



# MurphyLink<sup>®</sup>

## Analog Gages Series

### MLA20 and MLA35

## Installation Instructions

**Warranty** - A limited warranty on materials and workmanship is given with this Murphy product.  
A copy of the warranty may be viewed or printed by going to [www.enovationcontrols.com/warranty](http://www.enovationcontrols.com/warranty)



**BEFORE BEGINNING INSTALLATION OF THIS PRODUCT**

- ✓ Disconnect all electrical power to the machine
- ✓ Make sure the machine cannot operate during installation
- ✓ Follow all safety warnings of the machine manufacturer
- ✓ Read and follow all installation instructions

**Please read the following information before installing.** A visual inspection of this product for damage during shipping is recommended before mounting. It is your responsibility to have a qualified person install this unit.

## Description

The MurphyLink® gages are a series of instruments designed to display the information transmitted by the Murphy Display and Diagnostic Module (MDDM) in a traditional analog format. Communication from the MDDM to these units is via an RS485 twisted pair proprietary serial link. These MurphyLink components are environmentally sealed, LED back lit (green) and are available in a standard 2 in. (51 mm) diameter polyester (PBT) case with a polycarbonate lens and a polyester clamp. The MLA35 Series models feature a 3-3/8 in. (86 mm) diameter polyester (PBT) case with a Polycarbonate lens and polyester clamp.

## Models

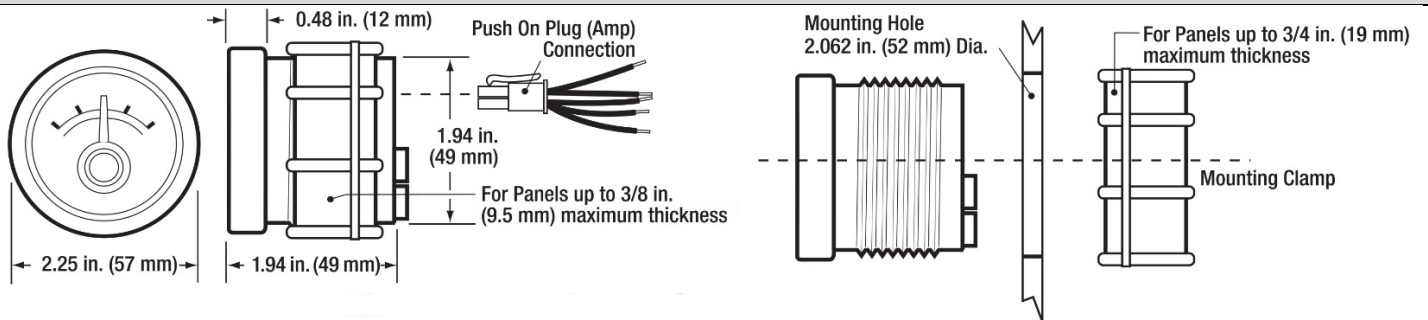
Basic 2 in. (51 mm) case models	
MLA20-A-100-A	Engine Oil Pressure
MLA20-B-250-A	Coolant Temperature
MLA20-C-12-A	Voltmeter 12 VDC
MLA20-C-24-A	Voltmeter 24 VDC
MLA20-D-100-A	Percent Load @ Current Speed
MLA20-E-400-A	Gear Oil Pressure
MLA20-F-250-A	Gear Oil Temperature
Basic 3-3/8 in. (86 mm) case models	
MLA35-T-3000-A	Tachometer
MLA35-S-85-A	Speedometer
<i>Note: All basic models listed above are available with Amp mini universal (standard), Deutsch or Metri-Pack connectors.</i>	



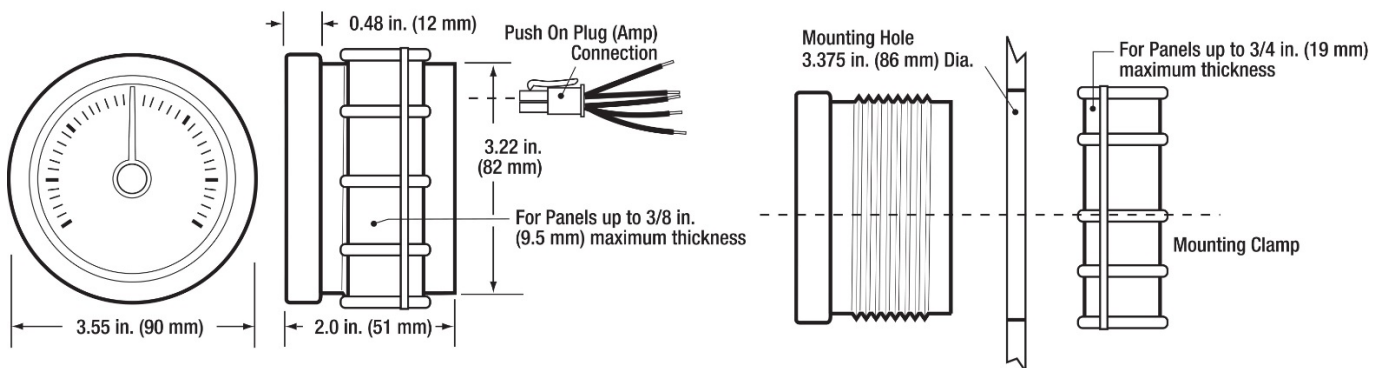
**CAUTION:** These instruments are designed to be used ONLY with the MurphyLink Display and Diagnostic Module (MDDM) or other approved MurphyLink products.

