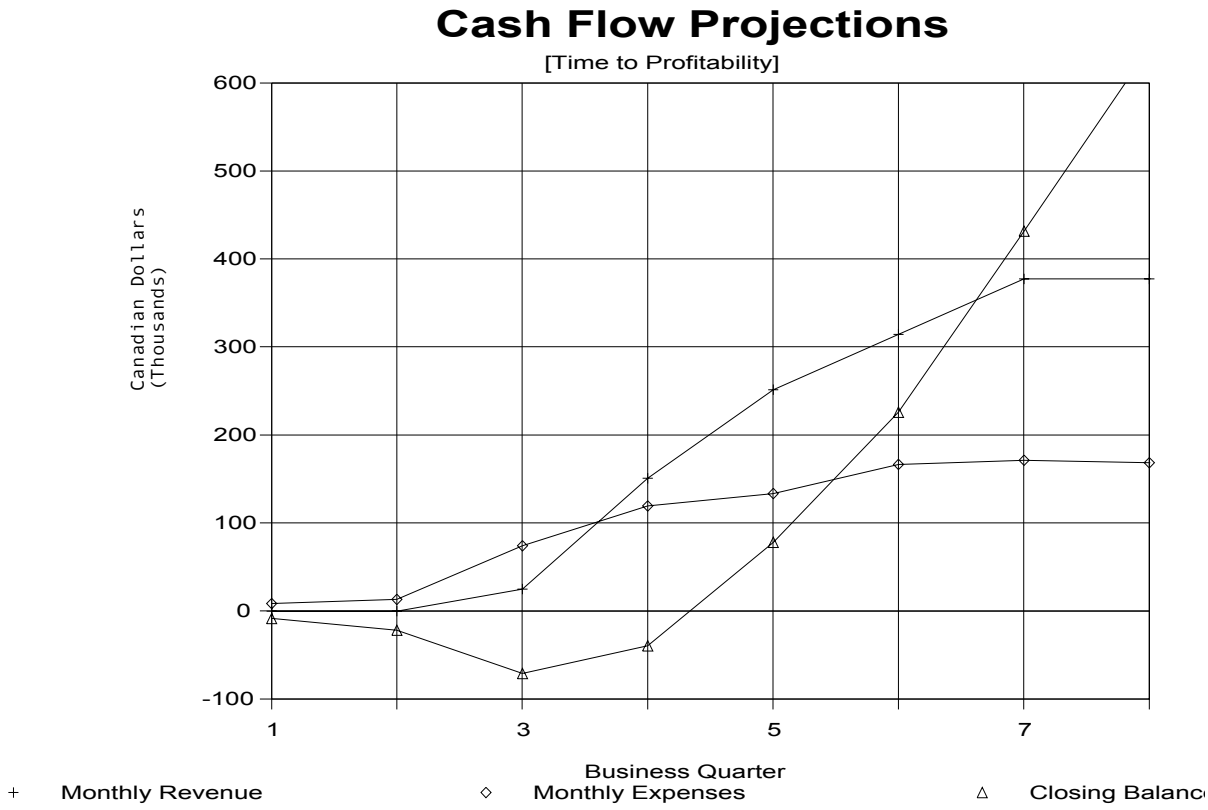
The Engineering Department will commence work on a prototype and vehicle simulator for the next application.

3rd. Quarter

A new advertizing brouchure will be created for the next application. In-vehicle testing will be performed for the new application. Magazines will be invited to test drive the project car. New distribution agreements will be obtained.

4th. Quarter

The Engineering Department will commence work on a prototype and vehicle simulator for the next application.


Cash Flow Projections
[Time to Profitability]
Canadian Dollars
(Thousands)
600
500
400
300
200
100
0
-100
1
3
5
7
Business Quarter
+ Monthly Revenue
◇ Monthly Expenses
△ Closing Balanc

Proposed Equity Structuring and Financing

Performance Solutions is offering 15% ownership, by way of common (voting) shares, in return for the required $80,000. financing.

