



## DYNAMIC EARLY WARNING SYSTEM



- Monitors 20 critical engine parameters
- 6-stage customizable alarm thresholds
- Thresholds adjust with engine speed
- Sensor history and baseline comparison
- Fuel management w/ 3 trip settings
- Mobile mirroring to your phone or tablet
- Cloud data backup & reporting

## TOTAL PROPULSION SYSTEM VISIBILITY

DEWLine augments your existing engine control module (ECM) and alarms to provide early detection of component issues before they cascade into a major repair. Thousands of diesel engines suffer premature failure each year. Many of these failures can be prevented if the pilot has adequate information at the helm. DEWLine adds 20 sensors to each engine and gearbox, plus additional sensors for your generators, to give you a comprehensive view of engine health at all times.

Data is only useful if it's easy to understand, and alarms never sound in calm, uncongested waters. DEWLine alarm thresholds are clearly visible on 210° sweep gauges. Gauge backgrounds turn yellow or red to make the cause of an alarm instantly recognizable. If a parameter appears to be out of range, the pilot can quickly check it against baseline readings to see if performance of that component may be deteriorating.

# THE DEWLINE DIFFERENCE

**Cruise with Confidence.** DEWLine gives you an unprecedented level of detail on the functioning of your propulsion system. So sit back and enjoy the ride knowing all is well. If something's amiss, DEWLine will let you know in plenty of time to take action.

**Relinquish the Helm.** DEWLine is especially valuable to pilots who are new or infrequent operators of a particular vessel. Whether you're handing over the helm to a crew member so you can get a few minutes of shut-eye, or hiring a captain for a relocation, DEWLine makes every pilot an expert on your boat's propulsion system.

**Telematics.** Perfect for owners who want to keep tabs on how their boat is being operated, DEWLine stores trip data to the cloud for later analysis. You'll know for certain the boat is being run according to your instructions and on the route you have (?)



**Mobile Mirroring.** Need to move about the boat to bring in a fish or visit with guests? Keep one eye on the helm by opening the DEWLine app on your phone or tablet. It's always good to have a second set of eyes on the gauges for whomever you've placed at the wheel.



**The Whole Truth.** Diagnosing engine problems is often complicated by our inability to recall details of operation and gauge readings leading up to an event. DEWLine's History page gives your mechanic a full play-by-play of all 20 parameters to zero in on the failed component without a lot of trial and error. Once the repair is complete, a new sensor baseline is easy to record from the DEWLine Console by the press of a button.



Sea Water Flow



Turbo Boost



Fuel Flow



Exhaust Gas Temp



Crankcase Pressure

# SYSTEM COMPONENTS

DEWLine offers two console options to suit the needs of each operating location. Select the 12" Console for your primary navigation helm to provide keen insights into each engine's operation. For secondary helms, such as a tuna tower, choose the 8" DEWLine Console for a consolidated view of both engines.

**DLC-1210** is a 12" touchscreen console that takes the place of an engine's existing gauge package. One DLC-1210 supports one engine, one generator, multiple tanks, and battery banks. Features include:



DLC-1210

- IP66 waterproof
- 1,000 Nits
- Anti-glare
- NMEA2000



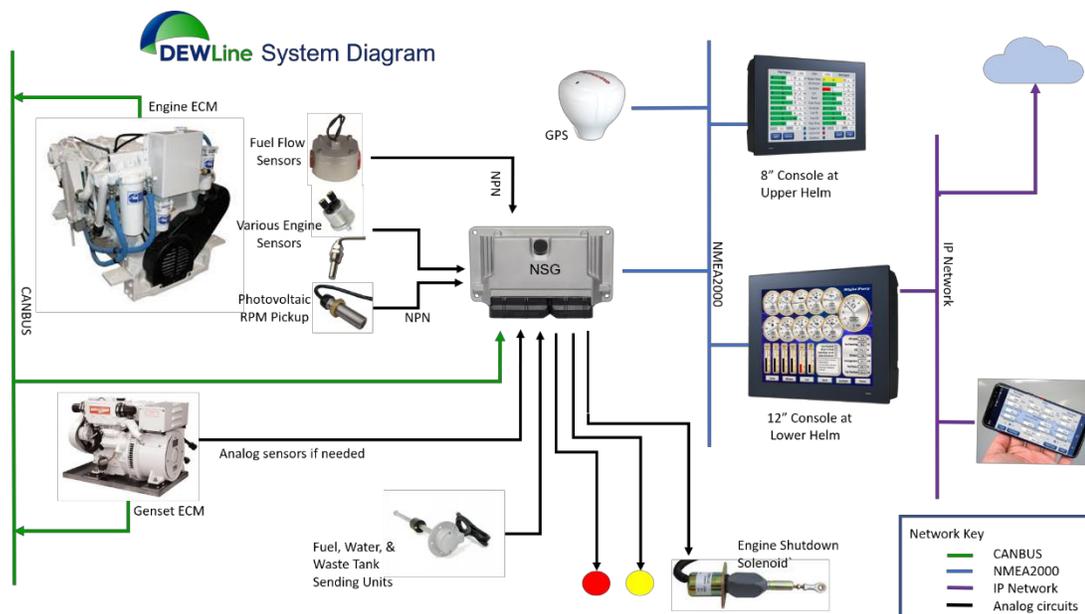
DLC-810

**DLC-810** is an 8" LCD touchscreen that provides a simplified view of engine operation to complement an existing gauge package. DLC-810 supports up to two engines and may be used with on multiple helms with or without other DEWLine Consoles.

