

OWNERS MANUAL

All information contained in this owner manual is the property of P. A. Ignition Co., Inc. and cannot be duplicated in whole or in part by any means or disseminated or distributed without the prior written consent of P. A. Ignitions Co., Inc. The information in this manual has been carefully compiled and checked for accuracy and is believed to be correct. However, P. A. Ignition Co., accepts no responsibility for inaccuracies which may occur. All specifications in this manual are subject to change without notice.

**Power Arc Ignitions Co., Inc.
2518 N.E. 102 Ave.
Ankeny, IA 50021
(515) 964-7608**

The following customer actions automatically voids the warranty..

1) Drilling or cutting of any kind into the adapter. 2) Incorrect wiring of the adapter. 3) Use of adapter on systems with defective charging systems. 4) Physical damage to the adapter. 5) Any other items covered in the warranty & instruction manual.

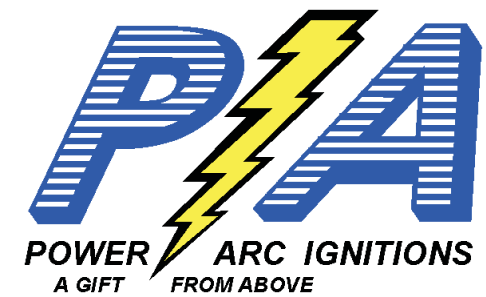
LIMITED WARRANTY

P. A. Ignition Co., Inc. warrants to the original retail purchaser of a PowerArc IDS ignition that it will, free of charge, repair or replace at its own option, the product if returned to P. A. Ignition Co., Inc. within 6 months after purchase and if found by P. A. Ignition Co., Inc. to be defective in material or workmanship. This warranty is not transferable by the purchaser and shall be voided: if alterations not authorized by P. A. Ignition Co., Inc. are made in the equipment or if the serial number or date of manufacture has been altered, defaced or removed. Nor does this warranty apply: if the equipment has been subjected to accident, misuse, improper hookup, damaged by flood, fire, or act of God, or has been used on circuits or voltages other than those indicated in its instruction manual. If the equipment is found to be defective in materials or workmanship the equipment will be returned and P.A. Ignition Co., Inc. will pay the return shipping (this does not include next day shipping, second day shipping, shipments outside of the continental U. S. A. or shipments outside of the U.S.A.). All warranty work outside of the U.S.A. must include prepayment of return shipping. Customs, duties or tariffs are not covered by this warranty. If the equipment is found to be defective but is due to customer misuse (as described in warranty) P. A. Ignition Co., Inc. will notify the customer and if the customer wants the defective equipment returned P. A. Ignition Co., Inc. will return the equipment C.O.D. freight. If the equipment is found to be in operational order when returned to the factory P.A. Ignition Co., Inc. will return the module with a \$30.00 service charge plus freight and C.O.D. Charges.

Any module returned under the warranty must include note of explanation of failure and be accompanied by a dated bill of sale.

P. A. Ignition Co., Inc. warranty obligations are limited to those set forth herein and no other obligations, expressed or implied, are assumed by P. A. Ignitions Co., Inc.

Some states do not allow the exclusions or limitations of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