The Cash Flow Projections conservatively estimate that a profit of **$3,028,375.** will be made by the end of the 5th. business year. This translates to a profit of **$454,256.** for the investor - an average of a **40%** per year return on investment. By the end of the 2nd. business year, the investor profit share is $96,056.

The principals of Performance Solutions will continue to support the business operations for the first business year without drawing any salaries to ensure that the business becomes profitable in the shortest possible time.

Risks

The most significant risk relates to inventory purchases for production. The actual operation and research & development overhead is minimal and may be reduced if required. If product sales are slower than anticipated, less inventory can be purchased, and staff size may be reduced without seriously affecting sales potential. To minimize inventory costs, sales forecasts must be carefully analyzed.

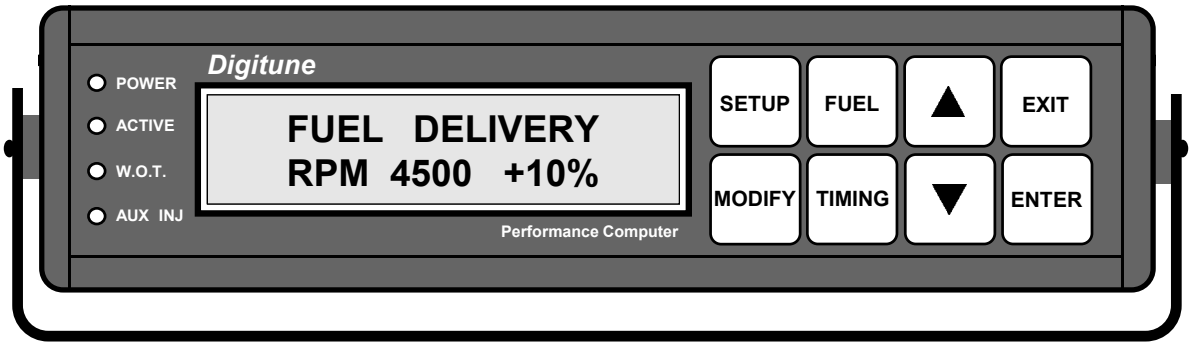
Normally new product development has considerable technological risk associated with it. In this case, Performance Solutions has already invested significant resources in the research & development of the Digitune Performance Computer and foresees no significant problems getting the product to market in the allotted time.

NEW PRODUCT ANNOUNCEMENT

Performance Solutions is pleased to announce the development of a revolutionary product for the automotive performance industry: The ***Digitune*** Performance Computer.

The ***Digitune*** Performance Computer increases the power of modern computer controlled engines by allowing precise adjustment of fuel flow, ignition timing and turbocharger boost during wide open throttle (W.O.T.) conditions. Expansion Capabilities for auxilary fuel injectors, nitrous oxide injection and knock sensors can provide even greater increases in power. Vehicle safety and reliability are improved with the built-in rev limiter and engine diagnostic functions. This equipment works with the stock engine management computer.

A 10 to 15% power improvement is typical for a stock, non-turbocharged vehicle. Much greater power increases can be obtained with: increases in turbocharger boost; engine modifications to the intake/exhaust system, cylinder heads, camshafts and pistons; and the addition of a nitrous oxide injection system.



The Digitune Display/Keyboard Module (actual size)

Adjustable Parameters:

- ***fuel delivery curve***
- ***ignition timing curve***
- ***turbocharger boost limit***
- ***RPM limit***
- ***W.O.T. activation point***

Reliability and Safety Features:

- ***engine diagnostics***
- ***engine monitoring***
- ***anti theft mechanism***
- ***fuel cutoff rev limiter***

Expansion Capabilities:

- ***auxiliary fuel injectors***
- ***nitrous oxide & auxilary W.O.T. activation***
- ***g-Analyst interface***
- ***knock sensors***

