

Product Manual



Part Number: MVP-ML6702-44
Revision: 1.0

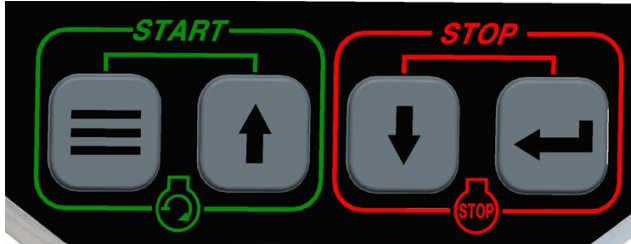
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Starting the engine

Keypad Start

When turning the key switch to run, pressing the Menu and UP arrow button, the module will provide power to the crank circuit to manually start the engine.

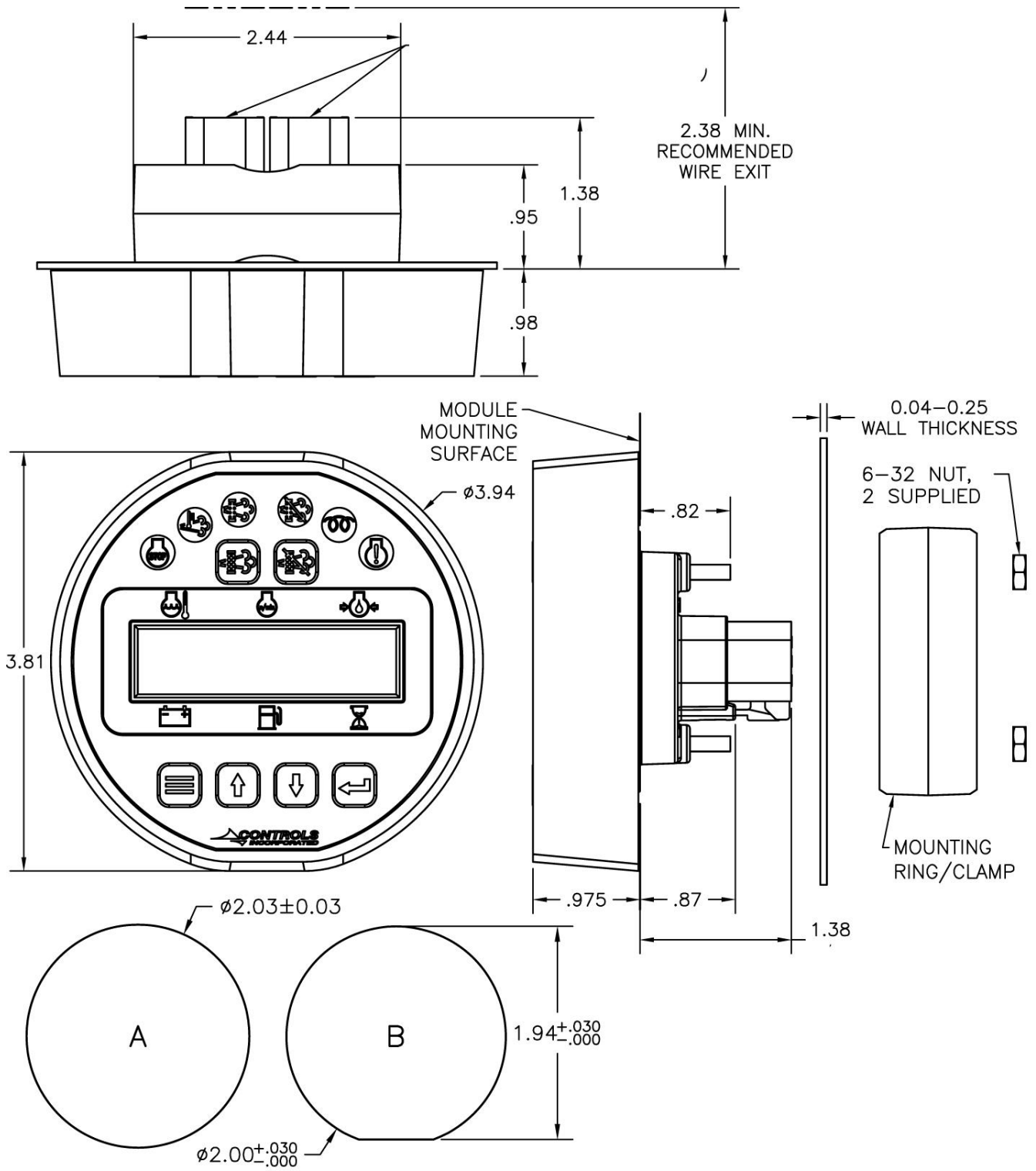


Preheat

When the Preheat option is selected in the menus (Module Configuration), engine starting using the display buttons will be delayed while the Preheat circuit is energized. A message will appear on the screen notifying the operator that the glow plugs are energized. The Start Buttons must be pushed throughout the full preheat time to complete the action. Once the preheat time is complete, the engine will be started.