POWER ARC IDS-ECP OWNER'S MANUAL



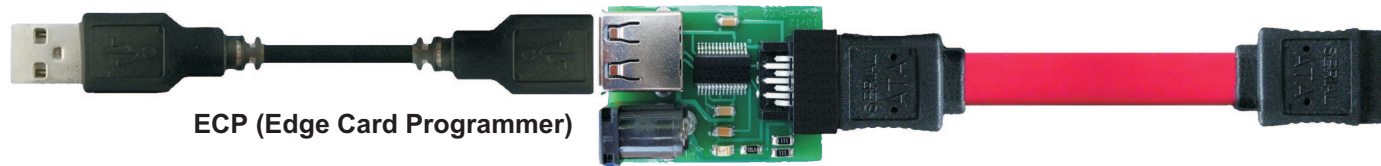
ECP- Edge Card Programmer

**Required for Programing
and Updating firmware
of all IDS Ignitions**

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<http://www.powerarc.com>

PATENT #4,951,629 OTHER PATENTS PENDING

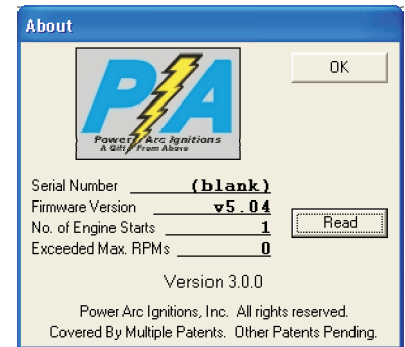
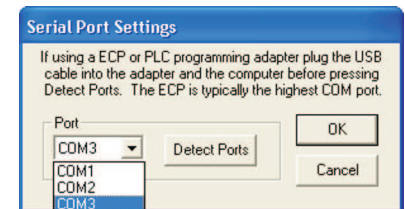


ECP (Edge Card Programmer)

The ECP (Edge Card Programmer) is used to program all new IDS ignitions with the edge card programmer connection. The adapter has an integrated USB to serial converter and a LED light which indicates whether or not power is applied to the ignition. The adapter has a standard USB Type A female connector on one end and a SATA cable connector on the other end (do not plug the SATA connector into a computer). The SATA or edge connector plugs into the updated versions of the C, D and M series IDS ignitions.

Before an ignition can be programmed the IDS application must be installed. Download the version 3 IDS setup file from powerarc.com and install the IDS application. Make sure you install the USB to Serial driver when prompted. You can now plug the USB cable into the ECP and the computer. Wait until the ECP USB serial adapter is recognized by the computer before starting the IDS application. Now go to the Config menu and choose Configure Serial Port. Press the Detect Ports button and pick the serial port that corresponds to the ECP adapter. This will typically be COM3. The ECP driver software defaults to COM3 unless some other device has already taken this port. If there are multiple COM ports the highest port in the list is likely the ECP adapter. You may have to use trial and error or go to the Windows Device Manager - Ports (COM & LPT). The ECP adapter should show up as an USB Serial Port with the COM port number listed. If no serial ports are detected make sure the ECP adapter is plugged into a USB port in the computer and that the device drivers have been installed. Next go to the help menu and pick About and then Power Arc IDS. You must have the ECP hooked to the computer and the ignition. The edge card connector can only be plugged one way into the ECP and ignition module. Power must be supplied to the ignition during this operation. If the ignition module is installed in a vehicle turn the ignition key/switch on. You may also use an AC to DC 12V wall adapter if it was purchased with the ECP. Do not use a battery charger to power the ECP adapter or the ignition module. If the ECP LED light is not on you do not have power to the ignition. Once the power has been verified click on the Read button. If the values in the About dialog box load then you are ready to program the ignition. If you get an error message you may have to :

- Re-configure the serial port. Try a different COM port if multiple ports showed up during detection. It may be necessary to restart the IDS application after you re-configure the port.
- Make sure the ECP adapter is plugged into a USB port.
- The edge connector must be plugged into the ECP and ignition.
- Make sure power is applied to the ignition. The red LED light on the ECP must be on when programming an ignition.



To program the ignition simply open/create the desired ignition timing map (curve file *.crv) and press the program button. Make sure the ECP is connected to the USB port of the computer. The edge card connector must be plugged into the ECP and the ignition. The ignition must have power supplied to it when programming as indicated by the red LED of the ECP. When finished programming the ignition remove the program cable. The ignition will not operate with the program cable inserted. A detailed explanation of how to create a timing map can be found in the help section of the IDS application once it has been installed.

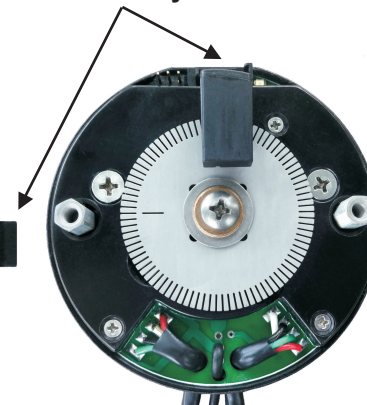


ECP (Edge Card Programmer)
Actual Cable Length Approximately 5 Feet



The ECP must be unplugged from the Ignition before the ignition can be timed or operated

The edge card programming connector is keyed and will only fit in one direction



D-Series ignition shown. ECP also works with all C-Series and M-Series ignitions