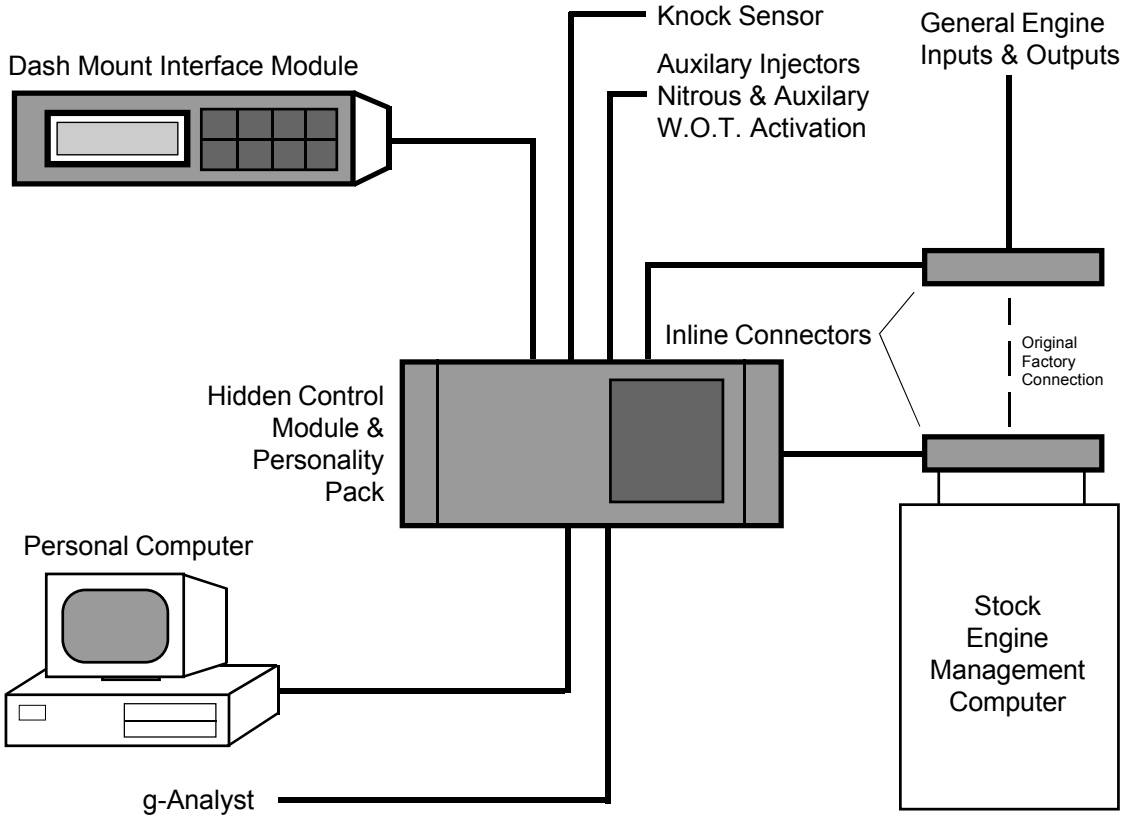
System Components:

- ***dash mount Display/Keyboard***
- ***hidden Control Module***
- ***Personality Pack for each Vehicle Make***
- ***Inline Connector***

Performance Solutions, P.O. Box 48763, Bentall Centre, Vancouver, B.C., Canada, V7X 1A6

The ***Digitune*** Performance Computer functions with most modern fuel injected vehicles by using Personality Packs and Inline Connectors that are specific to each manufacturer. Installation is straight forward with only simple connections being required to the stock computer module via the Performance Solutions Inline Connector System.

An engine can be tuned directly from the dash mount Digitune Interface Module or through the use of a personal computer. Performance Solutions IBM PC compatible software provides a graphical means of adjusting performance parameters. Settings can be stored on disk and recalled when required. A simple connection from the personal computer to the Digitune Control Module allows up to 10 sets of parameters to be transferred to its internal memory. Individual sets may be selected for active use at will - even while driving. A set may be altered and then transferred back to a PC if desired. The *Digitune Users Guide* gives tips on how to use these features to achieve maximum performance increases under a wide variety of conditions.



Digitune System Interconnections

If you would like to be kept informed of the ***Digitune*** Performance Computer applications which are under development or if you wish to receive our Technical Bulletins, please write and ask to be placed on our mailing list.