



Dyna Pro DP-IIS-A Intelligent Ignition Sensor User Guide



Warning!

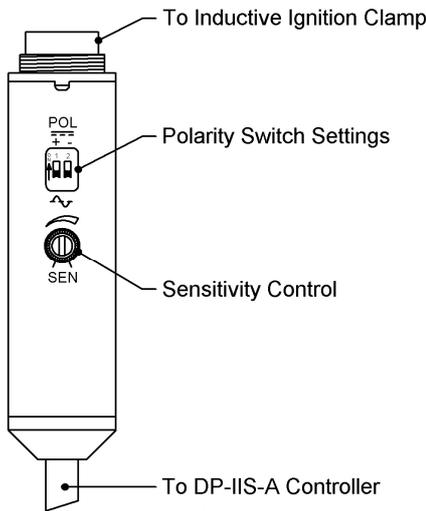
The inductive pickup contains a fragile Ferrite Core that is very sensitive to vibration. Do not drop the inductive pickup or snap the pick-up closed. Use extreme care in handling and placement of the pickups. Keep mating surfaces of the ferrites clean. The Ferrites cores are not covered under your warranty.

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Overview



The Dyna Pro intelligent ignition pick-up sensor is a microprocessor-controlled system designed for ignition sensing on virtually any ignition system. This system will work on low tension AC ignition feeds, DC CDI ignitions, HT Plug wires and will even deal with multi-spark ignition system. The microprocessor will try to distinguish between an actual firing pulse and unwanted noise or Electro Magnetic interference (EMI).

On certain types of ignition systems the inductive clamp can be put around multiple cables to obtain an ignition pick-up, for example, to place the clamp around all of the cables coming from a plug top coil.

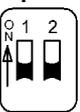
In some cases it is also possible to clamp around one of the battery cables.

Polarity 'POL' Switch Settings

The '**POL**' switch settings are used to set the ignition system type, HT, CDI, ECU, Low Tension, AC or DC. The switch settings below give an indication for how these switches should be set according to the ignition type but are not a definitive setting.

PLEASE NOTE: These setting positions are for guidance only. Incorrect switch positioning can do no damage.

Full AC ignition pick-up



1. Normal for HT Pick-up Usage
2. Low Tension Non CDI Ignitions



DC Ignition pick-up (Clamp Direction 1)

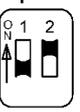


1. Low Tension Non CDI Ignitions
2. CDI / ECU Low Tension Ignitions

Note: Pick-up will only work in one Direction on a DC System.

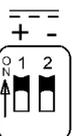


DC Ignition pick-up (Clamp Direction 2)



1. Low Tension Non CDI Ignitions
2. CDI / ECU Low Tension Ignitions

Note: Pick-up will only work in one Direction on a DC System.



Incorrect (Ignition Pick-up switched off)



Sensitivity 'SEN' Setting Adjustment

To set the sensitivity, with the vehicle running and the inductive clamp in place, decrease the sensitivity (anti clock-wise) slowly until the RPM needle drops to zero. Slowly start to increase the sensitivity (clock-wise) until the RPM needle shows constant on the display, adjust the RPM scaling for correct ignition speed in the '*Dyna Run*' software.

Appendix A: Dyna Pro DP-AF-1000D Troubleshooting Tips

Problem	Likely Root Cause	Fix
Cannot get any readings (Basic)	<ol style="list-style-type: none"> 1. Plugs not fully seated. 2. Incorrect 'POL' Switch settings. 3. 'SEN' Setting is set to low. 4. System Lock-up. (Rare) 5. Not an ignition Signal Cable. 	<ol style="list-style-type: none"> 1. Verify all connectors are fully seated. 2. Insure that the 'POL' Switch settings ARE NOT both in the 'ON' position. 3. Increase the 'SEN' setting (turn clock-wise) 4. Unplug from the MPU Unit wait 10 seconds and then reconnect. 5. Find another ignition signal cable.
Get an RPM reading but the needle keep ' <i>Dropping Low</i> '	<ol style="list-style-type: none"> 1. 'SEN' Setting is set to low. 	<ol style="list-style-type: none"> 1. Increase the 'SEN' setting (turn clock-wise)
Get an RPM reading but the needle keep ' <i>Flicking High</i> '	<ol style="list-style-type: none"> 1. 'SEN' Setting is set to High. 2. Incorrect 'POL' Switch settings. 	<ol style="list-style-type: none"> 1. Decrease the 'SEN' setting (turn anti clock-wise) 2. Change the 'POL' Switch settings.
Pick-up clamp only works when placed on cable in one orientation.	<ol style="list-style-type: none"> 1. 'POL' Setting incorrect. 	<ol style="list-style-type: none"> 1. When one of the 'POL' switch setting are switched to the 'ON' position the clamp becomes polarity sensitive, Reverse the clamp on the cable or make the two 'POL' switch settings vies-versa.
Erratic tachometer operation	<ol style="list-style-type: none"> 1. Electro Magnetic Interference (EMI) 2. Clamp detecting signals from other cable (i.e.: clamp is around a cable coming from the ECU). 3. Spark plug breaking down. 	<ol style="list-style-type: none"> 1a. Using a jumper wire, ground the metal case of the inductive clip to the motorcycle chassis. 1b. Keep the computer as far away from the Dyno as possible. 1c. Rout the inductive wire 90 degrees (perpendicular) away from the vehicle. When laid alongside (parallel) to the motorcycle they can act as an antenna. 2. Move ignition clip to another part of the wiring loom. 3. Replace Spark Plugs.
No USB Communication	<ol style="list-style-type: none"> 1. Electro Magnetic Interference (EMI) 2. No Resistor plug caps. 	<ol style="list-style-type: none"> 1a. Same as above. 1b. USB Cable from Dyno to Computer Longer than 5 Metres. 1c. Keep the USB Cable away from the Ignition pick-up cables or mains power cables. 2. Replace with Resistor Plug caps.

[Appendix B: Dyna Pro DP-IIS-A Spares List](#)

 The image shows two components of the Inductive Ignition Clamp Sensor. The top component is a metal clamp with a black handle and a silver-colored metal body. The bottom component is a black cable with a silver-colored metal connector at the end.	<p>Inductive Ignition Clamp Sensor</p> <p>Part No. DP-IIS-A-01</p>
 The image shows two components of the Controller Head (3.5metre Cable). The left component is a black cylindrical controller head with a blue cable attached to the bottom. The right component is a silver-colored metal connector with a blue cable attached to the bottom.	<p>Controller Head (3.5metre Cable)</p> <p>Part No. DP-IIS-A-02</p>

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