When using Multiplex panels, both the Main and Remote panels must be configured with the same Preheat Time.

INSTALLATION INFORMATION



MOUNTING HOLE REQUIREMENTS (A OR B)

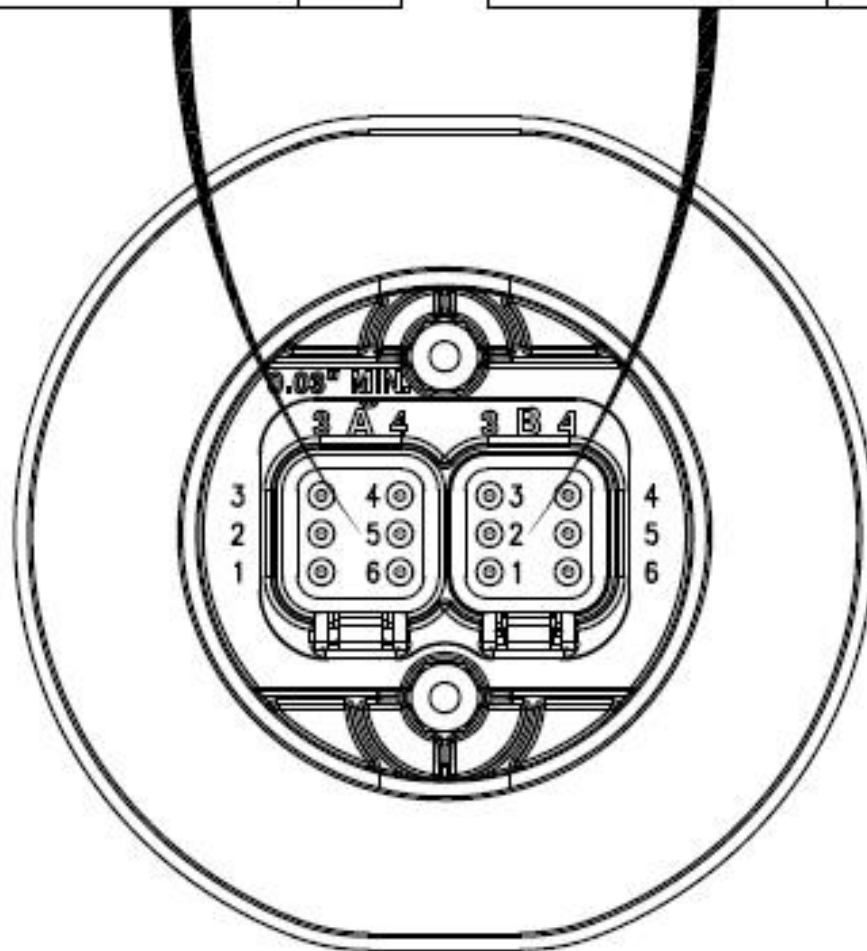
CONNECTOR INFORMATION

CONNECTOR A

FUNCTION	PIN
BATTERY +	1
CAN HIGH	2
CAN LOW	3
SPEED INPUT	4
FUEL LEVEL	5
BATTERY -	6

CONNECTOR B

FUNCTION	PIN
E-STOP INPUT	1
FUEL/RUN OUTPUT	2
TEMP INPUT	3
OIL PRESSURE INPUT	4
PREHEAT OUTPUT	5
CRANK OUTPUT	6



ENGINE HARNESS CONNECTOR INFORMATION

Engine Harness Connector –Deutsch 21 pin (HDP24-24-21PE)

Remote Panel Harness Connector –Deutsch 9 pin (HD10-9-1939P-B022)



