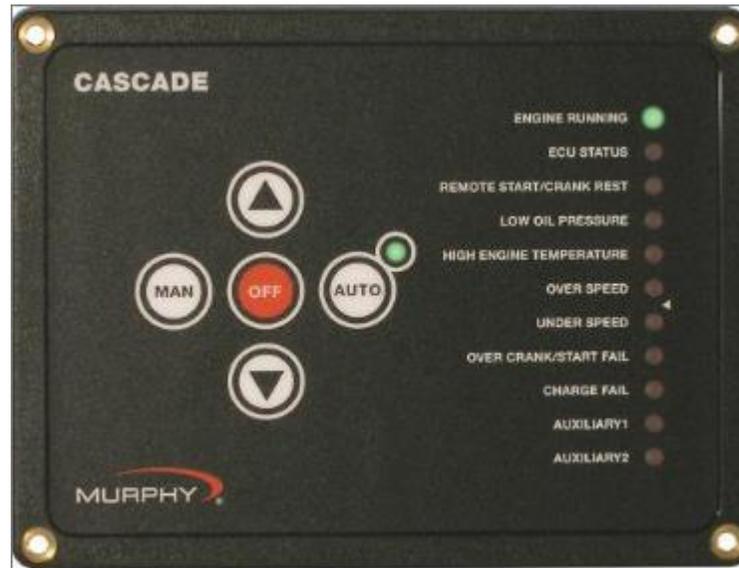


# Quick Start Guide

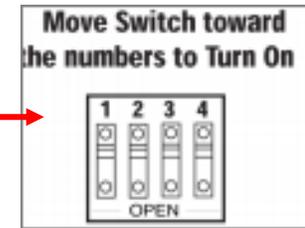
## Setting Up the CD101 from Keypad



## Setting Up the Cascade

To enter the **SETUP Mode**, first remove DC power to the Cascade controller for approximately 10 seconds.

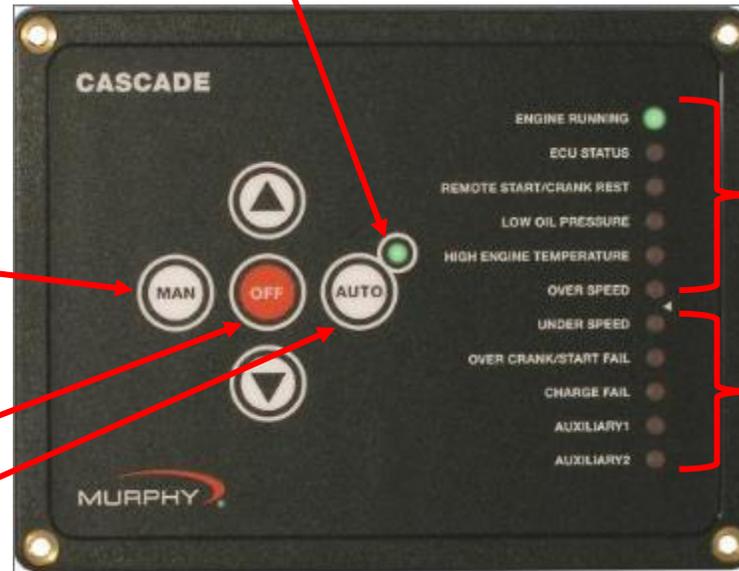
On the back of the controller are four DIP switches, set switch #1 to ON (see schematic at right) then restore DC power. The **AUTO** mode LED will blink to indicate that the Cascade is in the **SETUP MODE**.



When in the **SETUP MODE**, pressing the “**MAN**” (Manual) button steps up thru the entire list of parameters. The pattern of the top six LEDs, LEDs Bank 1 is used to indicate which parameter is selected. The pattern will change once each time the “**MAN**” button is pressed.

Pressing the “**OFF**” button steps up thru all the available values for each parameter. The pattern of the bottom five LEDs, LEDs Bank 2 is used to indicate which value is selected. The pattern will change once each time the **OFF** button is pushed.

Pressing the “**AUTO**” button stores the displayed value.



