



# ECU Ignition Drive Current Settings



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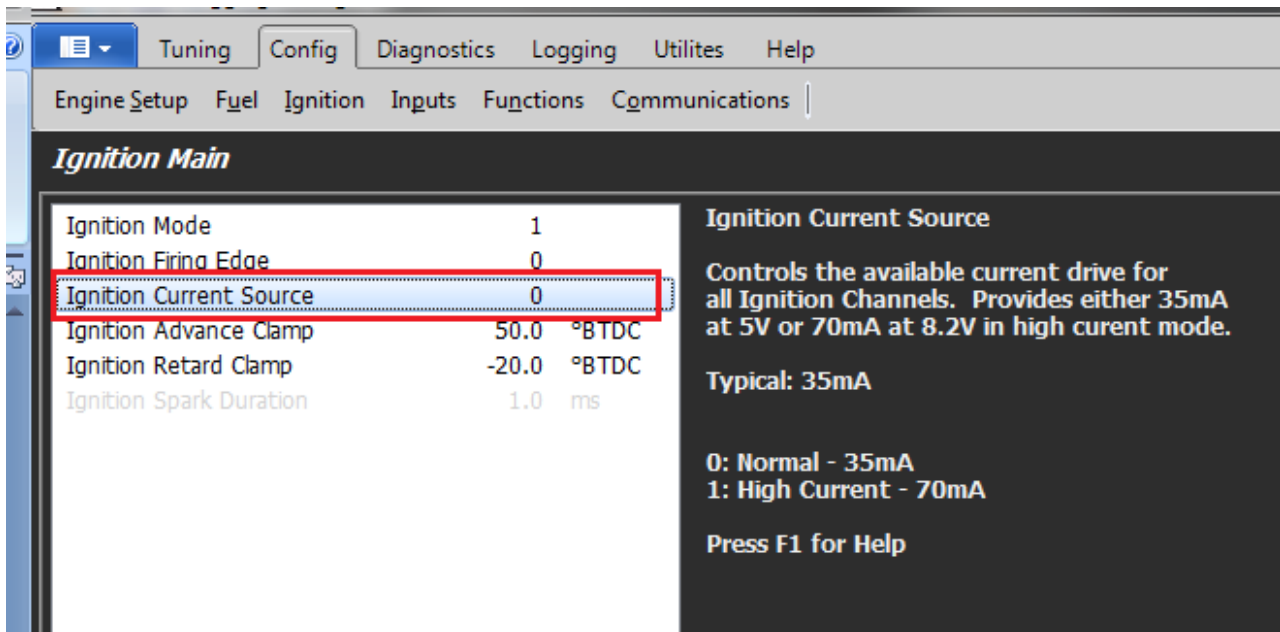
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## 1.0 Introduction

The Emtron ECU has built-in selectable current sourcing control, that applies all Ignition Channels when they are driving at TTL levels into an igniter.

This setting can be adjusted from the Configuration View -> Ignition Main menu.



The screenshot shows the Emtron ECU Configuration View -> Ignition Main menu. The 'Ignition Current Source' parameter is highlighted with a red box and set to 0. The right panel provides details for this parameter.

Parameter	Value
Ignition Mode	1
Ignition Firing Edge	0
<b>Ignition Current Source</b>	<b>0</b>
Ignition Advance Clamp	50.0 °BTDC
Ignition Retard Clamp	-20.0 °BTDC
Ignition Spark Duration	1.0 ms

**Ignition Current Source**  
Controls the available current drive for all Ignition Channels. Provides either 35mA at 5V or 70mA at 8.2V in high current mode.  
Typical: 35mA  
0: Normal - 35mA  
1: High Current - 70mA  
Press F1 for Help

## 2.0 Normal Current Mode(35mA)

In this setting the Ignition Channel can drive 35mA at 5.0V. This setting will be suitable in most applications. A summary in Table 1 is shown below.

Ignition Drive Output Current (mA)	Ignition Drive Output Voltage Level (V)
25	5.7
35	5.1
45	4.5
60	3.7
70	3.1
80	2.6

Table 1 - Normal Mode Current Summary

## 3.0 High Current Mode(70mA)

In this setting the Ignition Channel can drive 70mA at 8.2V. This setting is suitable when one Ignition Channel is required to drive two igniters which doubles the current requirements or in situations when the current demand of an igniter is high, requiring more than the conventional 25 - 30mA. A summary in Table 2 is shown below.

Ignition Drive Output Current (mA)	Ignition Drive Output Voltage Level (V)
25	10.7
35	10.1
45	9.6
60	8.7
70	8.2
80	7.6

Table 2 - High Current Mode Summary