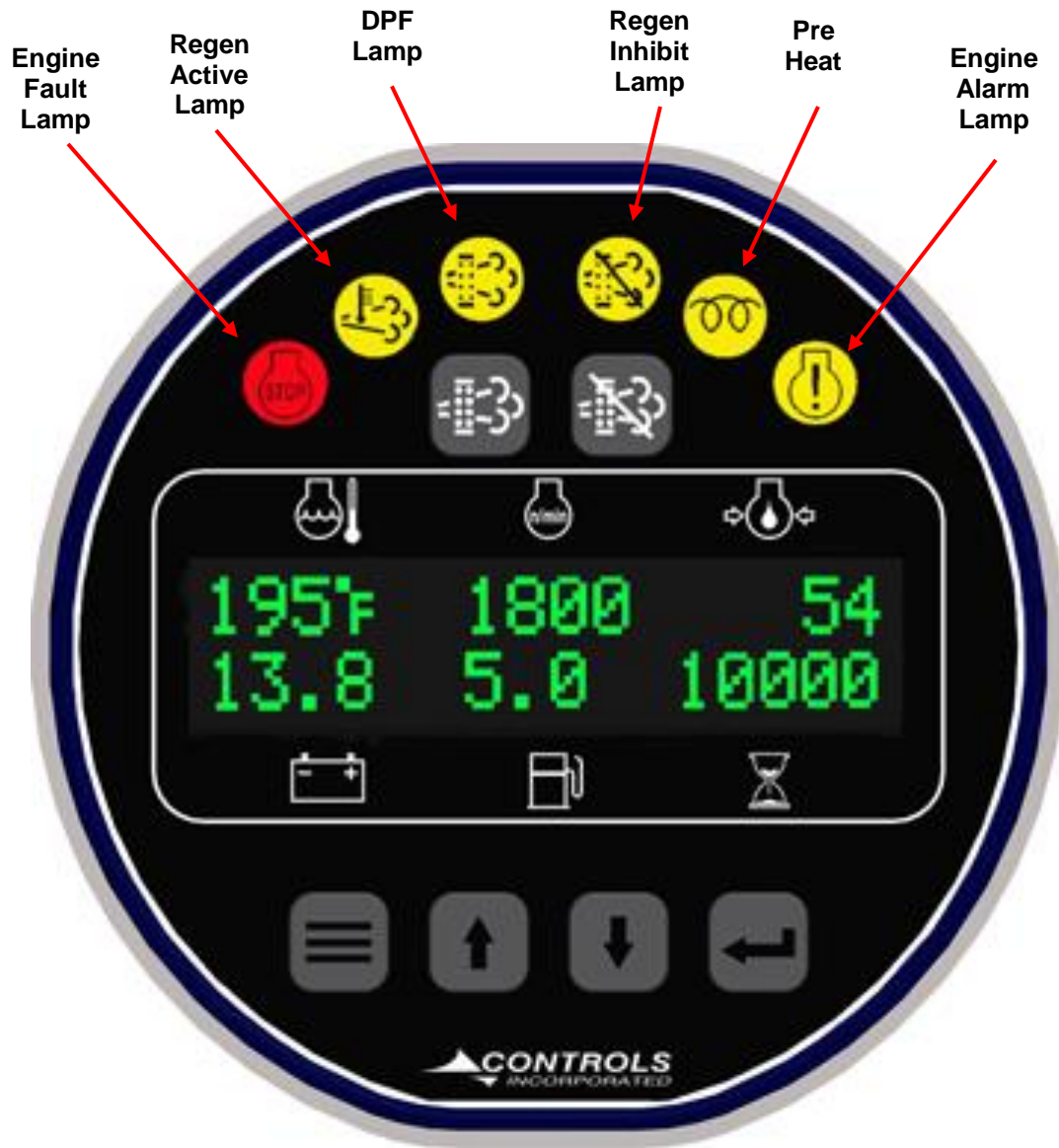
21 Pin Connector

Pin	Function
B	Battery Positive
E	Battery Negative
G	Key On Power
D	Crank Signal
V	J1939 High
U	J1939 Low
J	Alternator Excite
H	Engine Temperature
X	Oil Pressure
L	Preheat
Loose	Fuel Level Sender

9 Pin Connector

Pin	Function
A	Batter Negative B-
B	Battery Positive B+
C	CANbus Low
D	CANbus Low
E	Open
F	Fuel Signal/ECU Power Out
G	Fuel Signal/ECU Power In
H	Open
J	E-Stop Signal

Indicator Lamps



CONTROL PANEL ANALOG AND DIGITAL INPUTS

The panel has one analog input and up to three digital inputs available to monitor other components, senders or signals. These inputs can be used for a number of purposes including alarms and shut downs.

Input	Heading	Default	Options	Connector	Pin
Analog 1	Function	Fuel Level		A	5
Digital 1	Normally	Open	Open / Closed	B	1
	Function	Alarm			
	Message	E-Stop			
	Check	Off	Off / Always / Run		

Digital Function Activation

- 1) Off / Always / Run – Describes when the parameter will be monitored for alarm conditions. Run refers to when the engine is running. Off disables the alarm conditions. Always enables the alarm constantly regardless of engine state.
- 2) Alarm Delay – The time period, after Sender Check Bypass, that the parameter must be on the alarm condition before the alarm becomes latched.

MENU SYSTEM

To Enter Menu System

Hold MENU button and press ENTER button.