LEDs Bank 1

LEDs Bank 2

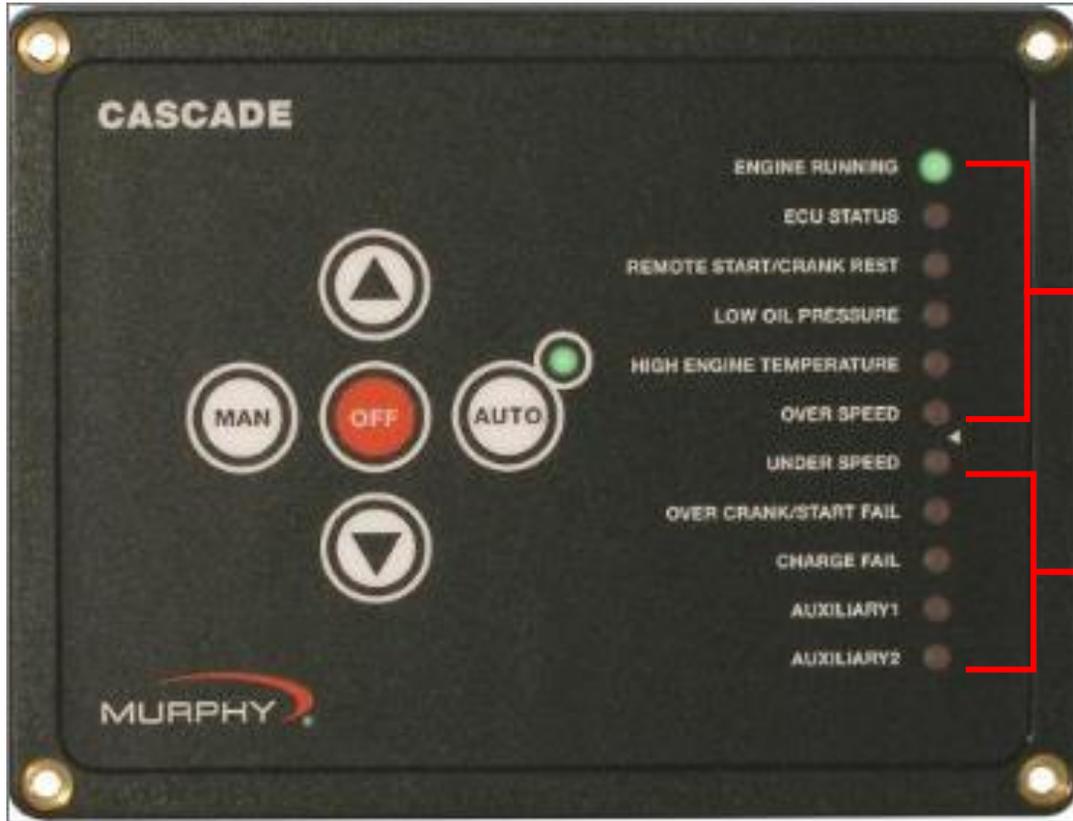
If any value is changed, it will blink until stored, except a value of zero. If any value is changed but not stored, and the parameter is changed, the value will still be what was shown originally.

If you accidentally go past a desired parameter or value, you can step back by pressing the down arrow button.

The complete parameter/value list and corresponding LED indication are shown on Table 1 – Parameter Values and Corresponding LED indication. (see pages 15-18 of the Installation and Operations Manual) via the following link; [Product Information \(enovationcontrols.com\)](http://enovationcontrols.com).

When you are finished with setup, set switch #1 to the Normal Operating Position (OPEN) remove DC power for 10 seconds, then restore DC power.

Parameter			
#	Description	LED Bank 1	LED Bank 2
32	Crank Disconnect	●○○○○○	○○○○○



LED's shown on the CD101 indicate the configuration value for parameter 32 shown from Top to bottom on the CD101.  
 LED's read from left to right on the Parameter list at top of page, a filled dot means LED is on.

**Not all Parameters need to be changed.**

**Parameters that typically need to be changed include.**

Parameter				
#	Description	LED Bank 1	Value (*= default)	LED Bank 2
1	Engine Speed Source	○ ○ ○ ○ ○ ●	Magnetic Pickup* Generator AC J1939 (ECU)	○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ● ○ ○ ○ ● ○ ○
7	Preheat Timer	○ ○ ○ ● ● ●	0 Sec* 5 Sec 10 Sec 15 Sec 20 Sec 25 Sec 30 Sec 45 Sec 60 Sec	○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ● ○ ○ ○ ● ○ ○ ○ ○ ○ ● ● ○ ○ ○ ● ○ ○ ○ ○ ○ ● ○ ● ○ ○ ○ ● ● ○ ○ ○ ○ ● ● ● ○ ○ ● ○ ○ ○ ○

**Set the Flywheel Tooth Count in parameters 48,49,50 when Magnetic Pickup is selected.**

**If application calls for Glow Plug Set parameter 7 Value and then set parameter 23 to preheat.**

Parameter				
#	Description	LED Bank 1	Value (* = default)	LED Bank 2
23	Auxiliary Output 1	○●○●●●	Not Used*	○○○○○
			Warmup	○○○○●
			Cooldown	○○○●○
			Warmup/Cooldown	○●○●●
			Preheat	○○●○○
			Engine Running	○○●○●
			At Load	○○●●○
			Lo Oil Press Shutdown	○○●●●
			Hi Eng Temp. Shutdown	○●○○○
			Overspeed Shutdown	○●○○●
			Overcrank Shutdown	○●○●○
			Alternator Fail/Battery	
			High/Low/Weak	○●○●●
			Engine Speed Up	○●●○○
			Engine Speed Down	○●●○●
			Common Alarm	○●●●○
			Controller in	
			AUTO mode	○●●●●
			Shutdown	●○○○○
			Loss of Speed	
			Signal Fault	●○○○●
			Underspeed Fault	●○○●○

**If Preheat timer Value is set in parameter 7  
Set parameter 23 to Preheat.**

Parameter				
#	Description	LED Bank 1	Value (* = default)	LED Bank 2
42	Lo Batt Voltage Setpoint.	●○●○●○	Warning Disabled	○○○○○
			8.5V	○○○○●
			9.0V	○○○●○
			9.5V	○○○●●
			10.0V	○○●○○
			10.5V*	○○●○●
			11.0V	○○●●○
			11.5V	○○●●●
			18.0V	○●○○○
			19.0V	○●○●○
			20.0V	○●○●○
			21.0V	○●○●●
			22.0V	○●●○○
			22.5V	○●●○●
			23.0V	○●●●○
			23.5V	○●●●●

**24 Volt systems will require changes to parameters 42,43 and 44.**

**42 Low Batt Voltage Setpoint**

**43 High Batt Voltage Setpoint**

**44 Weak Batt Voltage Setpoint**