Central to DEWLine's operations is the NEMA2000 Sensor and Alarm Gateway (NSG). This module connects existing analog sensors on your engine plus new sensors provided by Timbolier to the data network, allowing both DEWLine consoles and other devices to read their outputs.

**NSG-390** is a highly advanced control module that performs three essential functions:

- ❑ Converts signals from up to 30 Sensors and switches to NMEA2000.
- ❑ Converts CANBUS signals from legacy ECMs to NMEA2000.
- ❑ Activates light or sonic alarms as well as engine shutdown solenoids upon command from the DEWLine Console.



DEWLine bridges three data networks:

- CANBUS legacy engine data
- NEMA2000 vessel data
- WiFi/IP data

# UNPARALLELED PROTECTION

## DEWLine Sensors and Alarm Configuration

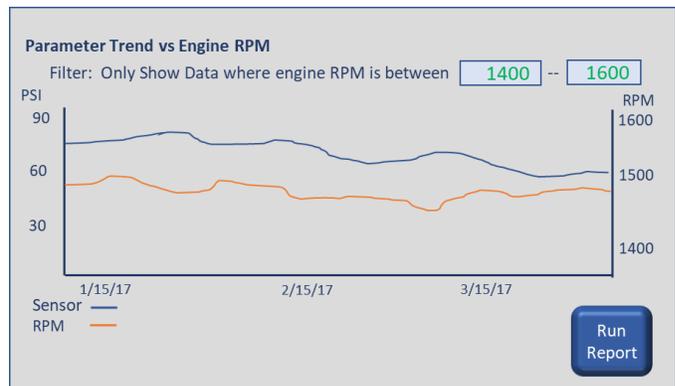
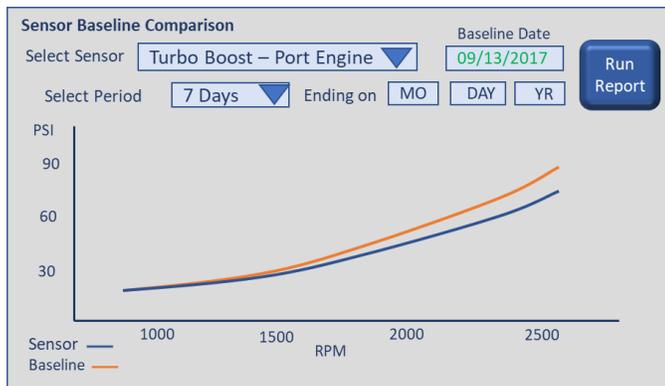
Sensor	Yellow	Red	High	Low	Shutdown	Dynamic	Degrade
Engine Speed	X	X	2730	X		X	X
Oil Pressure	X	X	X	X	30 Sec	X	X
Oil Temp	X	X	255	X	X	X	
Coolant Temp	X	X	220	X	30 Sec	X	X
Intake Temp		X	190		30 Sec		X
Low Oil level	X	X			X		
Coolant Level Low	X	X	X	X	30 Sec	X	X
Power Imbalance	X						
Fuel Pressure	X	X	X	X	X		
Crankcase Pressure	X	X	X	X	X	X	
Exhaust Gas Temp	X	X	X	X	X	X	
Turbo Boost	X	X	X	X	X	X	
Turbo Oil Temp	X	X	X	X	X		
Water in Fuel Detect	X	X	X	X	X		
Gear Oil Pressure	X	X	X	X	X	X	
Gear Oil Temp	X	X	X	X	X	X	
Fuel Flow Supply	X	X	X	X	X		
Fuel Flow Return	X	X	X	X	X		
Sea Water Pressure	X	X	X	X	X	X	
Alternator Amps	X	X	X	X			
Volts	X	X	X	X			
Generator RPM	X	X	X	X			
Fuel Level Tank 1	X	X		X			
Fuel Level Tank 2	X	X		X			
Water Tank Level	X	X		X			
Black Water Tank Lvl	X		X	X			
High Bilge Level		X	X	X			

Most modern marine engines have few sensors that focus on engine health (shown in blue). By the time most engine alarms sound, the damage is already done.

DEWLine monitors key engine parameters (shown in green) that give insight to problems long before they become critical faults.

## LEARN FROM THE PAST

Nothing is more critical to preventing component failures than having insight into past performance. DEWLine's Baseline Comparison and Parameter Trend charts make it easy to spot a subsystem that is underperforming.



For more information visit our web site at [www.timbolier.com](http://www.timbolier.com) or call 410.317.4628 Option 2.  
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