

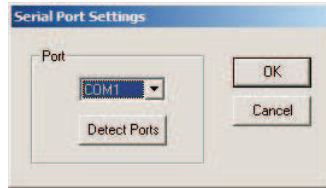
PLC (Program Link Cable)



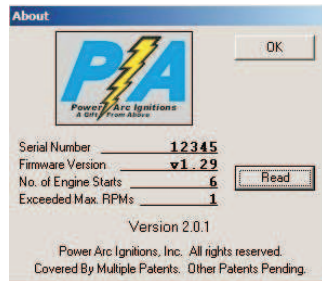
**CONNECT CABLE TO THE PLC MODULE ONLY.
DO NOT CONNECT TO THE COMPUTERS PS2 PORT**

The PLC (Program Link Cable) is used to program all IDS ignitions. The rectangular end of the cable the 7 pin green MTA-100 connector attaches to the ignition module (See orientation of connector on back page). The round end (6 pin mini-din connector) attaches to the PLC Module. The PLC Module (DB9 connector) is connected to the serial port* of your computer or to a USB to serial adapter.

Before an ignition can be programmed the IDS application must be configured. Go to powerarc.com to download the program. Once the program is loaded and is running go to the Config menu and chose Serial Port. Press the Detect Ports button and pick the serial port (Com 1-6) that the PLC is connected to. If there are multiple serial ports and you do not know which port the cable is attached to you may have to use trial and error or consult the computers documentation. Once the port has been configured and the IDS application has been closed and restarted you are ready to see if communication between the computer and ignition works. **You must have power supplied to the ignition during this operation.**



Next go to the help menu and pick About and then Power Arc IDS. Click on the Read button.

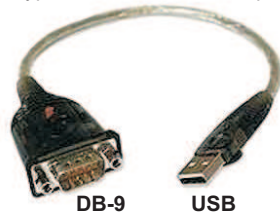


If the values in the about box load then you are ready to program the ignition. If you get an error message you may have to re-configure the serial port and/or check for connection problems. Make sure there is power to the ignition, that the DB-9 connector of the PLC Module is plugged into the correct serial port or USB to Serial Adapter and that the 7 pin green MTA-100 connector is plugged into the ignition (See orientation of connector on back page). Restart the IDS application if you have to re-configure the serial port. A detailed explanation of the IDS interface and features, including how to create a curve and program the ignition can be found in the IDS Help.

When finished programming the ignition remove the program cable. The ignition will not operate with the program cable inserted. IDS C1 and C2 ignitions can only be reprogrammed by certified Power Arc dealers.

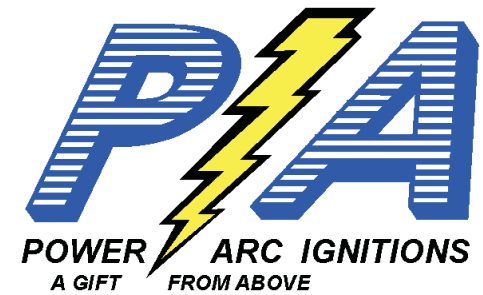
If you do not have a serial port you will have to purchase a USB to Serial Adapter. Many newer laptops do not have serial ports. You can find USB to Serial Adapters at Best Buy, Radio Shack and other computer or electronics stores.

Typical USB to Serial Adapter



DB-9

USB



POWER ARC IDS-PLC OWNER'S MANUAL



PLC - Program Link Cable

Required to Program and Update firmware
of all CP/VP Model IDS Ignitions

**Note: The PLC is intended for testing and design
purposes. Ignitions with program connectors are
only to be used in off road applications.**

The PLC (Program Link Cable) requires a serial port
to interface with a computer. If your computer does
not have a serial port connector you will
need a USB to serial port adapter.



Typical USB to Serial Port Adapter

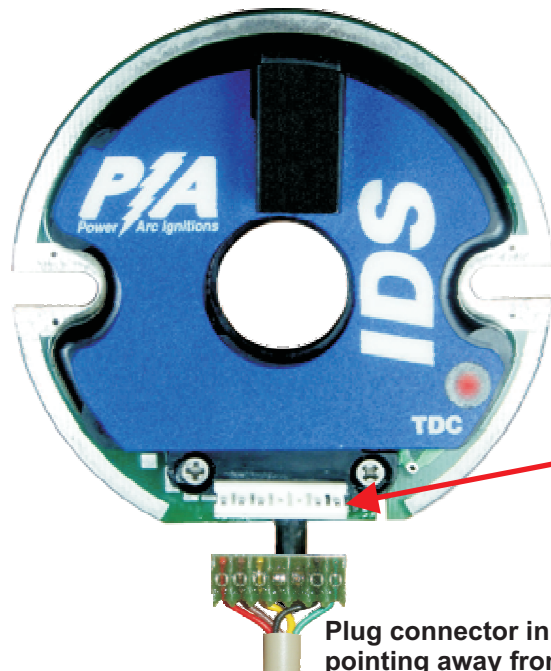
POWER ARC IGNITIONS CO., INC.
2518 N. E. 102 AVE.
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(515) 964-7608

<http://www.powerarc.com>
PATENT #4,951,629 OTHER PATENTS PENDING

The PLC (Program Link Cable/Module) allows the user to reprogram CP/VP model IDS ignitions (IBM Compatible Computer running Windows only).

WARNING DO NOT PLUG THE PROGRAM CABLE INTO A PS2 PORT ON THE BACK OF THE COMPUTER. IT MUST BE PLUGGED INTO THE PLC MODULE AND THE PLC MODULE MUST BE CONNECTED TO A SERIAL PORT OR A USB TO SERIAL ADAPTER. IF YOU DO NOT UNDERSTAND THIS CONTACT POWER ARC FOR ADDITIONAL INSTRUCTIONS.

1. Configure the USB to Serial adapter (if required) before plugging in the Program Link Cable. Refer to the manufactures instructions for installation.
IMPORTANT: WHEN USING A USB TO SERIAL ADAPTER ALWAYS PLUG THE ADAPTER INTO THE SAME USB PORT.
2. Open the IDS program (available for download at www.powerarc.com) and select the COM port of the USB to Serial Adapter port or the Serial Port being used by selecting the Config - Serial Port menu. Click on Detect Ports. Select the correct COM port and click OK. This port must be selected before the ignition can be programmed. If no ports appear the USB to serial adapter has not been correctly installed. If the program does not restart automatically close the IDS program and restart once the port has been selected.
3. Connect the PLC Module to the USB to Serial Adapter or directly to a serial port. Plug the round end (6 pin mini-din connector) to the PLC module. Plug the rectangular end of the 7 pin green MTA 100 connector to the CP/VP ignition module (**See orientation of connector below**). The Ignition module must have power supplied to it to program and read the ignition.
4. Select the Help menu and pick About. Then click on the Read button. If everything is properly configured and connected the information in the About dialog box will be filled in. If it does not work properly try the following.
 - a) Close the IDS program and restart. Try reading the information from the ignition in the About dialog again.
 - b) Make sure you selected the correct COM port. Try other COM ports. Restart the IDS program before reading information from the ignition.
 - c) Recheck all the connections and make sure you have power to the ignition. Always use the same USB port for the USB to serial adapter.



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

CONNECT CABLE TO MODULE OR PLC ONLY. DO NOT CONNECT DIRECTLY TO THE COMPUTERS PS2 PORT



A USB to Serial adapter will be required if your Laptop does not have a Serial Port



Typical USB to Serial Adapter