## MLA20 and MLA35 Dimensions and Mounting

### MLA20 Series



### MLA35 Series



## MLA20 and MLA35 Typical Wirings for 12 and 24 VDC

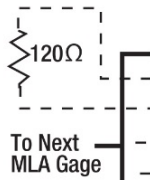


### **WARNING: Disconnect battery negative cable before wiring or service.**

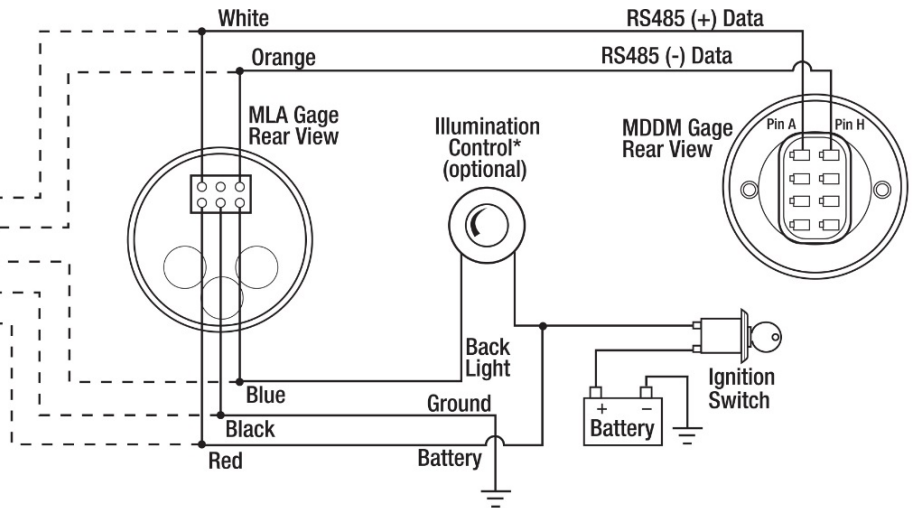
Devices containing solid state components can be damaged or caused to malfunction when used in systems which incorporate inductive loads (e.g., relays, solenoids, etc.) that can generate voltage spikes. To reduce the potential for this type of damage, install a fly back or clamping diode across all inductive loads. Use Murphy diode package 65-00-0343 or equivalent. A typical diode is 1N4005 and is readily available from commercial sources. Failures of this type are not covered by our Limited Warranty.

## 12 VDC

Place Resistor at End of Line on Last MLA gage.  
(included for factory purchased panels.)

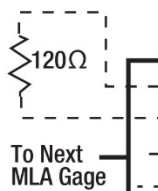


\* Electronic Dimmer switch recommended with 4 A, capacity or heavy duty rheostat switch, 25 ohm, 5 watt.  
For more than 6 MLA gages, contact factory for rheostat sizing.

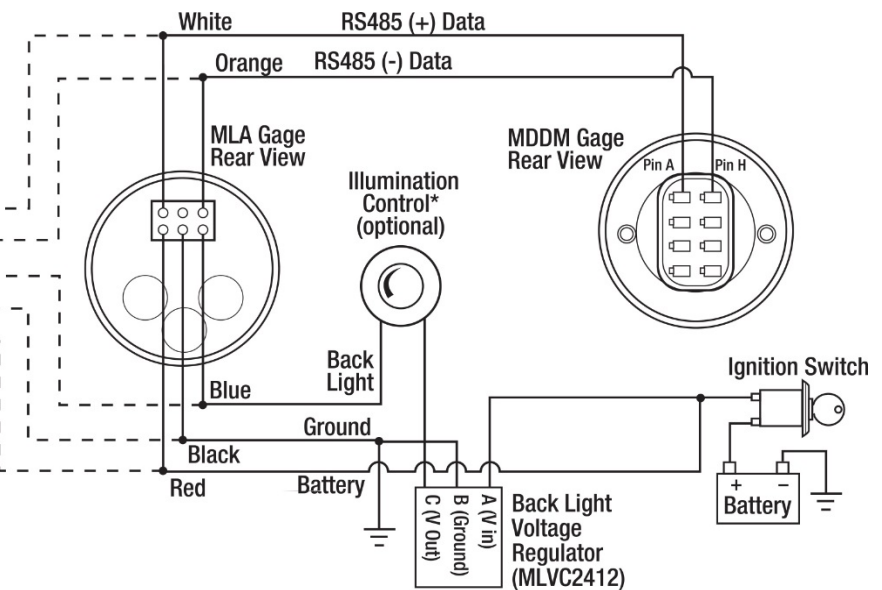


## 24 VDC

Place Resistor at End of Line on Last MLA gage.  
(included for factory purchased panels.)



\* Electronic Dimmer switch recommended with 4 A, capacity or heavy duty rheostat switch, 25 ohm, 5 watt.  
For more than 6 MLA gages, contact factory for rheostat sizing.



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