Menu Navigation

Press MENU button to scroll menu options.

Press UP arrow button to enter menu.

Press DOWN arrow button to reverse.

Exit Menu System

Hold MENU button and press ENTER button.

To Change a Setting

Press ENTER button to bring up brackets [].

Press UP arrow button and DOWN arrow button to change setting.

Press ENTER button to make selection, brackets disappear.

Recycle key to the OFF position after changing a setting.

Main Menu

Main Menu	Sub Menu		
Active Engine Fault Codes	View/Scroll Active Fault Codes	} Viewing Menu	
Stored Engine Fault Codes	View/Scroll Stored Fault Codes		
Engine Parameters	View ECU Engine Information (% Load, Torque, Oil Temp, etc.)		
Engine Identification	Engine Model # View		
	Engine Serial # View		
Module Information	Control Unit Part# View		
	Control Unit Software Version View		
Controller Setup (PASSWORD PROTECTED)	Quick Setup	(1)	} Configuration Menu
	Engine Parameter Configuration	(2)	
	Input Configuration	(3)	
	Output Configuration	(4)	
	Throttle Configuration	(5)	
	Engine Safety Configuration	(6)	
	Module Configuration	(7)	
	Display Configuration	(8)	
	CAN Configuration	(9)	
	Maintenance Configuration	(10)	
	Emissions Configuration	(11)	
	Clutch Configuration	(12)	

To access the controller setup menus, a password is required.

Configuration Menus

(1) Quick Setup	Engine Manufacturer
	TSC Minimum Speed
	TSC Maximum Speed
	Performance Display Off/On
(2) Eng. Parameter Configuration	Parameter Selection (Speed, Coolant Temp., Oil Pressure, Fuel Level, Voltage, Hour Meter)
	Parameter Setup (Varies based on parameter)
(3) Input Configuration	Configure Selection (Channels/Message)
	Digital 1-3 Function
(4) Output Configuration	Configure Selection (Channels/Message)
	Relay 1 Function (Default to Fuel/Run)
	Relay 2 Function (Default to Preheat)
	Relay 3 Function
(5) Throttle Configuration	Throttle Type
	E-Throttle Mode
	Cooperative TSC Mode
	TSC Minimum Speed
	TSC Maximum Speed
	TSC Bump Speed
	TSC Ramp Rate
	Throttle Curve
Multi State Speeds 1-4	
(6) Engine Safety Configuration	Sender Check By-Pass (Default = 0:10)
	Parameter Selection (Fuel Level, Oil Pressure, Temperature, Battery, Overspeed, Speed Limit, Derate to Shutdown)
	Parameter Settings (vary based on selection)
(7) Module Configuration	Pre Alarms Displayed
	Clear Number of Starts
	Engine Run Criteria Speed
	Engine Stop Criteria Speed
(8) Display Configuration	English/Metric Selection
	Performance Display Off/On

(9) CAN Configuration	Engine Manufacturer (Default = Cummins)
	TSC1 Address (Default = 3) Others available
	Source Address (Default = 3) Others available
	Engine Address (Default = 0) Others available
	Speed Transmit On/Off
	Temperature Transmit On/Off
	Oil Pressure Transmit On/Off
	Fuel Level Transmit On/Off
	Voltage Transmit On/Off
	Hours Transmit On/Off
Faults Transmit	
(10) Maintenance Configuration	Service Messages (Default = No)
	Schedule Selection
	Schedule Reset Yes/No
	Schedule Interval Setting
	Schedule Warning Setting
	Schedule Trip Setting
	Schedule Message
(11) Emissions Configuration	DEF Level Check (Default = Off)
	Low DEF Pre Alarm (Default = 16%)
	Low DEF Alarm (Default = 0%)
	DEF Alarm Delay
	Allow Service Regeneration Yes/No (Deere Only)
	Regeneration Interlock On/Off
	TSC Transmit Yes/No (stop TSC to engine during regeneration)
	DPF Inhibit Lamp Source

(12) Clutch Configuration	Clutch #1 Engage Trip (Default = None)
	Clutch #1 Engage Speed (Default = 800 rpm)
	Clutch #1 Engage Load (Default = 0%)
	Clutch #1 Engage Coolant Temperature (Default = 150°F)
	Clutch #1 Engage Delay (Default = 0:00)
	Clutch #1 Engage Interval (Default = 0:00)
	Clutch #1 Release Trip (Default = None)
	Clutch #1 Release Speed (Default = 800 rpm)
	Clutch #1 Release Load (Default = 0%)
	Clutch #1 Release Coolant Temperature (Default = 150°F)
	Clutch #1 Release Delay (Default = 0:00)
	Clutch #1 Release Interval (Default = 0:00)

